District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nOY1803834027
District RP	1RP-4960
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible Party PERMIAN WATER SOLUTIONS, LLC		OGRID 37	73626			
Contact Name JENNI USHER		Contact Te	Contact Telephone 512-820-8772			
Contact email JENNI@PERMIANWS.COM		Incident #	(assigned by OC.	D) nCH1834760902, nOY1823336566,		
Contact mail	ing address	PO BOX 2106,	MIDLAND, TX 7	79702		nOY1821950108, nCH1821239639, nOY1803834027, nOY1730058924,
Location of Release Source nKL1632848695, nJXK1616127644, nKJ1512041707, nTO1502927174, nPAC0531137785  Latitude 32.48086 Longitude -103.42566			nKL1632848695, nJXK1616127644, nKJ1512041707, nTO1502927174, nPAC0531137785			
			(NAD 83 in dec	cimal degrees to 5 decin		
Site Name 1	KAISER ST.	ATE SWD #009				CR DISPOSAL
Date Release	Discovered			API# (if app	olicable) 30-02	5-02538
Unit Letter	Section	Township	Range	Cour		
F	13	21S	34E	LEA		
Surface Owner: State Federal Private (Name:  Nature and Volume of Release  Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)						
X Crude Oi			•		covered (bbls)	
X Produced	Water	Volume Released (bbls) UNKNOWN		OWN	Volume Red	covered (bbls)
Is the concentration of dissolved chloride in produced water >10,000 mg/l?		hloride in the	☐ Yes ☐	No		
Condensa	Condensate Volume Released (bbls)			Volume Red	covered (bbls)	
Natural C	Natural Gas Volume Released (Mcf)			Volume Red	covered (Mcf)	
Other (describe) Volume/Weight Released (provide units)		e units)	Volume/We	eight Recovered (provide units)		
Cause of Rel C-141 FILE		RESS MULTIPLE	E HISTORICAL I	NCIDENTS AT TI	HIS WELL.	

Received by OCD: 8/28/2023 2:17:46 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division Page 2 of 1449

Incident ID nOY1803834027
District RP 1RP-4960
Facility ID
Application ID

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	AT LEAST ONE OF THE HISTORICAL WHICH SIGNIFIES A MAJOR RELEA	L INCIDENTS REPORTED WAS GREATER THAN 25 BBLS, SE.
X Yes No	,	
	·	om? When and by what means (phone, email, etc)?
PLEASE SEE PREVIO	US C-141'S.	
	Initial Re	esponse
The responsible	party must undertake the following actions immediatel	unless they could create a safety hazard that would result in injury
X The source of the rele	ease has been stopped.	
X The impacted area ha	s been secured to protect human health and	the environment.
X Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
X All free liquids and re	ecoverable materials have been removed and	d managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred
		lease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release notinent. The acceptance of a C-141 report by the Cate and remediate contamination that pose a thre	pest of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: JENNI	USHER	Title: REGULATORY ANALYST
Signature: <i>Jennú U.</i>	sher	Date: 9/14/2021
email: <u>JENNI@PERMI</u>	ANWS.COM	Telephone: 512-820-8772
OCD Only		
Received by:		Date:

Page 3 of 1449

Incident ID	nOY1803834027
District RP	1RP-4960
Facility ID	
Application ID	

# Site Assessment/Characterization

This information must be provided to the appropriate district of fice no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ☐ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No	
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No	
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No	
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ☐ No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data  Data table of soil contaminant concentration data  Depth to water determination  Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release  Boring or excavation logs  Photographs including date and GIS information  Topographic/Aerial maps  Laboratory data including chain of custody	ls.	

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 8/28/2023 2:17:46 PM State of New Mexico
Page 4 Oil Conservation Division

Page 4	of 14	49
		1

Incident ID	nOY1803834027
District RP	1RP-4960
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a the addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	tifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In
Printed Name:	Title:
Signature:	Date:
email:	Telephone:
OCD O. I.	
OCD Only	
Received by:	Date:

Page 5 of 1449

	- "8" " J - 1"
Incident ID	nOY1803834027
District RP	1RP-4960
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	included in the plan.	
<ul> <li>□ Detailed description of proposed remediation technique</li> <li>□ Scaled sitemap with GPS coordinates showing delineation points</li> <li>□ Estimated volume of material to be remediated</li> <li>□ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>□ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>		
<u>Deferral Requests Only</u> : Each of the following items must be con	firmed as part of any request for deferral of remediation.	
Contamination must be in areas immediately under or around prodeconstruction.	oduction equipment where remediation could cause a major facility	
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health	, the environment, or groundwater.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases		
which may endanger public health or the environment. The acceptar liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local later.	and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of	
Printed Name: JENNI USHER	Title: REGULATORY ANALYST	
Signature: Jenní Usher	Date:9/21/2021	
email: <u>JENNI@PERMIANWS.COM</u>	Telephone: 512-820-8772	
OCD Only		
Received by:	Date:	
Approved Approved with Attached Conditions of A	Approval	
Signature:	Date:	

REMEDIATION PLAN IS TO FOLLOW SLO PHASE 1 AND PHASE 2 WORK PLANS USING TETRA TECH DELINEATION REVISED WORK PLAN DATED JANUARY 27, 2020 TO RESOLVE ALL OUTSTANDING INCIDENTS. WORK PLAN IS ATTACHED.

	Page 0 01 1449
Incident ID	nOY1803834027
District RP	1RP-4960
Facility ID	
Application ID	

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachr	ment Checklist: Each of the follo	wing items must be included in the closure report.
A scaled site and san	npling diagram as described in 19.1	15.29.11 NMAC
Photographs of the r must be notified 2 days p	emediated site prior to backfill or porior to liner inspection)	photos of the liner integrity if applicable (Note: appropriate OCD District office
✓ Laboratory analyses	of final sampling (Note: appropriat	te ODC District office must be notified 2 days prior to final sampling)
Description of remed	liation activities	
and regulations all operator may endanger public healt should their operations has human health or the environce compliance with any other restore, reclaim, and re-ve	ors are required to report and/or file th or the environment. The acceptance failed to adequately investigate a comment. In addition, OCD acceptance federal, state, or local laws and/or getate the impacted surface area to a NMAC including notification to acceptance.	complete to the best of my knowledge and understand that pursuant to OCD rules be certain release notifications and perform corrective actions for releases which ance of a C-141 report by the OCD does not relieve the operator of liability and remediate contamination that pose a threat to groundwater, surface water, nice of a C-141 report does not relieve the operator of responsibility for regulations. The responsible party acknowledges they must substantially the conditions that existed prior to the release or their final land use in the OCD when reclamation and re-vegetation are complete.  Title: Project Manager  Date: 5 5 23  Telephone: (432) 634-7865
OCD Only		
Received by: Shelly W	ells	Date: <u>8/28/2023</u>
remediate contamination t	OCD does not relieve the responsible that poses a threat to groundwater, so any other federal, state, or local law	le party of liability should their operations have failed to adequately investigate and surface water, human health, or the environment nor does not relieve the responsible ws and/or regulations.
Closure Approved by:	Nelson Velez	Date:09/01/2023
Printed Name:	Nelson Velez	Title: Environmental Specialist - Adv

Printed Name:

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN RE PERMIAN WATER SOLUTIONS, LLC

NMOCD-ACO-201813

#### AGREED COMPLIANCE ORDER

Pursuant to the New Mexico Oil and Gas Act ("Act"), NMSA 1978, Section 70-2-1, et seq., and 19.15.29.15 NMAC, the Director of the Oil Conservation Division ("OCD") and Permian Water Solutions, LLC ("PWS") enter into this Agreed Compliance Order ("Order").

### I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

- 1. OCD is charged with the administration and enforcement of the Act and the rules adopted thereunder, and has jurisdiction over Operator and its wells and sites in New Mexico.
- 2. PWS owns the wells identified in Exhibit A ("Wells").
- 3. On October 15, 2018, Cambrian Management, LTD and PWS submitted a Form C-145 application and requested OCD's approval to transfer the Wells.
- 4. PWS in the Form C-145 application certified that, as a condition of OCD's approval to transfer the Wells, it would be responsible to take corrective action for releases at the Wells, "including releases that occurred before I became operator of record."
- 5. On October 16, 2018, OCD approved the Form C-145 application to transfer the Wells.
- 6. Pursuant to 19.15.29.7(C) NMAC, PWS is the "responsible party" for the releases at the Wells.
- 7. Pursuant to 19.15.29 NMAC, PWS must characterize and remediate the releases at the Wells identified in Exhibit A ("Incidents").
- 8. PWS has initiated the characterization and remediation of the Incidents at the Kaiser Well
- 9. OCD is authorized to impose sanctions for violations of the Oil and Gas Act and orders issued and rules promulgated pursuant to the Oil and Gas Act, including denial or revocation of registrations, applications, permits, authorizations and transfers, and the assessment of civil penalties. See 19.15.5.10 NMAC.
- 10. PWS requests this Order in order to avoid sanctions under the Oil and Gas Act and 19.15.29 NMAC for the Incidents and to provide PWS an opportunity to demonstrate its commitment to compliance with the Act and rules.

PWS admits the findings of fact and waives its right to appeal from this Order, provided however that PWS reserves the right to appeal OCD's interpretation or application of this Order.

#### II. ORDER

12. <u>Kaiser Incidents.</u> PWS shall complete the remediation of the Kaiser Incidents in accordance with the OCD-approved remediation plan.

#### 13. Other Incidents.

- A. PWS shall submit characterization and remediation work plans for the Incidents through the OCD fee portal no later than May 27, 2022.
- B. If OCD does not approve a characterization or remediation work plan, OCD shall provide a written explanation of the deficiency, and no later than thirty (30) days after OCD provides such explanation, PWS shall submit a revised work plan addressing the deficiency. If OCD does not approve the revised work plan, OCD shall provide a written explanation of the deficiency, and no later than thirty (30) days after OCD provides such explanation, PWS shall submit a second revised work plan addressing the deficiency. If OCD does not approve the second revised work plan, PWS shall be in breach of the Order, and PWS shall pay a stipulated penalty and be subject to additional sanctions as provided below.
- C. No later than the last deadline, which includes any extensions granted, as established by OCD for the final completion of the remediation work of each of the other Incidents, PWS shall complete the characterization and remediation of each of the other Incidents, provided however that PWS may request an extension of time for good cause shown.
- D. In evaluating a request for an extension of time under subparagraph C, OCD shall consider PWS's status as a small operator with limted resources, its ongoing commitment of resources to other remediation projects in New Mexico, including the Kaiser remediation project, and its need to reallocate resources before commencing a a remediation project required by this Order.

- Documents and Other Communications.
  - A. Paragraphs 13 and 14. PWS shall submit all documents related to Paragraphs 13 and 14 through the OCD Permitting fee portal.
  - B. Other Communications. All other communications related to the Order shall be submitted electronically to:

OCD: Jesse Tremaine, Esq.

JesseK.Tremaine@state.nm.us

PWS: Luke Kittinger, Esq. Luke@abadieschill.com

- 15. If PWS fails to comply with a requirement of this Order, no later than thirty (30) days after receipt of a written demand from OCD, in addition to any other sanction imposed by OCD pursuant to the Oil and Gas Act and the rules adopted thereunder, PWS shall pay a stipulated penalty of \$500.00 for each day until it complies with each separate requirement ("Stipulated Penalty"). Each failure to comply with a requirement of this Order shall be subject to a separate Stipulated Penalty.
- 16. If PWS fails to pay the Stipulated Penalty or portion thereof within thirty (30) days after receipt of a written demand from OCD, it shall pay interest on the Stipulated Penalty or unpaid portion thereof until paid in full at the interest rate of 8.75 percent.
- 17. Notwithstanding an assessment of a Stipulated Penalty, PWS shall comply with its remaining obligations of this Order.
- 18. Upon receipt of written request, OCD and PWS shall confer in good faith to resolve any dispute regarding the Order.
- 19. If PWS cannot reasonably perform or achieve an obligation under this Order due to Force Majeure, OCD shall stay the obligation and any other reasonably related obligation until OCD in its sole discretion decides PWS can reasonably comply with such obligation and the period for compliance with such obligation and any other reasonably related obligation shall be extended for an additional number of days equivalent to the period of the stay. For the purpose of this Order, Force Majeure means an event beyond the reasonable control of PWS which prevents PWS from complying with an obligation under this Order, including fire, explosion, earthquake, drought, flood, war, terrorism, or an agency's undue delay to issue a permit, easement, license or other required consent required to comply with this Order.
- 20. Upon successful completion of this Order, OCD shall notify PWS in writing that it is released from liability for the Incidents.

21. OCD reserves the right to sanction PWS for any alleged violation not addressed in this Order, provided however that PWS reserves all rights accorded by statute and regulation.

# NEW MEXICO OIL CONSERVATION DIVISION

Woul	Date: 2/17/2022	
Adrienne Sandoval		
Director		

PERMIAN WATER SOLUTIONS, LLC

Josh Brooks President Pate: 1-28-

# **EXHIBIT A**

WELL	API	INCIDENT ID	DISCOVERY DATE	LOCATION	DISTRICT	MATERIAL	SOURCE
KAISER STATE SWD #009	30-025-02538	nCH1834760902	11/2/2018	F-13-21S-34E	Hobbs		
KAISER STATE SWD #009	30-025-02538	nOY1823336566	8/17/2018	F-13-21S-34E	Hobbs	Produced Water	Valve
KAISER STATE SWD #009	30-025-02538	nOY1821950108	8/6/2018	F-13-21S-34E	Hobbs	Produced Water	Pump
KAISER STATE SWD #009	30-025-02538	nCH1821239639	6/20/2018	F-13-21S-34E	Hobbs	Produced Water	Other
KAISER STATE SWD #009	30-025-02538	nOY1803834027	2/7/2018	F-13-21S-34E	Hobbs	Produced Water	Pump
KAISER STATE SWD #009	30-025-02538	nOY1730058924	10/18/2017	F-13-21S-34E	Hobbs	Produced Water, Crude Oil	Unknown
KAISER STATE SWD #009	30-025-02538	nKL1632848695	not stated	F-13-21S-34E	Hobbs	Produced Water	Frac Tank
KAISER STATE SWD #009	30-025-02538	nJXK1616127644	5/17/2016	F-13-21S-34E	Hobbs	Produced Water	Tank
KAISER STATE SWD #009	30-025-02538	nKJ1512041707	4/24/2015	F-13-21S-34E	Hobbs	Produced Water	Pipeline
KAISER STATE SWD #009	30-025-02538	nTO1502927174	1/14/2015	F-13-21S-34E	Hobbs	Produced Water	<b>Production Tank</b>
KAISER STATE SWD #009	30-025-02538	nPAC0531137785	9/11/2005	F-13-21S-34E	Hobbs	Produced Water	Pipeline
DORSTATE SWD #001	30-015-23728	nAB1724135283	8/23/2017	H-27-25S-28E	Artesia	Produced Water	Other
DORSTATE SWD #001	30-015-23728	nAB1613157015	5/2/2016	H-27-25S-28E	Artesia	Produced Water	Valve
A N ETZ #001	30-025-07713	nOY1804732368	7/15/2017	P-26-19S-38E	Hobbs	Produced Water	Flow
RICE SWD F #029	30-025-12802	nLWJ1008538662	11/11/2006	F-29-18S-38E	Hobbs	Produced Water	Other
RICE SWD F #029	30-025-12802	nPAC0633335042	11/11/2006	F-29-18S-38E	Hobbs	Produced Water	Pipeline
ANN SWD #001	30-015-23580	nMAP1825433366	9/5/2018	G-18-19S-26E	Artesia	Produced Water	Tank
DELAWARE RIVER #002	30-015-24784	nAB1721451368	7/25/2017	E-11-26S-28E	Artesia	Produced Water	Fitting
EXXON STATE #003	30-015-01096	nGEG0433742034	12/2/2004	O-15-21S-27E	Artesia	Crude Oil	<b>Production Tank</b>
ROHMER #001	30-015-25722	nAB1817142364	6/13/2018	F-23-22S-27E	Artesia	Produced Water	Valve



# CLOSURE REPORT FOR KAISER STATE SWD LEA COUNTY, NEW MEXICO

Prepared for:

### PERMIAN WATER SOLUTIONS, LLC.

P.O. Box 2106 MIDLAND, TEXAS 79702

Prepared by:

**Tetra Tech** 

901 West Wall Street, Suite 100 Midland, Texas 79701 (432) 682-4559 Fax (432) 682-3946

May 2, 2023

complex world CLEAR SOLUTIONS-



May 2, 2023

New Mexico State Land Office 310 Old Santa Fe Trail P.O. Box 1148 Santa Fe, New Mexico 87504 Oil Conservation Division, District 1 1625 North French Drive Hobbs, New Mexico, 88240

Re: Closure Report for the Permian Water Solutions, LLC., Kaiser State SWD, Unit F, Section 13, Township 21 South, Range 34 East, Lea County, New Mexico.

#### Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by Permian Water Solutions, LLC. (Permian Water Solutions) to assess the impacted areas at the Kaiser State SWD, Unit F, Section 13, Township 21 South, Range 34 East, Lea County, New Mexico. The site coordinates are 32.48086°, -103.42566°. The site location is shown on **Figures 1** and **2**.

## **Background**

Ten releases occurred at the site impacting the pad area and inside the facility berms. The initial C-141 Forms are include in **Appendix A**.

- NPAC0531137785: According to the State of New Mexico Permitting Site, the release
  was discovered on September 11, 2005 and released approximately 10 bbls of produced
  water due to a broken line. Approximately 9 bbls of fluids were recovered.
- 1RP-3512: According to the State of New Mexico C-141 Initial Report submitted by Pyote Water Systems, LLC, the release was discovered on January 14, 2015 and released approximately 20 bbls of produced water due to a vac truck overfilling the sumps. Approximately 20 bbls of fluids were recovered.
- 1RP-3621: According to the State of New Mexico C-141 Initial Report submitted by Pyote Water Systems, LLC, the release was discovered on April 24, 2015 and released approximately 100 barrels of produced water due to a truck hitting a load line. Approximately 100 bls of fluids were recovered.
- **1RP-4305**: According to the State fo New Mexico C-141 Initial Report submitted by Pyote Water Systems, LLC, the release was discovered on May 17, 2016 and released approximately 1,050 bbls of produced water due to a lightning strike. Approximately 1,050 bbls of fluids were recovered.
- 1RP-4525: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD, the release was due to a leak in the frac tanks used



during facility reconstruction after the lightning strike. An unknown volume of fluids was released, and none were recovered.

- **1RP-4855**: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD, the release was discovered on October 18, 2017 and released approximately 50 bbls of produced water and crude oil within the berm due to an unknown cause. None of the fluids were recovered.
- 1RP-4960: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD, the release was discovered on January 31, 2018 and released approximately 20 bbls of produced water due to a failed pump seal. Approximately 10 bbls of free-standing fluids were recovered.
- **1RP-5139:** According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD, the release was discovered on June 20, 2018 and released approximately 150 bbls fo produced water due to a failure on the wellhead. Approximately 150 bbls of fluids were recovered.
- 1RP-5149: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD, the release was discovered on August 6, 2018 and released approximately 200 bbls of produced water due to a valve malfunction. Approximately 200 bbls of fluids were recovered.
- 1RP-5163: According t State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD, the release was discovered on August 17, 2018 and released approximately 500 bbls of produced water due to a valve malfunction, causing tanks to overflow onto the lined berm. Approximately 500 bbls of fluids were recovered.
- **1RP-5273:** According to the State of New Mexico C-141 Initial Report submitted by Permian Water Solutions, LLC, the release was discovered November 2<sup>nd</sup>, 2018 and released approximately 20 bbls of crude oil due to an oil skim tank overflowing onto the berm. Approximately 16 bbls of fluids were recovered.

### Site Assessments

Tetra Tech conducted site assessment activities from May 7<sup>th</sup>, 2019, to January 13, 2020, and the details of these activities are thoroughly described in the approved Work Plan (*Revised Work Plan for Permian Water Solutions, LLC., Kaiser State SWD* dated January 27, 2020) included in **Appendix B**. From the dates of May 7<sup>th</sup> through the 14<sup>th</sup>, 2019, Tetra Tech installed a total of thirty-two (32) sample points using a combination of a truck-mounted air rotary rig, and a stainless-steel hand auger. At this time, vertical delineation for total BTEX and total TPH was not achieved for the sample points installed within the bermed areas, due to the presence of storage tanks and utilities on the site. Additionally, at the request of NMSLO, the tanks observed on the western berm were removed and Tetra Tech returned to the site on January 13, 2020, and installed 2 more bore holes in the areas of the previous location of the tanks.



The proposed work following the sampling activities included the excavation of 13 different areas corresponding to the sample points (SP-1 through SP-10, SP-17 through SP-21, SP-23 through SP-30, SP-34, SP-36, SP-37, and SP-38) and proposed depths ranging from 0.5-1 ft bgs, to 15 ft bgs. The proposed excavation areas and depths are depicted in **Figure 4** of the **Revised Work Plan** included in **Appendix B**.

#### **Site Characterization**

#### Significant Water Features

According to the NFHL (National Flood Hazard Layer) Flood Data Application and the USGS (United States Geological Survey) National Water Information System Mapper, there were no watercourses, lakebeds, sinkholes, playa lakes, springs, wetlands, subsurfaces mines, private domestic water wells, or floodplains located within the specified distances. Additionally, the site is located in a low karst potential area. The NFHL Map and USGS Mapper are shown in **Appendix B** of the **Revised Work Plan**.

#### Significant Boundaries

According to Google Earth US Government City Boundaries and US School Districts, the lateral extents of the release were not within a incorporated municipal boundaries, defined municipal fresh water well field, or a school district. Additionally, there were no occupied permanent residences, schools, hospitals, institution, or churches located within the specified distances of the lateral extents of the release.

#### Groundwater Review

Groundwater research was completed for the site through the USGS (United States Geological Survey) National Water Information System and New Mexico Office of the State Engineer (NMOSE) Water Rights Reporting System. Groundwater research conducted through these two resources, show the closest water well approximately ½ mile south of the site, and has a reported depth to groundwater fo 101 feet below surface. The groundwater information is shown in **Appendix B** of the **Revised Work Plan**.

#### Monitoring Well

A monitoring well was installed near the western end fo the pad on August 19, 2021, as part of the monitoring and abatement program requirements mandated by the New Mexico State Land Office (NMSLO). The total depth (TD) of the well was 87.5 ft bgs, and the depth to watertable (DTW) was reported at 71.5 ft bgs. Per the request of the NMSLO, and the New Mexico Oil Conservation Division (NMOCD), a water sample was collected from the well on August 27, 2021, and it was submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA method 8021B, and chloride by EPA method 300.0. Copies of laboratory Copies of laboratory analysis and chain-of-custody documentation are included in **Appendix D**. The water sample collected (MW-1) did not indicated any concentrations of BTEX and TPH, however a chloride concentration of 3,3570 mg/L, and total dissolved solids of 9,590 mg/L were indicated.



# Regulatory

A risk-based evaluation was performed for the site following the NMOCD's Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene and for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene) was determined to be nondetect according to the NMSLO's requirements. Based upon the site characterization, the proposed RRAL beyond the top 4.0' of soil, for TPH is 1,000 mg/kg (GRO + DRO + ORO). Additionally, based on the site characterization as well as the NMSLO requirements, the proposed RRAL beyond the top 4.0' of soil, for chlorides is 7,000 mg/kg.

#### Remediation Activities

Excavation began on site in August 2020, as Permian Water Solutions and Tetra Tech proceeded with the proposed excavation shown in **Figure 4** of the **Revised Work Plan** included in **Appendix B**. The original Contract Substantial Completion Date of November 17, 2020 was not met due to increasing complexity of mobility and excavation, and increasing volume of material to be removed, and a Revised Contract Substantial Completion Date was set for July 12, 2021; a completion date that was also missed due to increasing complexity of project and volume of material that needed to be removed.

Contract SW-330 was then submitted as a two-phase approach to the remediation activities to divide the affected areas in two sections (eastern and western) to facilitate mobility, accessibility, and overall safety of project. The areas included in phase I and phase II are depicted in **Figure 4**. Additionally, bi-weekly meetings were established with representatives from the OCD, NMSLO, Permian Water Solutions, and Tetra Tech, to discuss the state of the project and its progress. The copies of the progress meetings notes are included in **Appendix C**.

### <u>Phase I</u>

Tetra Tech conducted confirmation sampling activities starting October 25, 2021, as part of the Kaiser State SWD #9 Phase I completion. From October 25 through December 12, 2021, a total of 124 five-point composite samples were collected for the completion of Phase I including 91 bottom hole samples (BH-1 through BH-91), 33 sidewall samples (SW-1 through SW-33). Additionally, three discrete samples (DS-1, DS-2, and DS-3) were collected for areas showing visual evidence of staining. The selected soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in **Appendix D**. The results of the sampling are summarized in **Table 1**, sample locations are shown on **Figure 5**.

Referring to **Table 1**, the areas for all the samples collected (BH-1 through BH-91, and SW-1 through SW-33) indicated total BTEX, TPH, and chloride concentrations below RRALs with the exception of the area for sample (SW-8) which indicated a chloride concentration of 9,820 mg/kg, exceeding the maximum of 7,000 mg/kg requested by the NMSLO for chlorides.



However, based on the NMOCD's remediation standard maximum of 10,000 mg/kg for chlorides, the NMSLO approved leaving the area in place. The areas for the three discrete samples collected (DS-1, DS-2, and DS-3) indicated chloride concentrations above RRALs at 1,310 mg/kg at 2 ft bgs, 7,010 mg/kg at 3 ft bgs, and 7,820 mg/kg at 2 ft bgs, respectively. Additionally, the areas of samples (DS-2, and DS-3) indicated total TPH concentrations above RRALs with levels at 1,290 mg/kg, and 1,980 mg/kg, respectively.

The areas for samples (SW-8, DS-1, DS-2, DS-3) were planned to be addressed via a remediation plan extension approved and denoted as Kaiser State SWD #9 Phase 1.5. Following remediation activities, Tetra Tech conducted confirmation sampling by collecting five-point composite bottom hole samples, and five-point composite sidewall samples every 500 square feet within the remediation. A total of 22 bottom hole samples (BH-92 through BH-113), and 4 five-point composite sidewall samples (SW-34 through SW-37) were collected beginning May 6, 2022. Sample locations for the excavation areas corresponding to Phase 1.5 are shown in **Figure 5**. Referring to **Table 1**, all of the areas for the samples collected indicated total BTEX, TPH, and chloride concentrations below RRALs, except for the area for sample (BH-103), that exceeded the limit requested by SLO with an indicated concentration of 7,750 mg/kg at 5 ft bgs.

#### Phase II

Tetra Tech conducted confirmation sampling activities from July 6, 2022 through December 14, 2022, as part of the Kaiser State SWD #9 Phase II completion. A total of 145 five-point composite samples were collected in this time: 99 bottom hole samples (BH-114 through BH-212), and 46 sidewall samples (SW-38 through SW-83). Additionally, the selected soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in **Appendix D**. The results of the sampling are summarized in **Table 1**, sample locations are shown on **Figure 6A** and **6B**.

Referring to **Table 1**, the areas for all the bottom hole samples (BH-114 through BH-212) indicated concentrations of total BTEX, total TPH, and chloride below the RRALs. All the areas for sidewall samples (SW-38 through SW-83) indicated concentrations of total BTEX, total TPH, and chloride below the RRALs with the exception of samples (SW-45, SW-46, SW-53, SW-54, SW-56, SW-58, SW-60, SW-68, SW-69, SW-70, SW-71, SW-72, SW-75, SW-76, SW-77, SW-78, SW-79, and SW-83).

The following areas indicated constituents above the criteria, however they were removed from site as part of the expansion of the excavation and do not represent areas of the final surfaces of the excavation. The area corresponding to sample (SW-45) indicated an elevated total TPH concentration of 1,110 mg/kg at a depth of 4.5-8 ft bgs. The area for sample (SW-54) indicated an elevated chloride concentration of 717 mg/kg at 0-4.5 ft bgs. The area corresponding to sample (SW-58) indicated an elevated total TPH concentration of 8,970 mg/kg at 6-8 ft bgs. The area corresponding to sample (SW-78) indicated an elevated chloride concentration of 15,800 mg/kg at 4-10 ft bgs.



The following are the areas where one or more of the constituents was above the criteria and variance from RRALs were requested mostly for safety and conservation reasons:

- Sample (SW-46): This area indicated a chloride concentration of 995 mg/kg at 0-5 ft bgs, the variance request was approved on October 12, 2022. The variance was requested due to the proximity of the excavation to pasture off-lease to the north, and on the basis of the additional horizontal delineation sample (H-1) indicating a chloride concentration of 72.0 mg/kg at depth from surface to 2 ft bgs.
- Samples (SW-53, SW-56, SW-68, and SW-77): These areas indicated chloride concentrations of 2,180 mg/kg, 1,120 mg/kg, 2,210 mg/kg, and 3,710 mg/kg, respectively; the variance request was approved on October 12, 2022. The variance was requested due to the proximity of the excavation to property off-lease to the west, and on the basis of the additional horizontal delineation samples (H-2 through H-6) indicated chloride concentrations ranging from 17.0 mg/kg to 57.3 mg/kg at depths from surface to 2 ft bgs.
- Samples (SW-60, SW-69, SW-70, and SW-71): The areas for samples (SW-60, SW-69, and SW-71) indicated chloride concentrations of 2,390 mg/kg, 6,380 mg/kg, and 1,460 mg/kg, respectively. The areas of samples (SW-69, and SW-70) indicated total TPH concentrations of 1,890 mg/kg, and 1,770 mg/kg, respectively. The variance request was approved on October 12, 2022. The variance was requested to prevent the damaging of the monitor well that could have occurred as part of the extension of the excavation into the omnidirectional 15' exclusion zone previously established for the monitor well.
- Sample (SW-72): This area indicated a total TPH concentration of 436 mg/kg. The
  variance request was approved on November 28, 2022. The variance was requested
  based on the criteria-complying sample previously collected at SW-72 at 0-8 ft bgs,
  and the additional horizontal delineation samples (H-8 and H-9) indicating chloride
  concentrations of 89.9 mg/kg and 672 mg/kg, for the areas corresponding to the
  extension of SW-72.
- Samples (SW-75, SW-76, SW-79, and SW-83): These areas indicated chloride concentrations of 931 mg/kg, 613 mg/kg, and 1,070 mg/kg, respectively. The variance request was approved on January 18, 2023. The variance was requested based on the limited impacts of the soil at depth, indicated by the previously collected data for areas involved in the extension of sidewalls SW-76 and SW-79 (SP-15), and SW-75 and SW-83 (SP\_7). The data for sample points (SP-7, SP-15) can be found in Table 1 for the Revised Work Plan included in Appendix B of this report.

The variances were approved by the Oil Conservation Division and the New Mexico State Land Office, and the emails with the requests and approvals are included in **Appendix A.** 



#### **Conclusions**

Following remediation of the areas of impact, Tetra Tech conducted confirmation soil sampling of the area by collecting 5-point composite confirmation bottom hole and sidewall samples to ensure the impacted soil was fully removed. Approximately 48,000 cubic yards of impacted soil was removed and properly disposed of, and the area was backfilled with clean to surface grade material. The analytical results indicated all confirmation samples reported below the RRALs for all constituents. The final reclamation and reseeding of the remediated areas will be deferred until site abandonment. Based on this information, it is recommended that the site and the associated release numbers (NPAC0531137785, 1RP-3512, 1RP-3621, 1RP-4305, 1RP-4525, 1RP-4855, 1RP-4960, 1RP-5139, 1RP-5149, 1RP-5163, and 1RP-5273) receive closure. The final C-141 forms are included in **Appendix A**.

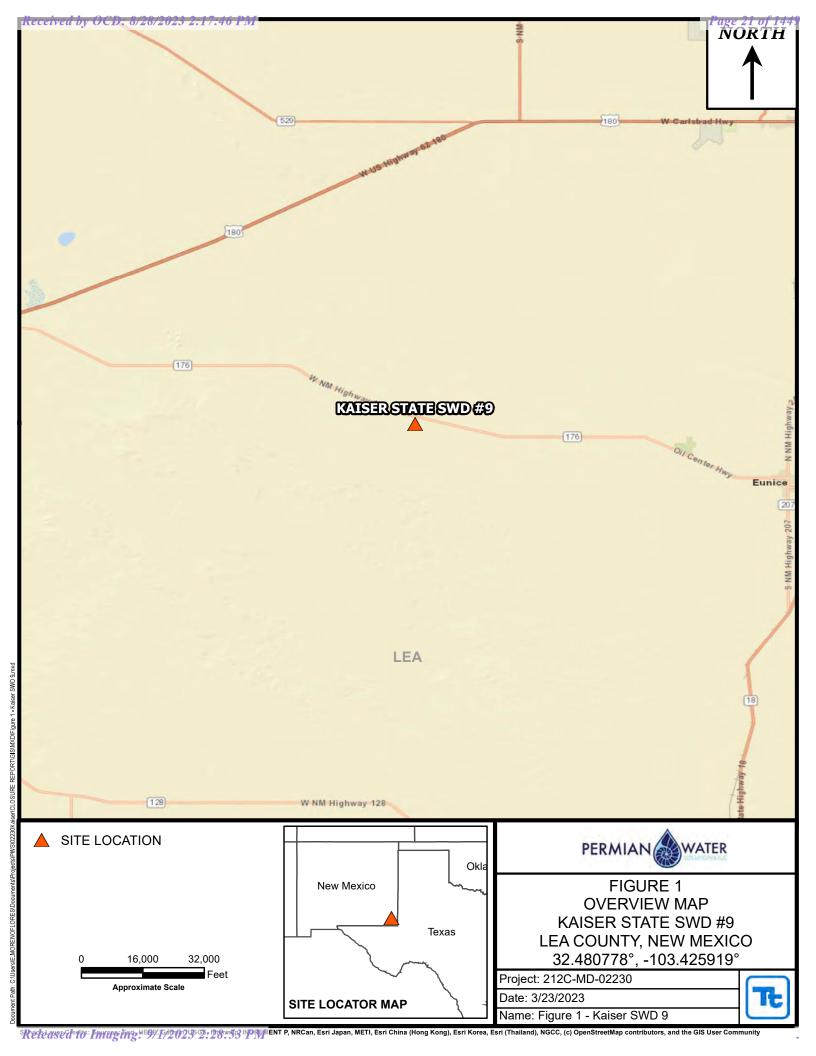
If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

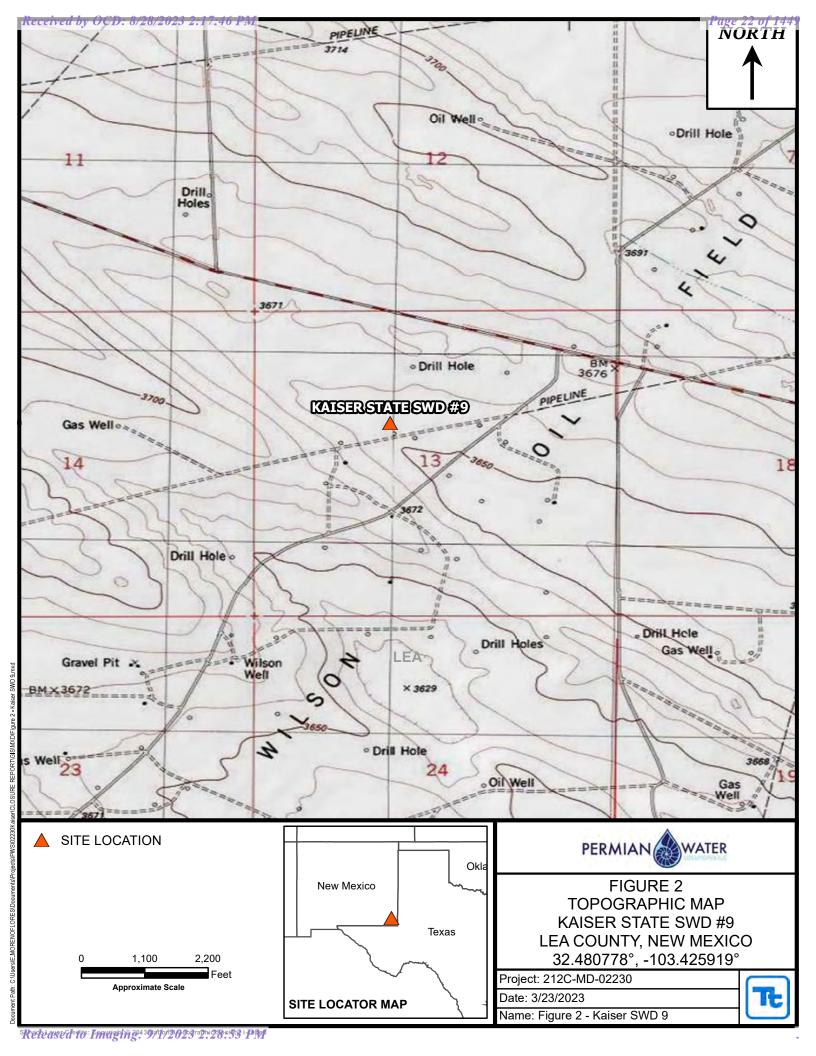
Respectfully submitted, TETRA TECH

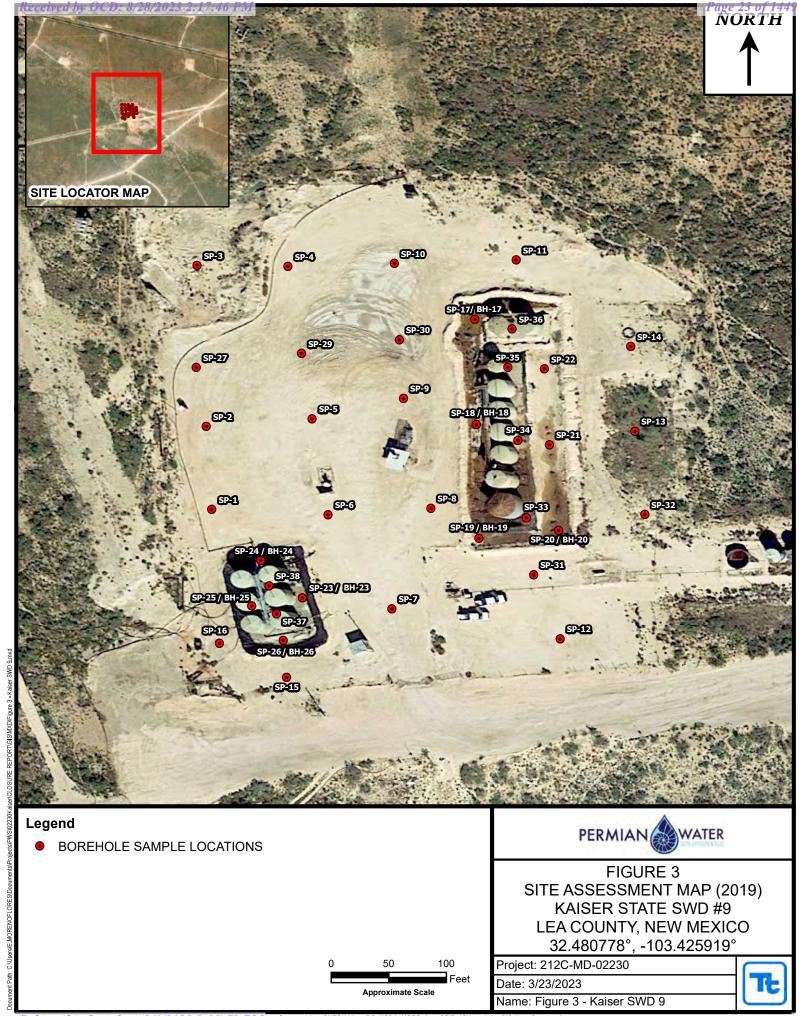
Ezequiel MorenoFlores, Geologist Brittany Long, Project Manager Clair Gonzales, P.G, Senior Project Manager

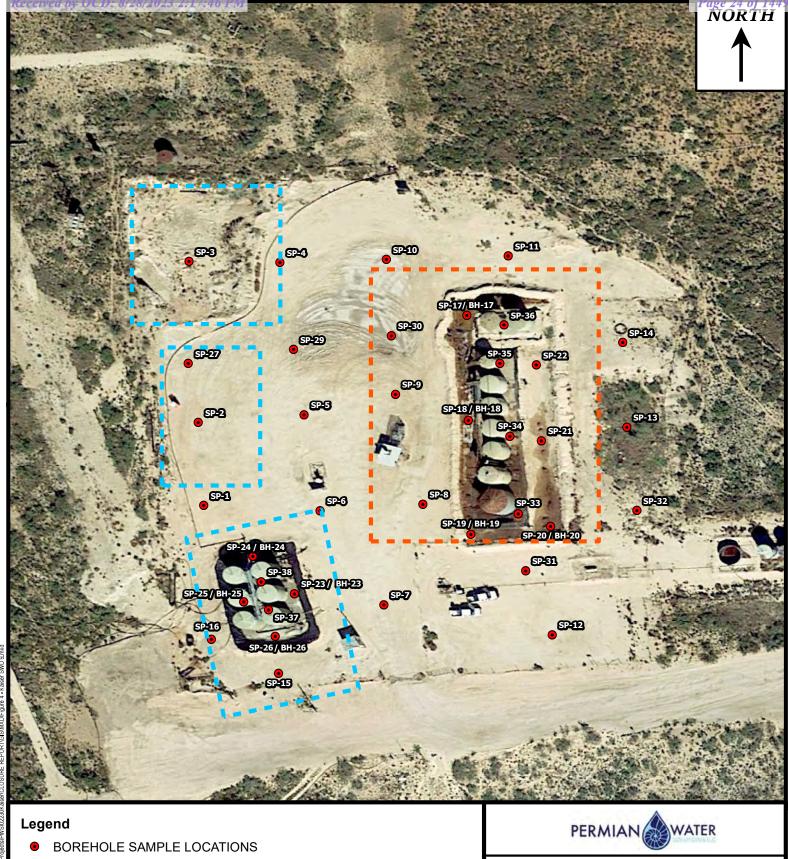


# **Figures**









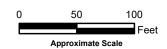
- PHASE I OUTLINE
- PHASE II OUTLINE

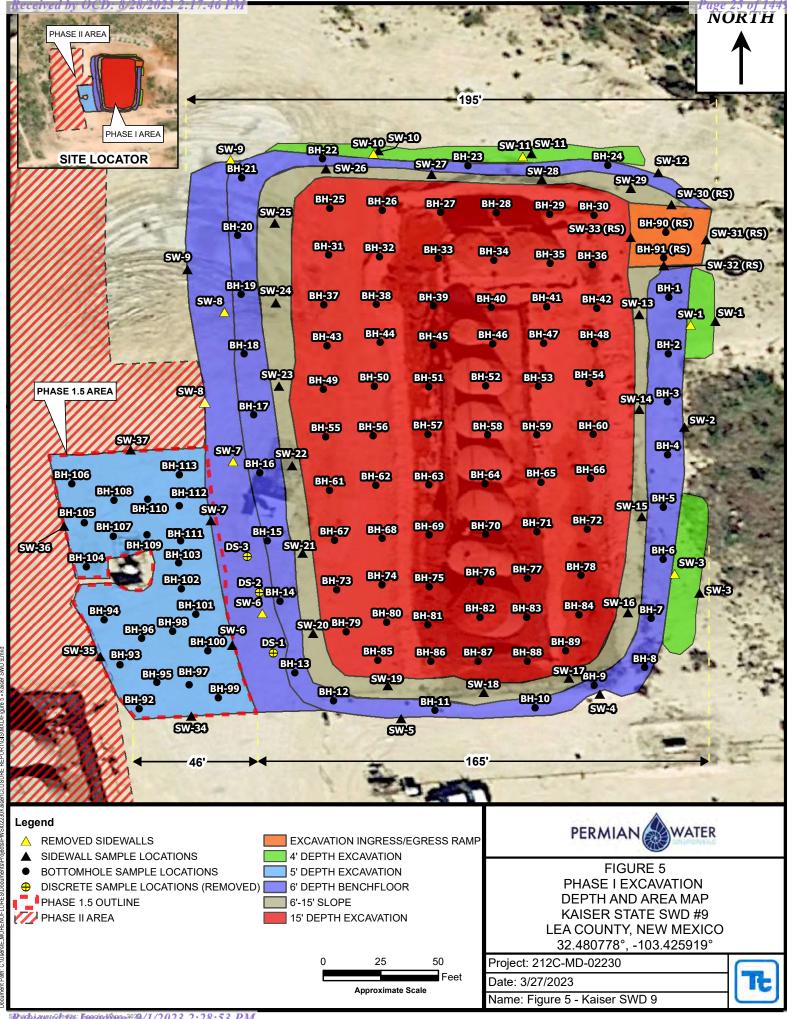
FIGURE 4
PROPOSED PHASE I AND PHASE II
KAISER STATE SWD #9
LEA COUNTY, NEW MEXICO
32.480778°, -103.425919°

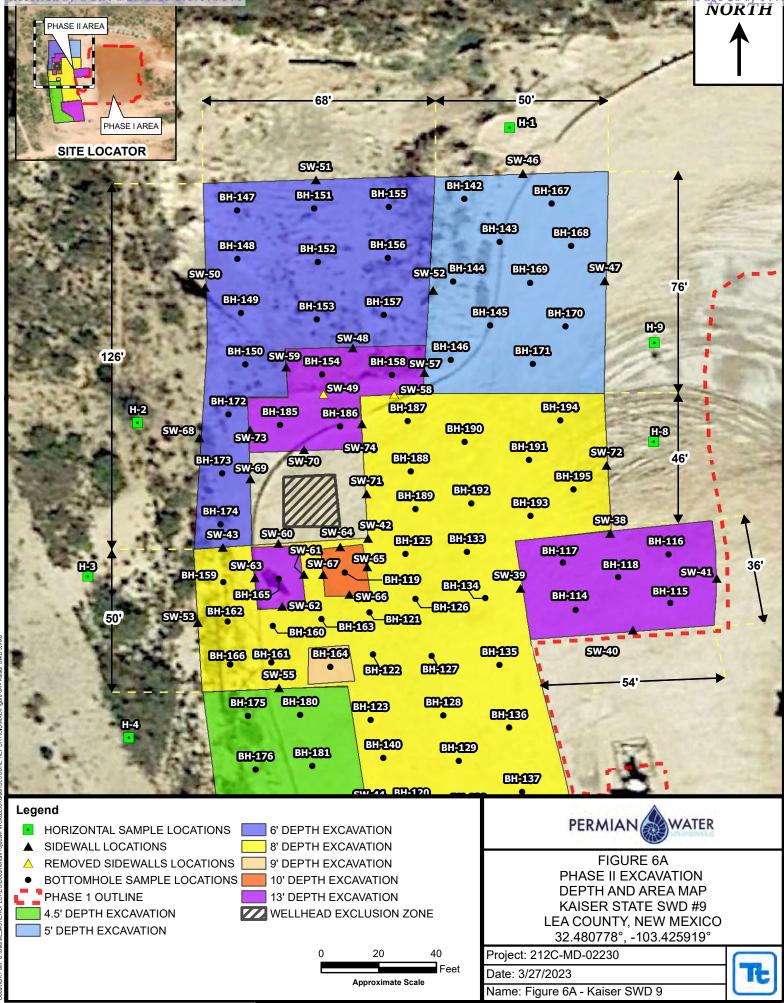
Project: 212C-MD-02230

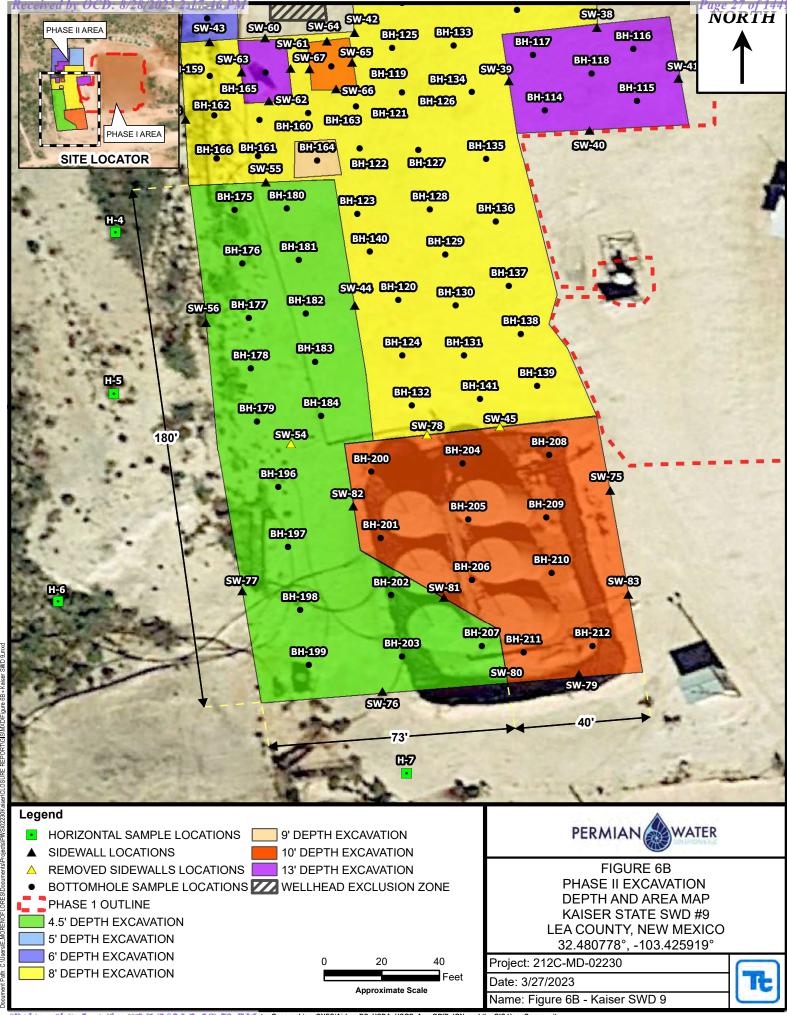
Date: 3/23/2023

Name: Figure 4 - Kaiser SWD 9











# **Tables**

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

BH-1			BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
BH-2         102772021         6         X         -         449.9         449.9         449.9         40.0200         40.0200         40.00200         40.00399         40.00399         235           BH-3         102770021         6         X         -         <50.0	Sample ID	Sample Date				GRO			Total	4		_	•		
BH-3	BH-1	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,680
BH-4	BH-2	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	235
BH-6	BH-3	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	60.7
BH-6	BH-4	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	48.9
BH-7	BH-5	10/27/2021	6	Х	-	<49.8	51.5	<49.8	51.5	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	123
BH-8	BH-6	10/27/2021	6	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	534
BH-9         10/27/2021         6         X         .         <49.9	BH-7	10/27/2021	6	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	546
BH-10         10/27/2021         6         X         -         <49.9	BH-8	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,990
BH-11 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <0.00199 <0.00199 <0.00199 <0.00199 <0.00398 <0.00398 1,330 BH-12 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.0020 <0.00200 <0.00200 <0.00200 <0.00400 <0.00400 1,170 BH-13 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.0020 <0.00200 <0.00200 <0.00200 <0.00400 <0.00400 1,170 BH-13 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.00299 <0.00199 <0.00199 <0.00199 <0.00199 <0.00398 <0.00398 1,370 BH-14 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <0.00290 <0.00200 <0.00200 <0.00200 <0.00200 <0.00398 <0.00398 1,370 BH-15 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <0.00290 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00399 <0.00399 4,450 BH-15 10/27/2021 6 X - <49.8 <49.8 <49.8 <49.8 <49.8 <0.00202 <0.00202 <0.00202 <0.00202 <0.00399 <0.00399 <0.00399 4,220 BH-15 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.00200 <0.00200 <0.00200 <0.00200 <0.00202 <0.00403 <0.00403 3,560 BH-17 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <49.9 <0.00201 <0.00201 <0.00202 <0.00202 <0.00403 <0.00398 <0.00398 3,350 BH-18 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.00201 <0.00201 <0.00201 <0.00201 <0.00202 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00402 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403 <0.00403	BH-9	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,980
BH-12 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.00200 <0.00200 <0.00200 <0.00400 <0.00400 <0.00400 1.170 BH-13 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <49.9 <0.00199 <0.00199 <0.00199 <0.00199 <0.00199 <0.00398 <0.00398 <1.370 BH-14 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <49.9 <0.00199 <0.00200 <0.00200 <0.00200 <0.00399 <0.00399 <0.00399 <1.370 BH-15 10/27/2021 6 X - <49.9 <49.9 <49.9 <49.9 <0.00200 <0.00200 <0.00200 <0.00200 <0.00399 <0.00399 <0.00399 <4.220 BH-16 10/27/2021 6 X - <49.8 <49.8 <49.8 <49.8 <49.8 <0.00202 <0.00202 <0.00202 <0.00202 <0.00202 <0.00403 <0.00399 <0.00399 <4.220 BH-17 10/27/2021 6 X - <49.8 <49.8 <49.9 <49.9 <49.9 <0.00199 <0.00199 <0.00199 <0.00199 <0.00199 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <0.00399 <	BH-10	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,500
BH-13         10/27/2021         6         X         -         <49.9	BH-11	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,330
BH-14         10/27/2021         6         X         -         <49.9	BH-12	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,170
BH-15         10/27/2021         6         X         -         <50.0	BH-13	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,370
BH-16         10/27/2021         6         X         -         <49.8	BH-14	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	4,450
BH-17         10/27/2021         6         X         -         <49.9	BH-15	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	4,220
BH-18         10/27/2021         6         X         -         <49.9	BH-16	10/27/2021	6	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	3,560
BH-19 10/27/2021 6 X - 49.9 49.9 49.9 49.9 49.8 49.8 0.00200 0.00200 0.00200 0.00200 0.00400	BH-17	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,350
BH-20         10/27/2021         6         X         -         <49.8	BH-18	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,390
BH-21         10/27/2021         6         X         -         <49.9	BH-19	10/27/2021	6	Х	_	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,060
BH-22         10/27/2021         6         X         -         <49.9	BH-20	10/27/2021	6	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	449
BH-23         10/27/2021         6         X         -         <50.0	BH-21	10/27/2021	6	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	169
BH-24         10/27/2021         6         X         -         <50.0	BH-22	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,220
BH-25         10/27/2021         6         X         -         <49.8	BH-23	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	141
BH-26         10/27/2021         6         X         -         <50.0	BH-24	10/27/2021	6	Х	_	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	107
BH-27         10/27/2021         15         X         -         <49.8	BH-25	10/27/2021	6	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	447
BH-28         10/27/2021         15         X         -         <50.0	BH-26	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,450
BH-29         10/27/2021         15         X         -         <49.9	BH-27	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	372
BH-30         10/27/2021         15         X         -         <50.0	BH-28	10/27/2021	15	Х		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	290
BH-31 10/27/2021 15 X - <49.9 <49.9 <49.9 <49.9 <0.00199 <0.00199 <0.00199 <0.00398 <0.00398 689	BH-29	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	139
	BH-30	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	156
BH-32   10/27/2021   15   X   -   <49.9   <49.9   <49.9   <0.00200   <0.00200   <0.00200   <0.00400   <0.00400   833	BH-31	10/27/2021	15	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	689
	BH-32	10/27/2021	15	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	833

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

		BEB Sample	Soil	Status		TPH (	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-33	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	504
BH-34	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	140
BH-35	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	333
BH-36	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	286
BH-37	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	4,260
BH-38	10/27/2021	15	Х	-	<49.9	87.2	<49.9	87.2	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,030
BH-39	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	3,300
BH-40	10/27/2021	15	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,190
BH-41	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	0.00222	<0.00399	<0.00399	702
BH-42	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	461
BH-43	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	2,440
BH-44	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	465
BH-45	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	284
BH-46	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,560
BH-47	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	122
BH-48	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,050
BH-49	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	472
BH-50	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	0.0214	0.0176	0.00625	0.0581	0.103	1,330
BH-51	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,750
BH-52	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,410
BH-53	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	960
BH-54	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	508
BH-55	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,680
BH-56	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	2,450
BH-57	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,190
BH-58	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	4,190
BH-59	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,760
BH-60	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,150
BH-61	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,660
BH-62	10/27/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,480
BH-63	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,000
BH-64	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,760

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

		BEB Sample	Soil	Status		TPH (	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-65	10/27/2021	15	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	823
BH-66	10/27/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	522
BH-67	10/27/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	854
BH-68	10/28/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,930
BH-69	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	632
BH-70	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	921
BH-71	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	0.00378	<0.00401	<0.00401	452
BH-72	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	692
BH-73	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	2,790
BH-74	10/28/2021	15	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,620
BH-75	10/28/2021	15	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	982
BH-76	10/28/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,190
BH-77	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,430
BH-78	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	426
BH-79	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	561
BH-80	10/28/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	609
BH-81	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	871
BH-82	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	309
BH-83	10/28/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	0.00427	<0.00400	0.00427	775
BH-84	10/28/2021	15	Х	-	<50.0	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	710
BH-85	10/28/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	656
BH-86	10/28/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,090
BH-87	10/28/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,500
BH-88	10/28/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,390
BH-89	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	2,630
BH-90	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	107
BH-91	10/28/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,100
BH-92	5/6/2022	5	Х	-	<50.0	346	176	522	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	4,070
BH-93	5/6/2022	5	Х	-	<49.9	62.5	82.6	145	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	976
BH-94	5/6/2022	5	Х	-	<50.0	247	165	412	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,770
BH-95	5/6/2022	5	Х	-	<50.0	113	131	244	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,780
BH-96	5/6/2022	5	Х	-	<49.9	55.3	111	166	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,350

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

		BEB Sample	Soil	Status		TPH (	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-97	5/6/2022	5	Х	-	<49.9	97.6	140	238	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	5,290
BH-98	5/6/2022	5	Х	-	<50.0	<50.0	102	102	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,090
BH-99	5/6/2022	5	Х	-	<50.0	<50.0	73.6	73.6	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,860
BH-100	5/6/2022	5	X	-	<49.9	<49.9	56.8	56.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	5,050
BH-101	5/6/2022	5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,460
BH-102	5/6/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,550
BH-103	5/6/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	7,750
BH-104	5/6/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,010
BH-105	5/6/2022	5	Х	-	<49.9	54.4	122	176	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	954
BH-106*	7/6/2022	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	21.0
BH-107	5/6/2022	5	Х	-	<50.0	169	169	338	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,530
BH-108*	7/6/2022	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	71.9
BH-109	5/6/2022	5	Х	-	<49.9	<49.9	86.4	86.4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	946
BH-110*	8/18/2022	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	388
BH-111	5/6/2022	5	Х	-	<49.9	<49.9	64.3	64.3	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	3,640
BH-112	5/6/2022	5	Х	-	362	<50.0	<50.0	362	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	374
BH-113	5/6/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	942
BH-114	7/6/2022	10	Х	-	<50.0	99.5	<50.0	99.5	<0.0202	<0.0202	<0.0202	<0.0404	<0.0404	266
BH-115	7/6/2022	10	Х	-	<49.9	86.1	<49.9	86.1	0.0439	<0.0201	<0.0201	<0.0402	0.0439	47.4
BH-116	7/6/2022	10	Х	-	<49.9	196	<49.9	196	0.0597	<0.0202	<0.0202	<0.0403	0.0597	76.8
BH-117	7/6/2022	10	Х	-	<50.0	644	98.9	743	0.0553	<0.0199	<0.0199	<0.0398	0.0553	114
BH-118*	7/26/2022	13	Х	-	<49.9	247	<49.9	247	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	263
BH-119*	7/26/2022	10	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	382
BH-120*	8/18/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	578
BH-121	7/6/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	5,280
BH-122	7/6/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,280
BH-123	7/6/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	201
BH-124*	8/18/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	298
BH-125	7/6/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,800
BH-126	7/7/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	4,170
BH-127	7/7/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	472
BH-128	7/7/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	582

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

		BEB Sample	Soil	Status		TPH (	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-129	7/7/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	926
BH-130	7/7/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	675
BH-131	7/7/2022	8	Х	-	<49.9	63.5	<49.9	63.5	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	85.5
BH-132*	8/18/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	325
BH-133	7/6/2022	8	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	634
BH-134	7/7/2022	8	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,300
BH-135	7/7/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	722
BH-136	7/7/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	490
BH-137	7/7/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	167
BH-138	7/7/2022	8	Х	-	<50.0	55.9	<50.0	55.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	512
BH-139	7/7/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,390
BH-140	7/6/2022	8	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	970
BH-141	7/7/2022	8	Х	-	<49.9	61.0	<49.9	61.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	2,410
BH-142	7/12/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	167
BH-143	7/12/2022	5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	984
BH-144	7/12/2022	5	Х	-	<50.0	226	<50.0	226	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	501
BH-145	7/12/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	903
BH-146	7/12/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	751
BH-147	7/12/2022	6	Х	-	<50.0	478	59.0	537	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	22.7
BH-148	7/12/2022	6	Х	-	<49.9	138	52.3	190	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	6.69
BH-149	7/7/2022	6	Х	-	<49.9	64.6	<49.9	64.6	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	7.07
BH-150	7/6/2022	6	Х	-	<50.0	83.6	<50.0	83.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	10.9
BH-151	7/7/2022	6	Х	-	<50.0	126	<50.0	126	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	21.9
BH-152	7/12/2022	6	Х	-	<50.0	74.9	<50.0	74.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	16.0
BH-153	7/12/2022	6	Х	-	<49.9	117	<49.9	117	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	22.7
BH-154*	8/18/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	88.9
BH-155	7/12/2022	6	Х	-	<50.0	111	<50.0	111	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	20.8
BH-156	7/12/2022	6	Х	-	<50.0	94.0	<50.0	94.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	16.3
BH-157	7/12/2022	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	34.4
BH-158*	7/26/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	99.8
BH-159*	8/18/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,010
BH-160	7/26/2022	8	Х	-	<50.0	133	83.6	217	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	563

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

Sample ID	Sample Date	BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
•		Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-161	7/26/2022	8	X	-	<49.9	147	71.4	218	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	515
BH-162*	8/18/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	892
BH-163	7/26/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	107
BH-164*	8/18/2022	9	Х	-	<49.9	92.4	<49.9	92.4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,680
BH-165	8/18/2022	8	X	-	<49.9	64.6	<49.9	64.6	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	613
BH-166	8/18/2022	8	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	233
BH-167	8/18/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	404
BH-168	8/18/2022	5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	354
BH-169	8/18/2022	5	Х	-	<50.0	80.5	<50.0	80.5	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	382
BH-170	8/18/2022	5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	826
BH-171	8/18/2022	5	Х	-	<50.0	75.0	<50.0	75.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	180
BH-172	8/18/2022	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	253
BH-173	8/18/2022	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	329
BH-174	8/18/2022	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00196	<0.00196	<0.00196	<0.00393	<0.00393	131
BH-175	8/18/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	374
BH-176	8/18/2022	4.5	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	554
BH-177	8/18/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,360
BH-178	8/18/2022	4.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	632
BH-179	8/18/2022	4.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,090
BH-180	8/18/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,540
BH-181	8/18/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	1,560

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

		BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-182	8/18/2022	4.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	806
BH-183	8/18/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,050
BH-184	8/18/2022	4.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	898
BH-185*	9/19/2022	13	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	591
BH-186*	9/19/2022	13	Х	-	<50.0	84.3	<50.0	84.3	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	320
BH-187	8/18/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	816
BH-188	8/18/2022	4.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,360
BH-189	8/18/2022	4.5	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	181
BH-190	8/19/2022	4.5	Х	-	<49.9	234	<49.9	234	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	686
BH-191*	9/19/2022	8	Х	-	<50.0	94.3	<50.0	94.3	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	267
BH-192*	9/19/2022	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	249
BH-193*	9/19/2022	8	Х	-	<50.0	64.0	<50.0	64.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	66.4
BH-194	9/19/2022	8	Х	-	<49.9	817	169	986	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	55.8
BH-195	9/19/2022	8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	34.5
BH-196	9/19/2022	4.5	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,110
BH-197	9/19/2022	4.5	Х	-	<50.0	96.5	<50.0	96.5	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	1,710
BH-198	9/19/2022	4.5	Х	_	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	4,900
BH-199	9/19/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	528
BH-200*	11/7/2022	10	Х	-	<50.0	74.9	<50.0	74.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	2,280
BH-201*	11/7/2022	10	Х	-	<50.0	74.3	<50.0	74.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1300
BH-202	9/19/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,130
BH-203	9/19/2022	4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	330
BH-204*	11/7/2022	10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	2,010
BH-205*	11/7/2022	10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,480
BH-206*	11/7/2022	10	Х	_	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,290
BH-207	9/19/2022	4.5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	4,000
BH-208	11/7/2022	10	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6,190
BH-209	11/7/2022	10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,470
BH-210*	12/14/2022	11	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	699
BH-211	11/7/2022	10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,230
BH-212	11/7/2022	10	Х	-	Α	228	<50.0	228	<0.00199	<0.00199	<0.00199	0.0395	0.0395	2,970
SW-1*	12/23/2021	0-4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	287

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

Sample ID	Sample Date	BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
·	•	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SW-2	10/25/2021	0-6	Х	-	<49.9	74.3	<49.9	74.3	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	43.4
SW-3*	12/23/2021	0-4	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	341
SW-4	10/25/2021	0-6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,060
SW-5	10/25/2021	0-6	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	2,250
SW-6*	12/23/2021	0-4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,800
SW-7*	12/23/2021	0-4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	2,400
SW-8*	12/23/2021	0-4	-	Х	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	9,820
SW-9*	12/23/2021	0-4	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	380
SW-10*	12/23/2021	0-4	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	354
SW-11*	12/23/2021	0-4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	348
SW-12	10/26/2021	10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,080
SW-13	10/26/2021	15	Х	-	<50.0	96.1	<50.0	96.1	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,840
SW-14	10/26/2021	15	Х	-	<49.8	56.3	<49.8	56.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	185
SW-15	10/26/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	209
SW-16	10/26/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,170
SW-17	10/26/2021	15	Х	-	<50.0	55.1	<50.0	55.1	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,270
SW-18	10/26/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	826
SW-19	10/26/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	1,000
SW-20	10/26/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,150
SW-21	10/26/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	5,770
SW-22	10/26/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	9,240
SW-23	10/26/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,070
SW-24	10/26/2021	15	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,240
SW-25	10/26/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	5,920
SW-26	10/26/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	447
SW-27	10/26/2021	15	Х	-	<49.9	<49.9	<49.9	<49.9	0.00206	0.00205	<0.00201	<0.00402	0.00411	9,970

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

Sample ID	Sample Date	BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
-		Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SW-28	10/26/2021	15	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	3,280
SW-29	10/26/2021	15	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	416
SW-30 (Ramp)	10/28/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	169
SW-31 (Ramp)	10/28/2021	4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	109
SW-32 (Ramp)	10/28/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	582
SW-33 (Ramp)	10/28/2021	8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	831
SW-34*	7/6/2022	0-6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	20.4
SW-35*	7/6/2022	0-6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	244
SW-36*	7/6/2022	0-6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	56.8
SW-37*	7/6/2022	0-6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	21.7
SW-38	8/18/2022	4.5-13	Х	-	<49.9	151	<49.9	151	<0.0404	<0.0404	<0.0404	<0.0808	<0.0808	448
SW-39	7/29/2022	0-13	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	111
SW-40	7/29/2022	0-13	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	52.3
SW-41	8/18/2022	6-13	Х	-	<49.9	<49.9	<49.9	<49.9	<0.0403	<0.0403	<0.0403	<0.0806	<0.0806	707
SW-42	8/18/2022	4.5-8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	107
SW-43*	8/18/2022	6-8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	951
SW-44	8/18/2022	4.5-8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	955
SW-45	8/18/2022	4.5-8	-	Х	79.7	1,030	<50.0	1,110	<0.00201	<0.00201	0.0108	0.0460	0.0568	679
SW-46 ★	8/18/2022	0-5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	995
SW-47	8/18/2022	0-5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	558
SW-48	8/18/2022	6-8	Х	-	<50.0	117	<50.0	117	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	70.5
SW-49	8/18/2022	4.5-6	-	Х	<50.0	264	<50.0	264	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	975

Table 1
Permian Water Solutions
Kaiser SWD
Phase I and II Confirmation Sampling
Lea County, New Mexico

			BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID		Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SW-50*		7/26/2022	0-6	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	52.0
SW-51*		7/26/2022	0-6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	201
SW-52		7/12/2022	0-6	Х	-	<49.8	81.4	<49.8	81.4	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	386
SW-53	*	8/18/2022	0-8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,180
SW-54		8/18/2022	0-4.5	-	Х	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	717
SW-55		8/18/2022	4.5-8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00197	<0.00197	<0.00197	<0.00394	<0.00394	1,730
SW-56	*	8/18/2022	0-4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,120
SW-57		8/18/2022	6-8	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	65.5
SW-58		8/18/2022	6-8	-	Х	<49.8	7,350	1,620	8,970	<0.0100	<0.0100	<0.0100	<0.0200	<0.0200	202
SW-59		8/18/2022	6-8	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	40.5
SW-60	*	8/18/2022	0-13	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,390
SW-61		8/18/2022	8-13	Х	-	<50.0	76.1	<50.0	76.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	3,730
SW-62*		9/19/2022	8-13	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	330
SW-63		8/18/2022	8-13	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	561
SW-64		8/18/2022	8-10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	481
SW-65		8/18/2022	8-10	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	765
SW-66		8/18/2022	8-10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	275
SW-67		8/18/2022	8-10	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	215
SW-68	*	8/18/2022	0-6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	2,210
SW-69	*	8/18/2022	0-6	Х	-	<50.0	1,890	<50.0	1,890	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6,380
SW-70	*	8/18/2022	0-4.5	Х	-	<49.8	1,770	<49.8	1,770	<0.0400	<0.0400	<0.0400	<0.0800	<0.0800	352
SW-71	*	8/18/2022	0-4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,460
SW-72*	*	9/19/2022	0-8	Х	-	<49.9	348	87.6	436	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	70.1
SW-73		9/19/2022	6-13	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	394
SW-74		9/19/2022	8-13	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,800
SW-75*	*	12/14/2022	4-10	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,390
SW-76*	*	12/14/2022	0-4.5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	931
SW-77	*	9/20/2022	0-4.5	Х	-	<49.9	81.7	<49.9	81.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,710
SW-78*		11/7/2022	4-10	-	Х	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	15,800
SW-79*	*	12/14/2022	0-4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	613
SW-80		11/7/2022	4.5-10	Х	-	<50.0	263	<50.0	263	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	8,690
SW-81		11/7/2022	4.5-10	X	-	<49.9	192	<49.9	192	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	8,120
							· · · · · · · · · · · · · · · · · · ·								

# Table 1 Permian Water Solutions Kaiser SWD Phase I and II Confirmation Sampling Lea County, New Mexico

Sample ID		Sample Date	BEB Sample	Soil	Status		TPH	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
		Sample Date	Depth (ft)	In-Situ	Removed	GRO	DRO	ORO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SW-82		11/7/2022	4.5-10	Х	-	<49.8	216	<49.8	216	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	9,100
SW-83*	*	12/14/2022	0-4	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,070
DS-1		10/25/2021	2	-	Х	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	1,310
DS-2		10/25/2021	3	-	Х	1290	1,290	1290	1,290	<0.00200	<0.00200	<0.00200	<0.00401	<0.00399	7,010
DS-3		10/25/2021	2	-	Х	<49.9	1,980	<250	1,980	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	7,820
H-1		9/19/2022	0-2	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	72.0
H-2		9/19/2022	0-2	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	20.1
H-3		9/19/2022	0-2	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	57.3
H-4		9/19/2022	0-2	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	27.5
H-5		9/19/2022	0-2	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	17.0
H-6		9/19/2022	0-2	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	23.1
H-7		9/19/2022	0-2	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	26.7
H-8		11/7/2022	5	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	90
H-9		11/7/2022	5	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	672

Exceeds NMOCD RRALs for top 4.0'

<sup>\*</sup> Additional entries for samples were removed from the analysis table per the NMOCD request. However, all laboratory data is included in Appendix C.

<sup>\*</sup> Samples for the areas where a variance to leave the remaining concentrations in place was approved by the NMOCD and NMSLO.



# Photographic Documentation



#### Photo: 1

#### **Description:**

Overview of the surface of the 15'-deep floor of the central portion of the excavation for Phase I.

#### **Orientation:**

Looking southeast.



#### Photo: 2

#### **Description:**

View of the surface of the 15'-deep floor of the central portion of the excavation for Phase I.

#### **Orientation:**

Looking west.



1



#### Photo: 3

#### **Description:**

View of the white flags used to assist with sample distribution on the central portion of the excavation for Phase I.

#### **Orientation:**

Looking south.



#### Photo: 4

#### **Description:**

Overview of surface of the extended excavations corresponding to sample SW-1, as part of the Phase I excavations.

#### **Orientation:**

Looking south.



2



#### Photo: 5

#### **Description:**

View of the surface of the extended excavations corresponding to sample SW-3, as part of the Phase I excavations.

#### **Orientation:**

Looking southeast.



#### Photo: 6

#### **Description:**

View of the southern floor of the excavation as part of Phase 1.5.

#### **Orientation:**

Looking north.



3



#### Photo: 7

#### **Description:**

View of the central portion of the excavation for Phase 1.5.

#### **Orientation:**

Looking west.



### Photo: 8

#### **Description:**

View of the northern portion of the excavation for Phase 1.5, as well as the backfill (red, left) material used for Phase I.

#### **Orientation:**

Looking south.



/



#### Photo: 9

#### **Description:**

View of the excavation area of Phase II observed just West of the Phase 1.5 area.

#### **Orientation:**

Looking north.



#### Photo: 10

#### **Description:**

View of the central portion of Phase II annexed to Phase 1.5.

#### **Orientation:**

Looking northeast.



5



#### Photo: 11

#### **Description:**

View of the excavated area corresponding to sample BH-165, located in the central portion of the Phase II area.

#### **Orientation:**

Looking west.



### Photo: 12

#### **Description:**

View of the southern portion of the Phase II area.

#### **Orientation:**

Looking south.



6



Photo: 13

#### **Description:**

View of the southern portion of the Phase II area, and backfilled areas in the background.

#### **Orientation:**

Looking northwest.



#### Photo: 14

#### **Description:**

View of the southern portion of the Phase II area, the final area to be backfilled.

#### **Orientation:**

Looking north.



7



# Appendix A

C-141 Forms and Variance Approval Emails

# INCIDENT/SPILL DETAILS

INCIDENT ID: nPAC0531137785

No. ON EXCEL "INCIDENTS & SPILLS SEARCH - NMOCD — SEC 13-T21S-R34E LEA COUNTY":

<u>12</u>

CD	<b>Permitting</b>
UU	remuung

- Home
- Searches
- Incidents
- Incident Details

# NPAC0531137785 2005 MINOR A SWS @ 30-025-02538

General	Incident	Information

Site Name:

Well: [30-025-02538] KAISER STATE SWD #009

Facility:

Operator: [220351] P & W RESOURCES LLC

Status: Closure Not Approved
Type: Produced Water Release

District: Hobbs Severity: Minor Surface Owner: County: Lea (25)

Incident Location: F-13-21S-34E 1980 FNL 1980 FWL

Lat/Long: 32.4808578,-103.4256592 NAD83

Directions:

#### Notes

Source of Referral: Industry Rep
Resulted In Fire:
Endangered Public Health:
Fresh Water Contamination:
Action / Escalation: General Information
Will or Has Reached Watercourse:
Property Or Environmental Damage:

_			_	4 1	
Co	nta	ct	De	eta	IIS

Contact Name:

Contact Title:

#### **Event Dates**

Date of Discovery: 09/11/2005 Extension Date: 11/15/2018 Initial C-141 Received:

Characterization Report Received:

Remediation Plan Received:

Closure Report Received:

OCD Notified of Release:

Cancelled Date:

Characterization Report Approved:

Remediation Plan Approved:

Remediation Due:

Closure Report Approved:

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

#### Incidents Materials

Cause	Source	Material		Units				
Cause	Source	material	Unk.	Released	Recovered	Lost	Cinto	
Equipment Failure	Pipeline (Any)	Produced Water		10	9	1	BBL	

#### Incident Events

Date	Detail	
11/07/2005	C-141: "Line broke. Vacuumed up 9 bbls water. 150' of pasture land. Vacuumed up 9 bbls	

#### Orders No Orders Found

#### **Quick Links**

- General Incident Information
- <u>Materials</u>
- Events
- Orders

### **Associated Images**

- Incident Files (0)
- Well Files (38)

#### **New Searches**

- New Facility Search
- New Incident Search ♥
- New Operator Search ♥
- New Pit Search ♥
- New Spill Search
- New Tank Search
- New Well Search ♥

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012 1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220 Page 6

Received by OCD: 8/28/2023 2:17:46 PM tate of New Mexico
Oil Conservation Division

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Incident ID NPAC0531137785

District RP Facility ID Application ID

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

✓ Photographs of the remediated site prior to back must be notified 2 days prior to liner inspection)	kfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
■ Laboratory analyses of final sampling (Note: ap	propriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report an may endanger public health or the environment. The should their operations have failed to adequately inventuman health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface	ue and complete to the best of my knowledge and understand that pursuant to OCD rules d/or file certain release notifications and perform corrective actions for releases which acceptance of a C-141 report by the OCD does not relieve the operator of liability estigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for s and/or regulations. The responsible party acknowledges they must substantially area to the conditions that existed prior to the release or their final land use in cation to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager  Date: 5/5/2>  Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the res remediate contamination that poses a threat to ground party of compliance with any other federal, state, or	sponsible party of liability should their operations have failed to adequately investigate and water, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:
_	

Form C-141

Revised August 8, 2011

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	Release Notification and Corrective Action											
						OPERATOR Initial Report Final Repor						
	ompany P	yote Water	System	ıs, LLC				erations Mar	nager for NM			
Address		Illinois STI	2 950 N	Iidland TX		Telephone No. 432-448-4917						
Facility Nar	ne				ŀ	Facility Type Production Water						
Surface Ow	ner Pyote	Water Sy	stems,L	LC   Mineral O	wner		Pyote	API N	No. 30-025-02538			
				LOCA	TION	OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/S	South Line	Feet from the	East/West Line	County			
Г	13		34	10 ft	N/S	3			LEA COUNTY			
<del>- P</del>	13	25	-	titude 32.4808	355153	4 <b>9.55</b> gitud	e -103 425	630765566				
			Lu			of RELI		050705500				
Type of Rele	ase 20 bk	ols product	tion wa		UKE	Volume of		1s Volume	Recovered 20 bbls			
Source of Re			1011 110	<del></del>			our of Occurrence		d Hour of Discovery 1/14/15			
Was Immedia	ate Notice (		Yes [	] No □ Not Re	quired	If YES, To	Whom?	Jerry Burton	NM OM			
By Whom?	Jerry Bur			<u> </u>		Date and H	Our					
Was a Water			Yes 🖸	No No			lume Impacting th	he Watercourse.				
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	*								
none			•									
Describe Cause of Problem and Remedial Action Taken.*  Vac truck over filled the sumps~/ he failed to suck it out when they are instructed to do on each load. It is posted as well, at the sign in												
ticket area									1			
Describe Are	a Affected	and Cleanup A	Action Tak	ken.* The clean t	up area	or			tation is done. Load lines 3&4			
									an the snow we have had since			
		ry enough to	work on	those lines. DU	JE TO N	AOTHER NA	YTURE we have	had a compar	ny go out several times to do this			
for loads lin I hereby certi	fy that the	information gi	ven above	e is true and compl	lete to th	e best of my	knowledge and ur	nderstand that pu	rsuant to NMOCD rules and			
									eleases which may endanger			
									elieve the operator of liability			
									ter, surface water, human health compliance with any other			
		ws and/or regu			oport do		e the operator of t	esponsionity for	compriance was your			
							OIL CONS	SERVATIO	<u>N DIVISION</u>			
Signature:	1 mitou	nta.										
Signature.	Idamy I	Burton				Innroyad by	Environmental Sp	Cololist A-	7			
Printed Name	e:	our ton			, ,	Approved by	Environmental Sp	ecialist.				
Title: Open	rations N	Manager fo	or NM		A	Approval Dat	e <del>: 1/29/15</del>	Expiratio	n Date: 3/29/15			
E mail Addre	audra	a@pyotew	atersvst	tems.com		Conditions of	Approvale					
		······································				Johannons of	Attached					
Date: 1~23~	-10			: 432~448~49	917	Site sam	ples required.	Deliniate	1RP-3512			
Attach Addi	tional She	ets If Necess	ary				ediate as per l					
						guides.	1	-	294873			
						Submit final C-141 by 3 nTO15029271						
							- /					

	Page 33 of 1449
Incident ID	nTO1502927174
District RP	1RP-3512
Facility ID	
Application ID	

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ckfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
✓ Laboratory analyses of final sampling (Note: a	appropriate ODC District office must be notified 2 days prior to final sampling)
	ppropriate of a first state of the first state of t
Description of remediation activities	
may endanger public health or the environment. The should their operations have failed to adequately involved human health or the environment. In addition, OCE compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface accordance with 19.15.29.13 NMAC including notification.	nd/or file certain release notifications and perform corrective actions for releases which he acceptance of a C-141 report by the OCD does not relieve the operator of liability vestigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for we and/or regulations. The responsible party acknowledges they must substantially be area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager
	Title. Troject Wanager
Signature: Signature:	Date: 5/5/23
email: dmcinturff@dufrane.com	Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re remediate contamination that poses a threat to groun party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible r local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV

## State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

pKJ1512042374 nKJ1512041707

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Francis Dr., Santa Fe, NM 87505  Santa 1	Fe, NM 87	505									
	····	220 200 200	rtion								
Release Notification and Corrective Action  OPERATOR xxx Initial Report											
Name of Company PYOTE WATER SYSTEMS,	1	TOR xxx Initial Report  Final Report  Contact Jerry Burton NM Operations Manager									
LLC Address 400 W. Illinois Ste 900	Talanka	a No. 437 441	2 4017 on 432	.448.5323(Audra)							
Facility Name Kaiser SWD											
Facility Name Kaiser SWD Facility Type SWD- production water DIDPOSAL											
Surface Owner Pyote Water Systems, LLC   Mineral Owner Pyote Water Systems, LLC   API No. 30-025-02538											
Unit Letter   Section   Township   Range   Feet from the   North/South Line   Feet from the   East/West Line   County   Lea COUNTY											
Unit Letter Section Township Range Feet from the 125 ft North	in/South Line	Feet from the	East/West Line E/W	County Lea COUNTY							
Latitude	Longitud	Je									
NATII	RE OF RELE	ASE									
Type of Release; production water		f Release 100BBLS	S Volume	Recovered 100 BBLS							
Source of Release		Hour of Occurrence	e Date and 4/24/15	Hour of Discovery							
Vac truck (unknown due to no camera's) hit load line 3  Was Immediate Notice Given X Yes □ No □ Not Required	4/24/201.	o Whom? <i>Jerry Bi</i>		2:33 um							
By Whom? Unknown driver (575)-390-3836		HOUR; 4/24/2015									
Was a Watercourse Reached?	If YES, V	olume Impacting t	he Watercourse.								
	RECEIVED										
If a Watercourse was Impacted, Describe Fully.*		By OCD District 1 at 11:10 am, Apr 30, 2015									
		sy OCD Distri	ict 1 at 11:10	7 am, Apr 30, 2015							
Describe Cause of Problem and Remedial Action Taken.* unknown	n truck driver	hit load line 3 cau	sed a spill. We ha	d an anonymous driver call us							
at 2:35 am (575)390-3836 in the morning, upon his arrival he noticed been hit. He did not see this happen at the Kaiser	a large amou	nt of water on the	pad at the location	n, than noticed line 3 was had							
been nu. He aid not see this nappen at the Naiser											
Describe Area Affected and Cleanup Action Taken.*											
Area affected was the pad only at the location. Jerry and his pumper k		d damages themsel	ves, remedial wor	k done by L&J services							
(backhoe) 2 vac trucks one from Big Buck Services and one from BT.	Services										
The state of the s			1 11	· · · NR (OCD II I							
I hereby certify that the information given above is true and complete to regulations all operators are required to report and/or file certain release											
public health or the environment. The acceptance of a C-141 report by t	the NMOCD 1	narked as "Final Re	port" does not rel	ieve the operator of liability							
should their operations have failed to adequately investigate and remedi											
or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	does not rene	ve the operator of r	esponsibility for c	omphance with any other							
6 -//2-/		OIL CO	NSERVATION D	IVISION							
Signature: Printed paine: Jerry Burton			1/ 0								
Princed Stallie: Serry Burion	Approved b	y Environmental Sp	pecialist:	Lul fre							
Attle: NM Operations Manager for Pyote Water systems, LLC		-									
jerry@pyotewatersystems.com or audra@pyotewatersystems.com	Approval D	ate: 04/30/2015	Expiration	Date: 07/30/2015							
E-mail Address:	Conditions	of Approval:		American D							
4-26-2015	Site samples	equired. Delineate		Attached							
Date: 4/26/15 Phone:432.448.4917	as per MNO	D guides. Geotag	photographs of	111 5021							

remediation required.

\* Attach Additional Sheets If Necessary

Received by 10CD: 8/28/2023 2:17:46 PM ate of New Mexico
Page 6 Oil Conservation Division

	Page 57 of 1449
Incident ID	nKJ1512041707
District RP	1RP-3621
Facility ID	
Application ID	

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ekfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
✓ Laboratory analyses of final sampling (Note: ap	ppropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report ar may endanger public health or the environment. The should their operations have failed to adequately invhuman health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surfac accordance with 19.15.29.13 NMAC including notif Printed Name:  Dusty McInturff	rue and complete to the best of my knowledge and understand that pursuant to OCD rules and/or file certain release notifications and perform corrective actions for releases which a acceptance of a C-141 report by the OCD does not relieve the operator of liability estigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for we and/or regulations. The responsible party acknowledges they must substantially are area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title:  Project Manager  Date:  Date:
Signature: 5 me fall	
email: dmcinturff@dufrane.com	Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re remediate contamination that poses a threat to ground party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

#### Received by OCD: 8/28/2023 2:17:46 PM

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mex

**RECEIVED** Energy Minerals and Natura By JKeyes at 7:43 am, Jun 09, 2016

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Page 58 of 1449

## **Release Notification and Corrective Action**

						OPERATOR Initial Report  Final						rt	
Name of Company Pyote Water Systems,LLC						Contact Jerry Burton							
Address 400 W Illinois Ste 900 MIDLAND TX 79701						Telephone No. 432-448-4917							
Facility Nan	ne Kai	ser Swd				Facility Typ	e production	on Water					
Surface Own	ner STA	TE		Mineral C	wner	STATE		API N	o. 30-02	25-025	38		
				LOCA	OITA	N OF REI	LEASE						
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/West Line	County			_	
F	13	21s	215 34E						LEA C	OUNT	Γ <b>Υ</b>		
Latitude_32.4808578 Longitude_103.4256592 nad 83													
NATURE OF RELEASE													
Type of Relea			tanks whil	le driver was unloa	ading		Release 1050 BI		Recovered		) bbls		
Source of Rel		duction water					lour of Occurrence	e 5-17-16 Date an	d Hour of Di	scovery	<sub>/</sub> 4 PM	_	
Was Immedia	ite Notice (	iven?	Yes $\Gamma$	No Not Re	eauired	If YES, To		DUDTON via tala	nhana hu driv	.or			
By Whom?	UNKNOWN	DRIVER		. <u> </u>	1	Date and E	Iour 5/17/16 4P	BURTON via tele	priorie by un	/ei		_	
Was a Watero							olume Impacting t					_	
			Yes 🗌	] No		1050 BL							
If a Watercou	rse was Im	pacted, Descr	ibe Fully.*	k		ı							
fire melted	d parts of	the liner,v	vater go	t under the lin	er								
Describe Cau	se of Proble	em and Reme	dial Action	n Taken.*								_	
liahtinina h	it lood to	nko ond hi	irpod 6 (	EOO bbl tapka	logo th	on 2 bblo	broochad oon	tainment call	ad vaa tru	ok ou	t to omntu		
containmer				500 bbl tanks t the fire .	iess tr	ian z bbis	breeched con	itainment. cai	ed vac tru	CK OU	t to empty		
Describe Area	a Δ ffected :	and Cleanun /	Action Tak	ren *								_	
		-											
load side o	containm	ent have c	lean up	crew cleaning	ı up an	nd disposin	g of old tanks	and cat walk	to sundo	٧n			
I hereby certi	fy that the i	nformation gi	ven above	is true and comp	lete to th	ne best of my	knowledge and u	inderstand that no	rsuant to NN	10CD t	rules and	_	
				nd/or file certain r									
public health	or the envi	ronment. The	acceptanc	ce of a C-141 repo	ort by the	e NMOCD m	arked as "Final R	eport" does not re	elieve the ope	erator o	f liability		
				investigate and r									
				tance of a C-141	report d	oes not reliev	e the operator of	responsibility for	compliance	with an	y other		
federal, state,	or local lav	ws and/or regu	ilations.				OIL COM	CEDIATION	I DIVICI	ONI		_	
	_	<i>-</i>					OIL CON	SERVATIO1	N DIVISIO	<u>JN</u>			
Signature:	Jerry	Burton						1	Jan				
Printed Name	: Jerry E	Burton				Approved by Environmental Specialist:							
Title: NM (	Operation	ns Mgr				Approval Date: 06/09/2016 Expiration Date: 08/09/2016			19/2016				
E-mail Addre		-	tersyste	ms com		Conditions of	Annrovel.	· •					
L-man Audre	ss. joiry	<u>∞</u> pyolowa	Coroyoto				l Approvai: les only. Delinea	te and remediate	Attached	_			
Date: 5-18-	2016		Phone:	4324484917		er NMOCD			1RP 4305	5			

\* Attach Additional Sheets If Necessary

nJXK1616127644 pJXK1616127747 Received by OCD: 8/28/2023 2:17:46 PM State of New Mexico
Page 6 Oil Conservation Division

	Page 59 of 1449
Incident ID	nJXK16116127644
District RP	1RP-4305
Facility ID	
Application ID	

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ckfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: a	ppropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report as may endanger public health or the environment. The should their operations have failed to adequately inv human health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface	rue and complete to the best of my knowledge and understand that pursuant to OCD rules and/or file certain release notifications and perform corrective actions for releases which e acceptance of a C-141 report by the OCD does not relieve the operator of liability restigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for was and/or regulations. The responsible party acknowledges they must substantially be area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager  Date: 5/5/23  Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re remediate contamination that poses a threat to groun- party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Chy			e, NM 8/3		ation.				
		RE	Rele	ease Notific	cation			-		_		
Name of Company: Cambrian Management, LTD.						OPERATOR						
				t, LID.				nø				
Facility Na		St. Suite 90	Ю			Facility Typ	No. 432-631-43	98				
racility Na	ine. Kaisei	3WD#9				racinty Typ	e. SWD					
Surface Ow	ner: State			Mineral C	)wner:	State		AP	No. 30-025-	02538		
				LOCA	TIO	N OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North	South Line	Feet from the	East/West L	ine   County			
F	13	218	34E	1980		North	1980	West	Lea			
Latitude 32,4808578 Longitude -103.4256592												
			Li	atitude_32.4808								
m on 1		1 177		NAT	URE	OF REL		1 37.1	D 1	0		
Type of Rele Source of Re							Release: Unknow		me Recovered: and Hour of Di			
Source of Ke	elease; Frac	tanks				Date and F	iour of Occurrent	Date	and riour of Di	scovery	y.	
Was Immedi	ate Notice (		Yes [	No Not Re	equired	If YES, To	Whom?			1		
By Whom?					7	Date and H	lour:					
Was a Water	course Rea		Yes 🛭	No		If YES, Volume Impacting the Watercourse.						
If a Wateres	urca uma Im	pacted, Descr	ibo Eully									
Due to a light leaked result  Describe Are The frac tank	atning strike ing in the re ca Affected as were set	and Cleanup A	attery fluid aknown quarter Action Tal	d was transferred transitive of fluid. The cen.*	he fluid	from the leaf	n removed from	the location.				
I hereby cert	ify that the	information g	iven above	taken in preparati	lete to t	he best of my	knowledge and u	ctive actions fo	r releases which	n may e	endanger	
should their or the enviro	operations l	nave failed to	adequately OCD accep	ce of a C-141 report vinvestigate and rotance of a C-141	emediat	e contaminati	on that pose a the e the operator of	responsibility	water, surface water, surface water, surface	vater, hi with an	uman health	
							OIL CON	SERVATION	ON DIVISI	ON		
Signature:	m;ke	anthor	<del>y</del>			Approved by Environmental Specialist:						
Printed Nam	e: Mike An	thony							·			
Title: Field (	Operations S	Superintenden	t			Approval Da	te: 11/23/20	16 Expira	tion Date: 0	/23/2	2017	
E-mail Addr	ess: mantho	ny@cambrian	nmgmt.cor	n		Conditions of			Attache	d 🛮		
Date: 11/15/	16	Phone	e: 432-631	-4398		Please see	e attached Di	irective	1R	2 452	5	
Attach Add	itional She	ets If Necess	sary								348695 348917	

Received by OCD: 8/28/2023 2:17:46 PM State of New Mexico
Page 6 Oil Conservation Division

# Closure

Closure Report Attachment Checklist: Each of the	ne following items must be included in the closure report.
A scaled site and sampling diagram as described	in 19.15.29.11 NMAC
Dhatagraphs of the remediated site prior to back	fill or photos of the liner integrity if applicable (Note: appropriate OCD District office
must be notified 2 days prior to liner inspection)	in or photos of the finer integrity if applicable (Note: appropriate OCD District office
I be a story and loss of final compling (Notes our	propriate ODC District office must be notified 2 days prior to final sampling)
Laboratory analyses of final sampling (Note: app	propriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and may endanger public health or the environment. The a should their operations have failed to adequately investuman health or the environment. In addition, OCD a compliance with any other federal, state, or local laws restore, reclaim, and re-vegetate the impacted surface accordance with 19.15.29.13 NMAC including notific	the and complete to the best of my knowledge and understand that pursuant to OCD rules allor file certain release notifications and perform corrective actions for releases which acceptance of a C-141 report by the OCD does not relieve the operator of liability stigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for and/or regulations. The responsible party acknowledges they must substantially area to the conditions that existed prior to the release or their final land use in cation to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager  Date: 5/5/23  Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the resprendiate contamination that poses a threat to groundy party of compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal, state, or leavest to the compliance with any other federal with the compliance with the complin	ponsible party of liability should their operations have failed to adequately investigate and water, surface water, human health, or the environment nor does not relieve the responsible ocal laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

pOY1730059151

nOY1730058924

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

						<b>OPERA</b>	TOR		<b>✓</b> Initi	al Report		
Name of Company Cambrian Management, Ltd.							ke Anthony					
Address P.O. Box 272, Midland, TX 79702						Telephone No. (432)631-4398						
Facility Na	me Kaiser	State SWD			]	Facility Ty	pe Salt Wate	r Dispos	al			
Surface Ow	ner State			Mineral C	)wner S	State			API No	0. 30-025-02538		
				LOCA	ATION	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	ne Eas	t/West Line	County		
F	13	218	34E							Lea		
			Latitud	ie 32.4800857	78 Lo	ngitude_	-103.425659	2 NA	D83	L		
				NAT	URE	OF REL	EASE					
Type of Rele	ease Produc	ed Water & Ci	rude Oil			Volume o			THE CONTRACT OF THE CONTRACT O	Recovered		
Course of D	Jane	ou water a or	uuc Oii			50 bbls	Harris of Ossaur		0 bbls	Have a CDinassiani		
Source of Re	Unkno	own				Unknown	Hour of Occur	rence		Hour of Discovery 017, 12:35 PM		
Was Immedi	iate Notice		Yes D	No □ Not R	eauired	If YES, T	o Whom?					
By Whom?	144			1.00		Date and	Hour					
Was a Water	N/A	1 10						41 XV				
was a water	course Rea	PERSONAL CONTRACTOR OF THE PERSON OF THE PER	Yes 🔽	] No		If YES, Volume Impacting the Watercourse.						
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*		RECEIVED						
							Bv Olivi	a Yu	at 4:17	pm, Oct 27, 2017		
		em and Reme										
The cause	e of the re	lease is un	determir	ned and is curr	ently ur	nder inves	tigation. No	remedi	al action h	as been taken at this point.		
Describe Are	ea Affected	and Cleanup	Action Ta	ken.*								
The relea	se was co	onfined to th	ne prima	ry and second	ary ear	then cont	ainment ber	ms surre	ounding the	e SWD battery. The		
					tely 7,2	00 sq. ft.	Remediation	of the i	mpacted a	rea will be conducted in		
accordan	ce with N	MOCD and	NMSLC	guidelines.								
I hereby cert	ify that the	information g	iven abov	e is true and comr	olete to th	ne best of m	v knowledge a	nd unders	tand that pur	suant to NMOCD rules and		
regulations a	all operators	are required t	o report a	nd/or file certain i	release n	otifications	and perform co	orrective a	ctions for re	leases which may endanger		
public health	or the envi	ronment. The	acceptan	ce of a C-141 rep	ort by the	e NMOCD i	narked as "Fin	al Report	does not re	lieve the operator of liability		
										er, surface water, human health compliance with any other		
		ws and/or reg		plance of a C-141	report d	des not tene	ve me operato	or respo	iisioiiity ioi c	compitance with any other		
	7	Jones					OIL CO	ONSER	VATION	DIVISION		
Cionatura	Denu		- 11	A 1 L		914						
Signature: Denise Junes- Regulaton Analyst						Approved by Environmental Specialist:						
Printed Nam	e: Todd R	oberson (a	s agent	of Cambrian M	gmt.)	Approved b		10.400	iist:	-		
Title: Owne	er					Approval D	ate: 10/27	/2017	Expiration	Date:		
		trinityoilfiel	dservice	es.com			of Approval:					
							ched dire	ctive		Attached		
Date: 10/2		ets If Necess		: (575) 631-31	129							
macii Add	monai She	cis II Necess	sal y							<u>-</u>		

1RP-4855

Received by OCD: 8/28/2023 2:17:46 PM tate of New Mexico
Page 6 Oil Conservation Division

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ckfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: a	appropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
Description of remediation activities	
and regulations all operators are required to report at may endanger public health or the environment. The should their operations have failed to adequately inv human health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface	true and complete to the best of my knowledge and understand that pursuant to OCD rules ind/or file certain release notifications and perform corrective actions for releases which he acceptance of a C-141 report by the OCD does not relieve the operator of liability vestigate and remediate contamination that pose a threat to groundwater, surface water, of acceptance of a C-141 report does not relieve the operator of responsibility for was and/or regulations. The responsible party acknowledges they must substantially be area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager  Date: 15/5/23  Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re remediate contamination that poses a threat to ground party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Pilot I Nove	Title

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District III
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Santa Fe, NM 8/505														
Release Notification and Corrective Action														
						OPERATOR  ☑ Initial Report □ I						Final Report		
		ambrian Man				Contact M								
Facility Nan		2, Midland, 7	X 79702					. (432)631-43 Salt Water Di						
		State SVVD		T			урс	Oalt Water Di	эрозаг	T				
Surface Ow	ner State			Mineral C	wner S	State				API	No.	30-025-0	2538	
						OF RI		EASE						
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	F	eet from the	East/V	Vest Lin	e	County		
F	13	21S	34E									Lea		
Latitude 32.48008578 Longitude -103.4256592 NAD83														
				NAT	URE	OF REI								
Type of Relea	ase Produc	ed Water				Volume 20 bbls	6			10 bb	ls	ecovered		
Source of Re	lease Seal o	on pump				Date and Unknow		ır of Occurrenc	e			lour of Dis 3, 10:00 AM		
Was Immedia	ate Notice (		Yes   ✓	No Not Re	equired	If YES,	Го W	/hom?						
By Whom?	N/A					Date and	Hou	ır						
Was a Water							Volu	me Impacting t	the Wate	ercourse				
			Yes 🔽	] No		N/A RECEIVED								
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	k			K	ECEIVE						
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*			By	y Olivia	Yu a	t 9:3	4	am, Fe	eb 0	7, 2018
The seal of	n a pump	o failed. A v	acuum t	ruck was utilize	ed to re	ecover fre	e-st	tanding liquid	d. The	seal w	/as	repaired	during	g initial
response a	activities.													
Describe Are	a Affected	and Cleanup	Action Tal	cen.*										
				ry and second										
				ed approximat										
		se on 10/18 LO guidelin		ee 1RP-4855)	. Reme	ediation o	ııne	e impacted a	irea wi	ii be co	onai	uctea in a	3CCOT	dance with
THING B C	and minor	LO guidoiiii												
				e is true and comp										
				nd/or file certain r ce of a C-141 repo										
should their o	perations h	nave failed to	adequately	investigate and r	emediat	e contamin	ation	that pose a thr	eat to gr	round w	ater,	surface wa	ater, hu	ıman health
		addition, NM( ws and/or reg		otance of a C-141	report d	oes not reli	eve t	the operator of	respons	ibility fo	or co	mpliance v	vith an	y other
C C	, or local la	wo and or reg	diations.			OIL CONSERVATION DIVISION								
Signature:	Doni	in Jan	6								15	4		
						Approved 1	oy Er	nvironmental S	pecialis	t:	٦ (	$\cap$		
Printed Name	e: Denise	Jones			-		_	0/7/0040				<del>\</del>		
Title: Regul	atory Ana	al <u>y</u> st			_	Approval I	Date:	2/7/2018		Expirati	on E	Date:		/
E-mail Addre	ess: djones	s@cambria	nmgmt.c	om		Conditions						Attached		
Date: 2/	6/18	oto If Name		: (432) 620-91	81	see att	ach	ned directi	ive					
Auden Addi	nonai Sne	ets If Necess	sary		ſ	1RP-49	60	nOY.	1803	83 <u>4</u> 01	7			

pOY1803834550

Received by OCD: 8/28/2023 2:17:46 PM tate of New Mexico
Page 6 Oil Conservation Division

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ckfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: a	ppropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
	rue and complete to the best of my knowledge and understand that pursuant to OCD rule
may endanger public health or the environment. The should their operations have failed to adequately invitation health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surfact accordance with 19.15.29.13 NMAC including notification.  Printed Name:	and/or file certain release notifications and perform corrective actions for releases which he acceptance of a C-141 report by the OCD does not relieve the operator of liability restigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for we and/or regulations. The responsible party acknowledges they must substantially be area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title:  Project Manager  Date:  Date:
Signature: Small	
email: dmcinturff@dufrane.com	Telephone:(432) 634-7865
OCD O-1-	
OCD Only	1200
Received by:	Date:
Closure approval by the OCD does not relieve the re- remediate contamination that poses a threat to groun party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate a dwater, surface water, human health, or the environment nor does not relieve the responsitional laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Rel	ease Notifi	catio	on and Co	orrective A	Action	l			
						<b>OPERA</b>	ГOR		☐ Initi	al Report		Final Repor
Name of Company Cambrian Management, Ltd.  Address PO Box 272, Midland TX 79702  Facility Name Kaiser State SWD						Contact Mike Anthony Telephone No . 432-631-4398						
Surface Ow	ner State			Mineral (	Owner	r State			API No	o. 30-025-	02538	
				LOC	ATIC	ON OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the		th/South Line	Feet from the	East/V	Vest Line	County		
F	13	21S	34E							Lea		
			Latitud	1e 32.48085	78	Longitude -1	03.4256592	NAD	83			
						E OF REL		_				
Type of Rele	ease Produc	ed Water		IVA	IUK		Release 150 bb	ls	Volume	Recovered	150 bbl	s
Source of Re							Hour of Occurren			Hour of Di		
						06/20/2018			06/20/20	18 10:00 <i>A</i>	M_	
Was Immedi	ate Notice (		Yes X	No Not Re	equired	If YES, To	Whom?					
By Whom?					•	Date and I	Hour					
Was a Water	course Rea	ched?				If YES, Vo	olume Impacting	the Wate	ercourse.			
			Yes X	No								
If a Waterco	urse was Im	pacted, Descr	ribe Fully.	*								
Describe Car	ise of Probl	em and Reme	dial Actio	n Taken.*								
N:1	. 111 1 1 1	ec:1-	1.									
Nippie on wo	eimead broi	ke off – nipple	e was repia	icea								
Describe Are	a Affected	and Cleanup	Action Ta	ken.*	_							
All water wa be remediate		to the caliche	pad. All	water was picked	l up. T	This was on top	of a previous spi	ll that wa	s already	reported and	l is in the	e process to
be remediate	a.											
T 1 1	.C. 414 41	: C 4:	·1	. :	.1.4. 4.	4114£	.1	1 4	. 1 414	NIN	IOCD	1
				e is true and comp nd/or file certain								
				ce of a C-141 rep								
				y investigate and								
				otance of a C-141	report	t does not reliev	e the operator of	responsi	bility for o	compliance	with any	/ other
rederar, state	, or local la	ws and/or reg	uiations.				OIL CON	ICEDV	ATION	DIVISIO	ON	
							OIL CON	SERV	ATION	DIVISI	<u>JIV</u>	
Signature:						1			$\mathcal{L}\lambda$	+		
Printed Nam	e: Danica I	ones				Approved by	Environmental S	Specialist		· ·		
i imicu Ivalli	c. Demse J	ones					7/04/004					
Title: Regu	latory Anal	yst				Approval Da	7/31/201	<b>8</b>	Expiration	Date:		
E-mail Addr	ess: diones	@cambrianm	gmt.com			Conditions of	f Approval:				/	
/ Iddi	-35. <u>ajoitos</u>	,,					tached dire	ctive	7	Attached	ı L	
Date: 06/21/	2018	Phone:	:									
						1RP-5139	9	pCH <sup>2</sup>	182123	9860		
eleased to In	naging: 9	/1/2023 2:28	8:53 PM			nCH1821	239639					

Respired by 10CD: 8/28/2023 2:17:46 PM atte of New Mexico
Page 6 Oil Conservation Division

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	d in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	kfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: ap	opropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
	rue and complete to the best of my knowledge and understand that pursuant to OCD rules
may endanger public health or the environment. The should their operations have failed to adequately involument human health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface	ad/or file certain release notifications and perform corrective actions for releases which acceptance of a C-141 report by the OCD does not relieve the operator of liability estigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for and/or regulations. The responsible party acknowledges they must substantially are area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager
Signature: Signature:	Date: 5/5/23
email:dmcinturff@dufrane.com	Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re- remediate contamination that poses a threat to ground party of compliance with any other federal, state, or	sponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

Received by OCD: 8/28/2023 2:17:46 PM
District 1
1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico **Energy Minerals and Natural Resources**

Form C-141 Revised April 3, 2017 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

			Rel	ease Notific	eation	and Co	rrective A	ction	1			
						OPERA	TOR		X Initi	al Report		
Name of C	ompany C	ambrian Ma	nagemen	t, Ltd		Contact Andy Rickard						
Address PO Box 272, Midland, TX 79702						Telephone No. 432-620-9181						
Facility Name Kaiser State SWD						Facility Typ	e SWD					
Surface Owner State Mineral Owner						tate			API No	0. 30-025-02538		
				LOCA	TIO	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/	West Line	County		
F	13	21S	34E	1980	North		1980	West		Lea		
			Latitu	de 32.480938 N	Lo	ngitude -10	3.425227	NAD8	33			
				NAT	TURE	OF REL	EASE					
Type of Rele	ease Produc	ced Water					Release 200 Bb	ls	Volume	Recovered 200 Bbls		
Source of Ro	elease Valv	e				The second secon	Hour of Occurrence	ce		Hour of Discovery		
Was Immed	iota Matina (	Civan?				08/06/2013 If YES, To			08/06/20	18 10:00AM		
Was Immediate Notice Given?  X Yes ☐ No ☐ Not Required					quired	Christina I						
By Whom?							Hour 08/06/2018					
Was a Water	rcourse Rea		Yes X	No		If YES, V	olume Impacting	the Wat	ercourse.			
If a Waterna	urgo woo Im	pacted, Descr	ibo Eully	sk								
	when the	transfer pum		on while the injormers to lower p			a fuse blows on	high c	urrent. We	are having an electrician		
Describe Ar	ea Affected	and Cleanup	Action Ta	ken.*								
Only the are	a inside the	berm which is	s lined wit	th plastic was affe	cted. Al	I water was v	vacuumed up.					
regulations a public health should their or the enviro	all operators or the envi operations l onment. In a	are required in are required in are required in are	to report a e acceptan adequatel OCD acce	and/or file certain in ace of a C-141 report y investigate and i	release n ort by the remediat	otifications a e NMOCD m e contaminat	nd perform corre- parked as "Final Fi ion that pose a the	ctive ac Report" of reat to g	tions for rel does not rel round wate	suant to NMOCD rules and leases which may endanger leve the operator of liability r, surface water, human health compliance with any other		
-		_					OIL CON	SERV	ATION	DIVISION		
Signature:	Denie	u Jone	0						m	1		
Printed Nam	ne: Denise J	Iones				Approved by	Environmental S	Specialis	st:			
Title: Regul	latory Analy	/st				Approval Da	te: 8/7/2018	8	Expiration	Date:		
E-mail Addı	ress: djones	@cambrianm	gmt.com			Conditions o	f Approval:			Attached [		
				100 /00 00	1		spect liner in o	questic	on. Provid	Attached _		
	06/2018 itional She	ets If Neces		hone: 432-620-91			th a concise re	•				
Auacii Auu	idollal Sile	cis II INECES	oai y		i	nspection	with affirmation	on the	liner has	1DD 5140		
nOY1821	950108	[nO)	/18210	950272	a	nd will cor	ntinue to conta	ain liqu	ıids.	1RP-5149		
				000212	2	!) At least o	one photo mus	st dem	onstrate			
leased to In	naging: 9/1	1/2023 2:28:	:53 PM		t	At least one photo must demonstrate     the entire facility is lined.						

Received by OCD: 8/28/2023 2:17:46 PM atte of New Mexico
Page 6 Oil Conservation Division

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ckfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: a	ppropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
I hereby certify that the information given above is t	rue and complete to the best of my knowledge and understand that pursuant to OCD rules
may endanger public health or the environment. The should their operations have failed to adequately invi- human health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface	and/or file certain release notifications and perform corrective actions for releases which the acceptance of a C-141 report by the OCD does not relieve the operator of liability restigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for we and/or regulations. The responsible party acknowledges they must substantially be area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.
Printed Name:Dusty McInturff	Title: Project Manager
Signature: 5 The	Date: 5/5/23
email: dmcinturff@dufrane.com	Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re remediate contamination that poses a threat to groun party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

## State of New Mexico **Energy Minerals and Natural Resources**

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	icis Dr., Sant	a Fe, NM 8750				Fe, NM 875						
			Rel	ease Notifi	catio	on and Co	rrective A	ction	ı			
						<b>OPERA</b>	TOR		X Initia	al Report		Final Repo
Name of Co	ompany C	ambrian Ma	nagemen	it, Ltd		Contact Mr. Mike Anthony						
		, Midland, T					No. 432-631-4	398				
Facility Na	me Kaiser	State SWD				Facility Typ	e SWD					
Surface Ow	mer State			Mineral	Owner	State			API No	. 30-025-0	02538	
Surface Ow	ner State								ATTINO	. 50-025-	02330	
Unit Letter	Section	[ Township	Danna	Feet from the		N OF REI	Feet from the	I Family	Vant Tie	. Ct-		
F	13	Township 21S	Range 34E	1980	Nort		1980	West	West Line	County Lea		
			Latit	tude 32.480938	8 N_ L	ongitude10	3.4252271	NAD83				
				NA'	TURI	E OF REL	EASE					
Type of Rele	ease Produc	ced Water				Volume of	Release 500 Bb	ls	Volume I	Recovered :	500 Bb	ols
Source of Re	elease Unlo	ad Tanks					Iour of Occurrence 3 10:00AM	ce		Hour of Dis 18 11:00 A		1
Was Immediate Notice Given?  X Yes □ No □ Not Required						If YES, To	The state of the s	nember o				
By Whom? N	Mike Antho						lour 12:00 PM (	100000	are are are			
Was a Water			Yes X	. No		If YES, Vo	olume Impacting	the Wat	ercourse.			
YC 337 .		pacted, Desc		1.000								
		lem and Remo			omplete		Olivia Yu a					
		and Cleanup			ter was	recovered. The	e pit liner and tan	ks will t	oe washed a	nfter all wat	er has t	been picked
regulations a public health should their or or the enviro	or the envious longerations lon	are required ironment. The have failed to	to report a e acceptan adequatel OCD acce	and/or file certain ace of a C-141 rep y investigate and	release port by remedi	notifications a the NMOCD m ate contaminati	knowledge and und perform correct larked as "Final Right to that pose a three the operator of	ctive act Report" or reat to g	tions for rel does not rel round wate libility for c	eases which ieve the ope r, surface w ompliance	n may e erator o eater, hu with an	endanger of liability uman health
-		0					OIL CON	SERV	ATION	DIVISIO	ON	
Signature:	Denie	i for	w Cu						90	1		
Printed Nam	e: Denise J	lones				Approved by	Environmental S		t:	<b>-</b>		
Title: Regula	atory Analy	st				Approval Da	8/21/2018	8	Expiration	Date:		
E-mail Addr	ess: djones	@cambrianm	gmt.com			Conditions o				Attached	d 🔲	
Date: 08	3/17/2018		1	Phone:432-620-9	181	1 '	iner in questic			1		
		ets If Neces				NMOCD wi	ith a concise re	eport c	of the	1		
				2000015		inspection	with affirmati	on the	liner has	100	E160	2
	233365	1 1		3336912		and will co	ntinue to cont	ain liq	uids.	1RP-	-0103	2
eased to Im	naging: 9/	1/2023 2:28	:53 PM				hoto documen					

2) Dated photo documentation of liner.

Received by OCD: 8/28/2023 2:17:46 PM State of New Mexico
Page 6 Oil Conservation Division

	Page 71 of 1449
Incident ID	nOY1823336566
District RP	1RP-5163
Facility ID	
Application ID	

# Closure

Closure Report Attachment Checklist: Each of	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	ekfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final campling (Note: a	ppropriate ODC District office must be notified 2 days prior to final sampling)
	ppropriate obe bisiner once masses a survey of the survey
Description of remediation activities	
may endanger public health or the environment. The should their operations have failed to adequately inv human health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface	and/or file certain release notifications and perform corrective actions for releases which the acceptance of a C-141 report by the OCD does not relieve the operator of liability restigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for a sund/or regulations. The responsible party acknowledges they must substantially be area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager
Signature: Sur-Juff	Date: 5/5/23
email: dmcinturff@dufrane.com	Telephone:(432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the re remediate contamination that poses a threat to ground party of compliance with any other federal, state, or	esponsible party of liability should their operations have failed to adequately investigate and dwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NCH1834760902
District RP	1RP-5273
Facility ID	
Application ID	pCH1834761047

# **Release Notification**

# Responsible Party

Responsible	Party Peri	mian Water Solu	tions, LLC	OGRID	OGRID 373626				
Contact Na	me Dale G	losson		Contact	Contact Telephone 432-894-3636				
Contact em	ail dale@p	permianws.com		Incident	# NCH1834760902 KAISER STATE SWD				
Contact ma	ling address	PO Box 2106,	Midland, TX 79		@ 30-025-02538				
atitude 32.	480938			Longitude	103.425227				
Site Name I	aiser State	SWD	(11112-03-111	The second second	Salt Water Disposal				
Date Release	M. St. Branch			100000000000000000000000000000000000000	The state of the s				
Date Release	Discovered	1 11/2/18		API# (if ap	pplicable) 30-025-02538				
Unit Letter	Section	Township	Range	Cou	nty				
F	13	218	34E	Lea					
<b>7</b>	Materia	il(s) Released (Select	all that apply and atta	ch calculations or specific	justification for the volumes provided below)				
Crude Oi		Volume Releas	ed (bbls) 20		Volume Recovered (bbls) 16				
Produced	Water	Volume Releas	ed (bbls)		Volume Recovered (bbls)				
		Is the concentra produced water	tion of dissolved >10,000 mg/l?	chloride in the	☐ Yes ☐ No				
Condensa	te	Volume Release	ed (bbls)		Volume Recovered (bbls)				
Natural G	as	Volume Release	ed (Mcf)		Volume Recovered (Mcf)				
Other (de:	scribe)	Volume/Weight	Released (provi	de units)	Volume/Weight Recovered (provide units)				
Cause of Rele	ase Oil ski	m tank overflow	; all fluids conta	ined within contain	ment berm				

Received by OCD: 8/28/2023 2:17:46 PM State of New Mexico
Page 2 Oil Conservation Division

Incident ID NCH1834760902

District RP 1RP-5273

Facility ID

Application ID pCH1834761047

Was this a major release as defined by 19.15.29.7(A) NMAC?  ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
Glosson called District	notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, Dale I office @ 11:25 am on 11/2/18, was transferred to Christina Hernandez, Left voicemail and call back called back later in the afternoon and the report was made.
	Initial Response
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.
The impacted area ha	as been secured to protect human health and the environment.
Released materials ha	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been removed and managed appropriately.
Per 10 15 20 8 B (4) NIM	AC the responsible party may commence remediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig.	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have attend remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws  Title:    Date: 10  15  18
	EIVED
Received by: By CH	ernandez at 4:56 pm, Dec 13, 2018

Received by OCD: 8/28/2023 2:17:46 PM atte of New Mexico
Page 6 Oil Conservation Division

	Page /4 0] 1449
Incident ID	nCH1834760902
District RP	1RP-5273
Facility ID	
Application ID	

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Classes Barret Attack and Classes But Classes	d. C.H. in the second below the second
Closure Report Attachment Checklist: Each of the	the following items must be included in the closure report.
A scaled site and sampling diagram as describe	d in 19.15.29.11 NMAC
Photographs of the remediated site prior to bac must be notified 2 days prior to liner inspection)	kfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: ar	opropriate ODC District office must be notified 2 days prior to final sampling)
	proposition of the state of the
Description of remediation activities	
may endanger public health or the environment. The should their operations have failed to adequately involument human health or the environment. In addition, OCD compliance with any other federal, state, or local law restore, reclaim, and re-vegetate the impacted surface accordance with 19.15.29.13 NMAC including notifications.	ad/or file certain release notifications and perform corrective actions for releases which acceptance of a C-141 report by the OCD does not relieve the operator of liability estigate and remediate contamination that pose a threat to groundwater, surface water, acceptance of a C-141 report does not relieve the operator of responsibility for and/or regulations. The responsible party acknowledges they must substantially are area to the conditions that existed prior to the release or their final land use in fication to the OCD when reclamation and re-vegetation are complete.  Title:  Project Manager  Date:
email:dmcinturff@dufrane.com	Telephone:(432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the res remediate contamination that poses a threat to ground party of compliance with any other federal, state, or	sponsible party of liability should their operations have failed to adequately investigate and lwater, surface water, human health, or the environment nor does not relieve the responsible local laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

From: Smith, Cory, EMNRD

To: Gonzales, Clair

Cc: Crosby, Faith; Mann, Ryan; Dusty McInturff; "Jenni Usher"; Josh Brooks

Subject: RE: [EXTERNAL] PWS - Kaiser SWD - Variance Request \_ SW-77, SW-56, SW-53 and SW-68

Date: Wednesday, October 12, 2022 10:13:40 AM

You don't often get email from cory.smith@emnrd.nm.gov. Learn why this is important

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Clair,

OCD approves the variance to leave SW77,56,53,68 in place because the H2,3,4,5,6 show that its minimal

Please include this approval in your final C-141.

Cory Smith • Environmental Projects Supervisor Environmental Bureau Projects Group EMNRD - Oil Conservation Division 5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113

505.419.2687 | Cory.Smith@state.nm.us

http://www.emnrd.state.nm.us/OCD/

**From:** Gonzales. Clair < Clair.Gonzales@tetratech.com>

Sent: Tuesday, October 11, 2022 4:03 PM

**To:** Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>

**Cc:** Crosby, Faith <fcrosby@slo.state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>; Dusty McInturff <dmcinturff@dufrane.com>; 'Jenni Usher' <jenni@permianws.com>; Josh Brooks <josh@permianws.com>

Subject: [EXTERNAL] PWS - Kaiser SWD - Variance Request \_ SW-77, SW-56, SW-53 and SW-68

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Afternoon Cory,

Attached is the analysis table, laboratory report, and updated kmz – which includes the data for sidewall areas SW-77, SW-56, SW-53 and SW-68. These areas exceeded the reclamation thresholds for the top 4.0' for chlorides. However, BTEX and TPH concentrations were below the RRALs and reclamation standards.

The chloride RRALs for the site are 7,000 mg/kg, however the reclamation thresholds for the top 4.0 of material is 600 mg/kg for chlorides.

The chloride concentrations detected at SW-77, SW-56, SW-53 and SW-68 ranged from 1,120 mg/kg to 3,710 mg/kg. Based on discussions with the SLO and OCD during the bi-weekly meetings,

horizontal delineation samples (H-2 through H-6) were collected to the west of the facility from surface to 2' below surface in order to horizontally delineate the chloride impact. Horizontal delineation samples H-2 through H-6 showed chloride concentrations ranging from 17.0 mg/kg to 57.3 mg/kg.

Based on the horizontal delineation of the west sidewall areas of SW-77, SW-56, SW-53 and SW-68, which are along the facility fence line and unable to be expanded off-lease, Permian Water Solutions is requesting a variance to leave the remaining impact above the reclamation standards in place.

Please let me know if you have any questions.

Thank you,

# Clair Gonzales,

Clair Gonzales, P.G. | Project Manager & Office Lead

Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946

clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™

901 West Wall Street, Ste 100 | Midland, TX 79701 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Smith, Cory, EMNRD To: Gonzales, Clair

Cc: Crosby, Faith; Mann, Ryan; Dusty McInturff; "Jenni Usher"; Josh Brooks Subject: RE: [EXTERNAL] PWS - Kaiser SWD - Variance Request \_ SW-46

Date: Wednesday, October 12, 2022 10:24:31 AM

You don't often get email from cory.smith@emnrd.nm.gov. Learn why this is important

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Clair,

OCD approves the variance to leave SW46 in place due to vertical/horizontal delineation from H1 and offsite/vegetative regrowth.

Please include this approval in your final C-141.

**Cory Smith** • Environmental Projects Supervisor Environmental Bureau Projects Group EMNRD - Oil Conservation Division

5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113 505.419.2687 | Cory.Smith@state.nm.us

http://www.emnrd.state.nm.us/OCD/

**From:** Gonzales, Clair < Clair.Gonzales@tetratech.com>

Sent: Tuesday, October 11, 2022 4:06 PM

**To:** Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>

Cc: Crosby, Faith <fcrosby@slo.state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>; Dusty McInturff <dmcinturff@dufrane.com>; 'Jenni Usher' <jenni@permianws.com>; Josh Brooks <josh@permianws.com>

**Subject:** [EXTERNAL] PWS - Kaiser SWD - Variance Request SW-46

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Afternoon Cory,

Attached is the analysis table, laboratory report, and updated kmz – which includes the data for sidewall areas SW-46. This area exceeded the reclamation thresholds for the top 4.0' for chlorides. However, BTEX and TPH concentrations were below the RRALs and reclamation standards.

The chloride RRALs for the site are 7,000 mg/kg, however the reclamation thresholds for the top 4.0 of material is 600 mg/kg for chlorides.

The chloride concentration detected at SW-46 was 995 mg/kg. Based on discussions with the SLO

and OCD during the bi-weekly meetings, horizontal delineation sample H-1 was collected to the north of SW-46 from surface to 2' below surface in order to horizontally delineate the chloride impact. Horizontal delineation sample H-1 showed a chloride concentration of 72.0 mg/kg.

Based on the horizontal delineation of the sidewall area of SW-46, which is near the facility fence line and unable to be expanded off-lease, Permian Water Solutions is requesting a variance to leave the remaining impact above the reclamation standards in place.

Please let me know if you have any questions.

Thank you,

# Clair Gonzales,

Clair Gonzales, P.G. | Project Manager & Office Lead

Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946

clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™

901 West Wall Street, Ste 100 | Midland, TX 79701 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Smith, Cory, EMNRD

To: Gonzales, Clair

Cc: Crosby, Faith; Mann, Ryan; "Jenni Usher"; Dusty McInturff; Josh Brooks

Subject: RE: [EXTERNAL] Permian Water Solutions - Kaiser SWD Variance Request

Date: Wednesday, October 12, 2022 10:29:51 AM

You don't often get email from cory.smith@emnrd.nm.gov. Learn why this is important

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Clair,

OCD approves the Variance to leave SW60, 69,70,71 in place due to monitor well integrity concerns.

Please include this approval in your Final C-141.

Thanks,

Cory Smith • Environmental Projects Supervisor
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division

5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113

505.419.2687 | Cory.Smith@state.nm.us

http://www.emnrd.state.nm.us/OCD/

From: Gonzales, Clair < Clair. Gonzales@tetratech.com>

Sent: Friday, September 30, 2022 1:21 PM

**To:** Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>

**Cc:** Crosby, Faith <fcrosby@slo.state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>; 'Jenni Usher' <jenni@permianws.com>; Dusty McInturff <dmcinturff@dufrane.com>; Josh Brooks <josh@permianws.com>

**Subject:** [EXTERNAL] Permian Water Solutions - Kaiser SWD Variance Request

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Afternoon,

Attached is the analysis table detailing the confirmation samples collected at the Permian Water Solutions Kaiser SWD. Four (4) sidewall samples (SW-60, SW-69, SW-70, and SW-71) were collected from the excavation area around the onsite monitor well. The excavation has been performed up to within 15' of the monitor well. Further excavation towards the monitor well cannot be safely performed without risking the well integrity. The sidewall samples collected around the monitor well show concentrations as shown below and on the attached analysis table:

• SW-60: Chloride concentration of 2,390 mg/kg. TPH and BTEX concentrations are below the reclamation standards.

SW-69: Chloride concentration of 6,380 mg/kg and a total TPH concentration of 1,890 mg/kg. BTEX concentrations are non-detect.

- SW-70: Total TPH concentration of 1,770 mg/kg. BTEX and chloride concentrations are below the reclamation standards.
- SW-71: Chloride concentration of 1,460 mg/kg. TPH and BTEX concentrations are non-detect.

Based on the location of the samples collected and risk to the existing monitor well onsite; Permian Water Solutions requests a variance to leave the material around the monitor well, 15' in each cardinal direction, in place.

Please let me know if you have any questions or concerns.

Thank you,

# Clair Gonzales,

Clair Gonzales, P.G. | Project Manager & Office Lead

Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946

clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™

901 West Wall Street, Ste 100 | Midland, TX 79701 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Smith, Cory, EMNRD

To: Gonzales, Clair

Cc: Crosby, Faith; Mann, Ryan; Dusty McInturff; "Jenni Usher"; Josh Brooks

Subject: RE: [EXTERNAL] PWS - Kaiser SWD - Variance Request\_ Area of SW-72

**Date:** Monday, November 28, 2022 11:11:59 AM

**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Clair,

OCD approves to Permian's request to leave SW-72 in place due to the delineation samples of H8 and H-9.

Please include this approval in your final C-141 report.

Cory Smith • Environmental Projects Supervisor
Environmental Bureau
EMNRD - Oil Conservation Division
5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113
505.419.2687 | Cory.Smith@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

**From:** Gonzales, Clair < Clair.Gonzales@tetratech.com>

Sent: Tuesday, November 22, 2022 2:12 PM

**To:** Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>

**Cc:** Crosby, Faith <fcrosby@slo.state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>; Dusty McInturff <dmcinturff@dufrane.com>; 'Jenni Usher' <jenni@permianws.com>; Josh Brooks <josh@permianws.com>

**Subject:** RE: [EXTERNAL] PWS - Kaiser SWD - Variance Request\_ Area of SW-72

Good Afternoon,

As requested, horizontal and vertical delineation of the section between SW-72 and Phase I was completed. Attached is the updated kmz and analysis table. For reference, the sample previously collected at SW-72 showed a TPH concentration of 436 mg/kg at 0-8' bgs, non-detect BTEX concentrations and a chloride concentration of 70.1 mg/kg. Two (2) horizontal delineation samples (H-8 and H-9) were collected at 5' bgs. Both samples showed TPH and BTEX concentrations below the laboratory reporting limits. Additionally, chloride concentrations were below the RRALs for the site with concentrations of 89.9 mg/kg (H-8) and 672 mg/kg (H-9).

Based on the horizontal and vertical delineation of the impact in this area, Permian Water Solutions requests a variance to leave the remaining impact in the area of SW-72 in place.

Please let me know if you have any questions or concerns.

Thank you,

### Clair Gonzales,

Clair Gonzales, P.G. | Project Manager & Office Lead

Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946

clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™

901 West Wall Street, Ste 100 | Midland, TX 79701 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

**From:** Smith, Cory, EMNRD < cory.smith@emnrd.nm.gov >

Sent: Wednesday, October 12, 2022 9:26 AM

**To:** Gonzales, Clair < <u>Clair.Gonzales@tetratech.com</u>>

**Cc:** Crosby, Faith <<u>fcrosby@slo.state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>; Dusty McInturff <<u>dmcinturff@dufrane.com</u>>; 'Jenni Usher' <<u>jenni@permianws.com</u>>; Josh Brooks <<u>josh@permianws.com</u>>

**Subject:** RE: [EXTERNAL] PWS - Kaiser SWD - Variance Request\_ Area of SW-72

You don't often get email from cory.smith@emnrd.nm.gov. Learn why this is important

Clair,

I need to know the total volume of impacted soils estimated to be left in place.. To do that the area between SW-72 SW—9 needs to be vertically delineated.

**Cory Smith** • Environmental Projects Supervisor

Environmental Bureau Projects Group EMNRD - Oil Conservation Division

5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113

505.419.2687 | Cory.Smith@state.nm.us

http://www.emnrd.state.nm.us/OCD/

**From:** Gonzales, Clair < <u>Clair.Gonzales@tetratech.com</u>>

Sent: Tuesday, October 11, 2022 3:51 PM

**To:** Smith, Cory, EMNRD < cory.smith@emnrd.nm.gov>

**Cc:** Crosby, Faith < <a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>; Mann, Ryan < <a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>; Dusty McInturff < <a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>; 'Jenni Usher' < <a href="mailto:jenni@permianws.com">jenni@permianws.com</a>); Josh Brooks

<josh@permianws.com>

Subject: [EXTERNAL] PWS - Kaiser SWD - Variance Request\_ Area of SW-72

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Afternoon Cory,

Attached is the analysis table, laboratory report, and updated kmz – which includes the data for SW-72.

The RRALs for TPH in this area are 1,000 mg/kg for GRO+DRO or 2,500 mg/kg for total TPH. However, the reclamation thresholds for the top 4.0' are 100 mg/kg for TPH.

Referring to the analysis table, SW-72 showed a TPH concentration of 436 mg/kg. This sample was collected along the 8' sidewall – which proved to be logistically difficult. Therefore, the majority of the material collected for the soil sample was collected from the bottom portion of the sidewall that was easily accessible. Additionally, this sidewall area is approximately 25' from the edge of Phase I SW-9. The sample collected during Phase I at SW-9 showed TPH concentrations below laboratory reporting limits, indicating that the section between SW-72 and SW-9 is horizontally delineated.

Permian Water Solutions would like to request a variance to leave this remaining impact in place, based on the location of the area in proximity to Phase I and SW-9, and the logistics and safety concerns of collecting a composite sample of the top portion of the sidewall.

Let me know if you have any questions or concerns.

Thank you,

#### Clair Gonzales.

Clair Gonzales, P.G. | Project Manager & Office Lead

Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946

clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™

901 West Wall Street, Ste 100 | Midland, TX 79701 | www.tetratech.com

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Smith, Cory, EMNRD

To: Crosby, Faith; Jenni Usher; Mann, Ryan; Gallegos, David; dmcinturff@dufrane.com; Gonzales, Clair; Josh Brooks

Subject: RE: [EXTERNAL] RE: PWS - Kaiser SWD Confirmation Sampling \_ Phase II\_UPDATE-12-29-2022

**Date:** Wednesday, January 18, 2023 10:22:46 AM

Attachments: image001.jpg image002.png

#### **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Jenni,

SW-76 Your variance is approved to leave 931 Chlorides

SW-79 You variance is approved for 613 Chlorides is approved.

Per our conversation during our meeting on January 18, 2023 there is additional delineation data from a prior borehole that shows limited impacts at depth.

Your variance for approval for is approved

SW-75

SW-83

Please include these approvals in your final C-141 report.

**Cory Smith** • Environmental Projects Supervisor

Environmental Bureau Projects Group EMNRD - Oil Conservation Division 5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113 505.419.2687 | Cory.Smith@state.nm.us

http://www.emnrd.state.nm.us/OCD/

From: Crosby, Faith <fcrosby@slo.state.nm.us>

Sent: Tuesday, January 10, 2023 2:35 PM

**To:** Jenni Usher <jenni@permianws.com>; Mann, Ryan <rmann@slo.state.nm.us>; Gallegos, David <dgallegos@slo.state.nm.us>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; dmcinturff@dufrane.com; Gonzales, Clair <Clair.Gonzales@tetratech.com>; Josh Brooks <josh@permianws.com>

Subject: [EXTERNAL] RE: PWS - Kaiser SWD Confirmation Sampling \_ Phase II\_UPDATE-12-29-2022

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Thanks Jenni, Ryan and I will have something in writing to you asap

Best regards,

Faith Crosby

Water Bureau Manager

Oil, Gas, and Minerals Division

Office 505.827.5849

Fax 505-827-4739



New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87501 -Or-P.O. Box 1148 Santa Fe, NM 87504-1148

#### fcrosby@slo.state.nm.us

.....

**CONFIDENTIALITY NOTICE** - This e-mail transmission, including all documents, files, or previous e-mail messages attached hereto, may contain confidential and/or legally privileged information. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that you must not read this transmission and that any disclosure, copying, printing, distribution, or use of any of the information contained in and/or attached to this transmission is STRICTLY PROHIBITED. If you have received this transmission in error, please immediately notify the sender and delete the original transmission and its attachments without reading or saving in any manner. Thank you.

From: Jenni Usher < jenni@permianws.com>
Sent: Tuesday, January 10, 2023 1:58 PM

**To:** Crosby, Faith <<u>fcrosby@slo.state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>; Gallegos, David <<u>dgallegos@slo.state.nm.us</u>>; Cory, EMNRD Smith <<u>cory.smith@state.nm.us</u>>; <u>dmcinturff@dufrane.com</u>; Gonzales, Clair <<u>Clair.Gonzales@tetratech.com</u>>; Josh Brooks <<u>josh@permianws.com</u>>

Subject: [EXTERNAL] Re: PWS - Kaiser SWD Confirmation Sampling \_ Phase II\_UPDATE-12-29-2022

Hi, just keeping this email alive and not buried in everyone's inbox.

-Jenni

From: Jenni Usher

Sent: Wednesday, January 4, 2023 10:49 AM

**To:** 'Crosby, Faith' < <a href="mainto:state.nm.us">fcrosby@slo.state.nm.us</a>; 'Mann, Ryan' < <a href="mainto:mann@slo.state.nm.us">mann@slo.state.nm.us</a>; Gallegos, David < <a href="mainto:dgallegos@slo.state.nm.us">dgallegos@slo.state.nm.us</a>; Cory, EMNRD Smith < <a href="mainto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>; <a href="mainto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>; Gonzales, Clair < <a href="mainto:clair.Gonzales@tetratech.com">clair.Gonzales@tetratech.com</a>; Josh Brooks < <a href="mainto:josh@permianws.com">josh@permianws.com</a>>

**Subject:** PWS - Kaiser SWD Confirmation Sampling \_ Phase II\_UPDATE-12-29-2022

Hi everyone!

I'm forwarding updated lab results from Clair on the recent samples obtained from the SW corner tank battery area, the last portion of the area within the Kaiser lease. I've included some of her notes as well.

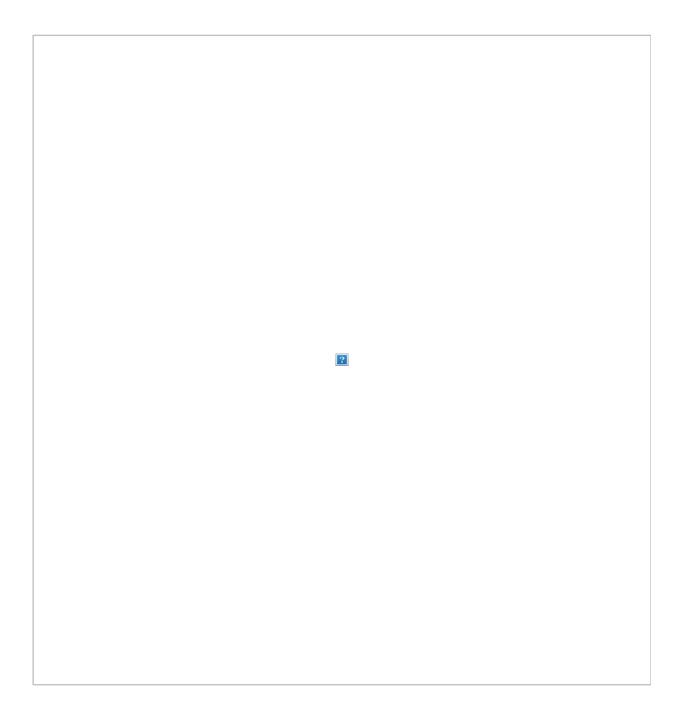
Faith, Dusty and I were on the call today and discussed these samples. I still need to summarize the meeting minutes, but we wanted to get these results circulated for everyone's review to try to avoid any hold-ups in the field for Dusty.

Unfortunately, it looks like the top 4' still exceeded for chlorides.. although not by a lot. Basically, all of the sidewall samples in the top 4' exceeded for chlorides – everything else was good. Now, SW-79 just \*barely\* exceeded with a concentration of 613 mg/kg. That may be able to be left as is.

I'm not sure how Cory will feel about 1,000 mg/kg in the top 4' in the areas of SW-75, SW-76 and SW-83. Below is a screenshot of where those areas are for reference.

I think we can ask for a variance for the south without issue; we did get that H-7 sample (which was like 26 mg/kg chlorides) so it is horizontally delineated.

Then that would leave us with SW-75 and SW-83 going to the east.



We're essentially up against the Southern Lease Line. There is about 10' further until we hit the Centennial Lease Line to the East. Dusty will need to think about how he could excavate further with the current existing hole and room left to navigate equipment around the lease. He'll get with Clair on sampling options.

On today's call we wondered if digging deeper or vertically delineating out East would be a consideration. Cory could advise on if deferral or variances would be accepted.

I hope this email serves to get us all on the same page with the current situation. Experts, please review and weigh in on how we can take care of this!

PS. I'm unable to attend an 8 am meeting on 1/18. I could probably do 7:30 am if people are up early, or we may propose 1/25 or a recorded 1/18 meeting. Just head's up!

Thank you,
Jenni Usher
Regulatory Analyst
512-820-8772 mobile
jenni@permianws.com



# Appendix B

Work Plan (2020)



**2020-04-07 Plan Recommendations:** The proposed timeline for the plan is 90 days.

The max TPH discovered was 34, 860 mg/kg, max Cl<sup>-</sup> 30,000 mg/kg and BTEX at 348 mg/kg. Contamination depths have reached at least 25'. Contamination was found in all areas in and around the pad and berm as well as the offsite areas tested.

#### Tasks:

- Remove all tank batteries, surface and buried pipelines, off-loading station and extraneous debris, including tanks in the pasture area.
- Any items that will be re-used may not be stored on site.
- Excavate the remediation area (inside dashed red line) to 15'. This shall be the new location of the replacement tank battery.
- Requirements for final samples:
  - o Floor samples to be taken in same location as previous samples.
  - o No less than 3 each cardinal sidewall samples around the perimeter.
  - Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl⁻ and BTEX
     ND.
  - PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill pit and excavations with clean, non-blended soils and place a clay membrane/bentonite mat at 4'-5'.

#### Timeline:

- All equipment to be removed within 45 days.
- Excavation and final sampling to be completed within 45 days.
- Backfill and clay membrane liner placement to be completed within 60 days.

Once Phase 1 is complete, PWS may construct a new tank battery with falcon-type liner, receive a written acceptance of installation, and re-commence commence injection for a period of 6 months. SLO will review activities for compliance with all environmental and easement requirements.



# **Phase 1 Work Plan Tasks Site Map**

# Kaiser State SWD #1

Phase 1 Work Plan Tasks:

Site outline

\_ . \_ Phase 1 remediation area

- 1. Remove all equipment & debris on site.
- 2. Excavate Phase 1 remediation area to 15'.
  - a) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - \* 7,000 mg/kg CT
    - BTEX NO
- Backfill non-blended soils and place a clay membrane/bentonite mat at 4'-5'.

\*\*All three stages to take no more than 45 days. \*\*



#### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - Include photos, final samples etc.;
  - SLO to confirm and approve.

# A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

#### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.
- \*\*Plan may be subject to change depending on data from soil and water samples.\*\*
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_

Site outline

Phase 1 Remediation Area

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
       7,000 mg/kg CI\*
    - STEXND
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days. \*\*
- anaplen may change subject to sample date from soil and seater testing.\*\*\*



SITE INFORMATION												
		Report T	ype: Revi	ised Wor	k Plan							
<b>General Site Info</b>	rmation:											
Site:		Kaiser State SWD										
Company:		Permian Wat										
Section, Townsh	ip and Range		Sec. 13	T 21S	R 34E							
Lease Number:		API No. 30-02	25-02538									
County:		Lea										
GPS:			32.48086			-103.4	12566					
Surface Owner:		State										
Directions:		HWY 176 for a	oproximately 0.2	25 miles, turn s	outh onto leas	e road and c	ea County, travel west on ontinue for 0.25 miles to the north side of the					
Release Data:		1RP-3512		1RP-3621		1RP-4305						
Date Released:		1/14/2015		4/24/2015		5/17/2016						
Type Release:		Produced Wa	ter	Produced		Produced \						
Source of Contam	nination:	Vac Truck		Truck hit I	oad line	Lightning S	Strike					
Fluid Released:		20 bbls		100 bbls		1050 bbls						
Fluids Recovered:	:	20 bbls		100 bbls		1050 bbls						
Release Data:		1RP-4525		1RP-4855		1RP-4960						
Date Released:		Unknown		10/18/201		1/31/2018						
Type Release:		Produced Wa	ter		Water & Oil	Produced Water						
Source of Contam	nination:	Frac Tanks		Unkown		Seal on Pump 20 bbls						
Fluid Released:		Unknown		50 bbls								
Fluids Recovered:		0 bbls		0 bbls wat		10 bbls						
Release Data:		1RP-5139		1RP-5149		1RP-5163						
Date Released:		6/20/2018	4	8/6/2018	14/-4	8/17/2018	11/1-1					
Type Release:	ination:	Produced Wa	ter	Produced	vvater	Produced \						
Source of Contam Fluid Released:	iination:	Wellhead 150 bbls		Valve 200 bbls		Unload Tanks						
Fluids Recovered:		150 bbls		200 bbls		500 bbls 500 bbls						
Release Data:		1RP-5273		200 0015		300 0013						
Date Released:		11/2/2018										
Type Release:		Oil										
Source of Contam	nination:	Tank Overflov	M.									
Fluid Released:	madon.	20 bbls	<u>v</u>									
Fluids Recovered:	<u> </u>	16 bbls										
Official Commun		1.0.000										
Name:	James Corbitt				Clair Gonzal	es						
Company:	Permian Water Sol	utions			Tetra Tech							
Address:	415 W. Wall St.				901 West W	all Street						
	Suite 320				Suite 100							
City:	Midland, TX 79701				Midland, Tex	2886						
Phone number:	(432) 305-4124											
Fax:	(432) 303-4124				(432) 687-8110							
Email:	iames@normiany	e com			Clair Conzo	iles@tetrate	ach com					
<b>ш</b> иан.	james@permianv	13.CUIII			Ciall.G0f1Za	แธง ๒ เธแชเธ	ich.com					

Site Characterization	
Depth to Groundwater:	Greater than 100'
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)										
Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides						
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	20,000 mg/kg						



January 27, 2020

New Mexico State Land Office 310 Old Santa Fe Trail P.O. Box 1148 Santa Fe, New Mexico 87504 Oil Conservation Division. District 1 1625 North French Drive Hobbs, New Mexico, 88240

Revised Work Plan for the Permian Water Solutions, LLC., Kaiser State SWD, Unit Re: F, Section 13, Township 21 South, Range 34 East, Lea County, New Mexico.

Tetra Tech, Inc. (Tetra Tech) was contacted by Permian Water Solutions, LLC. (Permian Water Solutions) to assess the impacted areas at the Kaiser State SWD, Unit F, Section 13, Township 21 South, Range 34 East, Lea County, New Mexico. The site coordinates are 32.48086°, -103.42566°. The site location is shown on Figures 1 and 2.

# **Background**

Ten releases occurred at the site impacting the pad area and inside the facility berms. The initial C-141 Forms are included in Appendix A.

- **1RP-3512:** According to the State of New Mexico C-141 Initial Report submitted by Pyote Water Systems, LLC the release was discovered on January 14, 2015 and released approximately 20 bbls of produced water due to a vac truck over filling the sumps. Approximately 20 bbls of fluids were recovered.
- 1RP-3621: According to the State of New Mexico C-141 Initial Report submitted by Pyote Water Systems, LLC the release was discovered on April 24, 2015 and released approximately 100 barrels of produced water due to a truck hitting a load line. Approximately 100 bbls of fluids were recovered.
- 1RP-4305: According to the State of New Mexico C-141 Initial Report submitted by Pyote Water Systems, LLC the release was discovered on May 17, 2016 and released approximately 1050 barrels of produced water due to a lightning strike. Approximately 1050 bbls of fluids were recovered.
- **1RP-4525:** According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD the release was due to a leak in the frac tanks used during facility reconstruction after the lightning strike. An unknown volume of fluids was released, and none were recovered.



- 1RP-4855: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD the release was discovered on October 18, 2017 and released approximately 50 bbls of produced water and crude oil within the berm due to an unknown cause. None of the fluids were recovered.
- 1RP-4960: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD the release was discovered on January 31, 2018 and released approximately 20 bbls of produced water due to a failed seal on a pump. Vacuum trucks were dispatched to remove all free-standing fluids, recovering approximately 10 bbls of fluids.
- 1RP-5139: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD the release was discovered on June 20, 2018 and released approximately 150 bbls of produced water due to a nipple on the wellhead. Approximately 150 bbls of fluids were recovered.
- 1RP-5149: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD the release was discovered on August 6, 2018 and released approximately 200 bbls of produced water due to a valve misfunction. Approximately 200 bbls of fluids were recovered.
- 1RP-5163: According to the State of New Mexico C-141 Initial Report submitted by Cambrian Management, LTD the release was discovered on August 17, 2018 and released approximately 500 bbls of produced water due to a valve misfunction, causing tanks to over flow into the lined berm. Approximately 500 bbls of fluids were recovered.
- 1RP-5273: According to the State of New Mexico C-141 Initial Report submitted by Permian Water Solutions, LLC the release was discovered November 2, 2018 and released approximately 20 bbls of crude oil due to an oil skim tank overflowing into the berm. Approximately 16 bbls of fluids were recovered.

#### Site Characterization

A site characterization was performed for the site and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. Additionally, the site is located in a low karst potential area. The nearest well is listed on the USGS Water Information System database in Section 13, approximately ½ mile south of the site, and has a reported depth to groundwater of 101' below surface. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in this area is between 100' and 125' below surface. The groundwater data is shown in Appendix B.

# Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases,



updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. A site characterization was performed for the site and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. The proposed RRAL for benzene was determined to be 10 milligrams per kilogram (mg/kg) and 50 mg/kg for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + MRO) or 1,000 mg/kg (GRO + DRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 20,000 mg/kg.

# **Soil Assessment and Analytical Results**

# **Initial Assessment**

Between May 7<sup>th</sup> and May 14<sup>th</sup>, 2019, Tetra Tech personnel were onsite to sample the facility areas. A total of thirty-one (31) sample points were installed to total depths ranging from 0-1' and 39'-40' below surface. Sample points SP-1, SP-2, SP-4, SP-5, SP-6, SP-7, SP-8, SP-9, SP-10, SP-11, SP-12, SP-14, SP-15, SP-16, SP-27, SP-29, SP-30, SP-31, and SP-32 were installed using a truck mounted air rotary rig. Due to access and safety issues, sample points SP-3, SP-13, SP-17, SP-18, SP-19, SP-20, SP-21, SP-22, SP-23, SP-24, SP-25, and SP-26 were installed using a stainless-steel hand auger. Selected soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The drilling logs are shown in Appendix C. The sample locations are shown on Figure 3.

#### Pad and Facility Areas

Referring to Table 1, sample points SP-1 through SP-16 and SP-27 through SP-32 did not show any benzene or total BTEX concentrations above the RRALs. However, sample points SP-2, SP-5, and SP-27 showed TPH concentrations above the RRALs with TPH highs of 20,034 mg/kg, 18,710 mg/kg, and 6,850 mg/kg at 6'-7' below surface, respectively. The TPH concentrations then declined with depth to below the RRALs at depths ranging from 9'-10' and 19'-20' below surface. None of the other sample points on the pad and facility areas showed TPH concentrations above the thresholds.

Additionally, the area of sample point (SP-8) showed a chloride concentration above the 20,000 mg/kg threshold at 0-1' below surface, which declined with depth and showed a bottom hole concentration of 96.0 mg/kg at 29'-30' below surface. None of the remaining sample points on the pad and facility areas showed chloride concentrations above the RRAL.



## **Bermed Areas**

The areas of sample points (SP-17 through SP-26), which were collected inside the bermed facilities, were installed to total depths ranging from 0-1' and 5-5.5' below surface. Deeper samples could not be collected due to a dense formation in the area and the truck mounted air rotary rig could not safely access these areas for deeper samples.

Referring to Table 1, the area of sample point (SP-22) did not show any benzene, total BTEX, TPH, or chloride concentrations above the RRALs. However, the areas of sample points (SP-17, SP-18, SP-19, SP-20, SP-21, SP-23, SP-24, SP-25, and SP-26) showed elevated TPH concentrations to the soils. The areas of sample points (SP-17, SP-21, and SP-25) showed TPH concentrations that declined with depth to below the thresholds at 2-3' below surface. The remaining areas were not vertically defined for TPH.

Additionally, the area of sample point (SP-20) showed benzene and total BTEX concentrations above the RRALs which were not vertically defined at 5-5.5' below surface. None of the remaining sample points inside the bermed facilities showed benzene concentrations above the 10 mg/kg threshold. In addition, the areas of sample points (SP-17, SP-21, SP-24 and SP-26) did not show any total BTEX concentrations above the RRALs. However, the areas of (SP-18, SP-19, SP-21, SP-23, and SP-25) showed total BTEX concentrations above the RRALs and the areas of sample points (SP-19, SP-20, and SP-23) were not vertically defined.

None of the samples collected at sample points (SP-17 through SP-26) showed chloride concentrations above the 20,000 mg/kg threshold.

# Additional Assessment

As requested by NMSLO, Permian Water Solutions removed the tanks and equipment from the two onsite facilities to allow access for vertical delineation. Tetra Tech personnel returned to the site on October 21-22, 2019, in order to vertically delineate the areas of SP-17 (BH-17), SP-18 (BH-18), SP-19 (BH-19), SP-20 (BH-20), SP-23 (BH-23), SP-24 (BH-24), SP-25 (BH-25), and SP-26 (BH-26) as well as to install four additional soil borings (BH-33, BH-34, BH-35, and BH-36) beneath the tanks of the eastern facility. The soil borings were installed using a truck mounted air rotary rig to total depths ranging from 19'-20' and 54'-55' below surface. Selected soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3

Referring to Table 1, none of the samples collected at any of the boreholes showed any benzene or chloride concentrations above the RRALs. Additionally, none of the samples collected at BH-17, BH-33, or BH-35 showed total BTEX or TPH concentrations above the RRALs.



The area of BH-36 showed a TPH high concentration of 9,630 mg/kg at 0-1', which declined with depth to 710 mg/kg at 2-3' below surface. The areas of BH-18, BH-24, and BH-34 showed TPH high concentrations of 12,700 mg/kg at 0-1', 6,400 mg/kg at 2-3', and 10,200 mg/kg at 0-1', respectively, which then declined with depth to below the RRALs at 4'-5' below surface. The areas of BH-19, BH-23, BH-25, and BH-26 showed elevated TPH concentrations to depths of 4-5', before declining with depth to below the RRALs at 6-7' below surface.

The areas of BH- 18, BH-19, BH-23, BH-24, BH-26, BH-34, and BH-36 did not show any total BTEX concentrations above the RRALs. However, the area of BH-20 showed a BTEX high concentration of 119 mg/kg at 6-7', which declined with depth to 16.1 mg/kg at 9'-10' below surface and the area of BH-25 showed a BTEX high of 194 mg/kg at 4-5' which declined with depth to below the laboratory reporting limit at 6-7' below surface.

At the request of NMSLO, the tanks located in the western berm were removed and Tetra Tech returned to the site on January 13, 2020 to install 2 additional bore holes (SP-37 and SP-38) beneath the previous location of the tanks. The soil borings were installed using a truck mounted air rotary rig to total depths ranging from 24'-25' and 34'-35' below surface. All soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3

Referring to Table 1, none of the samples collected showed benzene concentrations above the RRAL. Additionally, none of the samples collected in the areas of SP-37 and SP-38 showed chloride concentrations above the RRAL, with chloride high concentrations of 4,810 mg/kg (4'-5') and 6,130 mg/kg (2'-3'), respectively. The chloride concentrations then decreased with depth to below 600 mg/kg at 14'-15' (SP-37) and 19'-20' (SP-38). However, both areas showed TPH highs of 6,260 mg/kg (SP-37) and 7,340 mg/kg (SP-38) at 4'-5, which then decreased with depth to below the RRALs at 6'-7' below surface. Additionally, BTEX highs of 178 mg/kg (SP-37) and 51.0 mg/kg (SP-38) were detected at 4'-5', which decreased to below the RRAL at 6'-7' below surface.

#### Work Plan

Based on the laboratory data, Permian Water Solutions proposes to excavate the areas as shown on Figure 4 and highlighted (green) on Table 1. The areas of sample points SP-1, SP-3, SP-6, SP-7, SP-9, SP-10, SP-21, and SP-30 will be excavated to 6" to 1.0' below surface to address the surficial impact. The areas of sample points SP-2, SP-8, and SP-27 will be excavated to approximately 6'-7' below surface and the area of sample point SP-5 will be excavated to approximately 14-15' below surface. Additionally, as requested by NMSLO, the area of SP-4 will be excavated to 4-5' below surface.

To address the areas inside the bermed facilities, Permian Water Solutions proposes to excavate the areas of sample points SP-17, SP-18, SP-24, and SP-34 to approximately 3'



below surface, the areas of SP-19, SP-23, SP-25, SP-26, SP-36, SP-37, and SP-38 to approximately 5', and the area of SP-20 to approximately 10' below surface.

Once excavated, composite bottom hole and sidewall confirmation samples will be collected every 200 square feet, to be representative of the area and to confirm proper removal of the impacted soils. The areas will then be backfilled with clean material to surface grade, including the area of SP-3. Permian Water Solutions estimates approximately 15,200 cubic yards will be excavated, and the remediation to be implemented 90 days after the work plan is approved by both the NMSLO and NMOCD.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safely concerns for onsite personnel. As such, Permian Water Solutions will excavate the impacted soils to the maximum extent practicable.

#### Conclusion

Once the remediation activities are completed, a closure report will be prepared for NMOCD and NMSLO approval. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

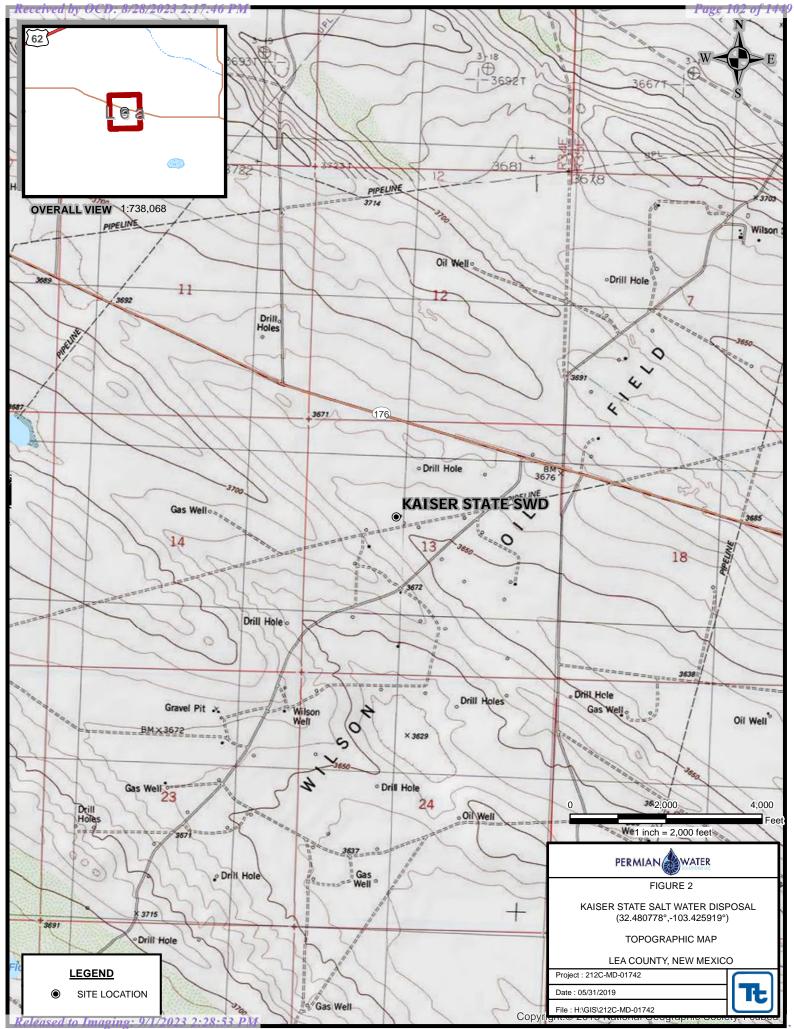
Respectfully submitted, TETRA TECH

Clair Gonzales, P.G.,

**Project Manager** 

Figures





Approximate Scale in Feet

**Tables** 

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

Sample ID	Sample	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
	Date		In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-1	5/7/2019	0-1	Х		<10.0	174	77.3	251	<0.050	<0.050	<0.050	<0.0150	<0.300	5,560
	"	2-3	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.0150	<0.300	1,650
		4-5	Х		-	-	-	-	-	-	-	-	-	1,330
	"	6-7	Х		-		-	-	-	-	-	-	-	864
	"	9-10	Χ				-	-	-	-	-	-	-	656
	"	14-15	Χ		-	-	-	-	-	-	-	-	-	496
		19-20	Х		-	-	-	-	-	-	-	-	-	576
	"	24-25	Х		-	-	-	-	-	-	-	-	-	320
	"	29-30	Х		-	-	-	-	-	-	-	-	-	144
	"	34-35	Х		-	-	-	-	-	-	-	-	-	144
SP-2	5/7/2019	0-1	Х		239	2,970	553	3,523	<0.050	0.372	0.760	6.36	7.49	6,530
	"	2-3	Х		58.6	638	128	825	<0.050	0.068	0.193	1.63	1.89	4,960
	"	4-5	Х		<50.0	346	248	594	<0.050	< 0.050	<0.050	<0.0150	<0.300	2,200
	"	6-7	Χ		394	14,900	4,740	20,034	<0.050	0.068	0.717	1.67	2.46	2,160
	"	9-10	Χ		10.4	592	221	823	<0.050	<0.050	<0.050	<0.0150	<0.300	2,480
		14-15	Х		-	-	-	-	-	-	-	-	-	4,640
	"	19-20	Х		-	-	-	-	-	-	-	-	-	1,100
	"	24-25	Х		-	-	-	-	-	-	-	-	-	448
	"	29-30	Х		-	-	-	-	-	-	-	-	-	240
	"	34-35	Х		-	-	-	-	-	-	-	-	-	240
SP-3	5/8/2019	0-1	Х		<10.0	113	35.2	148	<0.050	<0.050	<0.050	<0.0150	<0.300	3,040
	5/13/2019	1-1.5	Х		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.0150	<0.300	240
	"	2-2.5	Х		-	-	-	-	-	-	-	-	-	240
	"	3-3.5	Х		-	-	-	-	-	-	-	-	-	160
	"	4-4.5	Х		-	-	-	-	-	-	-	-	-	160
	"	5-5.5	Х		-	-	-	-	-	-	-	-	-	240
SP-4	5/7/2019	0-1	Х		<10.0	11.6	<10.0	11.6	< 0.050	< 0.050	<0.050	<0.0150	<0.300	1,680
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.0150	<0.300	1,170
	"	4-5	Х		-	-	-	-	-	-	-	-	-	928
	"	6-7	Х		-	-	-	-	-	-	-	-	-	624
	"	9-10	Х		-	-	-	-	-	-	-	-	-	464
	"	14-15	Х		-	-	-	-	-	-	-	-	-	400
SP-5	5/7/2019	0-1	Х		<10.0	91.4	56.8	148	<0.050	<0.050	<0.050	<0.0150	<0.300	5,040
	"	2-3	Х		<50.0	522	330	852	<0.050	<0.050	<0.050	<0.0150	<0.300	784
	"	4-5	Х		<10.0	401	270	671	<0.050	<0.050	<0.050	<0.0150	<0.300	368
	"	6-7	Х		400	13,800	4,510	18,710	<0.050	0.468	1.35	2.49	4.31	224
	"	9-10	Х		174	7,720	2,550	10,444	<0.050	0.175	0.429	1.25	1.85	224
	"	14-15	Х		11.2	1,150	287	1,448	<0.050	<0.050	<0.050	<0.0150	<0.300	240
	"	19-20	Х		<10.0	945	239	1,184	<0.050	<0.050	<0.050	<0.0150	<0.300	368
	"	24-25	Х		<10.0	609	145	754	<0.050	<0.050	<0.050	<0.0150	<0.300	288
	"	29-30	Х		-	•	-	-	-	-	-	-	-	64.0
	"	34-35	Х		-	-	-	-	-	-	-	-	-	96.0

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

	Sample	Sample	Soil Status		TPH (mg/kg)				Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-6	5/7/2019	0-1	X	Kemoveu	<10.0	106	46.2	152	<0.050	<0.050	<0.050	<0.0150	<0.300	5,520
	"	2-3	Х		<10.0	120	51.6	172	<0.050	<0.050	<0.050	<0.0150	<0.300	2,040
	"	4-5	Х		-	-	-	-	-	-	-	-	-	640
	"	6-7	Х		-	-	-	-	-	-	-	-	-	640
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	752
	"	14-15	Χ		-	-	-	-	-	-	-	-	-	576
	"	19-20	Х		-	-	-	-	-	-	-	-	-	432
SP-7	5/7/2019	0-1	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.0150	<0.300	3,920
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	< 0.050	< 0.050	<0.050	<0.0150	<0.300	1,140
	"	4-5	Χ		-	-	-	-	-	-	-	-	-	1,410
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	672
	"	9-10	Х		-	-	-	-	-	-	-	-	-	768
	"	14-15	Х		-	-	-	-	-	-	-	-	-	880
	"	19-20	Х		-	-	-	-	-	-	-	-	-	352
		24-25	Х		-	-	-	-	-	-	-	-	-	128
SP-8	5/7/2019	0-1	Х		<10.0	284	61.1	345	<0.050	0.121	0.136	0.382	0.639	30,000
	"	2-3	Χ		<10.0	86.3	<10.0	86.3	<0.050	<0.050	<0.050	<0.0150	<0.300	10,200
	"	4-5	Х		-	-	-	-	-	-	-	-	-	12,000
	"	6-7	Х		-	-	-	-	-	-	-	-	-	10,400
	"	9-10	Х		-	-	-	-	-	-	-	-	-	7,200
	- "	14-15	X		-	-	-	-	-	-	-	-	-	4,400
	- "	19-20	X		-	-	-	-	-	-	-	-	-	2,360
		24-25	X		-	-	-	-	-	-	-	-	-	304
	<u> </u>	29-30	Х		-	-	-	-	-	-	-	-	-	96.0
SP-9	5/7/2019	0-1	Х		<10.0	192	118	310	<0.050	<0.050	<0.050	<0.0150	<0.300	8,660
	"	2-3	Х		<10.0	10.9	<10.0	10.9	<0.050	<0.050	<0.050	<0.0150	<0.300	2,320
	- "	4-5	X		-	-	-	-	-	-	-	-	-	2,760
	- "	6-7	X		-	-	-	-	-	-	-	-	-	4,400
		9-10 14-15	X		-	-	-	-	-	-	-	-	-	3,760 4,800
		19-20	X		-	-	-	-	-	-	-	-	-	4,560
	"	24-25	X		-		_		_	_	-	-		1,230
	"	29-30	X		-	_	_	_	_	-	_	_	_	528
	"	34-35	X		-	-	-	-	-	-	-	-	-	832
SP-10	5/8/2019	0-1	Х	l	-10.0	-10.0	<10.0	<10.0	-0.050	-0.0E0	-0.050	-0.150	-0.200	1 200
3r-10	5/6/2019	0-1 2-3	X		<10.0	<10.0 <10.0	<10.0	<10.0	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	1,280 272
	"	4-5	X		-				-	-			-	176
00.44				l I										l
SP-11	5/8/2019	0-1	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	224
	"	2-3	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
		4-5	X		-	-	-	-	-	-	-	-	-	192
	"	6-7 9-10	X		-	-	-	-	-	-	-	-	-	96 112
		9-10			-	-		-	-	-	<u> </u>			112

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

	Sample	Sample	Soil Status		TPH (mg/kg)			Benzene	Toluene	Ethlybenzene	Xylene Total BTE	Total BTEX	X Chloride	
Sample ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-12	5/8/2019	0-1	Х	Kemovea	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,040
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
	II .	4-5	Χ		-	-	-	-	-	-	-	-	-	800
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	304
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	128
	"	14-15	Χ		-	-	-	-	-	-	-	-	-	208
SP13	5/8/2019	0-1	Х		<10.0	159	52.8	212	<0.050	<0.050	<0.050	<0.150	<0.300	288
SP-14	5/8/2019	0-1	Χ		<10.0	504	332	836	<0.050	<0.050	<0.050	<0.150	<0.300	640
	"	2-3	Χ		<10.0	100	55.6	156	<0.050	<0.050	<0.050	<0.150	<0.300	544
	"	4-5	Χ		-	-	-	-	-	-	-	-	-	464
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	384
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	288
	"	14-15	Χ		-	-	-	-	-	-	-	-	-	544
	"	19-20	Χ		-	-	-	-	-	-	-	-	-	1,960
	"	24-25	Χ		-	-	-	-	-	-	-	-	-	688
	"	29-30	X		-	-	-	-	-	-	-	-	-	208
		34-35	Х		-	-	-	-	-	-	-	-	-	80.0
SP-15	5/8/2019	0-1	Χ		<10.0	66.4	40.6	107	<0.050	< 0.050	<0.050	<0.150	<0.300	480
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.150	<0.300	672
	"	4-5	Χ		-	-	-	-	-	-	-	-	-	320
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	176
SP-16	5/8/2019	0-1	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.150	<0.300	384
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.150	<0.300	1,410
	"	4-5	Χ		-	-	-	-	-	-	-	-	-	1,570
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	1,330
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	1,170
	"	14-15	Χ		-	-	-	-	-	-	-	-	-	288
	"	19-20	Χ		-	-	-	-	-	-	-	-	-	816
SP-17	5/8/2019	0-1	Χ		2,130	11,200	2,010	15,340	<0.500	1.85	4.81	42.6	49.3	7,040
Inside Berm	II .	2-3	Χ		16.7	463	78.3	<10.0	<0.050	<0.050	<0.050	0.214	<0.300	11,200
	"	3-4	Χ		-	-	-	-	-	-	-	-	-	9,600
	5/13/2019	4-4.5	Χ		<10.0	622	75.3	697	<0.050	0.076	<0.050	0.184	<0.300	3,760
	"	5-5.5	Χ		<10.0	145	<10.0	145	< 0.050	<0.050	<0.050	<0.150	<0.300	9,680
BH-17	10/21/2019	0-1	Χ		<50.3	<10.0	<10.0	<10.0	<0.00101	<0.00101	<0.00101	0.00522	0.00522	881
	"	2-3	Χ		<49.9	<10.0	<10.0	<10.0	<0.00101	<0.00101	<0.00101	0.0122	0.0122	1,180
	"	4-5	Х		<50.1	<50.1	<50.1	<50.1	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	1,110
	"	6-7	Χ		<49.8	<49.8	<49.8	<49.8	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	2,270
	"	9-10	Χ		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,050
	"	14-15	Χ		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,520
	"	19-20	Χ		<50.2	<50.2	<50.2	<50.2	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	1,710
	"	24-25	Χ		<49.8	<49.8	<49.8	<49.8	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	937
	"	29-30	X		<50.2	<50.2	<50.2	<50.2	< 0.00100	<0.00100	< 0.00100	< 0.00100	< 0.00100	404

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

Sample ID	Sample	Sample	Soil	Status		TPH (	mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-18	5/7/2019	0-1	Х		1,950	8,290	1,320	11,560	0.883	20.6	9.44	60.9	91.8	9,730
Inside Berm	ı	2-3	Х		177	1,990	506	2,673	<0.050	0.124	0.430	1.06	1.61	5,520
BH-18	10/21/2019	0-1	Х		<251	11,100	1,640	12,700	<0.101	<0.101	0.196	0.965	1.16	7,190
	"	2-3	Х		444	6,210	747	7,400	<0.100	0.279	0.594	1.73	2.61	6.180
	"	4-5	Х		<49.9	183	<49.9	183	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	8,280
	"	6-7	Х		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	5,540
	"	9-10	Х		<50.3	<50.3	<50.3	<50.3	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	3,010
	"	14-15	Х		<49.8	<49.8	<49.8	<49.8	<0.000984	<0.000984	<0.000984	<0.000984	<0.000984	1,610
	"	19-20	Х		<50.0	<50.0	<50.0	<50.0	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	4,720
	"	24-25	Х		<49.8	<49.8	<49.8	<49.8	<0.000986	<0.000986	<0.000986	0.00348	0.00348	2,630
	"	29-30	Χ		<49.7	<49.7	<49.7	<49.7	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,250
	"	34-35	Х		<50.0	<50.0	<50.0	<50.0	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	1,120
	"	39-40	Х		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	772
	"	44-45	Χ		<50.0	<50.0	<50.0	<50.0	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	633
	"	49-50	Х		<49.9	<49.9	<49.9	<49.9	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	388
SP-19	5/8/2019	0-1	Х		2,980	14,800	2,930	20,710	3.95	46.4	9.53	71.3	131	6,560
Inside Berm	"	2-3	Х		64.8	786	176	1,027	<0.050	0.143	0.191	0.451	0.784	12,800
	5/13/2019	4-4.5	Х		2,270	7,380	805	10,455	2.21	48.5	36.9	131	219	4,120
BH-19	10/22/2019	0-1	Х		474	8,050	729	9,250	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	4,160
	"	2-3	Х		97.5	2,900	253	3,250	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	9,700
	"	4-5	Х		87.1	2,090	186	2,360	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	10,200
	"	6-7	Х		<50.2	<50.2	<50.2	<50.2	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	7,660
	"	9-10	Х		<49.9	<49.9	<49.9	<49.9	<0.000990	<0.000990	<0.000990	<0.000990	<0.000990	10,300
	"	14-15	Х		<49.8	<49.8	<49.8	<49.8	<0.000990	<0.000990	<0.000990	<0.000990	<0.000990	9,650
	"	19-20	Х		<49.8	<49.8	<49.8	<49.8	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	11,500
	"	24-25	Х		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	811
	"	29-30	Х		<50.0	<50.0	<50.0	<50.0	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	502
	"	34-35	Х		<49.8	<49.8	<49.8	<49.8	<0.000982	0.00182	<0.000982	<0.000982	0.00182	171
	"	39-40	Х		<49.9	<49.9	<49.9	<49.9	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	495
SP-20	5/8/2019	0-1	Х		3,520	25,300	6,040	34,860	21.7	80.8	17.3	61.2	181	2,520
Inside Berm	"	2-3	Х		2,930	13,400	2,870	19,200	15.3	73.7	15.0	101	205	1,630
	5/13/2019	4-4.5	Х		3,900	11,300	1,620	16,820	15.3	102	49.2	162	329	1,550
	"	5-5.5	Х		4,390	11,300	1,390	17,080	18.0	120	56.6	153	348	1,600
BH-20	10/22/2019	0-1	Х		302	3,560	339	4,200	0.00241	0.0227	0.0126	0.0558	0.0935	2,680
	"	2-3	X		821	4,840	396	6,060	0.5700	7.56	4.92	24.4	37.4	5,240
	"	4-5	Х		1,270	4,990	395	6,660	2.00	22.2	13.0	51.7	88.9	2,300
	"	6-7	Х		2,110	6,650	588	9,350	3.32	34.0	18.5	63.2	119	218
	"	9-10	Х		388	2,710	189	3,290	<0.0998	2.33	3.07	10.7	16.1	988
	"	14-15	Х		<50.2	365	<50.2	365	<0.00101	<0.00101	0.0126	0.0659	0.0785	3,800
	"	19-20	Х		<50.3	326	57.1	385	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	1,350
	"	24-25	Х		<50.1	62.8	<50.1	62.8	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	199

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

Sample ID	Sample	Sample	Soil	Status		TPH (	mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-21	5/8/2019	0-1	Χ		993	10,500	2,100	13,593	0.0740	2.12	2.05	14.3	18.5	2,240
Inside Berm	"	2-3	Χ		10.6	445	109	565	<0.050	< 0.050	<0.050	0.241	<0.300	1,100
	5/13/2019	4-4.5	Х		<10.0	725	57.2	782	<0.050	0.076	<0.050	<0.150	<0.300	3,120
	"	5-5.5	Х		<10.0	215	<10.0	215	<0.050	<0.050	<0.050	<0.150	<0.300	2,200
SP-22	5/8/2019	0-1	Х		<10.0	64.0	52.9	117	<0.050	<0.050	<0.050	<0.150	<0.300	880
Inside Berm	=	2-3	Х		<10.0	32.0	16.4	48.4	<0.050	< 0.050	<0.050	<0.150	<0.300	752
	5/13/2019	3-3.5	Χ		-		-	-	-	-	-	-	-	720
	"	4-4.5	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	848
SP-23	5/8/2019	0-1	X		593	12,800	2,390	15,190	<0.050	1.03	1.03	2.56	4.62	880
Inside Berm	5/14/2019	1-1.5	Χ		2,180	7,770	1,050	11,000	6.76	71.1	40.4	129	247	464
	=	2-2.5	Χ		97.7	662	48.8	809	1.06	5.98	5.38	17.6	30.0	3,680
	=	3-3.5	Χ		902	3,150	521	4,573	7.38	57.8	31.7	100	197	1,060
		4-4.5	X		2,760	9,000	1,170	12,930	14.2	112	50.7	150	327	2,760
BH-23	10/22/2019	0-1	X		407	3,250	258	3,920	0.0125	0.0446	0.0375	1.04	1.14	372
	"	2-3	Χ		664	3,060	209	3,930	0.0152	0.0333	0.0821	0.355	0.486	178
	"	4-5	X		1,050	4,150	338	5,540	0.394	0.374	0.232	1.02	2.02	55.9
	=	6-7	Х		74.5	742	76.9	893	0.0108	0.307	0.400	1.02	1.73	39.2
	=	9-10	Χ		<49.9	<49.9	<49.9	<49.9	0.00949	0.0698	0.138	0.392	0.609	359
	=	14-15	Χ		63.9	672	78.3	814	0.00230	0.0821	0.128	0.491	0.703	3,960
	•	19-20	Χ		<50.2	<50.2	<50.2	<50.2	<0.000994	0.00456	0.00189	0.00794	0.0144	6,740
	"	24-25	Χ		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	3,200
	"	29-30	Χ		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	2,370
	"	34-35	Χ		<49.9	<49.9	<49.9	<49.9	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	1,330
	"	39-40	Χ		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,350
	"	44-45	Χ		<50.0	<50.0	<50.0	<50.0	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	941
	"	49-50	Х		<50.1	<50.1	<50.1	<50.1	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	362
	"	54-55	Х		<50.0	<50.0	<50.0	<50.0	0.00260	0.00806	0.00849	0.0294	0.0486	286
SP-24 (Inside Berm)	5/8/2019	0-1	Χ		595	11,000	2,060	13,060	1.49	12.1	2.69	16.2	32.5	1,060
BH-24	10/22/2019	0-1	Χ		561	4,810	411	5,780	0.00859	0.8070	1.32	5.05	7.19	598
	=	2-3	Х		1,160	4,830	405	6,400	0.380	7.47	5.41	14.2	27.5	722
	=	4-5	Χ		92.8	827	119	1,040	0.0189	0.335	0.266	0.986	1.61	297
	=	6-7	Χ		<49.8	220	67	287	<0.000994	0.00366	0.00411	0.0128	0.0206	4,460
	"	9-10	Х		<49.8	166	<49.8	166	<0.000998	0.00218	0.00766	0.0276	0.0374	3,530
	"	14-15	Χ		<49.8	289	<49.8	289	<0.000994	<0.000994	0.00849	0.0366	0.0451	598
	"	19-20	Χ		<50.2	227	<50.2	227	<0.00100	<0.00100	0.0109	0.0388	0.0497	581
	"	24-25	Χ		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	0.00563	0.00563	494
	"	29-30	Х		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	247
						_				· ·				

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

Sample ID	Sample	Sample	Soil	Status		TPH (	mg/kg)	1	Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Oampie ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-25	5/8/2019	0-1	Χ		2,440	12,100	1,690	13,790	9.63	68.7	35.1	79.0	192	4,880
Inside Berm	5/14/2019	1-1.5	Χ		1,610	5,200	944	7,754	2.14	32.7	25.7	64.9	125	4,320
	"	2-2.5	Χ		85.1	450	65.6	601	0.397	5.74	5.26	15.2	26.6	1,150
	"	3-3.5	Χ		18.9	150	19.0	188	0.052	0.729	0.825	2.42	4.03	2,440
	"	4-4.5	Χ		39.2	398	154	591	<0.050	0.313	0.430	1.23	1.97	2,960
	"	5-5.5	Χ		<10.0	552	242	794	<0.050	<0.050	0.098	0.234	0.332	1,360
BH-25	10/22/2019	0-1	Χ		<49.9	223	<49.9	223	0.0160	0.281	0.283	0.752	1.33	5,200
	"	2-3	Χ		1,220	3,730	289	5,240	0.6600	8.86	5.73	13.3	28.6	5,200
	"	4-5	Χ		1,140	3,820	303	5,260	6.40	58.6	38.6	90.0	194	4,510
	"	6-7	Χ		<50.1	<50.1	<50.1	<50.1	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	1,460
	"	9-10	Χ		<50.1	<50.1	55.7	55.7	<0.00102	<0.00102	<0.00102	0.0119	0.0119	1,470
	"	14-15	Χ		<50.1	<50.1	<50.1	<50.1	<0.00100	0.0374	0.0628	0.188	0.288	805
	"	19-20	Χ		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	563
	"	24-25	Χ		<50.2	58.9	<50.2	58.9	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	349
SP-26 (Inside Berm)	5/8/2019	0-1	Χ		1,090	12,200	2,020	14,220	<0.050	1.34	1.33	4.02	6.69	640
BH-26	10/22/2019	0-1	Χ		795	4,560	405	5,760	<000994	<000994	<000994	<000994	<000994	8,630
	"	2-3	Χ		1,050	4,040	288	5,380	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	11,500
	"	4-5	Х		1,280	4,860	386	6,530	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	7,370
	"	6-7	Χ		<50.1	428	62.9	491	0.00825	0.0797	0.0637	0.203	0.355	5,300
	"	9-10	Χ		<50.2	383	77.7	461	0.0149	0.151	0.109	0.380	0.655	3,060
	"	14-15	Χ		<50.3	<50.3	<50.3	<50.3	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	3,080
	"	19-20	Χ		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	0.00130	0.00130	769
	"	24-25	Χ		<50.3	<50.3	<50.3	<50.3	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	529
	"	29-30	Χ		<50.3	<50.3	<50.3	<50.3	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	347
	"	34-35	Χ		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	325
SP-27	5/8/2019	0-1	Χ		<10.0	14.5	<10.0	15.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,440
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.150	<0.300	1,340
	"	4-5	Χ		<10.0	938	244	1,182	<0.050	< 0.050	<0.050	<0.150	<0.300	448
	"	6-7	Χ		<100	5,680	1,170	6,850	<0.050	0.0550	0.342	0.779	1.18	208
	"	9-10	Х		<10.0	80.6	<10.0	81.0	<0.050	<0.050	<0.050	<0.150	<0.300	208
	"	14-15	Χ		<10.0	206	29.2	235	<0.050	< 0.050	<0.050	<0.150	<0.300	272
	"	19-20	Χ		<10.0	93.2	12.9	106	<0.050	< 0.050	<0.050	<0.150	<0.300	704
1	"	24-25	Χ		<10.0	19.0	<10.0	19.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
	"	29-30	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.150	<0.300	128
	"	34-35	Χ		-	-	-	-	-	-	-	-	-	112
	"	39-40	Х		-	-	-	-	-	-	-	-	-	80.0
											•			

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

Sample ID	Sample	Sample	Soil	Status		TPH (	mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Gampie ib	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-29	5/8/2019	0-1	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	< 0.050	<0.050	<0.150	<0.300	1,070
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	< 0.050	< 0.050	< 0.050	<0.150	< 0.300	560
	"	4-5	Χ		-	-	-	-	-	-	-	-	-	160
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	48.0
SP-30	5/8/2019	0-1	Χ		<10.0	<10.0	<10.0	<10.0	< 0.050	< 0.050	<0.050	<0.150	<0.300	5,120
	"	2-3	Χ		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,330
	II .	4-5	Χ		-	-	-	-	-	-	-	-	-	1,490
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	682
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	704
	II .	14-15	Χ		-	-	-	-	-	-	-	-	-	256
SP-31	5/8/2019	0-1	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
	"	2-3	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
	II .	4-5	Χ		-	-	-	-	-	-	-	-	-	80.0
SP-32	5/8/2019	0-1	Х		<10.0	35.3	22.7	58.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
	"	2-3	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	512
	ıı .	4-5	Х		-	-	-	-	-	-	-	-	-	832
BH-33	10/22/2019	0-1	Х		<49.8	<49.8	<49.8	<49.8	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	1,360
	"	2-3	X		<49.7	<49.7	<49.7	<49.7	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	781
	"	4-5	X		<50.1	<50.1	<50.1	<50.1	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	1,080
		6-7	X		<50.2	<50.2	<50.2	<50.2	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	772
	ıı ı	9-10	X		<50.2	<50.2	<50.2	<50.2	<0.000982	<0.000982	<0.000982	<0.000982	<0.000982	446
	"	14-15	Х		<50.1	<50.1	<50.1	<50.1	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	287
	"	19-20	Χ		<49.9	<49.9	<49.9	<49.9	<0.000984	<0.000984	<0.000984	<0.000984	<0.000984	399
BH-34	10/21/2019	0-1	Х		1,470	8,110	638	10,200	0.00130	0.0246	0.0423	0.133	0.201	290
	"	2-3	X		1,140	5,310	449	6,900	0.00256	0.0498	0.0643	0.202	0.319	522
	"	4-5	X		81.3	869	132	1,080	<0.00100	0.00337	0.00622	0.0198	0.0294	1,080
	"	6-7	Х		<50.2	165	55.9	221	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	112
	"	9-10	Х		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	209
	"	14-15	Χ		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	480
	"	19-20	Χ		<50.1	<50.1	<50.1	<50.1	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	2,440
	"	24-25	Χ		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	0.0102	0.0102	2,260
	п	29-30	Х		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	741
	II .	34-35	Х		<50.0	<50.0	<50.0	<50.0	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	805
	"	39-40	Х		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	957
	•							1				•		

Table 1
Permian Water Solutions
Kaiser SWD
Lea County, New Mexico

Sample ID	Sample	Sample	Soil	Status		TPH (	mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-35	10/21/2019	0-1	Χ		<50.1	<50.1	<50.1	<50.1	<0.000992	<0.000992	<0.000992	<0.000992	<0.000992	1,660
	"	2-3	Х		<49.9	917	100	1,020	<0.000990	<0.000990	<0.000990	<0.000990	<0.000990	2,860
	"	4-5	Χ		<50.0	502	78.3	580	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	1,120
	"	6-7	Х		<49.7	<49.7	<49.7	<49.7	<0.000994	<0.000994	< 0.000994	<0.000994	<0.000994	3,340
	"	9-10	Х		<49.8	<49.8	<49.8	<49.8	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	3,180
	"	14-15	Χ		<49.8	<49.8	<49.8	<49.8	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	3,990
	"	19-20	Х		<50.2	<50.2	<50.2	<50.2	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	6,730
	"	24-25	Χ		<50.0	53.0	<50.0	53.0	<0.000998	<0.000998	<0.000998	0.00166	0.00166	1,790
	"	29-30	Χ		<49.8	<49.8	<49.8	<49.8	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	190
	"	34-35	Χ		<49.8	<49.8	<49.8	<49.8	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	523
	"	39-40	Χ		<49.8	<49.8	<49.8	<49.8	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	502
BH-36	10/21/2019	0-1	Χ		1,210	7,730	691	9,630	<0.0101	0.135	2.57	10.8	13.5	5,900
	"	2-3	Х		<50.1	588	122	710	<0.0996	1.30	1.14	13.4	15.8	7,660
	"	4-5	Χ		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	0.00311	0.00311	13,000
	"	6-7	Χ		<50.0	109	50.1	159	<0.00100	<0.00100	<0.00100	0.0184	0.0184	7,410
	"	9-10	Х		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	2,060
	"	14-15	Χ		<50.2	<50.2	<50.2	<50.2	<0.00101	<0.00101	<0.00101	0.00186	0.00186	112
	"	19-20	Χ		<50.0	<50.0	<50.0	<50.0	<0.00100	0.00106	<0.00100	0.0143	0.0154	1,040
SP-37	1/13/2020	0-1	Х		886	4,130	382	5,400	0.283	0.436	0.258	6.62	7.60	3,040
(Inside Berm)	"	2-3	Х		1,170	3,230	301	4,700	0.642	21.20	7.33	21.5	50.7	3,200
	"	4-5	Х		1,730	4,130	397	6,260	0.209	9.64	36.8	131	178	4,810
	"	6-7	Χ		<50.0	224	<50.0	224	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,930
	"	9-10	Χ		<49.9	77.3	<49.9	77.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,170
	"	14-15	Х		<49.8	93.1	<49.8	93.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	542
	"	19-20	Χ		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	144
	"	24-25	Χ		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	49.0
SP-38	1/13/2020	0-1	Х		406	4,410	472	5,290	0.101	0.142	0.130	3.20	3.57	2,160
(Inside Berm)		2-3	Х		1,060	3,250	304	4,610	0.815	11.8	5.80	21.3	39.7	6,130
		4-5	Х		1,550	5,330	486	7,340	1.19	15.5	9.86	24.5	51.0	6,120
	"	6-7	Х		<49.9	233	<49.9	233	<0.00198	<0.00198	0.00484	0.0240	0.0289	812
	"	9-10	Χ		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	877
	"	14-15	Χ		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	943
	"	19-20	Х		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	343
	"	24-25	Х		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	300
	"	29-30	Х		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	200
	"	34-35	Х		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	162
												•		

# **Photos**





View Southwest - Area of SP-1



View South - Area of SP-2







View North – Area of SP-3



View West - Area of SP-4







View South - Area of SP-5



View East - Area of SP-6







View East - Area of SP-7



View Northwest - Area of SP-8







View Northwest - Area of SP-9



View West – Area of SP-10







View South - Area of SP-11



View North – Area of SP-12







View Northwest – Area of SP-13



View Southwest - Area of SP-14







View West – Area of SP-15



View East - Area of SP-16







View Northwest – Area of SP-17



View South - Area of SP-18







View South - Area of SP-19



View South - Area of SP-20







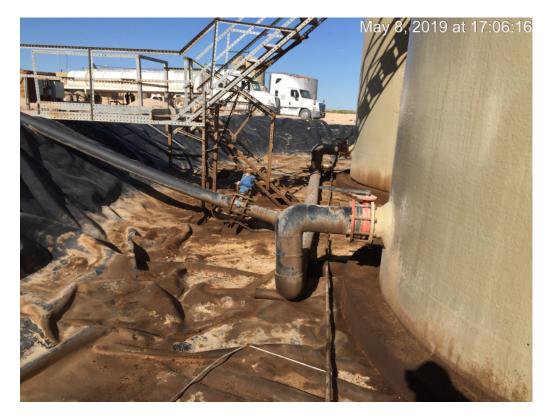
View North – Area of SP-21



View South - Area of SP-22







View East – Area of SP-24



View North - Area of SP-25







View West – Area of SP-26



View West - Area if SP-27







View North - Area of SP-29



View South - Area of SP-30







View North - Area of SP-31



View North – Area of SP-32







View Southwest – Area of BH-17



View Northeast – Areas of BH-18 and BH-19





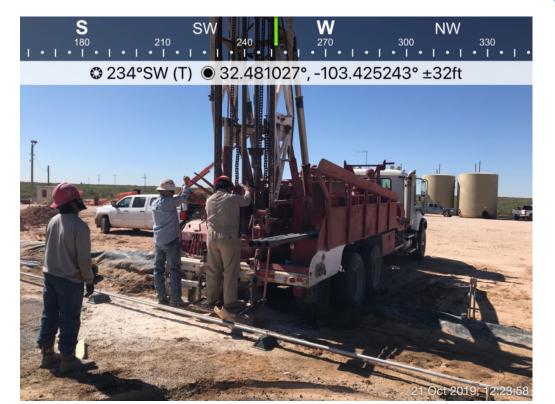


View Southeast – Area of BH-20



View Southwest - Areas of BH-23, BH-24, BH-25, and BH-26





View Southwest – Area of BH-17



View Northeast – Areas of BH-18 and BH-19







View Southeast – Area of BH-20



View Southwest - Areas of BH-23, BH-24, BH-25, and BH-26







View South - Areas of BH-33 and BH-34



View South - Area of BH-35



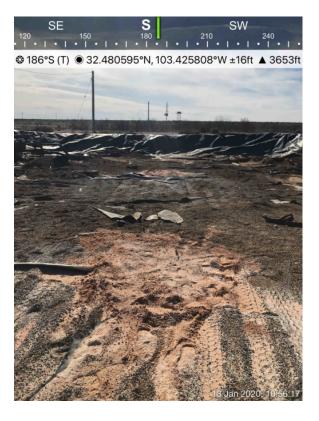




View Southeast – Area of BH-36







View South - Areas SP-37 and SP-38



View North – Areas of SP-37 and SP-38

Appendix A

Form C-141

Revised August 8, 2011

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

			Rele	ease Notific	eation	and Co	rrective A	ction	1		
						OPERAT	ГOR		Initia	al Report 🔲	Final Report
	mpany P	ote Water	System	is, LLC			y Burton Ope	eratio	ns Mana	ger for NM	
Address		Illinois STE	950 M	lidland TX		Telephone N			8~4917		
Facility Nat	ne				H	acility Typ	e Production	n Wa	<u>ter</u>		
Surface Ow	ner Pyote	Water Sys	stems,Ll	C Mineral O	wner		Pyote		API No	. 30~025~0	02538
						OF REI	LEASE				
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/V	West Line	County	
E.	13		34	10 ft	N/S	3				LEA CO	UNTY
-F	10	25	-	titude 32.4808	355153	425agitud	le -103.425	63076	65566	1	
						_ 0					
Type of Release 20 bbls production water  Volume of Release 20 bbls Volume Recovered 20 bbls  Production water  Output  Description:  Output  Description:											
Source of ReleaseVac truck  Date and Hour of Occurrence 1/14/1Pate and Hour of Discovery 1/14/15											
Was Immediate Notice Given?  Yes No Not Required  Was Immediate Notice Given?  Jerry Burton											
By Whom?	Jerry Burt	on				Date and H	lour				
Was a Water			Yes 🚺	No		If YES, Vo	olume Impacting the	he Wate	ercourse.		
If a Watercon	ırse was Im	pacted, Descri	ibe Fully.*	*							
none		<b>r</b>									
110110											
Describe Cau Vac truck	se of Probl	em and Remed	dial Action / he faile	n Taken.*	when tl	nev are inst	ructed to do on	each l	oad. It is p	oosted as well, a	t the sign in
ticket area		•				· ·			•	,	U
Describe Are	a Affected	and Cleanup A	Action Tak	en.* The clean	up area	or					
							ight in caliche a				
been shut d	lown for a	bout 4 mont	hs, the ac	ccess water is fr	om all t	he rain bac	ek n September a	and Oc	ctober,than	n the snow we	have had since
been shut d	lown for a	bout 4 mont	hs, the ac	ccess water is fr	om all t	he rain bac		and Oc	ctober,than	n the snow we	have had since
been shut of than. Has r	lown for a not been di	bout 4 mont y enough to	hs, the ac	ccess water is fr those lines. DU	om all t JE TO N	he rain bac MOTHER NA	ek n September a	and Oc had a	ctober,than company	n the snow we leave go out several	have had since times to do this
than. Has r for loads li I hereby certi regulations a	lown for a not been do not bee	bout 4 mont by enough to nformation gi are required to	work on ven above or report ar	those lines. DU	OM all to JE TO A lete to the elease no	he rain bac MOTHER NA e best of my otifications ar	ATURE we have knowledge and used perform correct	and Oce had a nderstartive act	ctober,than company nd that purs	go out several suant to NMOCD eases which may	have had since times to do this rules and endanger
been shut of than. Has refore loads line I hereby certifications a public health	down for a not been do not been do not been do not be a long to the interval of the environment of the envir	bout 4 mont ry enough to nformation gi are required to ronment. The	work on ven above o report ar acceptance	those lines. DU is true and compand/or file certain rece of a C-141 repo	JE TO A lete to the elease no	he rain bac MOTHER NA e best of my tifications ar NMOCD m	ATURE we have knowledge and used perform correct arked as "Final Ro	and Oce had a nderstartive act	ctober, than company and that pursions for relations not relations	go out several suant to NMOCD eases which may leve the operator	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their of	down for a not been do not been do not been do not be not been do not be not been do not be not be not been do not be not	bout 4 mont ry enough to nformation gi are required to ronment. The ave failed to a	work on ven above o report ar acceptance acc	those lines. DU is true and compador file certain rece of a C-141 repo	JE TO A  lete to the elease no ort by the emediate	he rain bac MOTHER NA e best of my stifications at NMOCD m contaminati	kn September a  ATURE we have  knowledge and used perform correct arked as "Final Roon that pose a throught	e had a  nderstantive active a	ctober,than company nd that purs ions for relators not relators not relators	go out several suant to NMOCD eases which may eve the operator r, surface water, h	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their of or the environ	down for a not been drawn 3 & 4 Ify that the ill operators or the environment. In a	bout 4 mont ry enough to nformation gi are required to ronment. The ave failed to a	work on ven above o report ar acceptance dequately OCD accep	those lines. DU is true and compador file certain rece of a C-141 repo	JE TO A  lete to the elease no ort by the emediate	he rain bac MOTHER NA e best of my stifications at NMOCD m contaminati	ATURE we have knowledge and used perform correct arked as "Final Ro	e had a  nderstantive active a	ctober,than company nd that purs ions for relators not relators not relators	go out several suant to NMOCD eases which may eve the operator r, surface water, h	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their of or the environ	down for a not been drawn 3 & 4 Ify that the ill operators or the environment. In a	bout 4 mont ry enough to nformation gi are required to ronment. The ave failed to a ddition, NMC	work on ven above o report ar acceptance dequately OCD accep	those lines. DU is true and compador file certain rece of a C-141 repo	JE TO A  lete to the elease no ort by the emediate	he rain bac MOTHER NA e best of my stifications at NMOCD m contaminati	kn September a ATURE we have knowledge and us nd perform correc arked as "Final Ro on that pose a thro e the operator of r	and Oce had a nderstantive active act	company and that pursions for relations for relations not relations and water ibility for company to the compan	go out several suant to NMOCD eases which may eve the operator r, surface water, h	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their of or the environ federal, state.	down for a not been drawn 3 & 4 Ify that the ill operators or the environment. In a	bout 4 mont ry enough to nformation gi are required to ronment. The ave failed to a ddition, NMC	work on ven above o report ar acceptance dequately OCD accep	those lines. DU is true and compador file certain rece of a C-141 repo	JE TO A  lete to the elease no ort by the emediate	he rain bac MOTHER NA e best of my stifications at NMOCD m contaminati	kn September a ATURE we have knowledge and us nd perform correc arked as "Final Ro on that pose a thro e the operator of r	and Oce had a nderstantive active act	company and that pursions for relations for relations not relations and water ibility for company to the compan	go out several suant to NMOCD eases which may ieve the operator r, surface water, h ompliance with a	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their of or the environ	down for a not been do not be a not been do not be a not been do not be not be not been do no	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	work on ven above o report ar acceptance dequately OCD accep	those lines. DU is true and compador file certain rece of a C-141 repo	om all t	he rain bac MOTHER NA e best of my stifications as NMOCD m contaminations not reliev	ATURE we have knowledge and used perform correct arked as "Final Roon that pose a three the operator of r	and Oce had a nderstantive active active active active active active port of the second of the secon	etober, than company and that pursions for releatoes not reliate round water ibility for control of the control	go out several suant to NMOCD eases which may ieve the operator r, surface water, h ompliance with a	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their of or the environ federal, state.	down for a not been drage 3 & 4 lify that the ill operators or the envi operations hument. In a not or local law	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	work on ven above o report ar acceptance dequately OCD accep	those lines. DU is true and compador file certain rece of a C-141 repo	om all t	he rain bac MOTHER NA e best of my stifications as NMOCD m contaminations not reliev	kn September a ATURE we have knowledge and us nd perform correc arked as "Final Ro on that pose a thro e the operator of r	and Oce had a nderstantive active active active active active active port of the second of the secon	etober, than company and that pursions for releatoes not reliate round water ibility for control of the control	go out several suant to NMOCD eases which may ieve the operator r, surface water, h ompliance with a	rules and endanger of liability
than. Has r for loads li I hereby certi regulations a public health should their o or the environ federal, state.  Signature:  Printed Name	down for a not been do not be not been do not	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	hs, the active above or report are acceptance dequately OCD acceptance.	those lines. DU is true and compador file certain rece of a C-141 repo	om all t  JE TO A  lete to the lelease no ort by the emediate report do	he rain bac MOTHER NA e best of my stifications as NMOCD m contaminations are not reliev	ATURE we have knowledge and used perform correct arked as "Final Roon that pose a three the operator of r	and Och had a nderstantive active act	etober, than company and that pursions for releations not relative round water ibility for company that the company of the com	go out several suant to NMOCD eases which may ieve the operator r, surface water, h ompliance with a	rules and endanger of liability
than. Has refor loads his I hereby certifications a public health should their correlations or the environment of the environme	down for a not been do not be not been do not been do not been do not be not been do not been	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regulation	hs, the active work on ven above to report ar acceptance dequately OCD acceptations.	those lines. DU is is true and compand/or file certain report investigate and retrance of a C-141 report investigate and retrance of a C-141 report investigate.	om all t  JE TO A  lete to the lelease no ort by the emediate report do	he rain bac MOTHER NA e best of my stifications as NMOCD m contaminations are not reliev	ATURE we have knowledge and used perform correct arked as "Final Reform that pose a three the operator of receive the operator	and Och had a nderstantive active act	etober, than company and that pursions for releations not relative round water ibility for company that the company of the com	n the snow we go out several suant to NMOCD eases which may seve the operator r, surface water, hompliance with a DIVISION  Date: 3/29/15	rules and endanger of liability
than. Has r for loads lit I hereby certi regulations a public health should their o or the environ federal, state.  Signature:  Printed Name  Title: Open	down for a not been drag a & 4 lify that the ill operators or the enviroperations had not been drag a life by the individual of the indivi	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regu	hs, the active above or report are acceptance adequately of acceptations.	those lines. DU is true and compand/or file certain rece of a C-141 reportance of a C-14	om all t  JE TO A  lete to the lelease no ort by the emediate report do	he rain bac MOTHER NA e best of my stifications as NMOCD m contaminati ses not reliev Approved by Conditions of	knowledge and used perform correct arked as "Final Reform that pose a three the operator of reform correct arked as "Final Reform that pose a three the operator of reform that pose as three the operator of reform that Special Properties of the Properties of Approval:	and Oce had a nderstar tive act teport" deat to gresponsion	company  and that pursions for releates not reliate round water ibility for control of the contr	go out several go out	rules and endanger of liability
than. Has refor loads lift. Thereby certifications a public health should their corthe environgederal, state.  Signature:  Printed Name  Title: Open  E-mail Address  Date: 1~23-	down for a not been drag a & 4 lify that the ill operators or the environment. In a gor local law Jerry E rations A less: audra	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regulation furton  Manager for appyotews	hs, the active work on wen above to report are acceptance acceptance acceptance acceptance acceptance with the second acceptance acceptance with the second	those lines. DU is is true and compand/or file certain report investigate and retrance of a C-141 report investigate and retrance of a C-141 report investigate.	om all t  JE TO A  lete to the lelease no ort by the emediate report do	he rain bac MOTHER NA e best of my stifications an NMOCD m contamination ses not reliev Approved by Conditions of	kn September a ATURE we have knowledge and used perform correct arked as "Final Reform that pose a three the operator of a OIL CONSTITUTE Environmental Space 1/29/15  Approval:  ples required.	had a nderstantive active acti	etober, than company and that pursions for relations for relations not relative to the count water ibility for company (ATION).  Expiration 1	n the snow we go out several suant to NMOCD eases which may seve the operator r, surface water, hompliance with a DIVISION  Date: 3/29/15	rules and endanger of liability
than. Has r for loads lit I hereby certi regulations a public health should their o or the environ federal, state.  Signature:  Printed Name  Title: Open	down for a not been drag a & 4 lify that the ill operators or the environment. In a gor local law Jerry E rations A less: audra	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regulation furton  Manager for appyotews	hs, the active work on wen above to report are acceptance acceptance acceptance acceptance acceptance with the second acceptance acceptance with the second	those lines. DU is true and compand/or file certain rece of a C-141 reportance of a C-14	om all t  JE TO A  lete to the lelease no ort by the emediate report do	he rain bac MOTHER NA e best of my stifications an NMOCD m contamination ses not reliev Approved by Conditions of	knowledge and used perform correct arked as "Final Reform that pose a three the operator of reform correct arked as "Final Reform that pose a three the operator of reform that pose as three the operator of reform that Special Properties of the Properties of Approval:	had a nderstantive active acti	etober, than company and that pursions for relations for relations not relative to the count water ibility for company (ATION).  Expiration 1	suant to NMOCD eases which may eve the operator r, surface water, hompliance with a DIVISION  Date: 3/29/15  Attached   1RP-3512	rules and endanger of liability numan health ny other
than. Has refor loads lift. Thereby certifications a public health should their corthe environgederal, state.  Signature:  Printed Name  Title: Open  E-mail Address  Date: 1~23-	down for a not been drag a & 4 lify that the ill operators or the environment. In a gor local law Jerry E rations A less: audra	bout 4 montry enough to nformation gi are required to ronment. The lave failed to a ddition, NMC ws and/or regulation furton  Manager for appyotews	hs, the active work on wen above to report are acceptance acceptance acceptance acceptance acceptance with the second acceptance acceptance with the second	those lines. DU is true and compand/or file certain rece of a C-141 reportance of a C-14	om all t  JE TO A  lete to the lelease no ort by the emediate report do	he rain bac MOTHER NA e best of my stifications an NMOCD m contamination ses not reliev Approved by Conditions of	kn September a ATURE we have knowledge and used perform correct arked as "Final Reform that pose a three the operator of a OIL CONSTITUTE Environmental Space 1/29/15  Approval:  ples required.	had a nderstantive active acti	etober, than company and that pursions for relations for relations not relative to the count water ibility for company (ATION).  Expiration 1	the snow we go out several suant to NMOCD eases which may leve the operator r, surface water, hompliance with a DIVISION  Date: 3/29/15  Attached  1RP-3512	rules and endanger of liability numan health ny other

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

nKJ1512041707

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action												
OPER	RATOR xxx Initial Report  Final Report											
Name of Company PYOTE WATER SYSTEMS, LLC	Contact Jerry Burton NM Operations Manager											
Address 400 W. Illinois Ste 900	Telephone No. 432.448.4917 or 432.448.5323(Audra)											
Facility Name Kaiser SWD	Facility Type SWD- production water DIDPOSAL											
Surface Owner Pyote Water Systems, LLC   Mineral Owner	er Pyote Water Systems, LLC API No. 30-025-02538											
LOCAT	TION OF RELEASE											
Unit Letter Section Township Range Feet from the 125 ft No.	orth/South Line Feet from the East/West Line County Lea COUNTY											
Latitude	Longitude											
NATURE OF RELEASE  Volume of Balance 100BB/S  Volume Recovered 100 BB/S												
Type of Release; production water Volume of Release 100BBLS Volume Recovered 100 BBLS												
Source of Release  Vac truck (unknown due to no camera's) hit load line 3	Date and Hour of Occurrence Date and Hour of Discovery 4/24/2015 4/24/15 2:35 am											
Was Immediate Notice Given X Yes No Not Required	If YES, To Whom? Jerry Burton											
By Whom? <i>Unknown driver (575)-390-3836</i>	Date and HOUR; 4/24/2015 2:35 am											
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.											
☐ Yes *** Ne***	RECEIVED											
If a Watercourse was Impacted, Describe Fully.*	By OCD District 1 at 11:10 am, Apr 30, 2015											
	own truck driver hit load line 3 caused a spill. We had an anonymous driver call us ed a large amount of water on the pad at the location, than noticed line 3 was had											
Describe Area Affected and Cleanup Action Taken.*  Area affected was the pad only at the location. Jerry and his pumper  (backhoe) 2 vac trucks one from Big Buck Services and one from Bi	r Kenny repaired damages themselves, remedial work done by L&J services T Services											
regulations all operators are required to report and/or file certain releas public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remed	to the best of my knowledge and understand that pursuant to NMOCD rules and use notifications and perform corrective actions for releases which may endanger by the NMOCD marked as "Final Report" does not relieve the operator of liability ediate contamination that pose a threat to ground water, surface water, human health out does not relieve the operator of responsibility for compliance with any other											
6 -//2-//	OIL CONSERVATION DIVISION											
Signature: Printed Name: Jerry Burton	Approved by Environmental Specialist:											
Attle: NM Operations Manager for Pyote Water systems, LLC	Approval Date: 04/30/2015 Expiration Date: 07/30/2015											
jerry@pvotewatersystems.com or audra@pyotewatersystems.com E-mail Address:	Conditions of Approval:											
4-26-2015 Date: 4/26/15 Phone:432.448.4917	Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of											
Attach Additional Sheets If Necessary	remediation required.											

#### Received by OCD: 8/28/2023 2:17:46 PM

Name of Company Pyote Water Systems,LLC

400 M III:---:- C4- 000 MIDLAND TV 70704

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mex

**RECEIVED** Energy Minerals and Natura By JKeyes at 7:43 am, Jun 09, 2016

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

pJXK1616127747

Initial Report

Page 140 of 1449

Final Report

**Release Notification and Corrective Action** 

**OPERATOR** 

Contact Jerry Burton

		ols Ste 900 in	MIDLAND	17 19101		Telephone I			
Facility Nar	ne Kai	ser Swd				Facility Typ	e production	on Water	
Surface Ow	ner STA	TE		Mineral C	wner	STATE		API No	. 30-025-02538
				LOCA	TIO	N OE DEI	LEACE		
Unit Letter	Section	Township	Range	Feet from the		N OF REI /South Line	Feet from the	East/West Line	County
F	13	21s		reet from the	North	/South Line	reet from the	Last/ West Line	•
Г	13	215	24s 34E						LEA COUNTY
			Lat	itude <u>32.4808</u>			le_103.42565	92 nad 83	
						OF REL		Т	
Type of Rele		ing struck load	tanks while	e driver was unloa	ading		Release 1050 BE		
Source of Re Was Immedia						If YES, To	Iour of Occurrenc	e 5-17-16 Date and	Hour of Discovery 4 PM
was illilliedia	ite Notice C		Yes □	No  Not Re	eauired	11 1123, 10		DUDTON via talan	aana hu drivar
By Whom?	I INKNOWN				1	Data and E	JERRY Iour 5/17/16 4PI	BURTON via telepl	lone by driver
Was a Water			•				olume Impacting t		
			Yes 🗌	No		1050 BL			
If a Watercou	rse was Im	pacted, Descri	ibe Fully *			1050 BL	5		
ii a watereot	irse was im	pacted, Descri	ioe i uny.						
fire melte	d parts o	f the liner,v	vater got	under the lin	er				
Describe Cau	se of Probl	em and Reme	dial Action	Taken.*					
					less th	nan 2 bbls	breeched con	tainment. calle	d vac truck out to empty
containme	nt after t	he fire dep	t put out	the fire .					
Describe Are	a Affected	and Cleanup A	Action Take	en.*					
		-							
load side	containm	ent have c	lean up d	crew cleaning	ı up ar	nd disposin	ig of old tanks	and cat walk t	o sundown
I hereby certi	fy that the i	nformation gi	ven above	is true and comp	lete to t	he best of my	knowledge and u	nderstand that purs	suant to NMOCD rules and
regulations a	l operators	are required to	o report an	d/or file certain r	elease n	otifications a	nd perform correc	tive actions for rele	eases which may endanger
									eve the operator of liability
									s, surface water, human health ompliance with any other
		ws and/or regu		ance of a C-141	героп и	ioes not renev	e the operator of i	esponsionity for co	omphance with any other
,							OIL CONS	SERVATION	DIVISION
	TOLLU	Burton							
Signature:	Jerry	Dru LUM						necialist: Jam	£lhye~
Printed Name	: Jerrv E	Burton				Approved by	Environmental S	pecialist:	
	, _						06/00/2016		08/09/2016
Title: NM (	Operation	ns Mgr				Approval Dat	te: 06/09/2016	Expiration	Date: 00/09/2010
E mail Adda	ee, ierry	@pyotewa	tersveter	ns com		Conditions	f Annroyalı		
E-mail Addre	ss. July	<u>шруоксича</u>	CISYSICI	110.00111		Conditions of Discrete samp	l Approval: les only. Delineat	e and remediate	Attached
Date: 5-18-	2016		Phone:	4324484917		oer NMOCD g			1RP 4305
* Attach Addi	tional Shee	ets If Necess	ary						nJXK1616127644

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr. Santa Fe. NM 87505

B 2016

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Form C-141 Revised August 8, 2011

pKL1632848917

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	icis Dr., Sant	a Fe, NM 8750	5-	Sa Sa	nta F	e, NM 875	605					
		RE	Rel	ease Notific	catio	n and Co	orrective A	ction	1			
	Well and the					<b>OPERA</b>	ГOR			al Report		Final Report
		ambrian Ma		t, LTD.		Contact: M						
		1 St. Suite 90	00			-	No. 432-631-439	98				
Facility Na	me: Kaiser	SWD #9				Facility Typ	e: SWD					
Surface Ow	ner: State			Mineral C	)wner:	State			API No	. 30-025-0	2538	
				LOCA	OITA	N OF RE	LEASE					
Unit Letter F	Section 13	Township 21S	Range 34E	Feet from the 1980	North	/South Line North	Feet from the 1980	East/ West	West Line	County Lea		
			L	atitude 32.4808			le103.425659	2				
T CD.1	D 1	1 117.4		NAI	UKE	OF REL			Walama I	Recovered: (	0	
Type of Rele Source of Re							Release: Unknow			Hour of Dis		v.
Source of Re	rease, riac	tans				Date and I	iour or occurrenc	۸.	Date and	nour or Dis	COVCI	<i>.</i>
Was Immedi	ate Notice (		Yes [	No Not R	equired	If YES, To	Whom?		-3)			
By Whom?					44	Date and I	lour:					
Was a Water	course Rea		Yes 🗵	No		If YES, V	olume Impacting t	the Wat	ercourse.			
Describe Car Due to a ligh	use of Probl		dial Actio							construction	ı. The	frac tanks
The frac tank	cs were set		de of the	ken.* affected battery. T taken in preparati				ound th	e battery be	rm and cont	inued	south-
regulations a public health should their or the enviro	all operators or the envi operations l onment. In a	are required to ironment. The have failed to	to report and acceptant ac	e is true and comp nd/or file certain r ce of a C-141 repo y investigate and r ptance of a C-141	release rort by the remedian	notifications a ne NMOCD re te contaminat	nd perform correct arked as "Final Ri ion that pose a thr	ctive ac eport" eat to g	tions for rel does not rel round water	eases which ieve the ope r, surface wa	may or rator o ater, h	endanger of liability auman health
							OIL CON	SERV	ATION	DIVISIO	N	
	(	anthor	<del>g</del>			Approved by	Environmental S	pecialis	st: Truck	an Lynchi		
Printed Nam	e: Mike An	thony										
Title: Field (	Operations S	Superintenden	t			Approval Da	te: 11/23/201	16	Expiration	Date: 01	<u>/23/</u>	2017
E-mail Addr	ess: mantho	ony@cambrian	ımgmt.co	m		Conditions o	f Approval:			Attached		
Date: 11/15/	16	Phone	e: 432-631	1-4398		Please se	e attached Di	rectiv	ve		452	25
		ets If Necess			-							0.19605

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

pOY1730059151

nOY1730058924

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Kei	ease Notifica		OPERA		cuon		al Report		Final Report
Name of Co	mpany Ca	ambrian Man	agement	. Ltd.			ke Anthony		v initia	а кероп		rmai Report
		2, Midland, T					No. (432)631-43	398				
Facility Na							pe Salt Water D					
Surface Ow	ner State			Mineral O	wner S	State			API No	. 30-025-02	2538	
				LOCA	TION	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/W	est Line	County		
F	13	21S	34E							Lea		
			Latitud	le 32.48008578	8_ Lo	ngitude_	-103.4256592	NAD8	3			
				NAT	URE	OF REL	EASE					
Type of Rele	ase Produc	ed Water & Cr	ude Oil			Volume o	f Release			Recovered		
Source of Re	lease	27.070000	2010 200			50 bbls	Hour of Occurrence	ce	0 bbls Date and	Hour of Disc	covery	
Source of Re	Unkno	own				Unknown				017, 12:35 PI		
Was Immedi	ate Notice (		Yes 🗸	No □ Not Re	quired	If YES, T						
By Whom?	N/A					Date and	Hour N/A					
Was a Water	course Read	TET D FO.	Yes 🗸	7 No		If YES, V	olume Impacting	the Water	course.			
If a Watercon	ırse was Im	pacted, Descr					RECEIVE	ED				
ir a watered	arbe was an	pacieu, Deser	ice i uny.				By Olivia	VII at	1.17	nm Oc	+ 27	2017
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*			by Onvia	<i>ru u</i> t	7.17	<i>piii,</i> 00	· · · · · ·	, 2011
The cause	or the re	lease is uni	aeter mir	ned and is curre	eritiy ur	idei ilives	augation. No rei	mediai a	action na	as been tai	ken at	triis point.
Describe Are	a Affected	and Cleanup A	Action Ta	ken.*								
affected a	rea inside	the berms	measu	ry and seconda ed approximate guidelines.								
regulations a public health should their or the enviro	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to	o report a acceptan adequately OCD accep	e is true and compl nd/or file certain re ce of a C-141 repo y investigate and re ptance of a C-141 r	elease ne rt by the emediate	otifications NMOCD recontamina	and perform correct narked as "Final R tion that pose a the	ctive action Report" do reat to gro	ons for rel oes not rel ound wate	eases which ieve the oper r, surface wa	may end ator of ter, hun	danger liability nan health
Signatura	Denin	Jones Re		4.1.4			OIL CON	SERV	ATION 9	DIVISIO	<u>N</u>	
Signature: Printed Nam			3	Analyst of Cambrian Mg	ımt.)	Approved b	y Environmental S	Specialist:	0	1		
Title: Owne			-3-11			Approval D	10/27/2	017 <sub>E</sub>	xpiration	Date:		
		trinityoilfiel	dservice	es.com			of Approval:					
Date: 10/23						1200130000	ched directiv	ve		Attached	2	
		ets If Necess		: (575) 631-312	29					4		

1RP-4855

Form C-141 Revised April 3, 2017

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District III
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr. Santa Fe. NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr.

1220 5. 5t. 11am	cis Di., Saint	a i c, ivivi 07505		Sa	nta Fe	, NM 87	505							
			Rele	ease Notific	ation	and C	orre	ective A	ction	1				
						OPERA	TOF	2		<b>√</b> I	nitia	l Report		Final Report
		ambrian Man				Contact M								
		2, Midland, T	X 79702	2				432)631-43						
Facility Nan	ne Kaiser	State SWD				Facility 13	pe Sa	alt Water D	isposal				_	
Surface Ow	ner State			Mineral C	wner S	State				API	No.	30-025-0	2538	
				LOCA	TION	OF RE	LEA	ASE						
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Fee	t from the	East/V	West Li	ine	County .		
F	13	21S	34E									Lea		
,			Latitud	le32.4800857	'8 Lo	ngitude_	-103.	4256592	NAD	83	•			
				NAT	URE	OF REI	LEAS	SE						
Type of Relea	ase Produc	ed Water				Volume of 20 bbls		ase		Volu 10 b		ecovered		
Source of Re	lease Seal c	on pump		Date and Unknowr		of Occurrent	ce			Hour of Dis 8, 10:00 AM				
Was Immedia		Given?	Yes 🔽	eauired	If YES, 7 N/A	o Who	om?							
By Whom?	ALL A				Date and	Hour			_					
Was a Water	N/A course Read	ched?	_			N/A If YES, V	/olume	Impacting	the Wate	ercours	se.			
			Yes 🔽	] No		N/A								
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	*				CEIV				_		
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*			Ву	Olivia	Yu a	it 9:	34	am, F	eb 0	7, 2018
			acuum t	ruck was utilize	ed to re	ecover fre	e-star	nding liqui	d. The	seal	was	repaired	during	g initial
response	activities.													
Describe Are	a Affected	and Cleanup A	Action Tal	ken.*										
The releas	se was co	onfined to th	ne prima	ry and second	a <b>ry</b> ear	then cont	ainme	ent berms	surrou	ınding	the	SWD ba	ttery.	The
				ed approximat										
				ee 1RP-4855)	. Reme	ediation of	f the ii	mpacted a	area wi	ill be d	cond	ucted in	accor	dance with
NIMOCD a	ana NIVISI	_O guidelin	es.											
I hereby certi	ify that the	information gi	iven above	e is true and comp	lete to th	ne best of m	y knov	vledge and u	understa	nd that	purs	uant to NM	OCD r	ules and
regulations a	II operators	are required t	o report a	nd/or file certain r	elease no	otifications	and pe	rform corre	ctive act	tions fo	r rele	eases which	may e	ndanger
				ce of a C-141 report investigate and r										
				otance of a C-141										
		ws and/or regi												,
		$\sim$					<u>C</u>	DIL CON	<u>ISER V</u>	ATI	<u>ON</u>	DIVISIO	<u>N</u>	
Signature:	20ni	ie Jon	6								()	4		
Printed Name	e Denise	Jones			Approved b	y Envi	ironmental S	Specialis	st:		( )			
						2	2/7/2018	3	<u>.</u>		4			
Title: Regul						Approval D				Expira	tion I	Date:		/
E-mail Addre	ess: djones	s@cambria				Conditions			ii (c			Attached		
Date: 2/	tional Sha	ets If Necess		: (432) 620-91	81	see att	acne	ed direct	ive					
Attacii Audi	nonai Sile	C13 11 14ECE25	out y		F	1RP-49	60	nOY	18038	8340	)27	$\neg$		

pOY1803834550

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Rel	ease Notifi	catio	on and Co	orrective A	ction	1			
						<b>OPERA</b>	ГOR		☐ Initi	al Report	☐ Fin	al Report
		ambrian Mar		, Ltd.		Contact Mi				_		
		Midland TX	X 79702				No . 432-631-4	398				
Facility Na	me Kaiser	State SWD				Facility Typ	be SWD					
Surface Ow	ner State			Mineral (	Owner	r State			API No	o. 30-025-0	02538	
				LOC	ATI(	ON OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the		th/South Line	Feet from the	East/	West Line	County		
	13	21S	34E							Lea		
F												
				32 48085	70		03.4256503	2				
			Latitud	le 32.48085	76	Longitude	03.4256592	NAD	083			
				NA	ΓUR	E OF REL						
Type of Rele							Release 150 bb			Recovered		
Source of Re	lease Well	head				06/20/2018	Hour of Occurren	ce		Hour of Dis 18 10:00A		
Was Immedi	ate Notice (	Given?				If YES, To			00/20/20	10 10.0071		
			Yes X	No Not Re	equired	l						
By Whom?						Date and I						
Was a Water	course Read	_	Yes X	No		If YES, Vo	olume Impacting	the Wat	ercourse.			
If a Waterco	urse was Im	pacted, Descr	ribe Fully.	*								
<b>D</b> " 0	25 11	1.5										
Describe Cai	ise of Probl	em and Reme	dial Actio	n Taken.*								
Nipple on we	ellhead brok	ke off – nipple	was repla	iced								
••		• •	•									
Dagariba Ara	a Affaatad	and Cleanup	Action To	zon *								
				water was picked	dup. T	This was on top	of a previous spi	ll that w	as already i	reported and	is in the pro	ocess to
be remediate			1	1	1	1	1 1		,	1	1	
I hereby cert	ify that the	information g	iven abov	e is true and com	plete to	the best of my	knowledge and	understa	nd that pur	suant to NM	OCD rules	and
				nd/or file certain								
public health	or the envi	ronment. The	e acceptan	ce of a C-141 rep y investigate and	ort by remedi	the NMOCD m	iarked as "Final I	Report"	does not rel	ieve the ope	rator of liab	ility health
				otance of a C-141								
		ws and/or reg			•	<b>T</b>						
							OIL CON	ISERV	/ATION	DIVISIO	<u>ON</u>	
Signature:									01	L		
						Approved by	Environmental S	Specialis	<sub>st:</sub> 6 0	Τ		
Printed Nam	e: Denise J	ones						1				
Title: Regu	latory Analy	yst				Approval Da	7/31/201	8	Expiration	Date:		
											,	
E-mail Addr	ess: <u>djones</u>	@cambrianm	gmt.com			Conditions of	* *	. (1)	_	Attached	ı 🔽	
Date: 06/21/	2018	Phone:	:			See at	tached dire	ctive				
						1RP-5139	9	рСН	182123	9860		
Released to In	naging: 9	/1/2023 2:22	8:53 PM			nCH1821		۳٠.۱	. 52 . 20			
						1110111021						

Form C-141 Revised April 3, 2017

Received by OCD: 8/28/2023 2:17:46 PM
District 1
1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico **Energy Minerals and Natural Resources**

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

**Release Notification and Corrective Action** 

						OPERA		Х	Initia	al Report		Final Repor
		ambrian Ma		t, Ltd		Contact Andy Rickard						
		, Midland, T	X 79702			Telephone No. 432-620-9181						
Facility Na	me Kaiser	State SWD				Facility Typ	e SWD					
Surface Owner State Mineral Owner					State		A	API No	. 30-025-0	02538		
				LOCA	TIO	N OF RE	LEASE					
Unit Letter F	Section 13	Township 21S	Range 34E	Feet from the 1980	North North	/South Line	Feet from the 1980	East/West West	t Line	County Lea		
			Latitu	de 32.480938 N				NAD83				
Type of Rele	ease Produc	ed Water		NAT	UKE	OF REL	Release 200 Bb	ls Vo	olume R	Recovered 2	200 Bb	ols
Source of Re							lour of Occurrence	ce Da	ate and	Hour of Dis	scovery	
Was Immedi	iate Notice					If YES, To	Whom?	08	700/201	10:00AIV		
D 1111 0.1			Yes	No Not Rec	quired	Christina I	7	2.25 DM				
By Whom? I Was a Water	course Rea	S ched?			_		lour 08/06/2018 olume Impacting		urce			
was a water	course Rea		Yes X	No		II ILS, V	name impacting	the watered	urse.			
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*		DEC	CENTED					
							EIVED					
						By O	livia Yu at	t 1:48 p	m, A	lug 07,	201	18
look at turn	ing up the	voltage at the	e transfo		eak cu	rrent.		- Ingir vario				
Only the area	a inside the	berm which is	s lined wit	h plastic was affec	eted. A	II water was v	racuumed up.					
regulations a public health should their or the enviro	all operators or the envious loperations lonment. In a	are required to ronment. The nave failed to	o report a acceptan adequately OCD accep	e is true and complete is true and complete certain rece of a C-141 report investigate and repart of a C-141 report ance of a C-141 report investigate and received in the certain cer	elease roort by the emedia	notifications a ne NMOCD m te contaminat	nd perform corre- parked as "Final Fi ion that pose a the	ctive actions Report" does reat to groun	s for relations	eases which ieve the ope r, surface w	n may e erator o eater, hi	endanger of liability uman health
-		0					OIL CON	SERVA	LION	DIVISIO	NC	
Signature:	Danie	a Jone	0						m	4		
Printed Name: Denise Jones				Approved by Environmental Specialist:								
Title: Regulatory Analyst				Approval Date: 8/7/2018 Expiration Date:								
E-mail Addr	ess: djones	@cambrianm;	gmt.com		1	Conditions o	f Approval:			Attication		
Deta: 09/0	06/2019		D	hono: 422 620 019	0.1	-	spect liner in o	•		Attached	1 📋	
Date: 08/0	06/2018 itional She	ets If Necess		hone: 432-620-918		NMOCD with a concise report of the						
			-			•	with affirmation			1RF	P-514	19
nOY1821  Ileased to Im			/18219 -53 PM	50272	:	2) At least one photo must demonstrate						
leased to Imaging: 9/1/2023 2:28:53 PM				the entire facility is lined.								

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico **Energy Minerals and Natural Resources**

Form C-141 Revised April 3, 2017 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Name of Co						<b>OPERA</b>	TOR		X Initia	al Report
						Contact Mr. Mike Anthony				
Address PO Box 272, Midland, TX 79702						Telephone No. 432-631-4398				
Facility Name Kaiser State SWD						Facility Typ	e SWD			
Surface Ow	ner State			Mineral O	wner S	State			API No	. 30-025-02538
				LOCA	TION	OF RE	LEASE			
Unit Letter F	Init Letter   Section   Township   Range   Feet from the   North				South Line	Feet from the 1980	East/V West	Vest Line	County Lea	
			Latit	ude 32.480938	N_ Loi	ngitude10	3.4252271	NAD83		
				NAT	URE	OF REL	EASE			
Type of Rele							Release 500 Bb			Recovered 500 Bbls
Source of Re	lease Unlo	ad Tanks				The second section of the sect	Hour of Occurrence 3 10:00AM	e		Hour of Discovery 18 11:00 AM
Was Immedi	ate Notice (	Given?				If YES, To			00/1//20	16 11.00 AW
			Yes 🗌	No 🗌 Not Rec	quired		and other OCD m	ember o	n location	
By Whom?							Iour 12:00 PM 0			
Was a Water	course Read		Yes X	No		If YES, Vo	olume Impacting	the Wate	ercourse.	
If a Waterco	urse was Im	pacted, Desci	ibe Fully.	*/			CEIVED			
		em and Reme mpletely and			npletely	lined pit @	the unload tank ar	ea. The	valve is be	eing repaired or replaced as
		and Cleanup			r was re	covered. Th	e pit liner and tan		e washed a	after all water has been picked
The release vup.  I hereby cert regulations a public health should their or the enviro	ify that the ill operators or the envioperations homent. In a	information g are required to ronment. The	iven above to report a e acceptanadequately OCD accep	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease no ort by the emediate	ne best of my otifications a e NMOCD me e contaminat	knowledge and und perform correctarked as "Final Rights to that pose a thr	ks will b inderstar ctive acti deport" d	nd that pursons for rel oes not rel ound wate	
The release vap.  I hereby cert regulations a public health should their or the enviro	ify that the ill operators or the envioperations homent. In a	information g are required ronment. The lave failed to ddition, NMO	iven above to report a e acceptanadequately OCD accep	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease no ort by the emediate	ne best of my otifications a e NMOCD me e contaminat	knowledge and und perform correct larked as "Final Right on that pose a three the operator of	ks will b inderstar ctive acti eport" d eat to gr responsi	nd that purs ons for rel oes not rel ound wate bility for c	suant to NMOCD rules and eases which may endanger lieve the operator of liability r, surface water, human health
The release vup.  I hereby cert regulations a public health should their or the enviro	ify that the ill operators or the envioperations homent. In a	information g are required ronment. The lave failed to ddition, NMO	iven above to report a e acceptanadequately OCD accep	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease nort by the emediate report de	ne best of my otifications a e NMOCD m e contaminat oes not reliev	knowledge and und perform correct tarked as "Final Right ion that pose a three the operator of OIL CON	ks will b understar ctive active eport" d reat to gr responsi	nd that pursons for reloes not relound wate bility for c	suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health ompliance with any other
The release vap.  I hereby cert regulations a public health should their or the environ federal, state	ify that the if the interest of the environment. In a correct law or local law	information g are required to ronment. The ave failed to addition, NMO ws and/or reg	iven above to report a e acceptanadequately OCD accep	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease nort by the emediate report de	ne best of my otifications a e NMOCD m e contaminat oes not reliev	knowledge and und perform correct larked as "Final Right on that pose a three the operator of	ks will b understar ctive active port" d reat to gr responsi	nd that pursons for reloes not relound wate bility for c	suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health ompliance with any other
The release vap.  I hereby cert regulations a public health should their or the enviro federal, state  Signature:	ify that the if the interest of the environment. In a correct law error or local law error Denise Jennise Jenn	information g are required to ronment. The lave failed to ddition, NMO ws and/or reg	iven above to report a e acceptanadequately OCD accep	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease nort by the emediate report de	ne best of my otifications a e NMOCD m e contaminat oes not reliev	knowledge and und perform correct tarked as "Final Right ion that pose a thruck the operator of OIL CON Environmental S	ks will bunderstaretive active	nd that pursons for reloes not relound wate bility for c	suant to NMOCD rules and eases which may endanger lieve the operator of liability r, surface water, human health ompliance with any other  DIVISION
The release vup.  I hereby cert regulations a public health should their or the enviro federal, state  Signature:  Printed Nam  Title: Regula	ify that the ill operators or the environment. In a , or local law	information g are required to ronment. The lave failed to ddition, NMO ws and/or reg	iven above to report a acceptant adequately OCD acceptulations.	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease nort by the emediate report de	ne best of my otifications a e NMOCD me e contaminat oes not reliev	knowledge and und perform correctarked as "Final Right ion that pose a three the operator of OIL CON Environmental Stee: 8/21/2018	ks will bunderstaretive active	nd that pursons for reloes not relound water bility for control of the control of	suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health ompliance with any other  DIVISION  Date:
The release vup.  I hereby cert regulations a public health should their or the enviro federal, state  Signature:  Printed Nam  Title: Regula  E-mail Addr	ify that the ill operators or the environment. In a condition of the condi	information g are required to ronment. The lave failed to ddition, NMO ws and/or reg	iven above to report and adequately DCD acceptulations.	e is true and comp nd/or file certain rece of a C-141 report investigate and rotance of a C-141	lete to the elease nort by the emediate report de	ne best of my otifications a e NMOCD me e contaminat oes not reliev  Approved by  Approval Da  Conditions o	knowledge and und perform correctarked as "Final Right ion that pose a three the operator of OIL CON Environmental Stee: 8/21/2018	ks will bunderstar tive active	ad that pursons for reloos not reloound wate bility for control of the control of	suant to NMOCD rules and eases which may endanger lieve the operator of liability r, surface water, human health ompliance with any other  DIVISION
The release vup.  I hereby cert regulations a public health should their or the enviro federal, state  Signature:  Printed Nam  Title: Regula	was completed if y that the interpretations in the environment. In a second control of the contr	information g are required to ronment. The lave failed to ddition, NMO ws and/or reg	iven above to report and adequately DCD acceptulations.	e is true and comp nd/or file certain rece of a C-141 report investigate and re	lete to the elease nort by the emediate report de	ne best of my otifications a e NMOCD me contaminat oes not relieved Approved by Approval Date Conditions of the conditio	knowledge and und perform correct arked as "Final Rich that pose a three the operator of OIL CON Environmental Stee 8/21/2018	ks will bunderstaretive active	ad that pursons for reloos not reloound water bility for control of the control o	suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health ompliance with any other  DIVISION  Date:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NCH1834760902
District RP	1RP-5273
Facility ID	
Application ID	pCH1834761047

# **Release Notification**

### Responsible Party

Responsible Party Permian Water Solutions, LLC				OGRID	373626			
Contact Name Dale Glosson				Contact '	Contact Telephone 432-894-3636			
Contact email dale@permianws.com				Incident	# NCH1834760902 KAISER STATE SWD			
Contact mai	ling address	PO Box 2106,	Midland, TX 79	702	@ 30-025-02538			
Latitude 32.	180938			on of Release S  Longitude decimal degrees to 5 dec	103.425227			
Site Name k	Caiser State	SWD	V		Salt Water Disposal			
Date Release	Discovered	11/2/18			oplicable) 30-025-02538			
Unit Letter	Section	Township	Range	Cou	inty			
F	13	218	34E	Lea				
	Materia	il(s) Released (Select	all that apply and atta	nd Volume of	c justification for the volumes provided below)			
Crude Oi	The second second	Volume Releas	ed (bbls) 20		Volume Recovered (bbls) 16			
Produced	Water	Volume Releas	ed (bbls)		Volume Recovered (bbls)			
		Is the concentra produced water	ation of dissolved >10,000 mg/l?	chloride in the	☐ Yes ☐ No			
☐ Condensa	te	Volume Release	ed (bbls)		Volume Recovered (bbls)			
☐ Natural Gas Volume Released (Mcf)			ed (Mcf)		Volume Recovered (Mcf)			
Other (de:	scribe)	Volume/Weigh	t Released (provi	de units)	Volume/Weight Recovered (provide units)			
Cause of Rele	ease Oil ski	m tank overflow	; all fluids conta	ined within contain	ament berm			

Received by OCD: 8/28/2023 2:17:46 PM State of New Mexico
Page 2 Oil Conservation Division

Incident ID NCH1834760902

District RP 1RP-5273

Facility ID

Application ID pCH1834761047

Was this a major release as defined by 1915.29.7(A) NMAC?  Yes No  If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, Dat Glosson called District I office @ 11:25 am on 11/2/18, was transferred to Christina Hernandez, Left voicemall and call bac number. C. Hernandez called back later in the afternoon and the report was made.  Initial Response  The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury  The source of the release has been secured to protect human health and the environment.  Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.  All free liquids and recoverable materials have been removed and managed appropriately.  If all the actions described above have not been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remediate lefforts have been successfully completed or if the release occurred within a lined containment are see (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for lossure evaluation.  Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases occurred within a lined containment are required to report and/or file certain release notifications and perform corrective actions for releases occurred within a lined containment are required to report and/or f		Application 15 pointed in a 10 in
Closson called District I office @ 11:25 am on 11/2/18, was transferred to Christina Hernandez, Left voicemail and call bac number. C. Hernandez called back later in the afternoon and the report was made.    Initial Response	release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury  The source of the release has been stopped. The impacted area has been secured to protect human health and the environment. Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. If all the actions described above have not been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of iresponsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Park Grasson  Title: Operations - Markette	Glosson called District	I office @ 11:25 am on 11/2/18, was transferred to Christina Hernandez, Left voicemail and call back
<ul> <li>☑ The source of the release has been stopped.</li> <li>☑ The impacted area has been secured to protect human health and the environment.</li> <li>☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.</li> <li>☑ All free liquids and recoverable materials have been removed and managed appropriately.</li> <li>If all the actions described above have not been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.</li> <li>Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.</li> <li>I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.</li> <li>Printed Name:</li></ul>		Initial Response
The impacted area has been secured to protect human health and the environment.  ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.  ☐ All free liquids and recoverable materials have been removed and managed appropriately.  If all the actions described above have not been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Pale Guesson  Title: Questions Supplied to the part of laws and/or regulations.  Pale Guesson  Total Pale Guesson	The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.  All free liquids and recoverable materials have been removed and managed appropriately.  If all the actions described above have not been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  Ihereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Pare Guesson  Title: Description  Date: 10,1518	☐ The source of the rel	ease has been stopped.
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.  All free liquids and recoverable materials have been removed and managed appropriately.  If all the actions described above have not been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Page Guesson  Title: Description  Date: 10,1518	☐ The impacted area ha	as been secured to protect human health and the environment.
If all the actions described above have <u>not</u> been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Pale Guesson  Title: Desarrows  Marketer  Date: 11518		
If all the actions described above have <u>not</u> been undertaken, explain why: The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.  Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Pale Guesson  Title: Desarrows  Marketer  Date: 1518	All free liquids and r	recoverable materials have been removed and managed appropriately.
within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.  I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Pare Guesson  Title: Devarious Maraces  Date: 1(151/8)	Per 19.15.29.8 B. (4) NM	AC the responsible party may commence remediation immediately after discovery of a release. If remediation
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Pare Gusson  Title: Devarious Muracek  Date: 1(151/8)		
email: Telephone: 457.884.3634	regulations all operators are public health or the environs failed to adequately investig addition, OCD acceptance of and/or regulations.  Printed Name:	required to report and/or file certain release notifications and perform corrective actions for releases which may endanger ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have gate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws  Title:
OCD Only Received by:  Received by:  By CHernandez at 4:56 pm, Dec 13, 2018	NECI	

Received by OCD: 8/28/2023	2:17:46 PM
Form C-141	State of New Mexico
Page 3	Oil Conservation Division

	Page 149 of 1449
Incident ID	
District RP	
Facility ID	
Application ID	

### **Site Assessment/Characterization**

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)				
Did this release impact groundwater or surface water?	☐ Yes ☐ No				
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No				
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No				
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No				
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No				
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No				
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No				
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No				
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No				
Are the lateral extents of the release overlying an unstable area such as karst geology?					
Are the lateral extents of the release within a 100-year floodplain?					
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?					
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.					
Characterization Report Checklist: Each of the following items must be included in the report.					
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data  Data table of soil contaminant concentration data  Depth to water determination  Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release  Boring or excavation logs  Photographs including date and GIS information  Topographic/Aerial maps  Laboratory data including chain of custody	ls.				

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 8/28/2023 2:17:46 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page 150 of 144	19
Incident ID		
District RP		
Facility ID		
Application ID		

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Printed Name:	_ Title:				
Signature:	Date:				
email:	Telephone:				
OCD Only					
Received by:	Date:				

Received by OCD: 8/28/2023 2:17:46 PM Form C-141 State of New Mexico Page 5 Oil Conservation Division

	Page 151 of 144	49
Incident ID		
District RP		
Facility ID		
Application ID		

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must b	e included in the plan.
<ul> <li>□ Detailed description of proposed remediation technique</li> <li>□ Scaled sitemap with GPS coordinates showing delineation poin</li> <li>□ Estimated volume of material to be remediated</li> <li>□ Closure criteria is to Table 1 specifications subject to 19.15.29.</li> <li>□ Proposed schedule for remediation (note if remediation plan times)</li> </ul>	12(C)(4) NMAC
Deferral Requests Only: Each of the following items must be con	nfirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around predeconstruction.	roduction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health	n, the environment, or groundwater.
I hereby certify that the information given above is true and comple	te to the best of my knowledge and understand that pursuant to OCD
	certain release notifications and perform corrective actions for releases nce of a C-141 report by the OCD does not relieve the operator of a and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name:	Title:
Signature:	Date:
email:	Telephone:
OCD Only	
Received by:	Date:
☐ Approved	Approval
Signature:	<u>Date:</u>

Appendix B

# Water Well Data Average Depth to Groundwater (ft) Permian Water Solutions - Kaiser SWD

	20 Sc	outh	3	34 East			20 Sc	outh	;	35 East			20 \$	South	;	36 East	
6	5	4 125	3	2	1	6 <b>5</b> 0	<b>6</b> 5 <b>64</b>	4	3	2	1	6	5	4	3	2	1
						64						32	28			92	40
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
											49		33	38		32	29
18	17 1 <mark>28</mark>	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
	140			150								34				45	
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
					270												
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26 1 <mark>06</mark>	25
																170	
31	32	33	34	<b>32</b> 35	36	31	<b>65</b> 32	33	34	35	36	31	32	33	34	35	36
								89					170			122	
3	5	4	3	2 79	1	6	5		3	2	1	6	5	4	3	2	1
2	21 Sc			33 East	1	6	21 Sc			34 East	14	6		South		35 East	14
				107													
7	8	9	10	11 <b>150</b>	12	7	8 <b>120</b>	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
								105			100						
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
								128									
30	29	28	27	26	25	30	29	28 <b>135</b>	27	26	25	30	29	28	27	26	25
		179															
31	32	33 <b>180</b>	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36
	22 Sc	outh		33 East			22 Sc	outh	;	34 East			22 \$	South		35 East	_
3	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
-	ľ	l .	ľ			Ĭ		ľ	ľ	Γ		ľ	ľ	Ι΄	ľ	1-	Ι΄

**30** 

**50** 

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

- Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34 NMOCD Groundwater Data
- Abandoned Waterwell (recently measured)

(In feet)



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

		POD Sub-		0	Q	0					Donth	Donth	Water
POD Number	Code		County				c Tws	Rng	х	Υ		_	Column
CP 00089	0	СР	LE				21S	_	647840	3594615 🎒	235		
CP 00092 POD1		СР	LE	1	3	1 25	21S	34E	647479	3591694* 🎒	196		
<u>CP 00489</u>		СР	LE			04	21S	34E	643274	3597749* 🎒	125	95	30
CP 00498		СР	LE		2 4	4 08	21S	34E	642287	3595932* 🌍	145	120	25
CP 00571 POD1		СР	LE	3	1 4	4 28	21S	34E	643499	3591063 🎒	170	135	35
CP 00583		СР	LE		;	3 21	21S	34E	642944	3592518* 🎒	171	128	43
CP 00588 POD1		СР	LE		3 2	2 33	21S	34E	643583	3589918* 🎒	89		
CP 00589 POD1		СР	LE		3 2	2 33	21S	34E	643583	3589918* 🎒	84		
CP 00590 POD1		СР	LE			01	21S	34E	648099	3597829* 🎒	79		
CP 00611		СР	LE		2	1 06	21S	34E	639838	3598306*	118	112	6
CP 00791		СР	LE	4	2 4	4 06	21S	34E	640754	3597413* 🎒	85	55	30
CP 01066 POD1		СР	LE	4	3 2	2 28	21S	34E	643735	3591345 🎒	210	140	70
CP 01067 POD1		СР	LE	1	3 4	4 28	21S	34E	643447	3591434 🎒	210	140	70
CP 01068 POD1		СР	LE	4	1 4	4 28	21S	34E	643609	3591005 🎒	180	140	40
CP 01069 POD1		СР	LE	2	1 4	4 28	21S	34E	643737	3591191 🎒	210	140	70
CP 01091 POD1		СР	LE	3	3 2	2 28	21S	34E	643446	3591434 🌕	200	140	60
CP 01364 POD1		СР	LE	4	2 3	3 16	21S	34E	643147	3594331 🌕	165	105	60
CP 01366 POD1		СР	LE	4	4	1 16	21S	34E	643196	3594698 🌕	180	110	70
CP 01671 POD1		СР	LE	2	4	1 16	21S	34E	643108	3594887 🎒	157		

120 feet Average Depth to Water:

> 55 feet Minimum Depth:

Maximum Depth: 140 feet

Record Count: 19

PLSS Search:

Township: 21S Range: 34E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



USGS Home Contact USGS Search USGS

### National Water Information System: Web Interface

USGS Water Resource	20

Data Category:	Geographic Area:	
Groundwater	✓ New Mexico	∨ GO

### Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News 🔊

Groundwater levels for New Mexico

Click to hide state-specific text

### Search Results -- 1 sites found

site\_no list =

• 322824103253301

### Minimum number of levels = 1

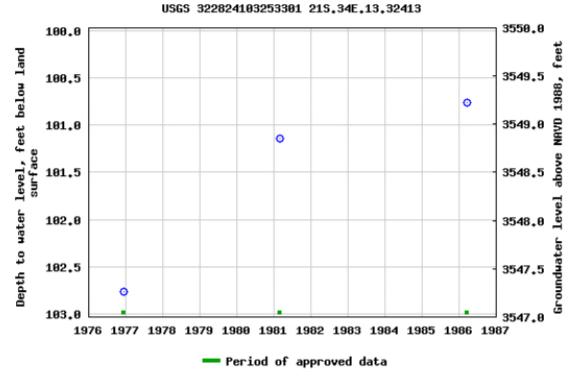
Save file of selected sites to local disk for future upload

### USGS 322824103253301 21S.34E.13.32413

Available data for this site	Groundwater:	Field measurements	/  GO	
Lea County, New Mexico				
Hydrologic Unit Code 13070	0007			
Latitude 32°28'24", Longit	ude 103°25	5'33" NAD27		
Land-surface elevation 3,65	50 feet abov	e NAVD88		
The depth of the well is 335	feet below	land surface.		
This well is completed in the	e Chinle Fo	rmation (231CHN	NL) local a	quifer.

### Output formats

Table of data	
Tab-separated data	
Graph of data	
Reselect period	



Breaks in the plot represent a gap of at least one year between field measurements.

Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

<u>U.S. Department of the Interior</u> | <u>U.S. Geological Survey</u>

Title: Groundwater for New Mexico: Water Levels

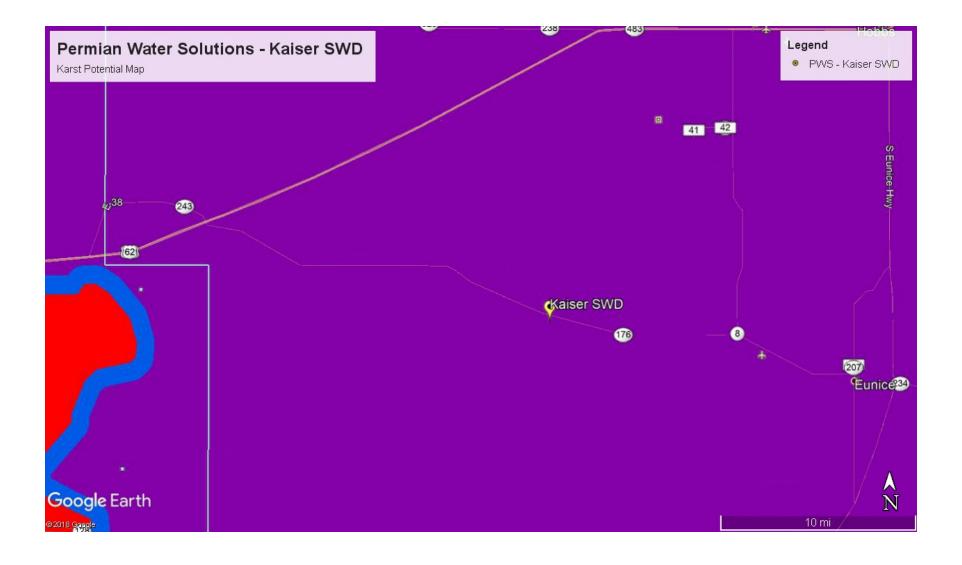
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

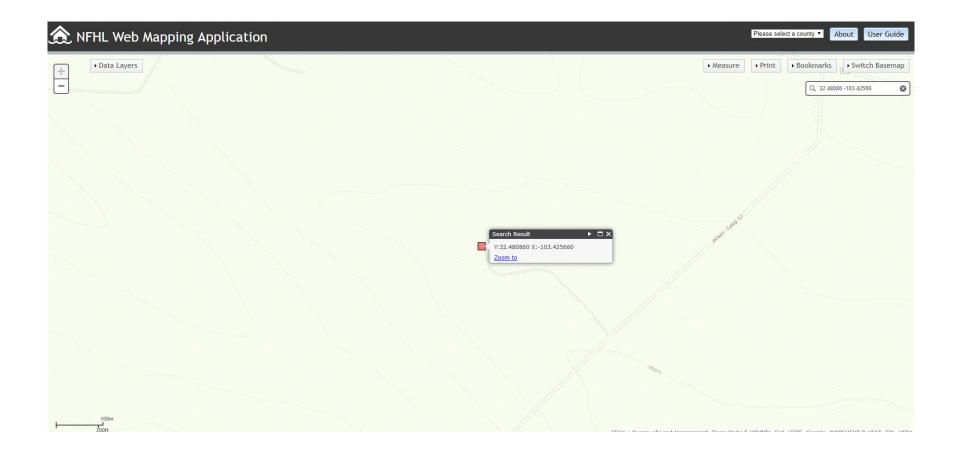
Page Contact Information: New Mexico Water Data Maintainer

Page Last Modified: 2019-05-13 12:56:28 EDT

1 0.95 nadww01







Appendix C

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-1									
GPS	32.480778° -103.425919°									
Project #:	212C-MD-01742									
Total Depth	35'									
Date Installed:	5/7/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Caliche and sand	No odor or Odor	3140	-						
2-3	Caliche and sand	No Stain or odor	1,700	-						
4-5	Caliche and sand	No Stain or odor	1,090	-						
6-7	Caliche and sand	No Stain or odor	879	-						
9-10	Caliche and sand	No Stain or odor	780	-						
14-15	Caliche and sand	No Stain or odor	685	-						
19-20	Caliche and sand	No Stain or odor	765	-						
24-25	Caliche and sand	No Stain or odor	476	240						
29-30	Caliche and sand	No Stain or odor	274	200						
34-35	Caliche and sand	No Stain or odor	265	-						

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-2									
GPS	32.480951° -103.425927°									
Project #:	212C-MD-01742									
Total Depth	35'									
Date Installed:	5/7/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Sand, concrete cuttings	Moderate odor	4980	-						
2-3	Sand, concrete cuttings	Moderate odor	4,000	-						
4-5	Silty sand	Moderate odor	1,990	-						
6-7	Silty sand	Heavy odor	1,800	-						
9-10	Silty sand	Faint odor	2,500	-						
14-15	Limestone and chert	Very faint odor	2,950	-						
19-20	Limestone and chert	No Stain or odor	924	-						
24-25	Limestone and chert	No Stain or odor	<i>787</i>	-						
29-30	Limestone and chert	No Stain or odor	510	280						
34-35	Limestone and chert	No Stain or odor	461	320						

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-3			
GPS	32.481342° -103.425949°			
Project #:	212C-MD-01742			
Total Depth	5.5'			
Date Installed:	5/13/2019			
Date ilistalled.	3/13/2019			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Caliche	Faint odor	2,420	-
1-1.5	Brown sand and caliche	No odor	415	-
2-2.5	Light brown sand and caliche	No odor	400	-
3-3.5	Light brown sand and caliche	No odor	297	-
4-4.5	Light brown sand and caliche	No odor	312	-
5-5.5	Light brown sand and caliche	No odor	365	_
5 5.0	and and and and	710 0407	333	
		1		

Client:	Permian Water Solutions										
Site Name	Kaiser SWD										
Sample ID:	SP-4	SP-4									
GPS	32.481349° -103.425743°										
Project #:	212C-MD-01742										
Total Depth	15'										
Date Installed:	5/7/2019										
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)							
0-1	Sand and caliche	No stain or odor	1620	-							
2-3	Sand and caliche	No stain or odor	1,690	-							
4-5	Sand and caliche	No stain or odor	1,140	-							
6-7	Sand and caliche	No stain or odor	714	-							
9-10	Sand and caliche	No stain or odor	656	480							
14-15	Sand and caliche	No stain or odor	655	480							
-		•									

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-5									
GPS	32.480979° -103.425687°									
Project #:	212C-MD-01742									
Total Depth	35'									
Date Installed:	5/7/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Dark brown sand	No Stain or odor	3180	-						
2-3	Dark brown sand	No Stain or odor	1,020	-						
4-5	Dark brown sand	No Stain or odor	754	400						
6-7	Dark brown sand	Heavy odor	510	-						
9-10	Dark brown sand	Heavy odor	610	-						
14-15	Dark brown sand	Heavy odor	673	-						
19-20	Dark brown sand	Heavy odor	689	-						
24-25	Dark brown sand	Moderate odor	575	-						
29-30	Light tan sand	No Stain or odor	679	240						
34-35	Light tan sand	No Stain or odor	596	200						
<b>L</b>	•			1						

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-6									
GPS	32.480748° -103.425638°									
Project #:	212C-MD-01742									
Total Depth	20'									
Date Installed:	5/7/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Dark brown sand	No Stain or odor	3950	-						
2-3	Dark brown sand	No Stain or odor	2,020	-						
4-5	Dark brown sand	No Stain or odor	1,030	-						
6-7	Light tan sand and caliche	No Stain or odor	905	-						
9-10	Light tan sand and caliche	No Stain or odor	825	640						
14-15	Light tan sand and caliche	No Stain or odor	642	480						
19-20	Light tan sand and caliche	No Stain or odor	531	450						

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-7			
GPS	32.480544° -103.425502°			
Project #:	212C-MD-01742			
Total Depth	25'			
Date Installed:	5/7/2019			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	Very faint odor	2360	-
2-3	Dark brown sand	Very faint odor	1,120	-
4-5	Light tan and red sand	No Stain or odor	783	-
6-7	Light tan and red sand	No Stain or odor	615	600
9-10	Light tan and red sand	No Stain or odor	632	720
14-15	Light tan and red sand	No Stain or odor	752	720
19-20	Light tan and red sand	No Stain or odor	655	440
24-25	Light tan and red sand	No Stain or odor	300	280

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-8			
GPS	32.480767° -103.425401°			
Project #:	212C-MD-01742			
Total Depth	30'			
Date Installed:	5/7/2019			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	Faint odor	9,080	-
2-3	Dark brown sand	Faint odor	5,650	-
4-5	Dark brown sand	Faint odor	4,490	-
6-7	Light tan and red sand	No Stain or odor	4,370	-
9-10	Light tan and red sand	No Stain or odor	3,970	-
14-15	Light tan and red sand	No Stain or odor	3,100	-
19-20	Sand with caliche and cert	No Stain or odor	1,700	-
24-25	Red sand	No Stain or odor	452	400
29-30	Red sand	No Stain or odor	147	180

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-9			
GPS	32.481030° -103.425445°			
Project #:	212C-MD-01742			
Total Depth	35'			
Date Installed:	5/7/2019			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	Faint odor	5,280	-
2-3	Dark brown sand	Faint odor	2,250	-
4-5	Light tan sand and caliche	No Stain or odor	1,820	-
6-7	Light tan sand and caliche	No Stain or odor	2,610	-
9-10	Light tan sand and caliche	No Stain or odor	2,280	-
14-15	Red sand	No Stain or odor	2,270	-
19-20	Red sand	No Stain or odor	2,680	-
24-25	Red sand	No Stain or odor	1,530	-
29-30	Red sand	No Stain or odor	405	440
34-35	Red sand	No Stain or odor	421	320
R				T.

Client:	Permian Water Solutions				
Site Name	Kaiser SWD				
Sample ID:	SP-10				
GPS	32.481350° -103.425486°				
Project #:	212C-MD-01742				
Total Depth	5'				
Date Installed:	5/8/2019				
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)	
0-1	Dark brown sand	No Stain or odor	1,200	-	
2-3	Dark brown sand	No Stain or odor	680	560	
4-5	Light tan sand and caliche	No Stain or odor	507	360	
			ĺ	1	

Client:	Permian Water Solutions				
Site Name	Kaiser SWD				
Sample ID:	SP-11				
GPS	32.481352° -103.425213°				
Project #:	212C-MD-01742				
Total Depth	10'				
Date Installed:	5/8/2019				
	0.0.20.0				
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)	
0-1	Dark brown sand	No Stain or odor	940	-	
2-3	Light tan sand and caliche	No Stain or odor	1,010	-	
4-5	Light tan sand and caliche	No Stain or odor	915	640	
6-7	Light tan sand and caliche	No Stain or odor	475	400	
9-10	Light tan sand and caliche	No Stain or odor	276	240	

Client:	Permian Water Solutions				
Site Name	Kaiser SWD				
Sample ID:	SP-12				
GPS	32.480449° -103.425113°				
Project #:	212C-MD-01742				
Total Depth	15'				
Date Installed:	5/8/2019				
	•				
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)	
0-1	Dark brown sand	No Stain or odor	1,140	-	
2-3	Dark brown sand	No Stain or odor	1,330	-	
4-5	Light tan sand and caliche	No Stain or odor	895	600	
6-7	Light tan sand and caliche	No Stain or odor	397	400	
9-10	Light tan sand and caliche	No Stain or odor	325	320	
14-15	Light tan sand and caliche	No Stain or odor	355	200	

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-13			
GPS	32.480942° -103.424907°			
Project #:	212C-MD-01742			
Total Depth	1'			
Date Installed:	5/8/2019			
	[5,5,20,0]			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	No Stain or odor	308	•

Permian Water Solutions			
Kaiser SWD			
SP-14			
32.481152° -103.424928°			
212C-MD-01742			
35'			
5/8/2019			
Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
Dark brown sand	No Stain or odor	895	-
Dark brown sand	No Stain or odor	667	-
Red sand	No Stain or odor	1,060	-
Red sand	No Stain or odor	898	440
Red sand	No Stain or odor	516	480
Red sand	No Stain or odor	1,120	560
Light tan sand with limestone and chert	No Stain or odor	1,510	1,400
Light tan sand with limestone and chert	No Stain or odor	1,020	-
Red sand	No Stain or odor	424	400
Red sand	No Stain or odor	315	120
			_
	Kaiser SWD SP-14 32.481152° -103.424928° 212C-MD-01742 35' 5/8/2019  Lithology/Sample Description Dark brown sand Dark brown sand Red sand Red sand Red sand Red sand Light tan sand with limestone and chert Light tan sand with limestone and chert Red sand	Kaiser SWD SP-14 32.481152° -103.424928° 212C-MD-01742 35' 5/8/2019  Lithology/Sample Description NOTES Dark brown sand No Stain or odor Dark brown sand No Stain or odor Red sand No Stain or odor Light tan sand with limestone and chert No Stain or odor Red sand No Stain or odor Light tan sand with limestone and chert No Stain or odor Red sand No Stain or odor	Kaiser SWD SP-14 32.481152° -103.424928° 212C-MD-01742 35' 5/8/2019  Lithology/Sample Description NOTES Salinity (ppm) Dark brown sand No Stain or odor 895 Dark brown sand No Stain or odor 667 Red sand No Stain or odor 1,060 Red sand No Stain or odor 898 Red sand No Stain or odor 898 Red sand No Stain or odor 1,120 Light tan sand with limestone and chert No Stain or odor 1,510 Light tan sand with limestone and chert No Stain or odor 1,020 Red sand No Stain or odor 1,020 Red sand No Stain or odor 1,020

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-15			
GPS	32.480365° -103.425729°			
Project #:	212C-MD-01742			
Total Depth	7'			
Date Installed:	5/8/2019			
	•			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	No Stain or odor	1,050	-
2-3	Dark brown sand	No Stain or odor	945	680
4-5	Dark brown sand	No Stain or odor	970	400
6-7	Light tan sand and caliche	No Stain or odor	1,030	440

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-16			
GPS	32.480448° -103.425897°			
Project #:	212C-MD-01742			
Total Depth	20'			
Date Installed:	5/8/2019			
	•			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand with gravel	No Stain or odor	553	-
2-3	Dark brown sand with gravel	No Stain or odor	1,350	-
4-5	Dark brown sand with gravel	No Stain or odor	1,390	-
6-7	Dark brown sand with gravel	No Stain or odor	1,430	-
9-10	Dark brown sand with gravel	No Stain or odor	1,250	-
14-15	Light tan sand and caliche	No Stain or odor	975	440
19-20	Light tan sand and caliche	No Stain or odor	725	360

Client:	Permian Water Solutions				
Site Name	Kaiser SWD	Kaiser SWD			
Sample ID:	SP-17				
GPS	32.481215° -103.425292°				
Project #:	212C-MD-01742				
Total Depth	5.5'				
Date Installed:	5/13/2019				
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)	
0-1	Caliche	Heavy odor	-	-	
2-3	Caliche	Heavy odor	-	-	
3-4	Caliche	Heavy odor	-	-	
4-4.5	Dark brown sand with clay & caliche	Moderate odor	OL	-	
5-5.5	Dark brown sand with clay & caliche	Faint odor	OL	-	

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-18			
GPS	32.480967° -103.425281°			
Project #:	212C-MD-01742			
Total Depth	3'			
Date Installed:	5/7/2019			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark sand and caliche	Heavy odor	4490	-
2-3	Dark sand and caliche	Heavy odor	3,340	-
		,		
	1		I .	

Client:	Permian Water Solutions						
Site Name	Kaiser SWD						
Sample ID:	SP-19						
GPS	32.480697° -103.425278°						
Project #:	212C-MD-01742						
Total Depth	4.5'						
Date Installed:	5/13/2019						
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)			
0-1	Dark sand and caliche	Heavy odor	4040	-			
2-3	Dark sand and caliche	Heavy odor	6,270	-			
4-4.5	Dark sand and caliche	Heavy odor	3,130	OL			

Client:	Permian Water Solutions					
Site Name	Kaiser SWD					
Sample ID:	SP-20					
GPS	32.480723° -103.425099°					
Project #:	212C-MD-01742					
Total Depth	5.5'					
Date Installed:	5/13/2019					
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)		
0-1	Dark sand and caliche	Heavy odor	1660	-		
2-3	Dark sand and caliche	Heavy odor	1,270	-		
4-4.5	Dark sand and caliche	Moderate odor	1,300	1200		
5-5.5	Light sand and caliche	Moderate odor	1,400	1280		

Client:	Permian Water Solutions					
Site Name	Kaiser SWD					
Sample ID:	SP-21					
GPS	32.480913° -103.425125°					
Project #:	212C-MD-01742					
Total Depth	5.5'					
Date Installed:	5/13/2019					
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)		
0-1	Dark sand and caliche	Heavy odor	1640	-		
2-3	Dark sand and caliche	Heavy odor	1,230	-		
4-4.5	Dark sand and caliche	Moderate odor	2,340	1760		
5-5.5	Dark sand and caliche	Moderate odor	2,100	1520		

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-22									
GPS	32.481100° -103.425121°									
Project #:	212C-MD-01742									
Total Depth	4.5'									
Date Installed:	5/13/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Dark sand and caliche	Faint odor	809	-						
2-3	Dark sand and caliche	Faint odor	843	-						
3-3.5	Light brown sand and caliche	Faint odor	1,110	640						
4-4.5	Light brown sand and caliche	No stain or odor	840	880						

Client:	Permian Water Solutions										
Site Name	Kaiser SWD										
Sample ID:	SP-23										
GPS	32.480575° -103.425705°										
Project #:	212C-MD-01742										
Total Depth	4.5'	4.5'									
Date Installed:	5/14/2019										
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)							
0-1	Sand with gravel and caliche	Heavy stain and odor	-	-							
1-1.5	Caliche	Heavy odor	374	-							
2-2.5	Red clay	Heavy odor	1,400	-							
3-3.5	Caliche	Heavy stain and odor	1,590	-							
4-4.5	Caliche	Heavy stain and odor	2,020	-							

Client:	Permian Water Solutions								
Site Name	Kaiser SWD								
Sample ID:	SP-24								
GPS	32.480632° -103.425799°								
Project #:	212C-MD-01742								
Total Depth	1'								
Date Installed:	5/8/2019								
	J. 100 - 100								
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)					
0-1	Sand with gravel and caliche	Heavy stain and odor	-	-					
	Deeper samples could not be obtained								
	due to rain water puddling in the area								
	upon return.								

Client:	Permian Water Solutions										
Site Name	Kaiser SWD										
Sample ID:	SP-25										
GPS	32.480534° -103.425837°										
Project #:	212C-MD-01742										
Total Depth	5.5'										
Date Installed:	5/14/2019										
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)							
0-1	Sand with gravel and caliche	Heavy stain and odor	-	-							
1-1.5	Caliche	Heavy stain and odor	2,640	-							
2-2.5	Red clay	Heavy stain and odor	1,380	-							
3-3.5	Caliche	Heavy stain and odor	3,090	-							
4-4.5	Caliche	Heavy stain and odor	2,410	-							
5-5.5	Caliche	Heavy stain and odor	2,320	-							

Client:	Permian Water Solutions										
Site Name	Kaiser SWD										
Sample ID:	SP-26										
GPS	32.480451° -103.425751°										
Project #:	212C-MD-01742										
Total Depth	1'										
Date Installed:	5/8/2019										
	15151-515										
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)							
0-1	Sand with gravel and caliche	Heavy stain and odor	-	-							
	Deeper samples could not be obtained										
	due to rain water puddling in the area										
	upon return.										

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-27									
GPS	32.481092° -103.425951°									
Project #:	212C-MD-01742									
Total Depth	40'									
Date Installed:	5/8/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Dark brown sand and gravel	No Stain or odor	3420	-						
2-3	Dark brown sand and gravel	No Stain or odor	4,800	-						
4-5	Sand	Heavy odor	2,830	-						
6-7	Sand and gravel	Moderate odor	8,000	-						
9-10	Sand and gravel	Moderate odor	7,400	-						
14-15	Sand and gravel	Moderate odor	7,300	-						
19-20	Sand and gravel	Moderate odor	4,650	-						
24-25	Sand and gravel	Moderate odor	287	-						
29-30	Silty sand	No Stain or odor	415	400						
34-35	Silty sand	No Stain or odor	385	200						
<u> </u>	ı									

Client:	Permian Water Solutions										
Site Name	Kaiser SWD										
Sample ID:	SP-29										
GPS	32.481134° -103.425716°										
Project #:	212C-MD-01742										
Total Depth	7'										
Date Installed:	5/8/2019										
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)							
0-1	Dark brown sand and gravel	No Stain or odor	2,280	-							
2-3	Dark brown sand and gravel	No Stain or odor	957	720							
4-5	Sand and caliche	No Stain or odor	200	200							
6-7	Sand and caliche	No Stain or odor	160	160							

Client:	Permian Water Solutions											
Site Name	Kaiser SWD											
Sample ID:	SP-30											
GPS	32.481158° -103.425458°											
Project #:	212C-MD-01742											
Total Depth	15'											
Date Installed:	5/8/2019											
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)								
0-1	Dark brown sand and gravel	No Stain or odor	5010	-								
2-3	Dark brown sand and gravel	No Stain or odor	2,410	-								
4-5	Sand and caliche	No Stain or odor	1,010	-								
6-7	Sand and caliche	No Stain or odor	946	-								
9-10	Sand and caliche	No Stain or odor	858	480								
14-15	Sand and caliche	No Stain or odor	262	200								

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	SP-31									
GPS	32.480607° -103.425155°									
Project #:	212C-MD-01742									
Total Depth	5'									
Date Installed:	5/8/2019									
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
0-1	Dark brown sand	No Stain or odor	355	-						
2-3	Dark brown sand	No Stain or odor	200	200						
4-5	Dark brown sand	No Stain or odor	212	160						
		1								

Client:	Permian Water Solutions											
Site Name	Kaiser SWD											
Sample ID:	SP-32											
GPS	32.480746° -103.424896°											
Project #:	212C-MD-01742											
Total Depth	5'											
Date Installed:	5/8/2019											
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)								
0-1	Dark brown sand	No Stain or odor	243	-								
2-3	Dark brown sand	No Stain or odor	762	400								
4-5	Dark brown sand	No Stain or odor	755	560								



**Soil Drilling Log with Field Testing Results** 

Project Name: Kaiser St SWD

**Project No.**: 212C-MD-01742

Location: Lea Co, NM

**Coordinates**: 32.481227 -103.425306

Elevation :

Date: Monday, October 21, 2019

Sampler : Conner Moehring

Driller: Scarborough Drilling

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
° <b>—</b> г		Black/brown sand		1	50				
		Black/brown sand			+				
		Red sand and silt							
5					55				
5 —		Red sand and silt			#				
10					60				
#1		Fine dry brown sand			+				
		Dense layer of caliche			#				
15 —		Caliche with pebbels			65				
20		Tan Sand with caliche	840		70				
+		Dense layer of caliche							
25		White fine caliche	700		75 ——				
王		Brown sand			$\pm$				
10		Fine red sand	500		#		Comments: T.D 30'		
35 —		Red Sand	480		#				
土し					土				
45					‡ ‡ ‡ ‡				
工!					工				
					+				
+					十				
45 —					十				
エー					工				
<b>-</b>					<b>_</b>				
					+				
50									

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



**Soil Drilling Log with Field Testing Results** 

Project Name: Kaiser St SWD

**Project No.**: 212C-MD-01742

Location: Lea Co, NM

**Coordinates**: 32.480967 -103.425290

Elevation :

Date: Monday, October 21, 2019

Sampler : Conner Moehring

Driller: Scarborough Drilling

Depth (ft.)	/L Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.) W	VL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
	Black and brown sand / gravel Black gravel			50 🛨				
5	tan and black gravel and sand			55				
10	Dense layer of caliche			60				
10	tan caliche Caliche layer	1,200		65				
20	Red brown sand			70				
#1	Dense layer of calchie			#1				
+ 1	Red brown sand	1,800		75				
30	Red brown sand	1,800		#	C	Comments: T.D 50'		
35	Red brown sand	1,000		#				
40	Red brown sand	800		<b>#</b>				
45	Red brown sand	480		#				
50 🛨	Red brown sand	400		土乚				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



Soil Drilling Log with Field Testing Results

Project Name: Kaiser St SWD

**Project No.**: 212C-MD-01742

Location: Lea Co, NM

Coordinates : 32.480704 -103.425281

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) W	VL Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
°∓┌	Black brown sand with gravel			50				
5	Black brown sand with gravel			55				
10	tan sand with calcihe			60				
<b></b>	Dense layer of caliche			$\pm$				
15	Caliche with tan sand			65				
10	Tan caliche with sand	>2000		70				
25	Red dry sand			75				
30	Red dry sand Dense layer of caliche	242		<b>+</b>		Comments: T.D 40'		
35	Red fine sand	142		Ŧ				
45	Red fine sand	313		#				
50				<u> </u>				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



**Soil Drilling Log with Field Testing Results** 

Project Name: Kaiser St SWD

Project No. : 212C-MD-01742

Location: Lea Co, NM

**Coordinates**: 32.480704 -103.425094

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
10	Black gravel and sand Black gravel with sand grey gravel and tan sand Tan sand and gravel Fine dry tan sand Dense layer of clay  Tan sand and gravel  Red fine sand Dense layer of caliche  Red sand fine	(ppm) 940 240		50		Comments: T.D 30'	(ppm)	(ppm)

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining

Soil Drilling Log with Field Testing Results

Project Name : Kaiser St SWD

Project No. : 212C-MD-01742

Location: Lea Co, NM

Coordinates: 32.4800551 -1 03.425712

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) WI	- Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
10	Black gravel damp black gravel damp tan sand / gravel  Tan sand and gravel  Caliche with tan sand Dense layer of caliche  Caliche sand tan  Red sand dry  Dry red sand	>2000		50		Damp red sand  Comments: T.D 55'	400	
35	Dry red sand			<b>+</b>				
45	Dry red sand  Damp red sand	1,200 1,100		#				
50	Damp red sand	440		Ŧ				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



**Soil Drilling Log with Field Testing Results** 

Project Name: Kaiser St SWD

Project No. : 212C-MD-01742

Location: Lea Co, NM

 $\textbf{Coordinates}: \ \ \, \underline{32.480613\ \text{-}103.425790}$ 

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
15	Black brown gravel  Tan black gravel and sand  Tan sand dry  brown tan sand  Brown tan sand  Tan caliche with gravel  Tan caliche with gravel	242		50				
30	Red sand	376				Comments: T.D 30'		

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



**Soil Drilling Log with Field Testing Results** 

Project Name : Kaiser St SWD

**Project No.** : <u>212C-MD-01742</u>

Location: Lea Co, NM

 $\textbf{Coordinates}: \ \ \, \underline{32.480517\ \text{-}103.425836}$ 

Elevation :

Date: Tuesday, October 22, 2019

Sampler : Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.) W	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
10	Black gravel  Brown sand with black gravel  Brown sand  Tan sand w/ caliche  Caliche with tan sand Dense layer of caliche  Dry red sand  Dense layer of caliche  Red dry sand	520 480		50		Comments: T.D 25'	(ppm)	(ppm)

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



Soil Drilling Log with Field Testing Results

Project Name : Kaiser St SWD

**Project No.** : <u>212C-MD-01742</u>

Location: Lea Co, NM

 $\textbf{Coordinates}: \ \ \, \underline{32.480445\ \text{-}103.425753}$ 

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) WL	. Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.) W	VL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
	Black and brown sand Black and brown sand			50 📘				
5	Black sand and gravel Tan sand			55				
10	Tan sand			60				
10	Tan sand with calcihe			65				
20	Tan sand with caliche	800		70				
25	Soft caliche			75				
<b>T</b>	Red sand	699						
30	Red sand	500		#	,	Comments: T.D 35'		
35	Red sand	480		#				
40				#				
45				<u></u>				
<b>T</b>				<b>#</b>				
50 🛨				<u></u>				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining

Location: Lea Co, NM

# TETRA TECH

Borehole ID: BH-33 Soil Drilling Log with Field Testing Results

 Project Name :
 Kaiser St SWD

 Date :
 Tuesday, October 22, 2019

 Project No.:
 212C-MD-01742

 Sampler:
 Conner Moehring

Coordinates: 32.480752 -103.425214 Driller: Scarborough Drilling

Elevation: Method: Air Rotary

Depth (ft.) WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
10	Black gravel with sand Black gravel and sand Brown sand with clay  Dry brown sand  Red sand with gravel	400		50		Comments: T.D 20'	(рріп)	(ррпі)

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



**Soil Drilling Log with Field Testing Results** 

Project Name : Kaiser St SWD

**Project No.** : <u>212C-MD-01742</u>

Location: Lea Co, NM

**Coordinates**: 32.480939 -103.425204

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) WL	. Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
5	Black and brown sand  Black and brown gravel and sand  Dry brown sand and clay  Dry brown sand  Dry red sand			55				
10	Dry red sand  Dense layer of caliche  Caliche cobbles	1,600		70 -				
30	Dry red sand  Dry red sand	540		#		Comments: T.D 40'		
40	Dry red sand	400		- - - - - - - - - - - - - - - - - -				
50				土				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining

Location: Lea Co, NM

# TE TETRA TECH

Borehole ID: BH-35 Soil Drilling Log with Field Testing Results

Project Name :Kaiser St SWDDate :Monday, October 21, 2019

Project No.: 212C-MD-01742 Sampler: Conner Moehring

Elevation : Method : Air Rotary

Depth (ft.) WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
° <b>∓</b> ┌	Black and brown gravel and sand			50 🛨				
#1	Black and brown gravel and sand			#				
5	Brown and tand sand			55				
10	brown sand and caliche			60				
15	Brown sand			65				
20	Dense layer of calciche			70				
25	Red sand			75				
30	Red sand			‡		Comments: T.D 50'		
35	Red sand with caliche pebbles			‡ ‡ ‡				
45	Very dense kayer of calcihe  Very dense kayer of calciche			‡ ‡				
50	Red Sand			<b>±</b>				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining

Location: Lea Co, NM

# TETRA TECH

Borehole ID: BH-36 Soil Drilling Log with Field Testing Results

Project Name :Kaiser St SWDDate :Monday, October 21, 2019

 Project No.:
 212C-MD-01742

 Sampler:
 Conner Moehring

 Coordinates : 32.481235 -103.425211
 Driller : Scarborough Drilling

Elevation: Method: Air Rotary

Depth (ft.) WL	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.) W	VL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
10	Black and brown gravel and sand Brown tan gravel  Tan caliche Dense layer of caliche  Brown/tan sand  Fine tan sand	Field Test	PID	Depth (ft.) W		Soil Description  Comments: T.D 20'	Field Test	Titration Test
50				#				

<sup>\*</sup> H.O. = Heavy Odor

<sup>\*</sup> L.O. = Low Odor

<sup>\*</sup> H.S. = Heavy Staining

<sup>\*</sup> L.S. = Low Staining



# Appendix C

**Progress Meetings notes** 

# **Progress Meeting Template**

Project: Kaiser State #9 Contract: SW-330 Today Date: 07/28/2021

Meeting Time: 8:00 am, Wednesday July 28, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, Wednesday August 4, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Maria Pruett		mpruett@slo.state.nm.us	NM State Land Office
Dusty McInturff		dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	Jenni@permianws.com	Permian Water
			Solutions
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech

# **Review Previous Meeting Minutes:**

**Old Business** / Action Items From Last Meeting: None. We're launching new today.

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

At SLO / Merchant Livestock request;

Pot hole left from gas pipeline locate has been backfilled Cattleguard has been cleaned out and reset.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Weather Delays:

Two Week Look Ahead:

Hope to start construction of new road next week, pending responses from one call. Numerous pipelines on site to cross over/add fill. At the staging area install a Liner down with berm to prepare for Phase 2. Field meeting with Tetratech, to kick off the plan; excavate material under old battery tank, soil testing at excavated depths, refill with clean material.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Establishing contact with pipeline owners for ROW. Pipelines marked and flagged clearly. New cattle guard will need to be installed 30-50' back from road to avoid Enterprise pipeline. Then add fence on Eastern perimeter to fence livestock out.

Critical Path Considerations: Complete Phase 1 so Phase 2 can begin. Make contact with pipeline owners for ROW so field work can begin. Faith offered assistance with contacting ROW owners.

Comn	าาต	SIO	ทาท	$\alpha$ .
Comm	110	DIO.	ш	€.

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Damaged tanks have been removed. Test Well #1 drilled.
- 2. Test well #2
  - a. Installed by end of Phase 1. SLO likely wants to keep as monitoring well. Dusty and Clair to determine if Test Well #2 needs to be moved due to being in the way of new tank battery location. Get with Maria and Ryan when known. Chris Cortez submitted paperwork to OSE to plug #1 and drill #2; awaiting approval from OSE, but plan is to perform work mid-end of August.
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. Item #3 Confirm green outline just needs to be excavated to 1' and refilled. Will be close to new tank battery location.
  - b. Item #4 Will SLO consider geosynthetic clay liner instead of bentonite clay membrane mat? Dufrane has had success with this and will send product info to SLO to review.
  - c. Dusty stated concerns with excavation depths greater than 19' may require separate engineering plan; how would they proceed if this occurs? SLO will evaluate samples at 8-12' as they go to determine if shallower depths are acceptable. If samples indicate deeper excavation is still necessary, a new plan will be devised to accommodate an engineering plan to address the new safety concerns.
  - d. Item #5 Are the purple outlined areas recent or legacy off-pad spills? 10 RP's on file for Kaiser site. Determine owner of PW line to South of lease road may be historical spill by another operator? Both sides to look into this further. PWS does not believe these are from Kaiser site.

Assign Follow Up Tasks For New Business:

Verify Date and Time of Next Meeting: 8:00 am, Wednesday August 4, 2021

Adjourn: at 9:00 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

# **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



# **Progress Meeting Template**

Project: Kaiser State #9 Contract: SW-330 Today Date: 08/4/2021

Meeting Time: 8:00 am, Wednesday August 4, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, Wednesday August 11, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Maria Pruett		mpruett@slo.state.nm.us	NM State Land Office
Dusty McInturff		dmcinturff@dufrane.com	Dufrane Construction
Josh Brooks	617/584-2889	jbrooks@dufrane.com	Permian Water Solutions
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

Review Previous Meeting Minutes: Faith made an update to the minutes Permian sent, but Permian did not receive. Requested for updated document to be resent.

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

SLO needs product specs of geosynthetic clay liner (GCL) for Maria and Ryan to review. RFI can be submitted for plastic liner consideration.

Phase 2 Purple Outlined areas: Permian expressed concern that these are off lease. SLO said Permian is responsible for investigating what happened, when, was a C-141 filed, etc and presenting the research to the SLO. They have done no investigation, just reviewed Google Imagery.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

One Calls still pending. Only one pipeline has been cleared, rest are still in conflict or unable to reach. Dusty will file 'no response' with NM 811 by end of day so they must respond within 24 hours. Dusty is working with Enterprise. No excavation has been started yet due to lack of one call responses. Equipment/cattle guard is being mobilized to site in anticipation of being cleared to start road construction soon.

Weather Delays:

Two Week Look Ahead:

Hope to receive pipeline operators' requirements for building over their pipelines. If it's just running material over, hopefully fieldwork can begin next week. Need to work with Enterprise more in depth to determine the exact road placement and cattleguard placement with regard to their pipeline ROW. Likely still at least 1 week out from starting fieldwork due to communication with pipeline operators.

Josh asked if the lease acreage could be reduced now that Test well #1 has been drilled. Faith will look into it and respond.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Permian is concerned with the oil/gas lease directly adjacent to the South and how to safely excavate this area. SLO requests a new site plan showing the new tank battery location and the approach to completing the work. Permian wants to have (1) road constructed for safe traffic flow, (2)

remediate Phase 1, old tank battery area, (3) establish lay down area, install liner, berm it up, stockpile material, (4) receive approval of Phase 1 remediation, and then new tank battery will be put in.

## **Critical Path Considerations:**

Josh wants the testing and feedback from the SLO/NMOCD to be done as quickly as possible, so equipment isn't sitting idle. He can provide a drone shot of progress and send to Faith and Ryan to expedite.

Dusty is concerned with excavating so close to the oil well to the South and establishing a safe slope. Josh confirmed what Permian needs to do to address the Phase 2 purple outlined areas off lease – do our research, summarize, and share with SLO and we'll go from there.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Josh asked if we just dig everything down to 15' and have Tetratech do testing instead of digging until we see clean dirt and stopping to test if shallower than 15'. Maria said that stopping and testing shallower may work for normal spill, but this site had decades of spills. Faith confirmed that 15' would be necessary and we could talk once we have test results to review.
- 2. Test well #2
  - a. SLO wants the location of this well along the West side of lease, not the NE corner. Preference is between the two most Southern Phase 2 blue dotted outlines. Clair is concerned with the fieldwork flow of this since excavations are required around this location. Josh said they'll get out there and work up revised site plan and possibly complete shallow remediation first, replace soil, then drill Test #2 well?
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. Clair questioned the closure criteria of 15' and how SLO arrived at this. Clair mentioned the NMOCD has areas that need to be dug out in between the 15' blue outlined areas. SLO has results from prior operators and determined that a blanket 15' for an area made more sense than varying different depths within an area. SLO and NMOCD have different requirements, and this is a general overlayed area, not GPS field accurate.

Assign Follow Up Tasks For New Business:

SLO requests a new site plan showing the Test #2 well location, research results of off pad spills (purple outline), and the technical specs of the geosynthetic clay liner and plastic liner.

Permian/Tetratech requests the data the SLO is looking at for the previous samples/spills and the updated minutes from July 28, 2021 meeting that Faith circulated.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday August 11, 2021

Adjourn: at 9:07 am

- \*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

# **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Sit

Site outline



Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TFH
    - 7,000 mg/kg CI\*
       BTEX ND
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days. \*\*
- aneplan may change subject to sample data from soil and water testing.



# **Progress Meeting Template**

Project: Kaiser State #9 Contract: SW-330 Today Date: 08/11/2021

Meeting Time: 8:04 am, Wednesday August 11, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, Wednesday August 18, 2021

## **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> – upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
David Gallegos			
Dusty McInturff		dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

**Review Previous Meeting Minutes:** 

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent RFI for plastic liner and product specs for Geosynthetic Clay Liner (GCL). Ryan and Maria have been unable to review, but Ryan said he would review today and didn't have major concerns. Faith approved the GCL, but they will not approve the plastic liner.

Phase 2 Purple Outlined Areas: Jenni has started research through the NMOCD online system but wants to look more in depth at a few items, discuss internally with Dusty and Clair, and summarize findings to present to the SLO. Permian will try to have this prepared for next week's meeting.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs. Recent submission for plastic liner was not approved.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty has met with Enterprise, Centennial, and DCP. Enterprise wanted a hydrovac truck to find line and they want 2' cover over pipeline. Centennial has two lines aboveground; they want 2' cover. DCP has two lines and they also want 2' cover. They've started to cut the road in and cover the pipelines. They've started subgrading prep on road for caliche to come in and cattleguard placement. The site is being cleaned while covering potholes and making ground more accessible for traffic flow. They've started removing underground infrastructure, conduit, piping around battery area. The staging area across the road has not been worked on yet.

Revised site layout was sent showing new battery, new road, staging area and pipeline locations.

Weather Delays:

Two Week Look Ahead:

Dusty hopes the staging area will be complete and to complete the road. It requires hauling in 1000 yards of material and hopefully the trucks hauling in will be reliable. It should take 3-4 days once they get moving though.

Clair and Dusty will work on spotting Test #2 location to add to revised site layout. SLO wanted it along Western side of old battery area because it was a hot area. SLO and Dusty/Clair will email throughout week to try to firm up location.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Nothing major at this time. Dusty said there is evidence of cattle around the location. Merchant has livestock out there. Fences will need to be put up to keep livestock segregated from the roads and staging area.

**Critical Path Considerations:** 

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. We're working on everything, nothing to add from either party.
- 2. Test well #2
  - a. Both sides will correspond over the week regarding the well location. SLO may want it to be a monitoring well.
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021

a.

Assign Follow Up Tasks For New Business:

Determine location of Test #2 well.

Meeting #2 minutes send for Final email circulation.

Summarize research of Purple Outlined Areas.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday August 18, 2021

Adjourn: 8:35 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

Phase 1 Remediation Area

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - All areas not noted in key, excavate to 6'.
  - Final samples to the following closure criteria:
    - 1,000 mg/kg TPH.
    - 7,000 mg/kg CI\* - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days. \*\*
- and len may change subject to sample data from spill and water testing that



### Progress Meeting #4

Project: Kaiser State #9 Contract: SW-330 Today's Date: 08/18/2021

Meeting Time: 8:00 am, Wednesday August 18, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, Wednesday August 25, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

## Review Previous Meeting Minutes:

### **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Lots of rain at the end of last week and over weekend causing delay because they don't want to tear things up in the field with heavy equipment.

Test well #2: Dusty and Clair sent proposed location to Faith and Ryan to review. It will be drilled as a permanent monitoring well, but remediation still needs to be able to be done around the location. Dusty and Clair think this location is still close to the SLO's hot spot area (near borehole #27), but it won't affect remediation efforts. Ryan is OK with the location. Dusty will let Atkins Engineering know they can move forward with the location and that it will be placed as a permanent monitoring well. One calls were placed for the location and August 19, 2021 is the date Atkins is scheduled to come out.

Safety:

Site Observations: Lots of rain. Surface needs to dry out more to do earthwork.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs. Recent submission for Test well #2 location was approved.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty was in the process of subgrade & finish grade on the new road, but the rain halted work. He was able to find 350 yards of caliche and is working on credit app approval from Mack Energy for future material. Some caliche is on the road and the cattle guard is on site, but the ground needs to dry out more before the road can be completed.

All pipelines have been covered with 2' except the Enterprise PL and a DCP PL. The Enterprise PL was found at 38" and 2' will go on top, but they want to use the soil from the cattle guard to cover it. DCP can't confirm if their PL on site is live or abandoned yet. Dusty asked them to come spot the line in the field since it may run within the excavation area, but they have not confirmed when they will do this yet. This will affect Phase 2, not Phase 1.

Weather Delays: Heavy rain delaying earthwork. Forecast appears sunny for upcoming week.

Two Week Look Ahead: Assuming the site dries out enough to pick up earthwork again, Dusty has liner to establish the laydown area. Ideally, they will haul material off instead of stocking it up in the laydown, but they'll need to see what happens once they are able to start digging. Phase 1 battery area is just too wet to excavate now.

Clair will be on site to mark boundaries for excavation this week. Hopefully mid-week next week excavation can begin if surface dries out enough.

Atkins Engineering to drill Test well #2 tomorrow. They will let it sit for a couple of days and then get samples for lab testing. Faith requested results be sent to the SLO and NMOCD concurrently. Dusty and Clair agreed.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate

sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Heavy rain has delayed field work.

**Critical Path Considerations:** 

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Still working on it, but rain has delayed earthwork. Need to wait for surface to dry out more.
- 2. Test well #2
  - a. Location approved. Atkins Engineering will be on site August 19, 2021, to drill as permanent well.
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. So far research on Purple outlined areas across the road has not yielded obvious incidents/spills reported in these locations.

Assign Follow Up Tasks For New Business:

Test well #2 should be completed and samples obtained for laboratory testing. Summarize concise details of Purple outlined areas research data for SLO to analyze. Get with Emily Hernandez to see if more information is available.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday August 25, 2021

Adjourn: 8:32 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

\_ ; \_

Phase 1 Remediation Area

 $\bigstar$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #5 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 08/25/2021

Meeting Time: 8:04 am, Wednesday August 25, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, September 1, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

### **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's.

Test well #2 has been drilled and set as a monitoring well. It has metal casing and bollards around it. Tetratech's scheduling was a bit crazy, but they will low flow and test the well on Thursday August 26, 2021. Test results are expected to be back by the middle of next week.

### Safety:

Site Observations: There was some sunshine and wind to help dry out surface but there was a little bit of rain last Saturday.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

The new road has been completed. Dusty has started mining material for the berm (to be stored in the staging area across the road) from the Merchant pit down the road. Tetratech was out to mark the Phase 1 excavation area and excavation has started. Dusty is running all their trucks and stockpiling material but they are working to secure more reliable truck and labor from third parties; it has been difficult to keep people committed. They've started excavation in the SE corner and will work their way N. 10-day weather forecast does not show rain.

Remaining pipeline issues – the DCP line is marked. They want us to pot hole but they have not confirmed is the line is active or inactive (live or dead). It may be located in the Phase 2 area. It is 5' deep and if it is live then 15' may be difficult to excavate around. If it is dead, DCP may require certain protocol for working around the line so they don't lose their ROW.

Dusty has been working with DCP contact Mario Camunez, 575-988-8764. He's a field guy that responds to one calls, so we may need help finding a DCP decision maker in the area to move forward. Faith and Ryan will review their ROW data and try to find a contact with DCP that Dusty can speak with. Dusty thinks the line is about 400' running N-S through Phase 2 area. He'll update the location on his KMZ file and circulate so Faith can review within the SLO GIS data to assist.

Weather Delays: 10-day forecast looks promising for sunshine!

Two Week Look Ahead:

Dusty is hauling Phase 1 material out. It is a large amount of dirt to be pulled and put back. Logistically he's trying to utilize the trucks to dump contaminated dirt and then rehaul clean dirt back. He needs to determine a suitable space for stockpiling the good dirt and basically continue excavation activities so that Clair/Tetratech is able to get on site and do their work.

The fence needs to be put up around the new road access.

The temporary liner needs to go in for the laydown area across the road.

Anticipating an area of 100 x 80' for a laydown area for the material that will be used to construct the berms. Plastic liner will be laid out under material. Faith said to update SLO as this task progresses further along.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to establish DCP communication regarding the status of their pipeline which may run through Phase 2 area.

Critical Path Considerations:

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Working on Phase 1 excavation. SLO will assist Dusty with obtaining a DCP contact to determine the course of action for their pipeline.
- 2. Test well #2
  - a. Well has been drilled and completed as permanent monitoring well. Plan is to obtain samples August 26, 2021 and receive results next week.
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. Purple outlined area research is underway. We contacted Emily Hernandez and Mike Bratcher with the OCD to see if they had more details on a few incidents we identified. Dusty is also taking photos of the areas.

Assign Follow Up Tasks For New Business:

Test well #2 laboratory results should be in next week.

SLO will try to find DCP contacts for Dusty to reach out to.

Permian will continue to seek approval of remediation work plan from OCD so both agencies concur with field objectives.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday September 1, 2021

Adjourn: 8:27 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface

water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

Ph

Phase 1 Remediation Area

 $\Rightarrow$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



### Progress Meeting #6 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 08/25/2021

Meeting Time: 8:06 am, Wednesday September 1, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, September 8, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

### **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's.

Test well #2 has been drilled and set as a monitoring well. Tetratech obtained samples Friday, August 27, 2021. Hopefully samples will be back at the end of this week or early next. Groundwater was at 71'.

The crew is disassembling offload station. Once offload station is disassembled, they will move to temporary fencing around containment liner across road for unload area. The crew will then move to access road fencing. Equipment is blocking the area off from cattle currently. Hopefully this will be completed by end of week and fence around new road can be built. Cattleguard is in.

Dusty is still working through DCP personnel for details pertaining to their pipeline and Phase 2 excavation.

Safety: Concerns with DCP line being active and affecting Phase 2 excavation.

Site Observations: Weather has been dry.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty working on DCP pipeline still. He spoke with Jordan Britton, the SLO-provided contact. She pushed it to Isiah, the original line locator Dusty spoke with last year. He originally told DCP to cut and reroute line, but it was not done. Line is Active, 3" poly, either gathering or gas line. Claudia with DCP called and will get with her supervisors and Dusty will update her after today's call with more information. DCP will allow excavation up to 2' to line, which Dusty is not comfortable with. They'd have to hydrovac to find line depths, but Dusty is concerned with getting close to active lines. This impacts Phase 2, but if Phase 1 side wall samples are impacted, the East and West walls of the pipeline will be affected. Faith wants Permian to obtain a waiver from DCP that DCP will accept full responsibility for anything that happens. Dusty thinks it would be easier if they reroute the line but needs SLO help with how this affects DCP's ROW or if SLO could make them reroute. Faith will check with the ROW division. Dusty will communicate today's meeting with DCP and submit RFI to SLO to keep record. Expect DCP to take a week or so to communicate internally.

Weather Delays: 10-day forecast looks promising, no rain.

Two Week Look Ahead:

Hoping excavation will be completed and bottom will be reached so Clair/Tetratach can obtain samples. If he can find more trucks it could be completed in two weeks.

Old tanks are being stored on West side of site/Phase 2 area. Once Phase 1 is complete, Josh will get involved with rebuilding the new tank battery. Need to have third party assess integrity of tanks to determine if they can be used.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to establish gameplan for DCP line.

**Critical Path Considerations:** 

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Working on Phase 1 excavation. SLO and Dusty will work on communication with DCP regarding their active pipeline.
- 2. Test well #2
  - a. Well has been drilled and completed as permanent monitoring well. Samples obtained August 27, 2021 and awaiting lab results.
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. Purple outlined area research is underway. Emily Hernandez and Mike Bratcher with the OCD did not have anything new to add. Cory Smith is an Environmental Engineer assigned to review the remediation plan. We just started sending him requested information. He also did not suggest any new places to search for incidents. He noted it was unlikely that older data would be linked up anywhere and their filing systems and personnel changes over the years resulted in an incomplete system for tracking incidents and pits.

Assign Follow Up Tasks For New Business:

Test well #2 laboratory results should be in next week.

SLO will discuss DCP pipeline issue internally with ROW and Legal. Dusty wants to know if DCP should be responsible for the remediation if they won't sign a waiver or reroute the line.

Permian will continue to seek approval of remediation work plan from OCD so both agencies concur with field objectives.

Permian will try to summarize all research pertaining to Phase 2 purple outlined areas to 'make our case' that these are not a result of the Kaiser #009 incidents.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday September 8, 2021

Adjourn: 8:38 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

Phase 1 Remediation Area

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #7 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 09/08/2021

Meeting Time: 8:03 am, Wednesday September 8, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, September 15, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetratech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Cory Smith	505/419-2687	Cory.Smith@state.nm.us	NM Oil Conservation Division

### Review Previous Meeting Minutes:

### **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's.

The temporary fencing is complete around new access road and laydown area across the road. The berms and liner are in place at the staging area across the road.

Test well #2 has been drilled and set as a monitoring well, MW-1. Tetratech obtained samples Friday, August 27, 2021. Groundwater was at 71'. Samples were received last night; they showed no benzene or BTEX, but chloride concentrations of about 3500. They forgot to test for TDS and have

asked the lab to do this. Results will be sent to the SLO and OCD. Cory asked if we had sample of produced water from tanks to know its chloride concentration, but we do not.

Cory/OCD wants to see the drilling logs and well construction. Tetratech will send their logs to Dusty and he'll obtain the drilling logs and well construction from Atkins Engineering to forward everything to Cory and SLO.

Safety: Concerns with DCP line being active and affecting Phase 2 excavation.

Site Observations: Had some rain but not enough to shut down fieldwork.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Fencing and containment built and lined. Still hauling dirt and stockpiling. Dusty could use more trucks to get it done faster but that has been difficult to find. They are still working to get to total depth so Clair/Tetratech to perform sampling. Dusty conservatively estimates they are about 55% there.

Cory/OCD has reviewed the Tetratech remediation work plan dated January 2020 and the SLO plans. He asked Dusty to submit both directly to him as a single file with a C-141 with all incident numbers listed. He'll expedite on OCD's end with their conditions for approval and he will send it to SLO so there is no competing data between agencies. Cory wants sampling protocol to be 400 square feet, 20' x 20', grab samples. It was 200 square feet before. Ryan approves this.

Cory/OCD mentioned their top 4' has different closure criteria but the SLO plan should cover that. They are OK with the 15' sampling depth; it may not be needed everywhere but needed at some depths so that is fine. OCD is not concerned with GCL until sample results are received. If it isn't necessary due to results being under sample limits, then we won't deal with it. Ryan is OK with this. If GCL is needed, OCD would prefer it to be 8' deep to get below the pipelines out there.

Cory/OCD requested sampling notifications be sent directly to his email and Ryan's and to physically mark sampling zones. Tetratech will flag them in the field and anticipates at least one week to obtain samples with two people sampling. Cory is good with backfilling after approved samples without seeking approval. Clarification of plan for digging out requested. Dusty and Clair are excavating all of the Phase 1 area, starting with the Eastern portion, treating the soil as contaminated, and then will begin sampling.

Weather Delays: 10-day forecast looks promising, no rain.

Two Week Look Ahead:

Hoping excavation will be completed and bottom will be reached so Clair/Tetratach can obtain samples. If he can find more trucks it could be completed quicker. Will use a machine in hole to shape up floor and walls to increase safety for testing portion.

Old fiberglass tanks are being stored on West side of site/Phase 2 area. Once Phase 1 is complete and backfilled, Josh will get involved with rebuilding the new tank battery. Need to have third party assess integrity of tanks to determine if they can be used. Old steel tanks were hauled off. When this stage is reached, Dusty will get with SLO with more details.

No new RFI's needed at this time. SLO will review OCD's conditions for approval. Cory hopes to complete this by end of this week, early next.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to establish gameplan for DCP line.

Critical Path Considerations:

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Working on Phase 1 excavation. SLO and Dusty will continue to communicate with DCP regarding their active pipeline. DCP Midstream field rep Johnny Grenados met Dusty on site last Thursday August 26<sup>th</sup> to walk the line with GPS software. DCP rep will go up the DCP chain to relay the situation, so we are still in holding pattern with this. Dusty revised kmz showing updated data and circulated to all. He used Google Earth to overlay SLO remediation areas, asked if SLO had a GPS spot for anything and they did not, just Google Earth. While building the revised kmz he noticed the Southern line of the blue box is really close to Enterprise's ROW but it may be too soon to tell and we may not have to dig under it either. Dusty will make sure Cory has revised kmz. Relayed it's a 3" polyline and DCP is uncertain what it is carrying. They may have purchased the line and older pipeline records are dicey/hard to find. Faith has contacted the ROW division for 'as built' plats or something to help but hasn't heard back yet. Jenni asked if there was anywhere else that we could try to find pipeline plats or records and no one could think of anywhere else.
- 2. Test well #2
  - a. Well has been drilled and completed as permanent monitoring well. Samples obtained August 27, 2021 and need to test for TDS.

- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. Purple outlined area research is still in progress. Jenni briefly spoke with Cory about these areas and he briefly looked and didn't see anything jump out. He mentioned the quality of the data may be bad for older incidents. These areas will not be considered for the OCD's conditions for approval. Jenni can request the OCD to help confirm why some incidents may not be closed out yet. They may have inspection notes not available to public. Dusty has field photos of plastic liner sticking out of ground we will include with summary.

Assign Follow Up Tasks For New Business:

Test well #2 laboratory results, logs, and construction data will be sent to SLO and OCD. SLO will discuss DCP pipeline issue internally with ROW and Legal. May need help putting pressure on DCP to respond.

Permian will continue to work with Cory/OCD to gain their conditions for approval. OCD will send their conditions for approval to SLO to review, so both agencies concur with field objectives.

Permian is working to summarize all research pertaining to Phase 2 purple outlined areas to 'make our case' that these are not a result of the Kaiser #009 incidents. Older incidents, inconsistent records, and multiple pipelines running through area have added more queries and research to sort through. Jenni is continuing to work on this and wants to be extremely thorough. Josh has been unable to review and weigh in also.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday September 15, 2021

Adjourn: 8:59 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



### Progress Meeting #8 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 09/15/2021

Meeting Time: 8:05 am, Wednesday September 15, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, September 22, 2021

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

(1 value, phone name of, office, what representing what office,			
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

### Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's.

Test well #2 has been drilled and set as a monitoring well, MW-1. Tetratech obtained samples Friday, August 27, 2021. Groundwater was at 71'. Results for TDS showed 9,590 TDS. Results were sent to the SLO and OCD. Data needs to be discussed by SLO because it shows groundwater contamination.

MW-1 drilling logs and well construction from Atkins Engineering and handwritten drilling logs from Tetra Tech have been sent to Cory/SLO.

Safety: Concerns with DCP line being active and affecting Phase 2 excavation.

Site Observations: Had some rain but not enough to shut down fieldwork.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Excavation is still underway. Dusty estimates they are at 65% with this stage. Dusty could use more trucks to get it done faster but that has been difficult to find. They are leaving an area intact to maintain current traffic flow pattern. They are still working to get to total depth so Tetra Tech can perform sampling.

Faith asked if there were any issues with people or critters coming on site. Dusty and his guys haven't seen cattle on site but they're seeing signs that something may be getting in although fences and cattle guard are intact. Game cams may be utilized to monitor overnight activity.

Cory/OCD sent a draft condition for approval to SLO, who will review and communicate with Cory. Dusty and Jenni will send Cory the merged work plans and C-141 he requested; it's just been busy.

Weather Delays: 10-day forecast looks promising, no rain. Although Dusty said this last week and it ended up raining a bit a few days.

Two Week Look Ahead:

Dusty still looking for more drivers/trucks to move more dirt. Still hoping excavation will be completed and bottom will be reached so Clair/Tetratach can obtain samples. Once he reaches depth it will slow down a bit as they shape up floor and walls to increase safety for testing portion.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to establish gameplan for DCP line.

Critical Path Considerations: Nothing new, just getting enough trucks and making sure site is secure overnight.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Working on Phase 1 excavation. Still working on making contact with the right DCP personnel that can assist us. Faith spoke with Cory about this and he said generally speaking during a remediation like this the operator of the gas line can pressure it down during excavation but that agreement is between the two operators. Dusty has an idea that they could cut the line at the North and South side and loop it around to connect while during remediation. After they can lay it back in if necessary for ROW. Faith said if this becomes the plan they can help with temporary ROW approval. Dusty will call DCP again. Faith spoke with their ROW division and they're unfamiliar with this situation they think it's typically dealt with between operators.
- 2. Test well #2/MW-1
  - a. Well has been drilled and completed as permanent monitoring well. Samples obtained August 27, 2021.
- 3. Phase 2 workplan, issued with this meeting request and by separate email on 07/23/2021
  - a. Purple outlined area research is still in progress. We'd like to be able to include the new incident that was discovered yesterday. Jenni would like an idea of how many lines are running through this area.
  - b. Late yesterday, September 14<sup>th</sup>, Dusty received a call from his field guys about a busted line near the Kaiser laydown area across the road. They walked the line and found blue San Mateo flags from one call report. Jenni found San Mateo contact info linked to Matador on the OCD site. Dusty called Matador and found they are affiliated with San Mateo. They sent an inspector out to track line. He's 90% sure it's theirs and will track it back to the nearest meter. Dusty went on site today and can see where the line burst. He estimates it may be 25-30 bbls of water that looks pretty clean and the flags were blue for fresh water. He'll send a pin drop and pictures to SLO. Matador is supposed to send their safety team out for further inspection today; they thought it may be fresh water. Line is located 30-45' from road, near Kaiser laydown area and purple scarred area at a mesquite bush. Dusty said there are lots of lines out there above ground and dipping below ground. He doesn't believe a driver could have trucked over the line to cause it to burst.

Assign Follow Up Tasks For New Business:

Merged SLO and Tetra Tech work plans and C-141 to Cory/OCD.

Permian is still working to summarize all research pertaining to Phase 2 purple outlined areas to 'make our case' that these are not a result of the Kaiser #009 incidents. Faith acknowledged the lack of data that industry maintains on their lines and that SLO has been able to collect is unfortunate. We'd like to evaluate the recent incident with the Matador/San Mateo line.

Dusty will send new incident location and pictures to Ryan and Faith. He'll tell Matador they need to get with SLO about this.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday September 22, 2021

Adjourn: 8:54 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

\_ - - F

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



### Progress Meeting #9 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 09/22/2021

Meeting Time: 8:02 am, Wednesday September 22, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, September 29, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	Cory.Smith@state.nm.us	NM Oil Conservation Division
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business: There are no outstanding RFI's.

Safety: Dusty unavailable.

Site Observations: Dusty unavailable.

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Excavation is still underway. Dusty emailed Faith on 9/21/2021 that he was unable to make the meeting but that they were still hauling dirt off to reach specified depth.

Dusty and Jenni sent Cory/OCD the merged work plans and C-141 he requested. Cory/OCD sent their conditions for approval to all parties including SLO via email on 9/21/2021. Cory has linked up the information to the OCD Online to each relevant incident number. Their timeline is 90 days for completion; however, an extension may be given with good cause as long as PWS can prove they are continuing to work towards the end goal.

Weather Delays: Cooler weather.

Two Week Look Ahead:

Dusty unavailable. Continuing excavation.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to establish gameplan for DCP line.

Critical Path Considerations: Nothing new.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

1. Ryan Man has heard from Kayla Tilman w DCP to get a decision made about the gas line situation for phase 2 workplan. They will work with Dusty.

Assign Follow Up Tasks For New Business:

- 1. We will catch up on Dusty's question (email 2021-09-21) regarding joint conditions of approval in our meeting next week.
- 2. Cory Smith will be on leave and will not attend next week's meeting.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday September 29, 2021

Adjourn: 8:08 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

\_ ; \_

Phase 1 Remediation Area

 $\Rightarrow$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #10 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 09/29/2021

Meeting Time: 8:11 am, Wednesday September 29, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, October 6, 2021

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

	,	, 1 8 1/	
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/260-8634	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

**Review Previous Meeting Minutes:** 

## **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's. DCP line and busted water line.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Excavation is still underway and they're at the point of stacking dirt on location that needs to be hauled off. There is a new delay with hauling the dirt off due to road construction on 176 at the entrance road to the lease. It's about ½ mile to East and 3 miles to West. The trucks are getting stopped and having to wait up to 15-20 min to pull out. It looks like they are expanding/widening the road. Everything is excavated except 30% is still intact for Phase 1. OCD's conditions for approval list a deadline right before Christmas. Hopefully Phase 1 will be complete, unsure of Phase 2 due to new traffic situation.

Dusty has spoken with Kayla in the DCP ROW Dept and one of their field ops guys. Yesterday they said they'd allow Dufrane to excavate around their line. They'll blow it down and isolate the line. They won't hold Dufrane or Permian responsible if there is damage to the line and they'll repair it if anything happens. Dusty suggested cutting and rerouting the line around the excavation area and they were not sure on this. It's about 120-150'of line. Dusty read their email to everyone. Faith requested getting something more official in writing from them on their letterhead and told Dusty to relay that SLO will need this. Dusty wants the location specifics tied to the agreement also.

Weather Delays:

Two Week Look Ahead:

Continuing excavation of last section, stockpiling dirt, and hauling bad dirt off. Reach 15' and clean hole up for Tetra/Clair to obtain samples.

SLO has authority to also obtain samples. When 15' is reached, they requested to give Ryan a couple of days' notice in case he wants to obtain samples or witness sampling. Tetra/Clair would like a week notice; scheduling is getting crazy for them.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Road construction at 176 has created new logistical challenges with hauling the bad dirt off. Unsure how long they'll be working at this location.

Critical Path Considerations: Nothing new.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

1. Ryan Man has heard from Kayla Tilman w DCP to get a decision made about the gas line situation for phase 2 workplan. They will work with Dusty.

Dusty will work on getting DCP agreement on their letterhead about excavating around their line. OCD and SLO won't issue joint conditions for approval; they will remain separate but SLO is open to discussion on specifics if situation arises. They have different closure standards but there should not be too much difference. Sampling results are key to next steps. SLO hopes that so much material has been removed that the results will be acceptable. Do not backfill until samples are reviewed by all. SLO will try to review results quickly so there is not a big hole sitting in the field for an extended period of time.

2. Jenni is working on summary and exhibits for [Matador spill on 9/14/21]. They called Ryan and said they thought it was less than 5 bbls but have not followed back up when Ryan asked them for details. Ryan will reach back out to them. Dusty said the line has been fixed but it does not appear they have been out to remediate anything. Jenni did not find anything on the OCD site under their entity names or ULSTR yet. She can email Emily Hernandez to see if they received notification.

Assign Follow Up Tasks For New Business:

Dusty will obtain something from DCP relieving liability while working around their line.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday October 6, 2021

Adjourn: 8:28 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #11 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 10/06/2021

Meeting Time: 8:05 am, Wednesday October 6, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, October 13, 2021

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

		<u> </u>	
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions

**Review Previous Meeting Minutes:** 

### **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business: There are no outstanding RFI's.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty said they are in 'dirt hauling mode' now. There was heavy rain last Thursday-Friday with a shower over the weekend that shut the site down. They started hauling again yesterday since the site has dried out. Hauling is the current focus, but they'll get back to excavating soon hopefully. The road construction at 176 is still hit or miss with delaying truck traffic. It just depends on if you catch the through traffic when pulling out on to the road. Otherwise, you will wait a bit. The same section of road is still under construction as was last week.

The DCP agreement has not been formalized yet. Dusty sent Kayla with DCP an email request last week for something on their letterhead with more site details listed but he hasn't received anything back or heard anything back yet. He will reach back out to them by the end of this week. Faith asked how long the process of pressuring the line down may take. Dusty estimates 2-3 weeks depending on the depth of line and amount to excavate around it. Plus, they'll need to get Tetra Tech down in the hole and complete testing. Cory suggested to expedite the lab results and hopefully get results back in 1-2 days.

Weather Delays: Heavy rain on Thursday September 30 – Friday October 1. Another small shower over the weekend kept site from drying out until yesterday, Tuesday October 5.

Two Week Look Ahead:

Continue hauling dirt off and then they will finish the last bit of excavation work and clean the hole up for safe sampling by Tetra Tech.

Cory asked for more details on excavation – how many cubic yards, how many trucks, what type of trucks, time to landfill and back? Dusty said they have about 10-11,000 cubic yards left, and they consistently have six (6) belly dump trucks with 18 cubic yards capacity. It takes about 1 hour and 20 minutes to reach the landfill. Each truck takes about six (6) loads a day. It is estimated that it will take about 15 days to haul off the remaining 10,000 cubic yards, assuming there are no delays due to things out of our control (weather, labor).

Cory mentioned ways to expedite the process – more trucks, expedited lab results, hauling clean dirt in when trucks come back. Dusty acknowledged all of this and mentioned the trucks and labor sourcing has been an issue since the beginning of this project and is an issue in general in the oilfield as business has picked back up for everyone. It's been tough to secure since it must be contracted out.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate

sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Road construction at 176 is still ongoing at this location causing slight trucking delays.

Critical Path Considerations: Nothing new.

Commissioning:

**Special Inspections:** 

Payment Schedule:

New Business / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Cory and Faith would like current site photos of the status of excavation with date and time-stamps. Dusty will obtain and email these to everyone.
- 2. Phase 2 workplan, issued by separate email on 07/23/2021
  - a. Cory will respond to Jenni's email that was sent to Emily Hernandez asking about the process and timeline for reporting spills to the OCD and incident numbers being assigned that are searchable to the public. The Matador/San Mateo flowline burst discovered on September 14 still has not shown up online. Faith is going to ask Ryan if he's received more information from them. We're uncertain of the amount and material that was released. Dusty will resend photos to Cory and Faith he took in the field. Cory said incident numbers are generated instantly online when an operator submits the notification of release. These are required to be called in within 24 hours if the amount exceeds 50 bbls liquid/500 mcf, reaches a waterway, causes a fire or injury. They must be submitted in writing within 14 days if the amount is 5 bbls liquid/50 mcf. It is possible paper filings mailed to field offices may take longer to be entered into the system, especially with teleworking from Covid. Cory said ultimately it is a selfreporting agency and they can't police everything in the field so if there's talk of a release that is older that is not online it is likely that it was not reported to them. Jenni mentioned not wanting to tattle-tale on other operators; the recent release just happened right near an area we are being asked to look into for the Phase 2 remediation plan. Cory said that if it's on our lease, the OCD and SLO could hold us responsible though. He'd like to see pictures.

Assign Follow Up Tasks For New Business:

Dusty will follow up with DCP to obtain something from them relieving liability while working around their line. He will also send pictures of the Matador/San Mateo burst line.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday October 13, 2021

Adjourn: 8:32 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

- - -

Phase 1 Remediation Area

 $\Rightarrow$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



### Progress Meeting #12 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 10/13/2021

Meeting Time: 8:02 am, Wednesday October 13, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, October 20, 2021

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Clair Gonzalez	432/260-8634	Clair.gonzales@tetratech.com	Tetra Tech

**Review Previous Meeting Minutes:** 

## **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's. No old business.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty said they're continuing to haul dirt off and Monday they started excavating the remaining portion of Phase 1.

Dusty has not heard from DCP at all regarding the formal letter from them relieving liability of damage to their line during excavation around it. He's called and they have not returned his calls. He'll keep trying to get something from them. Ryan has not heard from them either. Faith said as long as we're in accord and we have record that Dusty has been trying to reach out, then our records will show that DCP has not done what has been requested by Dufrane, to <u>put in writing</u> DCP's agreement to; 1. allow excavation around their line, and 2. accept the responsibility for any damages.

Weather Delays: No rain delays. It's getting chillier outside.

Two Week Look Ahead:

Continue hauling dirt off and then they will finish the last bit of excavation work and clean the hole up for safe sampling by Tetra Tech. They've scheduled Tetra Tech to begin testing on Monday, October 25. Clair said they're aiming for five (5) days of testing with two people on location. The samples will not be expedited at the lab. They'll turn in samples at the end of each day to avoid overwhelming the lab. It should be a standard 5-day turnaround.

Cory asked for more details on excavation – how many samples, how are they marking, and reminded them to email 2-day notification to OCD and SLO. Clair said 200 samples and for every 400 square feet they'll collect a 5 point composite sample. She noted they will pin flag the corners of the sample location versus the center, per Cory's suggestion.

Cory asked for the status of field photos. Dusty will take them today while he's on location and email to OCD and SLO.

Dusty confirmed that the truck situation is still the same; they're doing what they can with what they can find. The road construction has opened up both lanes. Equipment is staged on location so work is not completed, but it is not active at the moment in front of our lease road egress.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: Nothing with Phase 1. Jenni is still working on the Phase 2 issues.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Cory, Faith and Ryan would still like current site photos of the status of excavation with date and timestamps. Dusty will obtain and email these to everyone.
  - b. Continue excavation so sampling can take place.

Assign Follow Up Tasks For New Business:

Dusty will continue to follow up with DCP to obtain something from them relieving liability while working around their line. He will also send current photos of the status of Phase 1 excavation to OCD and SLO.

Jenni needs to circulate last week's meeting #11 minutes for 48 hr review to all.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday October 20, 2021

Adjourn: 8:16 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Sit

Site outline

- · - P

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



### Progress Meeting #13 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 10/20/2021

Meeting Time: 8:09 am, Wednesday October 20, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, October 27, 2021

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office

**Review Previous Meeting Minutes:** 

### **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's. The 'Purple Area Phase 2 Summary' is still outstanding from Permian. Jenni should have it wrapped up on her end to send to Josh for review within the next week.

A letter from DCP relieving Permian and Dufrane from damage liability has not been completed yet. They sent a letter that was lacking detail. Dusty emailed Kayla/DCP yesterday asking for more detail and if they'd consider letting Dufrane reroute the 120' of pipe during excavation. He mentioned they have certified poly-welders that can put it back together. He spoke with Johnny, their field rep, about this and they both agreed it would be a good idea. This would avoid a line hanging at 5-8' since excavation depth is 15'. Cory/OCD suggested excavating, testing, and backfilling sections so the entire

line isn't suspended and using sandbags or props to hold the line up. Dusty acknowledged; it would just add more time versus cutting the line and performing mass excavation and testing.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane is still excavating and hauling dirt off. They have contacted Centennial regarding their adjacent lease and the Southern wall of the 'pit'. They're working on benching and cleaning up the pit for testing.

Weather Delays: None.

Two Week Look Ahead:

Dufrane hopes to finish up the detail work in the pit this week so the Tetra Tech technicians can start sampling. They are scheduled to start Monday, October 25, 2021 and it should take 5 days. Dusty emailed SLO and OCD this and will email them if anything changes. Dufrane will continue to haul old dirt off (not excavate) and stockpile clean dirt during testing. Hopefully soil samples will be clean, and they can backfill. Dirt must continue to be hauled off to accommodate space before more excavation can be done. We'll need Josh on a call soon to discuss the options for setting up the new tanks after Phase 1 completion, and see if that is still his plan. OCD doesn't have issue with this, just that Permian must have all phases completed before injection authority can be reinstated.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: Nothing with Phase 1. Jenni is still working on the Phase 2 issues, but Dusty has concerns with the areas across the road. There are lots of lines running through the purple areas. He isn't sure where they go; he's followed some 2 miles in the field. The Goodnight line is underground. He expects delays with communication trying to figure this out within the current time frame. Faith/SLO said those areas may not be taken into consideration with Phase 2, but rather Phase 3. They will discuss internally. Cory/OCD said the purple areas aren't in the ROW for the well pad, which is their main concern.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Dusty has conveyed to Faith and Ryan concern with the Southern wall of the Phase 1 pit. It is very close to the adjacent Centennial lease and he is concerned with having enough room to safely benchmark and excavate. SLO provided Centennial contacts and Dusty spoke with 5-6 people. They came out and flagged their assets this morning, October 20, 2021. There's 20' to their lease and 44-45' to their wellhead. Centennial wanted to view our test results. Dusty updated his one call and had to manually include Centennial as they do not show up.
  - b. Cory and Dusty discussed soil composition and excavation techniques. It was suggested that an excavator can take samples if getting in the pit is not safe. Details of the Centennial well, 30-025-20461, Wilson Deep Unit #1 were discussed relating to their old reserve pit and where it may be located, if it is near where we are sampling or if it could have been located on the Kaiser lease. The location of 40' is getting close to where their reserve pit may have been located and their lease is very small so there aren't many places for the reserve pit to have been located. Dusty hasn't seen any plastic liner peeking up on location, although the well was drilled in 1963 and there may not have been a plastic liner. Cory said it was kind of dangerous to dig so close into their site since it may dig into their contamination. Our tank battery could have been on top of their reserve pit. When Tetra Tech last sampled, the old tank battery area had the worst results. Cory suggested sampling in two halves – top half 0-8' and then lower half because if they've leaked into our site this may be evidenced in the deeper portion. Sampling all at once may not reveal this. He also said that most spills are from reserve pits or tanks, not the wellbore. Jenni mentioned her research had revealed a few spills on the Centennial lease that were old and had no information linked up; they are also not linked up to the well details on the OCD site. Dusty asked if we'd be on the hook for remediating if it was from Centennial's lease and that there's been so many operators in this area it's hard to know who was where first. Example of the Kaiser site being on top of the existing DCP line. Faith said we'd have to see what the samples show and to plan to excavate onto the Centennial lease down to 15' and bench as required.

Assign Follow Up Tasks For New Business:

Dusty will continue to follow up with DCP to obtain something more detailed from DCP relieving liability for damages to their line during excavation. He'll keep SLO in the loop.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday October 27, 2021

Adjourn: 8:55 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #14 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 10/27/2021

Meeting Time: 8:03 am, Wednesday October 27, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, November 3, 2021

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Jenni Usher Clair Gonzales	512/820-8772 432/687-8123	jenni@permianws.com Clair.gonzales@tetratech.com	Permian Water Solutions Tetra Tech

## **Review Previous Meeting Minutes:**

### **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

A letter from DCP relieving Permian and Dufrane from damage/financial liability has not been completed yet. Dusty has not heard back from DCP after requesting this. He will keep Faith/SLO in the loop if SLO needs to step in and contact DCP. There is still some time before this is critical.

## Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane finished up the pit and sampling started on Monday. They're still hauling dirt off. They were able to dig and bench at the South wall adjacent to the Centennial lease. They did dig 15' onto the Centennial lease. They cannot dig much further in due to the location of the wellhead. The South wall looks problematic, but they hit rock at the bottom of excavation. Hopefully sampling will be completed this week and we'll all await results.

Weather Delays: None.

Two Week Look Ahead:

Finish sampling and receive lab results by end of next week. Continue to haul the dirt off. Pending lab results, the next step would be to backfill the pit and subgrade to prepare for new containment and battery. The plan is still the same, just had to remove more dirt than anticipated initially. Backfilling would begin at the North side of the pit. There are operators interested in sending their water when facility is complete. The OCD conditions for approval have a deadline just before Christmas. This is obtainable if everything goes perfectly. Cory Smith/OCD was on site Monday and Dusty walked him around. He was not on the call today, but Dusty said he seemed content with the progress and that Permian is working towards completion. As long as we're still making progress, the OCD will work with Permian on the deadline.

The plan for sampling was prepared by the Tetra Tech field tech. He spent the first day on location gridding and mapping the site. It appears he is starting at the North side and working South, sampling the side wall first, then the floor.

The South side of the pit hit rock. Dufrane would have to blast the rock or hammer hoe the rock to break it up if further excavation is necessary. Faith/SLO said they wouldn't require Dufrane to blast or hammer the rock. Dusty spoke with Cory while he was on site about the rock permeability and possibility of having to excavate the rock. It appears that the rock would be an acceptable stopping point preferably. Cory/OCD noted that the remediation in the rocks/etc would be dependent on the delineation data that would be required. Lab results will be a key component.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: Nothing at this time.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Wait for lab results to determine next steps.

Assign Follow Up Tasks For New Business:

Dusty will continue to follow up with DCP to obtain something more detailed from DCP relieving liability for damages to their line during excavation. He'll keep SLO in the loop.

Jenni has sent the purple area summary for review internally. Hopefully it will be ready to submit to SLO next week.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday November 3, 2021

Adjourn: 8:26 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Sit

Site outline

Pha

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #15 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 11/03/2021

Meeting Time: 8:03 am, Wednesday November 3, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, November 10, 2021

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Josh Brooks	617/584-2889	josh@permianws.com	Permian Water Solutions
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division

## **Review Previous Meeting Minutes:**

## **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

A letter from DCP relieving Permian and Dufrane from damage/financial liability has been received. They did not address cutting the line and rerouting during excavation. A field rep, Chase Guy, and field supervisor, Claudia Dabney, were listed on the letter. Dusty will reach out to them about cutting the line. A DCP field rep will be on location during excavation; it may be determined in the field that cutting the line is acceptable once they see what is going on.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Tetra Tech completed field sampling Thursday afternoon and completed notes and mapping on Friday. So far there have not been any lab results received. Tetra Tech does not anticipate needing to go back on site this week. They took 167 samples. They didn't field screen all the samples, but they did spot-check them. A couple of spots looked questionable along the South side. The lab called Clair/Tetra Tech to let them know they were backlogged and would not meet the standard turnaround time. She asked for preliminary samples to be sent as they have them.

Dufrane continued to haul off bad dirt and monitor the sampling process. He will continue to haul off bad dirt and bring clean dirt in while awaiting lab results.

Cory/OCD joined call and explained his statement from the #14 minutes that remediation in the rocks/etc would be dependent on the delineation data that would be required. He said that liquid in soil versus rock moves differently. OCD requires operators to delineate and see what's in the rock. Sometimes they let them leave it and sometimes they do not. So lab results are key. Cory thought most samples looked like they were pretty clean except the SW corner.

Faith/SLO asked how the OCD handles situations with remediation when it's right against another lease. Cory/OCD said he'd need to check but based on his field observations it was not likely Centennial's. Aerials show the Centennial site has been set up the same way for a long time. The wellhead is close but it's not likely the contamination source. More delineation data would be needed, sampling in high-low pattern to show contamination pattern to try to prove contamination source.

Weather Delays: None.

Two Week Look Ahead:

Hopefully soil samples are clean, and they can start backfilling with clean dirt and hauling off bad dirt. The plan is that if samples are clean, they'll backfill from the North end to the South end. Truck traffic will continue in a large circle hauling out bad dirt, hauling in clean dirt.

Clair will circulate results when received. She'll include a kmz file with a field map with slopes and everything needed to understand the sample locations.

Cory/OCD said they reached out to Matador about the pipeline burst that we let them know about last month. They said it was 5 bbls, so not required to report. OCD will keep on it; they had a large release in Carlsbad they've been working on. Dusty is glad Cory came out to the field to lay eyes on everything out there.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: Just need to figure out the South side and working around the DCP line soon.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Wait for lab results to determine next steps. Hopefully we'll have some by the end of this week, early next week.

Assign Follow Up Tasks For New Business:

Dusty will continue to follow up with DCP to see if they'll allow Dufrane to cut the line during excavation.

Jenni has sent the purple area summary for review internally. She asked Clair/Tetra Tech for assistance. Hopefully it will be ready to submit to SLO by the end of this week.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday November 10, 2021

Adjourn: 8:34 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

## Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

- 51

Site outline

-:-

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



### Progress Meeting #16 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 11/10/2021

Meeting Time: 8:04 am, Wednesday November 10, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, November 17, 2021

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Jenni Usher Clair Gonzales	512/820-8772 432/687-8123	jenni@permianws.com Clair.gonzales@tetratech.com	Permian Water Solutions Tetra Tech

### **Review Previous Meeting Minutes:**

### **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

A letter from DCP relieving Permian and Dufrane from damage/financial liability has been received. They did not address cutting the line and rerouting during excavation. Dusty spoke with a new DCP contact Monday that told him that if Dufrane/PWS wants to cut and reroute the line then they would be financially responsible for cutting, storing, and reinstalling the line for service. He is going to send Dusty a cost estimate for this. We're about a month out from this phase of the fieldwork, depending on the test results and backfilling progress. The current understanding is that the financial

responsibility is negated if Dufrane damages line during excavation, but not to remove it up front. Dusty is dealing with a whole new set of people within DCP now.

Update on Matador/San Mateo line burst from September: Dusty said it looked like someone had been out to scrape the surface in a 50' x 50' area around the incident location. Unsure where the bad dirt went (possibly our bad dirt pile - haha). Cory/OCD asked if they cleaned up the lines out there and Dusty said it looked like there were still pieces of cut up pipe out there. Cory/OCD had asked them to file a C-141 and he'll check in with his coworker Chad for progress.

Clair/Tetra Tech received preliminary data from the lab this morning. They still need to undergo QAQC procedures, but hopefully results will come in this afternoon. She did a quick run through of the 200 pg summary and thinks the results look like we'll be OK. Some TPH levels were a bit high – she needs to look further into these locations. Chlorides appeared below 7,000, a couple may have been at 9,000, she needs to verify this. A couple of spots had nominal BTEX but were still under the OCD threshold. Clair emailed her kmz sampling map to everyone. She'll update this map and circulate a final when all results are in.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty said more dirt was hauled off and clean dirt was brought in. Basic site cleanup. He had to pull a couple of guys off the Kaiser to work other jobs.

Weather Delays: No cause for delay. Foggy and cooler temps in the AM.

Two Week Look Ahead:

Waiting on samples and analysis. If all is good, backfill starting at North end working South. Continue to haul dirt. Personnel can be pulled back in when needed to backfill.

Clair/Tetra Tech's goal is to receive all the data from the lab and create analysis table with detailed sampling map to circulate for everyone's review.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: The road construction has started up again; it is causing slight delays with hauling dirt due to one lane being open.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Wait for lab results to determine next steps. Hopefully we'll have them this week.

Assign Follow Up Tasks For New Business:

Jenni is finalizing the purple area summary and will send to Faith and Ryan within 24 hours.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday November 17, 2021

Adjourn: 8:21 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
    - b) Final samples to the following closure criteria:
      - 1,000 mg/kg TPH
      - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



# Progress Meeting #17 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 11/17/2021

Meeting Time: 8:02 am, Wednesday November 17, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, December 1, 2021

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division

# **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

A letter from DCP relieving Permian and Dufrane from damage/financial liability has been received and forwarded to the SLO. Dusty has not heard back from Steven Wynn since they spoke last week about the cost estimate for cutting and rerouting the line during excavation. Faith/SLO said they may have to issue a letter to DCP that they would be responsible for contamination under the line because it is in the area that SLO wants PWS to dig.

Cory/OCD checked with his coworker Chad on the status of the Matador line burst. He said Matador is awaiting sample results for closure. They were asked to submit a release notification to get something in the OCD system. Faith/SLO asked for the OCD to share the sample results upon receipt.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Similar to last week, Dusty said more dirt was hauled off and clean dirt was brought in. They've been on autopilot with this while the soil sample results come in.

Soil sample results discussion – Ryan/SLO said most results were below the 7,000 mg/kg chloride and 1,000 mg/kg TPH threshold. There was some contamination in the SW corner they'd like to see removed. SLO is unsure if it's a safety issue to dig out 10' safely around DS-2, DS-3 and SW-6, NE side and SW side. SLO also wants removal on the way out at SW-01 on the NE side by the ramp. They asked how clearly the DCP line was marked in the field. Dusty said he's asked them to come out to mark it with wooden stakes instead of flags so it's easier to see but they have not done this yet. Ryan will try to get a hold of Kayla or Claudia with DCP to see if SLO can expedite getting the line marked because they'd like to see 10' excavation and backfilling started this week. They want 10' removed entirely, not sampled.

Cory/OCD comments on soil samples – none of the sidewall (SW) samples meet OCD threshold because they're over 6,000 mg/kg in the top 4'. He'd like a background area sample for comparison to see how salty the soils are in that part of New Mexico. Clair can try to grab a sample upgradient. He's OK with backfilling boreholes to 6'. For the SW corner, he'd recommend digging 4' out and it should be safer for OSHA and benching is not required. The top 4' are an issue for him since they exceed 6,000 mg/kg chlorides. He's wondering if 10' off the sidewalls with delineation holes will give us a a better idea. SW-5 failed, but since it's so close to the other operator's lease he doesn't want to chase that down. SW-4 and 5 were over. SW-17, 18, and 19 results were a little lower. He suspects we're at the tail end of contamination due to the depths.

Clair/Tetra said the last samples of this area were from 2019. SW-4 and SW-5 samples were clean at that time. She'll review the old data in detail and come up with a gameplan for everyone's review to address the top 4'.

Cory/OCD thought it made more sense to dig down to 4' and sample versus digging out 10'. He said it may end up going to 10', but the blue area benched and BH-13 and 14, SW-20 showing good numbers so the impact may be from something else. He suggested hydro excavating the DCP line so it is easier to see in the field since PWS needs more excavation towards the direction of the line.

Clair/Tetra confirmed next steps – issues are with SW-1, 3, 6, 7, 8, 9, 10, and 11. Moving out 10' laterally to 4' deep to obtain more samples, possibly using a backhoe to dig a trench and collect test holes may be best option. Tetra uses two different field screening methods to test in field. If field screen results are unfavorable, lab results will be necessary for official results. Dusty will try to push DCP to mark their line. Cory and Faith are good with backfilling the orange area to 6'. The use of GCL liner will not be required.

Weather Delays: No cause for delay.

Two Week Look Ahead:

Begin hauling good dirt into excavation area in preparation for backfilling while avoiding western edge of pit. Continue hauling bad dirt off location.

Dusty will give the field guys Wednesday-Friday off for Thanksgiving Holiday next week. We will all take off from next week's call for the holiday as well. Correspondence regarding the DCP line and further sampling will still take place between all parties.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Further sampling needed laterally out from SW-1, 3, 6, 7, 8, 9, 10, and 11 at 4' deep. Background Chloride sample needed for OCD. Clair/Tetra to coordinate.

Assign Follow Up Tasks For New Business:

Try to get DCP out on location to mark their line where it runs through PWS's facility.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday December 1, 2021

Adjourn: 8:39 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

- - -

Phase 1 Remediation Area

\*

Test Well #2



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
  - STEXND
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*Flan may change subject to sample data from spill and water testing \*\*\*\*



# Progress Meeting #18 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 12/1/2021

Meeting Time: 8:02 am, Wednesday December 1, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, December 8, 2021

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division

# Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

DCP agreed to flare the sour gas off their line, isolate it, and remove their line. They will not hold Dufrane or PWS financially responsible for any damages. Dusty will keep everyone updated on further communication with DCP and status of the line removal.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Similar to last week, Dusty said more dirt was hauled off and clean dirt was brought in as they back fill.

Tetra Tech was in the field doing field screenings in the areas of concern. They kept hitting refusal at about 1'-2' in all locations they needed to sample so they had to stop and reassess. New plan is to excavate out 10'W to 15'W x 4' deep and various lengths per sections of the pit wall.

Dusty said they are removing spoils from the north side pit side stockpile to access the areas to further excavate and can commence on the east side. The DCP line needs to be removed to complete excavation on the west side.

Weather Delays: No cause for delay.

Two Week Look Ahead:

Continue hauling bad dirt off location and bringing in clean dirt to back fill. Work on digging the horizontal lines out for resampling.

Plan for DCP to come out and remove their line so the west side can be accessed.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Further sampling needed laterally out from SW-1, 3, 6, 7, 8, 9, 10, and 11 at 4' deep. Background sample needed for OCD. Clair/Tetra to coordinate.

Assign Follow Up Tasks For New Business:

Try to get DCP out on location to mark their line where it runs through PWS's facility.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday December 8, 2021

Adjourn: 8:18 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

Phase 1 Remediation Area

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - All areas not noted in key, excavate to 6'.
  - Final samples to the following closure criteria:
    - 1,000 mg/kg TPH.
    - 7,000 mg/kg CI\* - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days. \*\*
- and len may change subject to sample data from spill and water testing that



# Progress Meeting #19 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 12/15/2021

Meeting Time: 8:02 am, Wednesday December 15, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, December 29, 2021

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
575/392-8736	rmann@slo.state.nm.us	NM State Land Office
432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
	575/392-8736 432/687-8123	

# Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty and Cory were unable to join the call today. Cory sent an email to Dusty late last night requesting a formal extension request and date for completion of certain field requirements since it does not appear the December 22, 2021 deadline for the OCD Conditions for Approval will be met. We will discuss further when both are available.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Since Dusty was unable to join the call today there is nothing to speak of for prior week performance.

Clair was able to update that they are working to get the horizontal lines dug out and once complete they will resample.

Weather Delays: No cause for delay.

Two Week Look Ahead:

Dusty emailed that they'll continue to haul off bad dirt and back fill with clean dirt as well as excavation. His email stated that they are looking to complete additional excavation on the north and east side tomorrow, 12/15/2021.

DCP said they would be out to remove their line this week, but they had not made it on site as of 12/14/2021. The west side excavation will commence once DCP has removed their line.

Next week's meeting will be canceled for the Christmas holiday, but if anyone needs anything they can email/call Faith and Ryan.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Merchant Livestock has questioned the source of the caliche that Dufrane is bringing in. Ryan and Faith said that they do not have standing in this project and we do not need to give them any information if they reach out to us. They are the lessee, not landowner.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Further sampling needed laterally out from SW-1, 3, 6, 7, 8, 9, 10, and 11 at 4' deep. Background sample needed for OCD. Clair/Tetra to coordinate. Soil to be removed.

Assign Follow Up Tasks For New Business:

Dusty and Permian need to formally request an extension to the OCD's Conditions for Approval by December 20, 2021 and show good cause for why an extension should be granted.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday December 29, 2021

Adjourn: 8:12 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site

Site outline

- - -

Phase 1 Remediation Area

\*

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg C1\*
  - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



# Progress Meeting #20 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 12/29/2021

Meeting Time: 8:01 am, Wednesday December 29, 2021

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, January 5, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Josh Brooks	617/584-2889	josh@permianws.com	Permian Water Solutions LLC

# **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty and Cory were able to join the call today. Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory has been out of office and will respond after he reviews the request.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

DCP removed their pipeline and excavation is complete along the North, East, and West sides of the pit. Approximately 75% of the initial phase 1 area has been backfilled to the first bench height of 7-8'. The North, East, and West walls aren't completely backfilled though since some sampling is still taking place and they don't want any potentially spoiled dirt to slough into the clean backfill. They're still hauling bad dirt out and bringing clean dirt in to backfill. The North side is completely clear, but the West side still has approximately 70% of the bad dirt to remove from location.

Tetra Tech was on location last Thursday the 23<sup>rd</sup> to obtain soil samples. Lab results are expected at the end of this week or early next week. The field tech, Zeke, indicated that the North and East sides looked OK, but the West side may require further excavation. Results will determine the next steps.

Weather Delays: No cause for delay, just windy.

Two Week Look Ahead:

Dusty emailed that they'll continue to haul off bad dirt and back fill with clean dirt. Josh said they're trying to stay methodical with the process in the field as the scope of work continues to increase.

DCP indicated they'd like to put their line back in the same location and there has been no determination of when this may need to take place. We'll wait for lab results before reaching out to DCP on this.

Cory said that additional conditions of approval are to be expected. The timing of removing spoiled soils from location isn't efficient and 70% left is too much. He said they need to utilize more equipment and more resources to move this forward quicker. Faith also agreed that they'd like to see this done quicker and asked if it was possible to dedicate more resources.

Josh and Dusty think the equipment on site is sufficient, but the trucking has been the biggest hold up. Right now three trucks are down awaiting parts to be shipped so repairs can be made. Supply chain issues are delaying the parts from arriving. Original scope of work was 14,000 cu yds and is now

at 24,000 cu yds, and further excavation may still be needed along the West side of phase 1 moving towards the phase 2 area.

Cory responded that initial planning with delineation efforts could have helped anticipate if/where further sampling may have been necessary. He said based on the lease history it could have been anticipated that the scope of work would likely increase.

Faith agreed we all want this done quicker. There is still another location, the Dorstate, that will be the next large remediation project. Faith will be working from Michigan for the unforeseeable future and Ryan may need to take over some meetings.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

More trucks are needed to continue to haul the bad dirt off location quicker. This has been a constant struggle.

OCD conditions for approval deadline of December 22, 2021 was not met.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Soil sample results needed to determine if further excavation is necessary, or if backfilling can commence to close out phase 1.

Assign Follow Up Tasks For New Business:

Cory/OCD to review Permian's request for an extension to the OCD's Conditions for Approval and provide response.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday January 5, 2022

Adjourn: 8:17 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - o SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.
- \*\*Plan may be subject to change depending on data from soil and water samples.\*\*
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg C1\*
- STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5°.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



# Progress Meeting #21 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 1/5/2022

Meeting Time: 8:08 am, Wednesday January 5, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, January 12, 2022

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

**Review Previous Meeting Minutes:** 

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory has not responded yet.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty said they continued to backfill the pit except along the Western edge of the pit. They left a section to the North open for truck traffic flow. He estimates 90-95% has been backfilled to 7-8'. 30-35% more of the spoiled dirt along the Western edge of the pit has been removed.

Soil sample results were received from the lab last night. The North and East sidewalls were below 600 mg/kg chlorides and the OCD regs. The West sidewalls were not. The top 4' is still pretty hot. They took 5-point composites per section so they can't tell the contaminated depths between 0-4', probably all 4'. It's more horizontal delineation moving out West, so expanding further out to the West. It may merge into phase 2.

The wellhead is about 15-17' away on the West side. Dusty asked how close they should get to it? None of us are sure. Clair said she thought 5-10' because it's a safety issue. We need Ryan and Cory to weigh in on this.

Weather Delays: It's getting colder, but the forecast shows sunny skies until this weekend. Then partly cloudy.

Two Week Look Ahead:

Dusty said that they'll continue to haul off bad dirt and backfill with clean dirt. Since the North and East results were acceptable, Faith said Dusty can continue to backfill those and maybe up to the first bench on the West side. Dusty said there are now 3 benches along the West side.

Clair will summarize findings for Ryan and Cory to review to determine next steps.

Hopefully we can come up with a practical plan between all of us on how to continue with phase 1 and into phase 2. We expected the West side to be troublesome due to the location of the flow lines and load lines.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate

sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

OCD conditions for approval deadline of December 22, 2021 was not met.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Soil sample results from Western wall need to be analyzed by Ryan and Cory.

Assign Follow Up Tasks For New Business:

Cory/OCD to review Permian's request for an extension to the OCD's Conditions for Approval and provide response.

Clair to summarize soil sample lab results for Ryan and Cory to review and assist with determining next steps along Western side of phase 1 pit.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday January 12, 2022

Adjourn: 8:21 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

#### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

Phase 1 Remediation Area

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - All areas not noted in key, excavate to 6'.
  - Final samples to the following closure criteria:
    - 1,000 mg/kg TPH.
    - 7,000 mg/kg CI\* - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days. \*\*
- and len may change subject to sample data from spill and water testing that



# Progress Meeting #22 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 1/12/2022

Meeting Time: 8:00 am, Wednesday January 12, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, January 19, 2022

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

**Review Previous Meeting Minutes:** 

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. PWS has not received a response from Cory/OCD yet.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty said they continued to backfill the pit except just along the Western edge of the pit. He estimates 90-95% has been backfilled to top bench at 8'. There is approximately 10% left of the bad dirt remaining along the Western side of the pit to haul out. Hopefully it will be removed completely by early/mid next week.

There has been no further excavation at this time until Ryan and Cory can coordinate on the soil sample results taken 12/23/2021 and the remaining hot areas. Proximity to the wellhead and safety excavating around it is the concern.

Weather Delays: There was a little bit of moisture yesterday, not much. It's windy and partly cloudy. 10-day forecast looks clear.

Two Week Look Ahead:

The rest of the spoiled dirt will be hauled off. They will continue to backfill the pit all the way around except for the Southwestern edge with hot sidewalls. That will remain at current backfill level until further excavation plans are stated.

Dusty said they have a couple of their trucks back on the road and were able to outsource a couple more. He reiterated that there is just a lack of CDL drivers in general. He can spend a couple of days just calling around looking for trucks, but it's mainly the drivers that are lacking. Conversation on the influx of Cuban truckers who obtained their CDL from Florida and headed West looking for work. Their experience is not up to par. There is also no young generation coming up to drive trucks and the older generation is retiring, so there are less drivers available in general. Less places for truckers to stop and rest when they hit their hours; Covid closed some rest stops down; now hiring CDL signs up around the Permian.

The three sidewall locations that exceeded the thresholds need to be reviewed by Ryan and Cory so they can determine how PWS can move forward in the field. It was mentioned that this area of Phase 1 may blend into Phase 2. This area is where the old unload station was located and various flow lines that ran to the wellhead. It's likely that historically waste haulers spilled in this area as they unloaded.

Dusty measured the wellhead is 30' away now. He thinks a 20' radius around the wellbore would be good since it's an old wellbore and he doesn't want to damage it. Ryan mentioned seeing if the OCD could defer the full cleanup around the wellhead until the well has been plugged, as part of that surface cleanup process. Then they can work around it for now.

Faith asked about the DCP line. If the line was still in the ground, it would be exposed. Dusty said the line was about 2.5' deep and they've excavated about 4' under it. It's in the current excavation area.

Dusty mentioned him and PWS want this cleaned up and the intent is to bring it back to active injection. They are cleaning up years of pollution from other operators unfortunately and it's taking longer than the OCD conditions for approval timeline or a normal remediation.

Discussion on whether starting Phase 2 is OK. Ryan is OK with it if it keeps them moving forward in the field. If Phase 1 Western wall blends into right into Phase 2, Josh will need to get involved to discuss rebuilding the tank battery. The last KMZ #7 layout didn't look like the new tank battery location would affect Phase 2 excavation, but it will reroute traffic flow. We're unsure if the OCD will allow PWS to rebuild the battery prior to Phase 2 completion. We'll also need to discuss how the remaining hot areas of Phase 1 are to be dealt with. Perhaps the wellhead ends up being an area that is left intact while excavation takes place all around it.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

OCD conditions for approval deadline of December 22, 2021 was not met.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Soil sample results from Western wall need to be analyzed by Ryan and Cory.

Assign Follow Up Tasks For New Business:

Cory/OCD to review Permian's request for an extension to the OCD's Conditions for Approval and provide response.

Soil sample results from Western wall need to be reviewed by Ryan and Cory to determine the next steps in the field. Safety radius around wellhead needs to be determined.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday January 19, 2022

Adjourn: 8:30 am

- \*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

# **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- - -

Phase 1 Remediation Area



Test Well #2



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



# Progress Meeting #23 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 1/19/2022

Meeting Time: 8:04 am, Wednesday January 19, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, February 2, 2022

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

(- ······)			
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory asked PWS for additional information that is due 1/21/2022. Cory wants dates for removal of Phase 1 dirt, when Phase 2 will begin and when it will finish.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty said there is about 4,000 yds of bad dirt piled up along the Western side left and a pile of 2,000-3,000 yards near the containment 50' North of the wellhead. They need to remove the scrap pipe that was dug up. They're closing the NE corner where the old ramp was up to 7'. Hopefully that will be closed up by the end of the week. A new ramp exists in the South-Southwest side of the pit. It's been built with clean dirt. New dirt is still being hauled in for backfill.

Weather Delays: Cold, but mostly sunny during the day. Pretty normal weather for this time of year.

Two Week Look Ahead:

Discussion on continuing excavation out along Southwest where hot spots were identified. 10' safety radius around wellhead determined. Cory/OCD would still want vertical delineation to take place to confirm extent of contamination. Previous soil samples did not get this close to the wellhead. To obtain these samples, this may require use of hand auger. Current samples along Western side were not able to get past 1-2' with hand auger, so backhoe may need to dig up top pad at surface. If Clair/Tetra Tech can't 'direct push' she can not hand auger.

Dusty said we're right at the edge of the current Phase 1. They need to get site cleaned up so there's more room on location – move tanks, remove all impacted soil and finish backfilling before starting Phase 2. There's also a small caliche pit that needs to be dug down and a polyline running from the old battery to be removed. Dusty is going on PTO for a week. He'll be expecting Dufrane to continue this while he is gone. Dusty and Clair will figure out sampling plan and get with Ryan.

Cory/OCD asked where the impacted soil was being taken. It is going to a private landowner's property in Texas. This is where the good red dirt is also coming from that is being used to backfill. They're currently running 5 trucks.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

OCD conditions for approval deadline of December 22, 2021 was not met.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Soil sample results from Western wall need to be analyzed by both Ryan and Cory and gameplan agreed upon.

Assign Follow Up Tasks For New Business:

Permian to respond to Cory's request for additional info with regard to the extension request to OCD conditions for approval by 1/21/2022.

Soil sample results from Western wall need to be reviewed by Ryan and Cory and communicated to Permian. Cory responded to Ryan that he was OK with Ryan's plan this morning. 10' radius around wellhead determined for safe excavation.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday February 2, 2022

Adjourn: 8:25 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ 9

Site outline

- - -

Phase 1 Remediation Area

\*

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- I. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg t1\*
    - STEXNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5°.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days. \*\*
- \*\*\*Plan may change subject to sample data from soil and water besting \*\*\*\*



## Progress Meeting #24 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 2/2/2022

Meeting Time: 8:01 am, Wednesday February 2, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, February 9, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

## **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory asked PWS for additional information that is due 1/21/2022. Cory wants dates for removal of Phase 1 dirt, when Phase 2 will begin and when it will finish. Dusty has responded to this and Cory is reviewing.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dusty was on PTO last week. He was on site Monday and this morning to inspect. He said they started to backfill to the second lift within the pit starting from the Southern edge heading North. The large stockpile of spoils along the West side has been removed. A smaller pile of 1,000-2,000 yds still needs to be removed near the South end. All tanks have been moved from the West side of lease to the North side. The facility has been picked up and looks pretty clean. There are a few large rocks that will be removed.

Clair/Tetratech was unable to obtain soil samples last week due to staff being out with Covid. She will email confirmation to Faith, Ryan, and Cory of the new sampling date; it is expected to be next Monday the 7<sup>th</sup> or Tuesday the 8<sup>th</sup> due to snow and ice that is starting today.

Weather Delays: There is snow and below freezing temperatures expected through Friday. No one will be on the roads if there is ice on them. If it starts thawing out Friday, they'll be back to work on location. The high is expected to be 38 degrees Friday.

Two Week Look Ahead:

Clair will send email notification of the new testing date to everyone when she has it confirmed. The field plan is to dig a 15' test trench to vertically delineate. They will also use the back hoe to grab horizontal delineation samples along the West wall. The results should be back in one week.

Dusty updated the kmz file of the location to show the new extension area moving West from the original Phase 1 area. They will continue to remove the spoils, haul in clean dirt, and backfill Phase 1 pit.

Cory will try to finish his review of Dusty's extension request. He noted he'll be confirming that the waste is being properly disposed of per the applicable Texas rule.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None at the moment.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Soil sample results from Western wall need to be analyzed by both Ryan and Cory and gameplan agreed upon.

Assign Follow Up Tasks For New Business:

Cory/OCD to respond to extension request.

Soil sample results from Western wall need to be reviewed by Ryan and Cory and communicated to Permian. Cory responded to Ryan that he was OK with Ryan's plan this morning. 10' radius around wellhead determined for safe excavation.

Jenni will have to miss next week's meeting; Faith will try to record and share it with her to transcribe.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday February 9, 2022

Adjourn: 8:15 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- - -

Phase 1 Remediation Area

 $\Rightarrow$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #25 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 2/9/2022

Meeting Time: 8:04 am, Wednesday February 9, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, February 16, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
575/392-8736	rmann@slo.state.nm.us	NM State Land Office
505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
	575/392-8736 505/419-2687 432/687-8123	575/392-8736         rmann@slo.state.nm.us           505/419-2687         cory.smith@state.nm.us           432/687-8123         Clair.gonzales@tetratech.com

## **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Soil samples obtained on Tuesday. Tetra Tech was on location with Dusty. They dug a trench to north of wellhead 10' out and all the way down to 15'. The chloride content aren't going to be a huge issue from the field screening. The other cleaned up to around 4', but we'll have lab results by next week's meeting. Clair thinks we'll be OK past the top 4'. They did horizontal sampling to get an idea of where the 4' on the west side of the wall needs to go out. SW-8 may be another 5' out to get cleaned up. SW-7, they stepped out in 5' increments to 15' and it was still above 600, so she thinks that area may merge into Phase 2. 15' out puts them close to the safe perimeter around the wellhead. The top 4'

have to be below 600 chlorides. Below that it's 10,000 chlorides, so we're OK. The field screenings were around 1800-2000 chlorides for field screenings below top 4'. Lab results will confirm.

Clair said they're pretty much done sampling. They'll need to take SW-8 out to 5' and they'll need confirmation samples there once complete, but that's about it. Dusty and Clair will work on that excavation and Dusty will update the kmz file to show the accurate field status.

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory asked PWS for additional information that was due 1/21/2022. Cory wanted dates for removal of Phase 1 dirt, when Phase 2 will begin and when it will finish. Dusty responded to this and Cory is reviewing. Cory hasn't been able to review because he's been working on the OCD waste rule. He sent it over to the legal dept to review because of other agreed compliance orders involving the Kaiser State #9. He hasn't heard back.

Discussion on other OCD NOV's to make sure SLO is aware of everything.

Brine wells were brought up – Dunaway #1 #2 and Hobbs State #10. Faith said there were terminated mineral leases and water supply wells associated with the brine wells. Dusty confirmed Jenni was spear-heading the regulatory filings and would know more about all of this. Permian was approval to plug the Dunaway #1 and #2 and are working with wireline companies and plugging companies to plug these wells. Dusty said everything is running an additional step through our lawyers, who are communicating with OCD legal. Faith said that Mike Bratcher/OCD told her about a year ago the OCD would be focused on making Permian plug the brine wells first.

Cory/OCD said the ACO is for the Kaiser, Dorstate, AN Etz, Rice F 29, An Swd, Delaware River #2, Exxon State #3, and Rhomer. It is designed to require delineation, so while Permian is working on the Kaiser they should be going out to these other sites in order, starting with the Dorstate and doing delineation and putting together a work plan for down the line. Dusty said we're still back and forth with legal and haven't started any delineation yet. Discussion on status of ACO – is it in draft stage or out yet? Faith wants to know how the OCD compliance orders are laid out to know how the Dorstate fits into the timeline and to make sure SLO and OCD are coordinated in their efforts to resolve everything correctly and it's documented correctly. That site should not be accessible to anyone at this time. Ryan confirmed that prior Dorstate delineation plans have been prepared, but not approved. Dusty confirmed they have not accessed the site yet. Clair confirmed Tetra Tech has some delineation data on the Dorstate already.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Aside from weather delays, Dufrane continued to haul and backfill. Two front end loaders went down so they've been loading trucks with an excavator. It's slower since they're hauling to pull dirt from sides of stockpile and they weren't set up for this. This has led to there being less good dirt stockpiled to backfill. Hopefully they'll get the loaders back up this week.

Yesterday Tetra Tech was on site to perform testing. Excavator did not run during testing. Clair estimates a 5 business day turnaround on the results, so hopefully next Monday-Tuesday.

Weather Delays: It snowed, which then melted and froze. Icy conditions shut down site for about 2 work days – Wednesday afternoon through Friday noon.

Two Week Look Ahead:

Finish digging out and sampling Phase 1 extension. Continue hauling bad dirt out, clean dirt in, and backfilling. Dusty wants to clean up everything from Phase 1 before starting Phase 2 excavation.

Cory will try to finish his review of Dusty's extension request. He'll be confirming that the waste is being properly disposed of per the applicable Texas rule.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None at the moment.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Dig SW-8 out 5' more, sample. Continue backfilling.

Assign Follow Up Tasks For New Business:

Cory/OCD to respond to extension request. Soil sample results from SW-8 dig out.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday February 16, 2022

Adjourn: 8:30 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

Pha

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #26 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 2/16/2022

Meeting Time: 8:04 am, Wednesday February 16, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, February 23, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

## Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory asked PWS for additional information that is due 1/21/2022. Cory wants dates for removal of Phase 1 dirt, when Phase 2 will begin and when it will finish. Dusty has responded to this and Cory is reviewing.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Clair/Tetratech was on site last Tuesday, the 8<sup>th</sup>, to obtain soil samples. She received the lab results late last night and was tabulating them this morning. She will circulate the data to everyone upon completion. The trench that was installed 10' North of the wellhead shows that the area around the wellhead will need to be excavated to 4' below surface. Below 4' the chlorides ranged from roughly1,500-3,000 range. The highest TPH below the top 4' was 190 mg/kg at 5-6' below surface. Below 7' non-detectable. No BTEX detected.

Horizontal trenches in sidewalls used field screening method to detect how far out they would need to dig. The northern areas, SW-8, would need to go out about 4-5'. One area, SW-7, looked like 15-20' out was not clean, and will likely merge to Phase 2.

Discussion on the Phase 1/Phase 2 label – can we agree that these samples will finish out Phase 1? Cory and Ryan are OK with this. Cory/OCD said it doesn't matter what phase we call it; the remediation will continue until samples are clean. He still sees the bigger bottleneck being the soil movement in and out of the facility. He questioned if every load hauled out was bringing a clean load in, how the Phase 1 pit is not backfilled completely yet, how there is still any spoil dirt on location, and the efficiency and logic of hauling the spoil dirt all the way to Texas instead of a nearby landfill.

Dusty responded that they are digging out dirt faster than it can be hauled off and clean dirt is being brought back in, but it's not an equal 1-1 haul. They have a small spoil pile left at the South end of the site and about 10,000 yds at the containment across the road. There will likely need to be a liner put down over the backfilled Phase 1 pit to place Phase 2 excavated dirt because the containment across the road is not large enough for the material that needs to be excavated.

In response to where the spoil dirt is being hauled and the efficiency, that is Josh's call. Dusty does not make the financial/operational decisions; he implements them in the field. Cory said it's the same issues every week. Jenni and Dusty acknowledge this and understand, but Josh is the owner of Permian and he makes the decisions. They are just doing as they are told and there's only so much they can do. Cory asked for Josh's email address. Faith asked to be cc'd if Cory/OCD reaches out to Josh.

Weather Delays: No mention this meeting.

Two Week Look Ahead:

All agree that Phase 1 can be complete upon this last set of sampling/excavation around the wellhead or it will be never-ending. The reality is this is going to be a huge hole at the facility due to years of leaking. Faith/SLO asked how they can help PWS keep moving forward in the field. Ryan asked if it would be helpful to take a pause on excavating to focus on hauling off the spoil dirt and backfilling the Phase 1 pit. Dusty agreed to this.

Cory will try to finish his review of Dusty's extension request. He may reach out to Josh separately. By the time these minutes were typed up Cory had emailed Josh cc'ing all.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Finish excavation of sidewall and wellhead radius that exceeded required thresholds. Backfill Phase 1 pit completely. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business:

Cory/OCD to respond to extension request.

Faith will send Jenni meeting #25 transcription since she was out last week.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday February 23, 2022

Adjourn: 8:28 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface

water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Si

Site outline

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing. \*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\* Flan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #27 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 2/23/2022

Meeting Time: 8:04 am, Wednesday February 23, 2022

Place: Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053

Next Meeting Date and Time: 8:00 am, March 2, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

### Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

	,	<u>, 1                                   </u>	
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

### Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory asked PWS for additional information that is due 1/21/2022. Cory wants dates for removal of Phase 1 dirt, when Phase 2 will begin and when it will finish. Dusty has responded to this and Cory is reviewing.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane is continuing to haul spoil dirt off and bring clean dirt in. There is still a little dirt left within the facility and the containment across the road. Dusty is working on getting two more off road trucks that can help move the dirt.

Weather Delays: Rain burst on Thursday shut things down for a bit, but don't expect precipitation over the next week, just some wind and colder temperatures.

Two Week Look Ahead:

Dufrane hopes to obtain more off road vehicles to move the remaining dirt off location so they can start digging out on the West side/Phase 2. Faith asked if there was anything SLO could do to help or if increasing the containment area across the road would help. Dusty doesn't think there's much room to increase the area due to existing ROW's and pipelines. Plus it makes more sense to just haul it all off so spoils don't hinder traffic flow. So he'd like to get it hauled out before starting excavation on the West side.

Cory will try to finish his review of Dusty's extension request. NMOCD just released their Waste Rule, so he has been slammed. He sent a follow up email to Josh asking for information on how the impacted soil is being handled and if he has considered transporting the impacted soil to a closer location in NM to save time/money associated with the additional drive time from driving to Texas. Josh has not responded yet.

If Ryan has anything to add it will be circulated via email to all.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Finish excavation of sidewall and wellhead radius that exceeded required thresholds. Backfill Phase 1 pit completely. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business:

Cory/OCD to respond to extension request.

Faith sent Jenni meeting #25 recording that Jenni needs to transcribe and circulate for review.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday March 2, 2022

Adjourn: 8:15 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #28 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 3/9/2022

Meeting Time: 8:03 am, Wednesday March 9, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, March 16, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

# **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Dusty sent an email to Cory on December 20, 2021 requesting a formal extension to the OCD current conditions for approval since the December 22, 2021 deadline for the OCD Conditions for Approval was not met. Cory asked PWS for additional information that is due 1/21/2022. Cory wants dates for removal of Phase 1 dirt, when Phase 2 will begin and when it will finish. Dusty has responded

to this and Cory said he's been pulled in lots of directions, but he needs to approve. Progress is progress.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane is continuing to mine clean dirt and bring in to backfill. Phase 1 pit is 75% backfilled. They're leaving the west side wall open to avoid sloughing contaminated dirt back into the good dirt. They're continuing to haul the bad dirt off site and talking to closer NM facilities to shorten the drive time. Monument wants soil samples of the stockpile, so Tetra Tech and Dusty will obtain them Thursday or Friday of this week. Josh and Cory have talked and Josh has Dusty looking into Sundance and Lea Land facilities as well for possible disposal options. Dusty said they're continuing both jobs – backfilling with clean dirt and hauling off bad dirt.

Weather Delays: None, strong winds are picking up but shouldn't cause delay.

Two Week Look Ahead:

More of the same. Haul in clean dirt and work on getting the contaminated stockpile across the road down before starting more excavation.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Finish excavation of sidewall and wellhead radius that exceeded required thresholds. Backfill Phase 1 pit completely. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business:

Cory/OCD to respond to extension request.

Jenni needs to circulate meeting #25 for review to all and send Faith the OCD orders PWS has.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday March 16, 2022

Adjourn: 8:12 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site

Site outline

-:-

Phase 1 Remediation Area

 $\bigstar$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #29 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 3/16/2022

Meeting Time: 8:04 am, Wednesday March 16, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, March 23, 2022

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

	,	7 8 37	
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

## **Review Previous Meeting Minutes:**

## **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Cory/OCD approved extension request by Dusty/Dufrane to meet OCD conditions for approval on 3/14/2022. The extension states to complete Phase 1 no later than 3/25/2022.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane is continuing to mine clean dirt and bring in to backfill. Phase 1 pit is backfilled with the exception of the west side wall to avoid sloughing contaminated dirt back into the clean pit. They're continuing to haul the bad dirt off site and have three NM facilities they're looking at to shorten the drive time. Tetra Tech was on site to obtain samples of the stockpile last Friday, 3/11 to supply to the Monument disposal facility. Hopefully results will be back from the lab this Thursday or Friday. Dusty also has the Sundance and Lea Land facilities as possible disposal options; Monument is just the closest facility to the Kaiser location.

Dusty thinks they will be able to meet the OCD's 3/25 deadline to complete Phase 1. Faith requested the updated KMZ file showing the 'new Phase 1 extension trench'.

Weather Delays: None.

Two Week Look Ahead:

More of the same. Haul in clean dirt and work on getting the contaminated stockpile across the road down before starting excavation of Phase 2. Wait for Tetra Tech's soil sample results and determine if/where the contaminated stockpile soil can go within NM.

Jenni asked what to do if results exceed the Monument disposal facility's thresholds. Cory said they can blend dirty dirt with lesser contaminated dirt to lower results, but it can not be blended with clean dirt ever. Dusty agrees this would just create more work and waste. He may blend up the stockpile.

Dusty asked for bi-weekly meetings as he is starting another large project and Faith said she'd like to keep them weekly at this time.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Finish excavation of sidewall and wellhead radius that exceeded required thresholds. Backfill Phase 1 pit completely. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business:

Dusty to circulate updated KMZ file showing the current field status.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday March 23, 2022

Adjourn: 8:11 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

- 51

Site outline

\_ ; \_

Phase 1 Remediation Area



Test Well #2

<sup>\*\*\*</sup>Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #30 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 3/23/2022

Meeting Time: 8:04 am, Wednesday March 23, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, March 30, 2022

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

		7 1 8	
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Clair Gonzales
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

## **Review Previous Meeting Minutes:**

## **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Cory/OCD approved extension request by Dusty/Dufrane to meet OCD conditions for approval on 3/14/2022. The extension states to complete Phase 1 no later than 3/25/2022.

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane continued to backfill the Phase 1 pit. They're pushing for it to be done by the OCD's 3/25 deadline. Dusty is hoping they'll be ready to cap it with caliche Monday. They continued to haul off the stockpile dirt.

Sort of off topic, but Dusty had a Zoom meeting with a company that treats soil for TPH. They're getting some samples to test out and they wanted to see if the SLO and OCD had any experience or opinion on this. Clair had told Dusty that they needed to see how it encapsulates the chlorides and they should talk to Cory about it. Faith said she'd get someone with SLO named Steve Ikeda to get in touch with Dusty to discuss in more detail. Dusty is not familiar using these products, but he listened to the sales pitch and asked questions; Clair is a fan of bioremediation with TPH, but she isn't as experienced with the chloride side. She mentioned soil washing and that it could take longer, so the time/cost would need to be analyzed further. Dusty asked the company how long it would take to remediate 10,000 yards and they said 30-45 days to let the product sit and bugs activate. Dufrane wants to get with OCD, try the samples and see if it could cut down on the hauling time. Faith is not opposed, but she wants more research done first.

Clair asked if they sampled the stockpile at 50-100 cubic yard increments and thresholds were under for chlorides and TPH, would they be able to use it to backfill, and then bring in clean dirt for the top 4'? Faith thinks it would be OK.

There have been delays at the labs due to instrumentation issues. Clair received a preliminary TPH report last night on the stockpile samples, but the lab is still working on the chloride report. She hopes to have the results back in a couple of days. The TPH data was lower but wasn't at the 50 cu yd interval. 600ish TPH was the highest.

Weather Delays: None.

Two Week Look Ahead:

Complete Phase 1 backfill and keep hauling the contaminated stockpile across the road down so they can start excavation of Phase 2. Receive Tetra Tech's soil sample results and determine if/where

the contaminated stockpile soil can go within NM – hopefully the Monument facility. Test the new product and see if it may help with this remediation.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Backfill Phase 1 pit completely and cap it w/ caliche. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business: None

Verify Date and Time of Next Meeting: 8:00 am, Wednesday March 30, 2022

Adjourn: 8:15 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Sit

Site outline

- - -

Phase 1 Remediation Area

\*

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



## Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #31 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 4/6/2022

Meeting Time: 8:05 am, Wednesday April 6, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, April 13, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM OCD
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Phase 1 backfill is complete except the 20' west side section where they're continuing to mine material out. 8" of backfill is needed and will be capped with caliche to finalize. 50% of stockpile across the road to finish removing. Lab results came back last Friday on the stockpile, and it looks like some can be sent to the Monument facility. They'll have to take the areas with thresholds too high somewhere else. They're hauling in surplus backfill for the Phase 2 portion. They have 9 trucks running now and are making good effort.

Weather Delays: None.

Two Week Look Ahead:

Continue with the west side trench. Haul off stockpile dirt to Monument to create more room for Phase 2 excavation. Hopefully the first part of next week Phase 2 (Phase 1.5) excavation can begin & continue hauling off bad dirt. Faith clarified the plan is to continue the Phase 1.5 trench and sample for results. Dusty confirmed that is the plan. He referenced the recent kmz file showing the southwestern section of Phase 1 as the trench beginning location, and that it moves <sup>3</sup>/<sub>4</sub> way up along the Phase 1 area, maintaining a 10' buffer around the wellhead. They delineated back to the well. It's a big, blended project at this point, as we thought it would end up.

Cory commented that things are still moving into place in the field. The OCD Phase 2 deadline is September, so reminded Dusty to keep this in mind. To which Dusty replied that this project is always on his mind. Agreeance among all that we're moving into Phase 2 timeline. Cory said the OCD focuses on closing out entire sites all at once. And that samples meet requirements for closure. He asked Clair if all the Phase 1 samples met thresholds for closure. Clair was having technical difficulties today but responded in the chat that everything was good except the west side wall that is still being worked on.

Faith said let's meet next week to discuss the trench and the bigger picture. If there need to be changes to the plan to accomplish this quicker or easier on site, OCD needs to know. Closure numbers must be met, but the plan on how to do this can deviate.

Cory asked about the status of the equipment that was on site last he was out there. Dusty said the tanks are on site but everything else has been removed except the guardrail around the wellhead, a power pole that ran to the old doghouse with automation equipment housed in it, and a polyline that he thinks used to be Endeavors. He needs to call them to find out. The 2-3 tanks that used to be on top of the Phase 2 area are removed. There's just some rubble that will be picked up and the polyline now. He'll send updated pictures to everyone.

Jenni reminded us to run bioremediation conversation from previous meeting by Cory for OCD's opinion on it. Dusty elaborated that he'd had a Zoom call with a bio bug company and would get samples to treat a 20 yd load for tph but was uncertain of the chloride capsulation and how the OCD viewed it. Cory asked for the name of the company, but Dusty wasn't sure off the top of his head. Cory said generally speaking, it takes longer (in situ remediation) so the September deadline may not be met. They'd want the company to prove the encapsulation timeframe. Dusty and Clair were also concerned about the uncertainty of the encapsulation timeframe for chlorides but thought tph was treated well.

Cory mentioned they've allowed soil shredding using hydrogen peroxide to clear the soil and it's worked. He also said the southeast has had success with soil washing, but he'd need to check in with his colleagues that work the area for more details. It's just running water to strip the chlorides out, not encapsulating it. RX Soils company possibly? Dusty said the company he spoke with explained they'd mix it all in a truck and let it sit there depending on how high the contaminates were. He said 3-5 days for a 20 yd batch, which does not seem efficient. Cory said he wouldn't tell them no on using the product, but this site does not need any additional kinks with it. Maybe try it on other sites.

Faith spoke with her District resource commissioner, and he had only done two in situ remediations. One was a produced water spill and the other a crude spill, but they got right on it. This site has decades of old spills Permian has inherited, so the scenario would not be the same. However, they were successful in the other projects; it just took some time.

Plan is to continue weekly meetings for the next month.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Backfill Phase 1 pit completely and cap it w/ caliche. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business:

Dusty send updated site pics.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday April 13, 2022

Adjourn: 8:29 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline



Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #32 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 4/13/2022

Meeting Time: 8:04 am, Wednesday April 13, 2022

Place: Zoom <a href="https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09">https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09</a>

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, April 20, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane is continuing to haul off material. Dusty has been trying to get with the guy at the Monument facility, but he has been out of town. He'll continue to try to get in touch. They plan to dig the trench area, phase 1.5 and get Tetra Tech out to sample the top 4'. Lots of dirt to move around. Faith asked how the truck numbers were looking and Dusty said it's going well and some of them are actually calling him for work now. Everyone laughed at that.

Weather Delays: Windy. There have been fires popping up around NM and west TX, but so far nothing has gotten close enough to the site to shut things down. Dusty said since the guys are enclosed in a cab while working the equipment, the wind is not too bothersome. If there's a fire and smoke too close, they will evacuate for safety concerns. If Dusty is not on location he has a supervisor out there that can contact all the trucks. Even though they're independent truckers they maintain contact with them regularly while on the job.

Two Week Look Ahead:

Strip the phase 1.5 trench back for soil sampling. Then continue stripping back into phase 2. Continue stockpiling material on site – hauling in a load and taking out a load. There's room across the road in the containment area also to stockpile if needed.

They hope to take soil samples next week and the following week. Clair said the issues the lab was having have been fixed. She said she'd check how the lab was doing before sending in the next set up samples in case she needs to send to another lab. She said there is Cardinal in Hobbs where she can send samples to also.

Ryan asked about the stockpile sample results. Clair said the TPH was 100-600. The chlorides had three areas less than 2,000, all were below 10,000. Dusty said a couple were in the 3,000's. Ryan asked about sending it to the landfill and Dusty said Monument should take the lower samples, but not the higher ones; he needs to speak with the Monument guy to confirm.

Faith asked if anything had been started on the Dorstate. Dusty and Jenni responded that they're working on the C-141's, Tetra Tech has supplied site characterizations, and a bid to do the remediation plans for the ACO. Jenni has pulled all the incident files and needs to fill in data to the C-141's. She's run things by their attorney and they're on the right track for submitting the required items to the OCD

to comply with the ACO deadline of May 27. Jenni will give Cory a head's up email when all items are submitted. The ACO does not distinguish any order for working the sites. The Kaiser is separate since its remediation plan started before the ACO was issued, but the other sites are lumped together. The specifics of the past incidents and remediation plans will dictate the OCD's timeframes and responses to the C-141's and remediation plans. Faith said that SLO didn't intend to have Permian working the Kaiser and the Dorstate remediation projects at the same time and if she can help get us access to the facility for soil borings or anything else to let her know.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.

Assign Follow Up Tasks For New Business:

Verify Date and Time of Next Meeting: 8:00 am, Wednesday April 20, 2022

Adjourn: 8:23 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Si

Site outline

\_ - - -

Phase 1 Remediation Area

\*

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #33 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 4/20/2022

Meeting Time: 8:07 am, Wednesday April 20, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, May 4, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Cory Smith	505/419-2687	cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Week Performance:

Dufrane is continuing to haul dirt off. Last week they experienced numerous issues on location. The excavator broke and is awaiting repair. Dusty will have a bulldozer moved in from another job location to take over the work of the excavator while it is being repaired.

Dusty spoke with the South Monument facility guy and he's not comfortable with the chloride content levels. Dusty doesn't want to spend the time mixing soils to try to lower the levels so he wants to haul dirt to the Lea Land facility instead.

The truck drivers are getting burnt out from the long hours and Dusty said they are not working as efficiently. They are still hauling dirt off as generated instead of stockpiling across the road.

Weather Delays: No delays. There are still red flag warnings and fire risks for the area.

Two Week Look Ahead:

Dusty hopes to be able to sample the top 4' of the trench at the end of next week, or Monday of the following week. The mechanical failures delayed the trench from being completely dug out, but the dozer should be there tomorrow to take over. And the trucking guys are just tired and need a reset so they can come back fresh and be more efficient.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Remove remaining spoil dirt to prepare for Phase 2 excavation dirt.
  - b. Clair/Tetra Tech said she thinks they can get someone out to sample the Phase 1.5 trench area at the end of next week. Faith asked for email notification.
  - c. Cory/OCD has nothing to add. Phase 1 is complete and now the September deadline to complete Phase 2 is next for the OCD. There will be no more extensions and summer will go by fast, so just meet the deadline.

Assign Follow Up Tasks For New Business:

Not directly tied to this remediation, but Dusty told Clair to proceed with their remediation plan quotes for the OCD ACO to clean up historical open incidents.

Jenni needs #31 meeting minutes confirmed so she can circulate the final version.

Faith said these meetings will go to every other week starting with the next meeting. She will circulate a new meeting invite.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday May 4, 2022

Adjourn: 8:17 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

- 31

Site outline



Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #34 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 5/4/2022

Meeting Time: 8:02 am, Wednesday May 4, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, May 18, 2022

## **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dufrane has hauled off much of the spoil material from the large stockpile across the road; there are about 1,000 yds remaining, so they've made a lot of progress on that. Phase 1.5 trench has been completely dug out. Dusty said they went a little more than 4' deep in some areas, maybe to 5' so he could see what it was looking like. That dirt has been moved out and stockpiled across the road.

The road construction is back. There is construction at the lease road entrance off of 176. It has resulted in a 2.5 hour roundtrip of 60 miles to haul the dirt off and return. Dusty has tapered that off to 2-3 trips per day and is putting material across the road in the meantime. The construction occurs for about 12 miles West, which is the direction they're traveling to the disposal facility. This has not caused delay with excavation on location though.

The loader that had a mechanical issue resulting in a small fire was out of service for 3 days. There were no injuries and they've been able to fix it. The mechanic is double-checking it today to determine that it may be put back in operation.

Dusty said they pulled two poly lines that were in the Phase 2 excavation area further West outside of the fence line so they are not in the way. They'd like to start Phase 2 excavation next week. He plans to leave a small boundary in place against the Western line of the property to leave room for sidewall testing. He hopes to begin excavation in the NW corner of the Phase 2 outline. He tracked the lines and said the markings on one say Red Dog/Dawg or Rebel. The other is a main trunkline that connects to a 4-1/2 that he thinks is XTO's. It's not time-sensitive at this moment to track down and contact these owners, but they will need to track them down at some point. Faith and Ryan will research on their end to see if they can help identify the lines' owners. The lines could have gone to the Kaiser at some point too. We'll all need to do some digging into it and communicate our findings.

Clair/Tetra Tech will be on location this Friday, May 6<sup>th</sup> to sample the Phase 1.5 trench area.

Weather Delays: No delays. There are still red flag warnings and fire risks for the area.

Two Week Look Ahead:

Dusty would like to begin Phase 2 excavation at the North end. On the most recent KMZ file, this is the small pit in green at the Northwest corner, then the deeper excavation area to the East that's

adjacent. He doesn't want to excavate so much dirt that they can't haul it off with the road construction time frames and he doesn't want it sitting on top of Phase 1 which has already been completed. He'll work on more truck power, or he may decide to excavate Phase 2 in increments by testing the Northern end and seeing what results look like. He could then backfill some if results are OK and then continue to excavate. He does not want to mess with a liner on Phase 1 or disturb anything on Phase 1 until they're closer to construction.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today that anyone can assist with. Hopefully the road construction does not last for very long.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Clair/Tetra Tech will sample the Phase 1.5 trench area May 6th. Email notification has been sent. Cory was not on today's call but responded to the email notification to collect BTEX samples since this is a new area. Lab results should be back by late next week and Clair will circulate to all. Ryan may be in area to swing by to witness sampling.

Assign Follow Up Tasks For New Business:

Jenni needs #31 meeting minutes confirmed so she can circulate the final version. She circulated #33 meeting minutes late and needs to double-check all minutes are up to date.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday May 18, 2022

Adjourn: 8:19 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - o SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.
- \*\*Plan may be subject to change depending on data from soil and water samples.\*\*
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



## Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #35 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 5/18/2022

Meeting Time: 8:05 am, Wednesday May 18, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, June 1, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Clair/Tetra Tech sampled the Phase 1.5 trench area and results have been received, but not tabulated for circulation yet. She said that the sidewall samples are exceeding the chloride and TPH thresholds. She thinks the trench will blend West into Phase 2. She'll try to have the results circulated to everyone by the end of the day or early tomorrow morning.

Faith mentioned that if the new tank battery location created any soil disturbance archaeological clearance would be necessary. Dusty said the tank batteries should be placed at the Northern portion of site, along fence line, edge of Phase 1. He doesn't foresee any new disturbance and he thinks they'll use less tanks than the previous layout, so less of a footprint.

Dusty/Dufrane excavated a larger area around the Phase 1.5 trench than first planned because they saw the sidewalls did not look good as they were excavating, so they kept extending out West. They removed the spoiled dirt and hauled it out. The stockpile area across the road was hauled all the way down to a thin layer to keep a buffer layer on top of the liner to protect the liner. They're still hauling the spoil dirt to the Lea Land facility.

The road construction is still present. It has moved West from the lease entrance location, but the Lea Land facility is still located West. It's still about a 2.5 hour roundtrip of 60 miles to haul the dirt off and return. Dusty is dealing with it with some hauling to Lea Land and some stockpiling across the road to keep things flowing.

They started excavating Phase 2 in the Northwestern corner smaller area to the east of the existing pit. It will likely blend into part of the 1.5 trench, becoming one big hole. Dusty thinks Phase 2 will just go as deep as needed versus varying depth levels to make it easier for excavation. They're a couple of feet in now and hauling off bad dirt, using the stockpile area as needed. Faith asked if the two-week lookahead was the same and Dusty confirmed.

Weather Delays: No delays. There are still red flag warnings and fire risks for the area.

Two Week Look Ahead:

Dusty hopes to keep excavating until the testing depth is reached for Clair/Tetra Tech. It is a lot of dirt and he'd like to work that section first to completion, capping it off when done. Then they'll

move to the center area of Phase 2, which will end up blending some with the Phase 1.5 trench center area. Then eventually further South where the old tank battery was and the Southern edge of the 1.5 trench. He's hoping the Northwestern edge is the cleanest.

Faith asked the sampling plan for the Northwest corner. Dusty said to dig to 15'and remove all the dirt. He'll draw a line at some point and if necessary, they'll extend further South. Cory mentioned that the OCD doesn't need them to dig to 15', especially if it's removing clean dirt. The OCD still agrees with 400 sq ft sampling.

Dusty asked if they can stop and test shallower than 15' then if the soil looks clean. Faith, Cory and Ryan think that is OK. They don't think the Northwestern portion needed to go to 15', possibly 5-6'. The previous SLO engineer is not there anymore and if it looks like you can stop and test at 5' then go for it. Dusty said it would be more cost effective to try this than to dig it all out to 15' and get it hauled off with road construction.

Cory suggested everyone review the last delineation report and boreholes. Everyone will review for the deepest boreholes and their location and communicate via email for what depths they think sampling is safe to take place at. 5' may be OK for Northwestern portion and then deeper sampling for the Southwestern portion. We'll try to communicate and decide by next meeting.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Clair/Tetra Tech will circulate soil sample results from the Phase 1.5 trench area. Phase 1.5 will blend into Phase 2.

Assign Follow Up Tasks For New Business:

Everyone review the previous delineation for borehole depths to determine the appropriate excavation depths necessary for Phase 2 areas.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday June 1, 2022

Adjourn: 8:24 am

- \*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

- 51

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



## Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*Flan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #36 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 6/1/2022

Meeting Time: 8:02 am, Wednesday June 1, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, June 15, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Clair/Tetra Tech circulated the Phase 1.5 trench soil sample results and proposed sampling plan via email to everyone on 5/25/22. The area was excavated to 5' bgs and sidewall samples exceeded the thresholds for chlorides and TPH. Bottom hole samples exceeded for TPH. So it is proposed to go down to 10'.

Dusty continued to remove dirt from the trench. They had stripped it back to get to Phase 2 NW pit. \*Clarified with Dusty – they did start to dig into the Northern side of the NW pit a couple of feet, as noted in last meeting minutes, but stopped excavating to remove the spoil dirt that was stockpiled at the Southern portion of the NW pit from the Phase 1.5 trench deepening.

They lost a day and a half due to a bad storm with quarter size hail. They got back to work last Friday and then took Monday off for Memorial Day, and they're back now. They're still removing dirt from the 1.5 trench and moving it out for disposal.

The road construction has moved West from the lease entrance location, but the Lea Land facility is still located West. The situation is better than it has been though.

Weather Delays: No delays. There are still red flag warnings and fire risks for the area.

Two Week Look Ahead:

Dusty had to remove some old garbage from the NW pit area in Phase 2 – old RR ties, timber, ranching debris. It's been an open pit area for a long time that collected debris. He's hoping to have material ready for Clair/Tetra Tech to sample by the end of next week. This would be material from the NW pit and the smaller area to the east of the existing pit. Based on the delineation reports, they thought 4-5' was sufficient for these areas. He'll need to maneuver the excavated dirt around deepening Phase 1.5 and opening up Phase 2 more so they're not bottlenecking themselves or working the dirt twice. He's hopeful that the samples will be good and they'll be able to close it up with good dirt.

The Phase 1.5 trench will need to go to 10'. Faith said she was looking at photos of an old produced water spill and it was in the area where the high readings were taken. The northern portion was like a lake. Dusty will get down to 10' and Clair will sample to see if 10' is enough. Otherwise, Dusty will reassess safety considerations with going deeper than 10'.

Ryan and Cory are OK with Clair's sampling proposal that was circulated via email. Ryan said it a good start and soil sample results will dictate if and how further testing may be needed. Cory had no issues. He mentioned the delineation report was older, so we may need to go deeper due to vertical migration, even though the SW part of the state doesn't get a lot of rainfall. He said it's OK to sample early and often versus excavating and hauling more dirt from a cost and time perspective.

Faith reminded Clair to give notification for the next round of sampling.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Clair/Tetra Tech will provide notification for Phase 1.5 10' sampling & Phase 2 NW pit and the smaller area to the east of existing pit

Assign Follow Up Tasks For New Business:

Verify Date and Time of Next Meeting: 8:00 am, Wednesday June 1, 2022

Adjourn: 8:24 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

\_ ; \_

Phase 1 Remediation Area

 $\Rightarrow$ 

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



# Progress Meeting #37 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 6/29/2022

Meeting Time: 8:02 am, Wednesday June 29, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, June 13, 2022

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

The testing plan is for 400 square feet composite samples based off of Clair's delineation report: 4-5' deep on Phase 2 NW area next to the small pit. 1-2' on the small pit. Crossing over into the Phase 1.5 area, they took 2 more feet off the bottom to 10' and 1-2' out around the sidewall. The East wall of Phase 2 is actually the Phase 1.5 trench. It's merging into one big hole. \*Clair's delineation report of Phase 2 area calls for the NW area next to the pit to be sampled at 4-5', the center section 5-6' deep and the southern section 4-5' deep.

Dusty said they had personnel issues the week of our last meeting. They lost 3 operators and had to move people around to do all the work. So they lost a week of work on our site, but they were able to get some guys hired and move original personnel is back on location working. They excavated last week and got things ready for Clair to come out and sample the Phase 1.5 and 2 excavated areas.

Dusty was on location and said it looked like there had been a lot of rain and there were deep ruts from the equipment. He was going to drive back through location to see how bad it was in the area where soil sampling is scheduled.

Weather Delays: It has rained for a week and there are tadpole ponds on location.

Two Week Look Ahead:

Dusty is hoping to get Clair/Tetra Tech in to sample the Phase 2 NW section, get good results and be able to backfill the area. Then he'll concentrate on the Phase 1.5 section.

Faith asked how large the spoil piles were. Dusty said it had pretty much been hauled out and now they're stocking new spoils over across the road. He has the trucks dropping off and loading up at the road so they aren't driving around within the site. Faith asked how much additional traffic used the road and Dusty said it's mostly lone pumpers coming out to check gauges and valves on the pipelines out there. They haven't had too much traffic on their road. The main lease road off of the highway has more traffic; he thinks there's more drilling and fracking going on.

Highway construction is just down to widening out the lease entrances/turnoffs now. Delays are minimal compared to what they were, maybe 5 minutes of waiting. Dusty asked one of the construction workers how much longer they would be out there and he said a couple more weeks.

Faith asked how many trucks were running and Dusty said 7-10, depending on the random issues that pop up, like blowouts, breakdowns. They joked that someone should follow the trucks throughout their routes all day long to keep them honest.

Clair confirmed to Cory that she understood his email response about upcoming sampling.

Dusty arrived at the area to be sampled and said they may need to push back to early next week (July 4<sup>th</sup> Monday) to let the water dry up. There were tadpole ponds. He asked if they had gotten much rain around Santa Fe to help with the fires. Faith said they had – they have total control of the Jemez fire by the lab and are still working the Hermits Peak/Calf Canyon one, which is not out but is under control. They've dropped crews from 2000 to 800-900. It's rained for a week every day.

Dusty said the pit is full of water. Clair confirmed they can't sample if it's too wet. She'll check her schedule and see when they can come out next week. She'll circulate notification email. Dusty will take pictures to circulate.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: None today.

Critical Path Considerations: None today.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Clair/Tetra Tech will provide notification for Phase 1.5 10' sampling & Phase 2 NW pit and the smaller area to the east of existing pit

Assign Follow Up Tasks For New Business:

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, July 13, 2022

Adjourn: 8:21 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface

water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

## **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- · - P

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #38 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 7/13/2022

Meeting Time: 8:04 am, Wednesday July 13, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, June 27, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division
Daniel Gallegos		dgallegos@slo.state.nm.us	NM SLO Water Bureau

Review Previous Meeting Minutes:

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business: Sampling should have taken place yesterday.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Clair/Tetra Tech started by saying they were on location last week and yesterday sampling a large area. The samples sent to the lab look like they'll be OK, but it looks like they'll need to extend Phase 2 out further West and South then they'd thought. Bottom hole samples look good though. They're currently at 6-8' deep now. Faith clarified they were extending laterally out West and Clair confirmed West of the wellhead out towards the fence line.

Dusty hopped in to elaborate on previous two weeks. They had to cancel the first round of testing due to rain, then the holiday delayed fieldwork, but they got back on everything after the holiday. The entire NW area has been excavated to 4-5'. The small pit to 1-2'. Phase 1.5 has blended into Phase 2 West. They've excavated out to the center of Phase 2, about 45' to the West. They didn't go all the way to the fence line yet to manage hauling the material off the top. They've started chasing a line out to the West from the Phase 1.5 Western wall out about 25'. The Western part of Phase 2 looks OK so far. Phase 1.5 floor also looks OK. Currently just chasing that West Wall out as Clair stated.

They need to go back to the North area and try to excavate chunks to see how far they're going to have to go. The Northwestern side may all blend together. This corresponds with old aerials Faith sent previously that showed old spills. They will probably have to go out deeper. The floor is looking OK, but there may be a pocket that needs to be dug out. They want to review the recent lab results for confirmation, but the Northeast corner of Phase 1.5 has a weird pocket about 20' x 20' or 30' x 30' that truncates down with the benching. It's about 35' from Phase 1 and it's really odd; Dusty hasn't seen it before. They've hit rock though, so they can't go any deeper. Once we see the results, then we'll see what we can do.

Cory screen shared one of the photos sent yesterday of the area with a gray section of dirt to confirm it was the area Dusty was talking about. Cory said he thinks it is degraded hydrocarbons. Dusty said it smells terrible, like death and oil. Cory said it should be soft and the lab samples will probably reveal hydrocarbons – signs of a really old spill. Dusty said the field guys had to take a break from excavating it for a few days to let the odor dissipate. He agrees with Cory that it's soft and coming out in clumps; they're just stuck at rock bottom now at 15'. Then benched 2-3' up. Cory said it may pan out. Dusty wanted lab results to confirm what we were chasing, especially if it's going to require a deeper hole. The top of the floor of Phase 1.5 was yellowish and then they encountered this.

Cory asked if Dusty could measure how far it is from the wellhead. Dusty is on location and said it looks like it's about 40-50' from the wellhead. Cory said it could be an old reserve pit with

degraded hydrocarbons or bentonite clay. Based on the color it could be an old reserve pit or flowback pit. He asked Clair if they did a photoionization detector in the field. She didn't have the equipment at the time, but thought it might look like old drilling mud. Cory asked if there was any trash found within the area. Dusty did not find any. Typically BOP to reserve pit is about 40'. Dusty confirmed when they build pads they do about 40-50' from the wellhead. So we're unsure where this will lead.

Clair said if the results aren't screaming hot, they can get as much of the material out as they can, then rock hammer or pick the rock to see if deeper. Cory said if the rule was followed to a "T", they'd get as much as possible, delineate it, profile it, and ask for a variance to keep it in place. The main concern is being water levels not being affected and benzenes & chlorides. If it's an old reserve pit, it could be 60-125'. Dusty agreed for a vertical well it could be 60-150'. Although it has not backed into our Phase 1. They left a buffer in place there that seems OK.

Cory asked when the soil turned this color during the digging. Dusty said it started with darker soil but about 4-5' they started seeing this, and then it got nasty at the bottom.

Cory opened Google Earth to place the location. It's slightly North and West of the wellhead. He didn't see any old tanks, but Google Earth only goes back to 1985 and this well is from the 50's. (Jenni update – drilled in 1942 as an oil well). Dusty also said there's a piece of concrete they found in the 'wellhead peninsula'. It's a few feet below the surface. They can't pick it out because it seems to be connected to the wellhead. It doesn't look like the typical T base nowadays. They'll just leave it undisturbed.

Cory asked Clair what the old delineation depth was. Clair confirmed 10' was expected; there was high TPH to 10-15' below surface; and dropped below RRALs at 20'.

Weather Delays: None at this time.

Two Week Look Ahead:

Dusty summarized by saying we're chasing these problem areas down to the West and focused on hauling dirt off site. He said it looks like a good dirt bike track for kids with all the different levels out there. We'll see what samples say.

Ryan said something to think about – is there a way to cap the reserve pit & if it can be fully delineated.

Cory asked if the September ACO deadline could be met. Dusty thinks it can if the excavation stays shallow on some of this stuff. They may still be hauling containment dirt off site, but if they stay shallower the cubic yardage will be the same/slightly less than Phase 1. Hopefully we'll be alright.

Clair asked if "fully delineated" meant using the 2019 delineation data, or re-delineating. Some may require more than a backhoe. Ryan and Cory aren't sure yet. We'll look into it further when more data comes back.

Daniel is good. We're all good. Faith will be out next week, but Ryan and Daniel can be reached if necessary. Dusty's drone photos were very much appreciated; he'll try to get them regularly.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to chase down problem areas to determine extent of damage.

Critical Path Considerations: None today.

$\sim$	•	•	•	
Comn	าเร	S <sub>1</sub> C	nın	$\mathfrak{g}$ :

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Waiting on lab results from Phase 1.5 and NW Phase 2.

Assign Follow Up Tasks For New Business:

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, July 27, 2022

Adjourn: 8:36 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

## **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
    - b) Final samples to the following closure criteria:
      - 1,000 mg/kg TPH
      - 7,000 mg/kg C1\*
    - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



# Progress Meeting #39 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 7/27/2022

Meeting Time: 8:04 am, Wednesday July 27, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, August 3, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

## **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Sampling is ongoing. Results were circulated yesterday from samples taken 7/6/22-7/12/22

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance/Abbreviated meeting due to lack of participants (summertime): Dusty said they've excavated a lot of the Phase 2 material out. Tetra Tech's field screenings from yesterday were looking like they were hitting higher chloride levels in some places; they'll probably have to take out another couple of feet to 8-9' deep (West of phase 1.5 about 60 feet from well head.) From the East wall headed West towards the fence line they're seeing high chlorides. They started digging the floor out more after Tetra Tech left. They are 4-5' deep from the mid-section of Phase 2 to the fence line now.

Faith asked if the results will meet OCD levels. The results we had received were circulated yesterday. There are a couple of areas that aren't looking good. The West sidewall corner of the NW 'pit' of Phase 2, they scraped back another 1-2'. The floor looks good here though. They scraped the walls and the chlorides look clean. There was a larger hole within the small pit with high TPH that they dug out. They dug out the area near the decomposed hydrocarbon zone; chlorides looked OK here.

Sadly, they found another decomposed hydrocarbon zone. It looks as bad as the first area. They haven't dug it out completely yet and they're down 15' hitting rock again. Dusty is unsure of the width. They're 60' to the South and it's still hot. It may be 60' x 30'? They'll end up having to dig out more of the 4-5' mid-section area too.

Weather Delays: None at this time.

Two Week Look Ahead:

They'll continue excavating and removing dirt. Discussion on capping the bad areas and requesting a variance. We're unsure of the details for this process, but we should all discuss soon since the ACO deadline is 9/30/22. We'll try to start an email conversation on it later this week – how to cap it.

Dusty is working on another project where they had to wait over a month for a GCL. He learned there are only 3 plants that manufacture these in the US, so it will take time. It may be better to try to dig it out for time's sake? We just found the second bad spot last week and Dusty dug it out until they hit rock and then started trenching. Faith says all parties need to review the current status and then we can all decide on best path forward. We think this may fall into 'unforeseen condition' category.

Dusty is concerned we may end up excavating back East towards Phase 1. He can see plastic liner coming up in the dirt they're excavating in the small pit in the NW corner. The chlorides in the field screenings seem like they're OK in some areas at least. The NW pit chlorides looked OK.

However, the West wall of Phase 2 was 1200 in the field, so they need to take it out further, but we're about 1-2' off the fence line already. Then they're off lease.

We'll have a meeting next week with everyone to try to figure out a game plan for moving this forward with little delay.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to chase down problem areas to determine extent of damage and we're encroaching on fence line to the West.

Critical Path Considerations: Second area of decomposed hydrocarbon discovered. Size is still being determined. We need to know more about capping and requesting a variance, or other options.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Lab results from Phase 1.5 and NW Phase 2 7/6/22-7/12/22 circulated. Need to all discuss/review.

Assign Follow Up Tasks For New Business:

Get Ryan and Cory's input on capping and variance options for the two decomposed hydrocarbon areas.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, August 3, 2022

Adjourn: 8:20 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

## **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- - -

Phase 1 Remediation Area

\*

Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #40 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 8/3/2022

Meeting Time: 8:01 am, Wednesday August 3, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, August 17, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Daniel Gallegos		dgallegos@slo.state.nm.us	NM SLO Water Bureau

# Review Previous Meeting Minutes:

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Sampling is ongoing and results are being circulated as data is received from the lab. Communicate with OCD on variance request to cap two decomposed hydrocarbon area.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance (one week since last meeting):

Clair's tech from Tetra Tech has been on site sampling the problem areas identified from the recent lab results. The new field screenings are showing less impacted chloride areas. The lab results will be needed to determine the other constituents. They've moved a lot of dirt around the location. Dusty said they haven't really dealt with the new area of decomposed hydrocarbons. They're focusing on the smaller stuff first, clearing up those areas and avoiding the gray areas.

The West wall of the first hydrocarbon area looks good for chlorides. They dug out about 10' to the West. There's a large rock that slightly raises the elevation in this area, but they can't get through it. The Southwest wall is also testing good for chlorides. They skimmed back 4' level to the area West. Then to 8' in a couple of spots, minus the two hydrocarbon zones. They're going deeper than 4' to get to the deeper threshold acceptance levels; it should help them out with testing thresholds.

The hydrocarbon zones are still an uncertainty. Dusty may need different equipment on site. The GCL's have long lead times. Dusty has a vacation lined up and our ACO is due at the end of September so we don't want to wait to make decisions on how to deal with the hydrocarbon zones.

Faith clarified that the 4' deep area was along the West side of Phase 2. Clair confirmed that those areas were field screened, and chlorides were a bit above the 600 mg/kg chloride content, so they'll grade lower and collect samples again.

Faith said that SLO does not need a variance request for a liner to be installed, but OCD does so we need to get with Cory on this aspect. She asked Ryan for his thoughts on leaving in situ, if he has a liner preference. Ryan said he'd be OK with a standard plastic polyethylene, but Cory would need to agree. This would cap both degraded hydrocarbon areas.

Dusty asked how much they excavate out before the cap goes on? There may only be a small sliver between the two areas, so he may want to take it all out. It's a 30' x 60' area that is 13-15' deep, depending on the rock depth. They saw a portion of the rock around 13-15' in the Southwest corner of Phase 1; it appears to run under the entire site in areas. The 30' by 60' area is an estimation by Dusty from looking at it. He hasn't touched the North wall yet. They also have to avoid the Monitor Well between the two areas of Phase 2 (NW pit and area to West of Phase 1.5). Site elevation seems to have led to fluid migration heading NW over time.

Clair screen shared her KMZ 'in progress' she is updating. BH-118 was the first gray area North of the wellhead. The second one isn't on a KMZ that has been shared yet, but it's around BH-165, which is the NW corner of the Phase 2 middle portion. They just took samples and are waiting on

results from the West sidewall. That data will reveal if the excavation will need to go further West outside of the lease line.

Weather Delays: None at this time.

Two Week Look Ahead:

Faith confirmed our lease is our current footprint, but she can make sure we can go outside lease if necessary. There are a lot of pipelines, including a buried produced water line running alongside the West side of the lease, so that should be a fun issue.

Faith reminded us to wait and see what the results say. The Spill Rule is OCD's so they'll need to weigh in. Off lease spills are still required to be cleaned up. The SLO take on it is different. It's clear there are legacy problems at this site and Dufrane has already done a lot of legacy clean up. There are a lot of lines in the area and not a lot of spill reporting has been done. Historical imagery proves that and Faith doesn't intend to make Permian clean everything up. Some legacy problems may remain. We do need the OCD to weigh in since the ACO deadline is the end of September.

Faith asked Dusty, Clair and Jenni to get with Cory and submit the necessary items to gain a variance to cap the degraded hydrocarbon areas with an HDPE liner since the GCL may take a long time to obtain. Faith and Ryan will also communicate with Cory regarding the plastic liner and variance. If everyone approves a plastic liner to cap, Dusty can excavate out as much as possible around the areas. They'll continue to clean up the other areas with less impact/concern.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to chase down problem areas to determine extent of damage and we're encroaching on fence line to the West.

Critical Path Considerations: Second area of decomposed hydrocarbon discovered. Size is still being determined. We need to know more about capping and requesting a variance, or other options.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Ongoing sampling in field chasing down hot spots. Results coming in and circulated upon receipt.

Assign Follow Up Tasks For New Business:

Get Cory's input on capping and variance options for the two decomposed hydrocarbon areas. Submit variance request with OCD.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, August 17, 2022

Adjourn: 8:27 am

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

## **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

### **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

\_ · \_ P

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #41 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 8/17/2022

Meeting Time: 8:02 am, Wednesday August 17, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, August 31, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting: Discuss variance request and updated lab results.

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty was on vacation for a week, but Dufrane continued excavation of the problem areas we'd identified. Those spots were dug out further for more testing. Clair will have a tech out tomorrow and Friday. They continued to haul dirt out.

Faith asked Cory to talk about the variance requests that were submitted to him. Cory had a death in the family and has been out of office, so he has not looked at it until today. Clair summarized that BH-118 was the original problem spot. Then BH-119 and BH-165, but recent lab results show those are OK. At BH-118 they first found gray material, 4480 TPH at 10' and at 13' it was good/non-detect. BH-199 & BH-165: 119 had odor but tested at 10' and it was below; 165 had gray staining and odor and was trenched to 13' and tested good. It was backfilled after they grabbed samples for safety concerns. The variance request was submitted for BH-119 and BH-165, but now possibly BH-164. Cory found the most recent email from Jenni on Monday with these updated results & map. Cory, now reading the results aloud – BH-118, failed at 10', now OK at 13'. BH-119 had odor, dug down to 10', it passed. BH-165, just to left of BH-119, OK now, it passed, but BH-164 is now the new problem child. Clair confirmed that is correct. They're going to resample that area. There's nothing in the field notes, but it exceeded for DRO. BH-164 is just south of BH-165 a few pins on the KMZ. Near SW-55. It's at 8' now; they're going to trench it to find the bottom. Cory says this sounds logical. Clair said they'll also sample the remaining areas and hopefully keep moving forward. She asked Dusty if the site was dry and he confirmed they hadn't received any rain.

Cory and Clair discussed how much area was left and if the variance request could be ignored now. They still need to dig the light blue area on the KMZ along the west side and southern yellow area. She'd like the variance to still be in play in case they run into something else. They still have a day to a day and a half of sampling to get everything to the lab, and need to dig out BH-164 more.

Weather Delays: None at this time.

Two Week Look Ahead:

Faith brought up that we're right up against the west side of our lease footprint and there are surface lines right on the other side with history unknown. Maverick is taking over the oil & gas lease. SLO is reviewing the lease history for environmental incidents and the company history for Maverick. It shouldn't affect our remediation project though. She's uncertain if the operator change has been submitted to OCD.

It's mid-August and we have an end of September deadline, where does Dusty see the next two weeks going? Hopefully the field screenings and lab results look good in the areas we've dug deeper. He is concerned with the fence line and going out past that. Faith asked Cory to explain the OCD spill rule regarding spills off lease and it's requirements. Cory's call dropped.

Dusty said they'll continue to excavate the hot spots, backfill, then move to the smaller spot to the south. He's been holding off on digging that out. Ryan got home from dropping his kid off at school and pulled up the KMZ map. Faith asked if Dusty could backfill the areas with recent clean tests. Ryan said it would be OK and they want to move this along.

Jenni to circulate meeting #40 minutes for Final by end of the week if no revisions received.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: Need to chase down BH-164 problem area to determine extent of damage and we're encroaching on fence line to the West.

Critical Path Considerations: Want to keep variance request on the table until BH-164 can be excavated and tested further.

Commissioning:

**Special Inspections:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Ongoing sampling in field chasing down hot spots. Results coming in and circulated upon receipt.

Assign Follow Up Tasks For New Business:

Sampling on site 8/18 and 8/19. Clair will circulate results when received.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, August 31, 2022

Adjourn: 8:25 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

## **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - o SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

#### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.
- \*\*Plan may be subject to change depending on data from soil and water samples.\*\*
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*Flan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #42 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 8/31/2022

Meeting Time: 8:03 am, Wednesday August 31, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, September 14, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting: Still waiting on updated lab results.

Assign Follow Up Tasks For Incomplete Old Business: Clair will circulate lab results when received.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty said they continued to haul dirt out and backfill the areas that were able to be filled – south of the wellhead, 4' area to the west, also the small pit in northwest corner of location, the hot spot they had been digging out to the east, and the south wall of the small pit.

They'd left an area in place between the larger phase 2 portion and the small northwest pit. Around the north side of the monitoring well and this small section they'd left in place they found another degraded hydrocarbon zone. At 4' it was nasty and Dusty told them to keep digging it out until they hit rock. (Jenni added this in: This area is north of BH-119 and BH-165 for reference). The three degraded hydrocarbon zones may have bled together somehow underground.

There has been a lot of rain and it's been muddy. Dusty has shifted focus to moving the stockpile out. It may be too muddy and sloppy soon to continue with excavation. He doesn't want the heavy machinery to mess up the clean backfilled areas.

Faith asked Clair for an update on the soil samples. Clair said she's still waiting on the results and the lab is just really backed up. She's hoping they'll come in the next day or two but they're just busy. She confirmed that they sampled BH-164 and the west side trench so it will be a full picture of everything when the data comes in.

Faith asked Dusty how deep the third degraded hydrocarbon zone was. Dusty said they dug to 4' initially, then 6', still nasty, so he told them to just keep digging until they hit rock like the other two zones. It looked the same as BH-118, BH-119, and BH-165. They're about to 14-15' now and look like they're hitting rock again. Faith asked how Cory had felt about the status of the other two degraded hydrocarbon zones. Dusty confirmed that the samples were clean at bottom once they were dug out. So hopefully once this has been dug out, they can resample and see clean samples in this zone too. Ryan said hopefully we won't run into any more of these zones. Dusty commented it's strange to chase them in the field; looks like they could have bled together but then there are clean streaks of separation between them too. No one has heard anything from Cory to update.

Weather Delays: There has been quite a bit of rain and may be more in the forecast. Dusty may have to shut down the site for a couple of days if this is the case.

Two Week Look Ahead:

We're nearing the OCD's deadline with this cleanup. Faith asked that everyone pay attention to correspondence regarding this to help Dusty try to finish in time. We're still making progress but

completing everything by the end of September with a few snags will make it hard. Dusty said they're about \$1.5 million in so far on the remediation and added fines and penalties will cripple us. Insurance budget has been surpassed and Permian is paying out of pocket. Josh and Dusty are going to finish the project no matter what; it's just already a lot of money without additional fines and we are still making progress. Faith said she would be willing to ask the OCD for an extension if necessary and Ryan acknowledged that we were still making progress and there have been smaller spills opened up for longer; the OCD is overwhelmed with spills right now.

Hopefully the last round of samples will come in soon and be clean and Dusty can focus on backfilling. If the third degraded hydrocarbon area is dug out and it samples clean at bottom, then that can be backfilled too.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Unforeseen Conditions or Problems: New degraded hydrocarbon area being dug out to 14-15' (rock)

Critical Path Considerations: Want to keep variance request on the table.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Ongoing sampling in field chasing down hot spots. Results coming in and circulated upon receipt.

Assign Follow Up Tasks For New Business:

Sampling on site 8/18 and 8/19. Clair will circulate results when received.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, September 14, 2022

Adjourn: 8:19 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

### **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - o SLO to confirm and approve.

#### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

#### B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ s

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



# Progress Meeting #43 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 9/14/2022

Meeting Time: 8:03 am, Wednesday September 14, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, September 28, 2022

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting: Lab results received and circulated by Clair.

Assign Follow Up Tasks For Incomplete Old Business: None.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

The first week of September it had been rainy so it was pretty sloppy. Dusty emailed pictures. It was also Labor Day weekend. They were back to work at the end of last week. They excavated more material and continued to haul dirt out. Faith screen shared the most recent KMZ map for Dusty to walk us through.

Dusty referred to the green SW corner – was backfilled to 8-10" finished grade. SW-56 and SW-54 are open due to issues. The yellow area next to the SW corner – started backfilling, but left area around SW-45 open. They have not touched the tank area yet because he didn't want to open up too much. They dug out further on the little purple area, SW-63. Backfilled BH-164 and BH-119. Monitor well = open pocket of 15' buffer around it. Backfilled to E towards BH-191, SW-72. Dug all out to 14' until they hit rock. big pocket of hydrocarbon stuff. They were going to dig to 4', then 2' more, but once they dug it out it was mucky and smelled. So Dusty had them take it all out. SW-58, N of monitor well – dug out and it's ready for retest. They began to backfill the yellow area to the S and blue area in the NW corner and through to the light blue area to the E. He left a buffer at SW-46. SW-50 cleaned up, so they're filling up against that wall. SW-68, next to island around the monitoring well. Continuing to backfill N side of the injection well. The first hydrocarbon zone is clean, so backfilling that.

After looking at it all, it's not as bad as thought. Things are moving in the right direction. Dusty asked what is the plan with SW-46 N side of the pit and the W side of phase 2 area?

Faith said the exceedances are close. Mentioned a typo in the email for SW-58, was 88,970 and should be 8,970. The table has correct amount. Clair is hoping to have her reps out there Friday, but likely Monday for resampling. May need a variance for sidewall and monitoring well. They're not sure how much further out W they can go. SW-46 to the North too. They're about 6-8" from the fence line. They'd have to remove the fence and then there's polylines in that area. Same for the N side and that has the DCP line that we had to have them cut early on.

Cory asking questions looking at KMZ map. Has Clair sampled outside of SW-56 to the West? Clair said she doesn't have those now. Cory asked if they took other samples? To grant the variance to the W, it must be fully delineated. We're below closure standards, but not reclamation closure standards. Cory asked if the area was undisturbed and there's lines out there? Dusty said there's mesquite shrubs, heavily vegetated and some lines. Clair confirmed to horizontally delineate to the W? Cory confirmed, told her to grab samples out that way and take pictures for the variance request. Show the vegetation and that it's growing. The tests are pretty low. SW-69 is high. It's by the monitor well. That should be OK around monitor well for a variance. There are tests all around it. Dusty will take

pictures today. Clair will get horizontal samples to the W and can send pics and request all together. Cory said it's better to submit a variance request for each area, keep them separate. Then it's easier for closure report. Dusty asked if we'd include a variance request for the N area, SW-46. Cory looked at the result, it's 995 and asked if it was also at the fence line. Dusty confirmed and said the DCP line is also cut there from when we first started. Cory said to request a variance to not go further than SW-46 and you're close to the variance standard, show pics of vegetation that is growing.

Faith said she was pretty delighted with the numbers.

Cory asked if 45 will be dug out, to the S? Yes, may wait to dig out SW-54 and 45 when we go further S. Hoping battery containment is good. Clair said down to 4-5' deep. Dusty said they'll wait to submit the variance request to see all of the W wall. Cory said to grab samples to get an idea.

Ryan said he was able to relent on some of the spots. Asked if Dusty was expanding on SW-72? Dusty said it's up for retest. E of SW-72 has actually been excavated out. They're out as far as the purple shaded area below it. Ryan asked BH-191, 193, 192? Dusty said yes, it's excavated to 14-15' to rock and it's ready for retest. That purple area is 14-15'. Cory commented that it went from 5' to 15', must have been pretty nasty. Dusty said it was. They took 4' down and just kept going. The odor was bad. Ryan thanked Dusty for explaining everything going on.

Weather Delays: Site was shut down at the beginning of last week due to rain.

Two Week Look Ahead:

Faith went around asking everyone for their questions. Cory asked if Dusty would be done by September 30<sup>th</sup>. Dusty said it was going to be real close. It'd be backfilled and to be topped with caliche. Polishing will still need to be done. And dirt hauled off still. He is optimistic but can't tell him for sure. Cory said so the remediation will be done, just not capped? Dusty said yes, it would be close but not picture perfect. Cory asked how much impacted soil was left? Dusty estimated 10,000 yards.

Ryan asked if Dusty had seen anyone out there working on an old tank battery to the SW lately. Dusty said yes, there have been some tank vac trucks and some tanks being removed. There's a small building around the wellhead. Ryan said they didn't know who was doing that.

Clair is good. She will send notification email for sampling soon when it's confirmed. Send Jenni #42 edits if you have any.

Dusty said he worried about issues with getting lab results timely, probably just going to say to pay more to expedite, but stuff that's out of our control generally, what happens if we don't meet the deadline? Cory said we'd be out of compliance with the rule and could be fined up to \$25K per day or \$2500 per day, unsure on that. He doesn't do it often. He doesn't know if they'd take that route per say, but 2 years is a long time to have this open. Dusty asked if it was the longest remediation and Cory wasn't sure. Faith said it was not for the SLO. She asked Cory for lenience because they're seeing good progress. The weekly meetings have been good for the Water Bureau and Commissioners to think we're making progress and in good faith. Cory doesn't disagree. He's saying the extension request was in March and we've all known what to work towards. Concerns have been communicated about getting rid of soil faster. Weather is it's monsoon season, rain should be expected.

Faith told Dusty to dig and haul like the wind.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations: Want to keep variance request on the table.

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Ongoing sampling in field chasing down hot spots. Results coming in and circulated upon receipt.

Assign Follow Up Tasks For New Business: Another round of resampling

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, September 28, 2022

Adjourn: 8:40 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Si

Site outline

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #44 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 9/28/2022

Meeting Time: 8:06 am, Wednesday September 28, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, October 12, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech

## Review Previous Meeting Minutes:

**Old Business** / Action Items From Last Meeting: Preliminary lab results received and circulated by Clair. She's waiting on BTEX results.

Assign Follow Up Tasks For Incomplete Old Business: Clair will circulate final results when received.

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty started by saying that all areas previously excavated that tested clean have been backfilled. He referred to the updated KMZ map Clair sent, and it has new colors now. BH-191, 192, and 196 were dug down to 15' and tests came back good, so that's been backfilled. BH-122 and 127 area was backfilled. All up to the North and East, where the small pit was has been backfilled. Everything except the area around the monitoring well and the areas where additional data is needed has been backfilled.

They started digging out the old tank area in the Southwest corner for testing. They continued to haul dirt out. Faith asked the current size of the stockpile across the road. He said it is about 5000 yds. It won't all be hauled out by September 30<sup>th</sup>. Last Wednesday they'd backfilled all the areas they could and have focused on hauling of dirt since then while waiting on test results.

Faith asked about the test results. Clair said she received preliminary data for TPH and Chlorides, but not BTEX. Importantly, most samples came back good with the horizontal samples they collected for the North and West variance requests. The South portion, new area had 4 bottom holes and 1 sidewall that exceeded for TPH. Faith clarified that this was the old tank battery area. Clair said they may need to request a variance there. The TPH threshold is 1000 mg/kg for GRO/DRO or 2500 for total TPH. We had 1200 mg/kg GRO/DRO and 1 had 3000 total TPH. BH-201 was higher though. Dusty thinks it looks like a vein running towards BH-207, which is good. Clair said they're at 4-1/2' deep, but they didn't have good data on that.

Faith asked Dusty based on his experience with this site if was able to continue excavation. Dusty asked Clair was our next depth was. Clair said we're at it. Dusty said if we're right at the mark for BH-200, 201, 205 and 206 we can try to go 2' deeper. Clair said BH-201 and 205 will be tough because they're right next to each other. She screen-shared the KMZ. SW-77 also had a slight exceedance, but the samples look OK in the preliminary results, just still need BTEX. Faith said we were set to request a variance there and asked if it was feasible to excavate out another 2'? Dusty said they could. He asked if he needed to go out further East on SW-75, like 1'? Clair said 10'. Dusty confirmed to excavate down to 5-5-1/2' and out 10' to the East. Start at trench at BH-201 and go East. Clair said that should be all that's left.

SW-72 was a bit high for TPH, but it's 8' deep and it's hard to grab at that depth. Faith said it's not safe and we've already done so much it's not rational. Focus on going to 5-6' in the old tank battery area. Dusty said SW-72 is about 15' away to getting too close to SW-8 and 9 in Phase 1. Faith said she wasn't as concerned with this exceedance now that the site with backfill is looking pretty good overall and it will be difficult to get in there. Ask for a variance from Cory. Dusty said he could excavate, but

putting someone down there was the issue. Faith asked for the exceedance and Clair thought it was around 400 TPH, which Faith said wasn't too bad.

Weather Delays: Site was shut down at the beginning of last week due to rain.

Two Week Look Ahead:

Faith asked if Dusty had his method for the South excavation. Dusty confirmed he has the room for it. He has trucks and people. He'll be able to backfill and continue to haul dirt out. The final grade and polishing will still need to be done and breaking down the berm and liner for the stockpile.

Faith asked Clair how long the closure request process takes. Clair said once she gets the final lab results for recent samples, she can submit a variance request, then we can submit a final report. This is a beast of a remediation and it will probably take her 3 weeks to pull everything together to submit the closure report. Faith asked that since Ryan and Cory aren't on the call, can we let them know what we've discussed, what we're submitting and when. So they can keep it on their radar that we're continuing to move forward. Lay out a schedule for them so they know what we're working towards.

Dusty asked if we should leave SW-72 and the monitoring well area open? Clair will try to get that variance request submitted to Cory today. Cory won't approve other variance requests until the final lab results are received. Dusty asked if he'll need to wait a bit and Clair said he should approve it. Discuss strategy for backfilling only certain areas and how long it may take to get the results in so Clair can request a variance for the North and West boundaries. Clair hopes she can submit requests for these areas by end of week. Faith asked if Dusty just focus on excavation this week until we know on variance for backfilling? She asked Clair how long variance requests usually take to be granted. She said usually as fast as they review them; she usually includes them in work plans, but they're mainly double-checking data so it's usually pretty quick. We're trying to avoid holdups in the field.

Dusty can backfill BH-155 and 156 in a day – day and a half, then excavate the area that needs to be dug out more.

Faith asked if we should meet next week and if anyone has any questions? Clair has no questions. Thoughts on meeting next week is based on Cory's responses to her requests. Dusty said unless they're able to get more samples he's not sure if there's enough to discuss by next Wednesday. The end of next week would be better. Jenni said that keeping everyone in the loop through email with the sampling and results and variance requests seems to work for the most part. We can decide to have a meeting if needed.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

Critical Path Considerations: Keeping variance request on the table.
Commissioning:
Special Inspections:

**Unforeseen Conditions or Problems:** 

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Ongoing sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Dusty to dig out Southwest old tank battery area more and another round of resampling for BH-200, 201, 205 and 206 and SW-75.

Variance Requests submitted to Cory.

Dusty, Clair, and Jenni to visit and lay out when last items will be completed with approximate timelines for Ryan and Cory so they are in the loop without needing to see these minutes.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, October 12, 2022

Adjourn: 8:39 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Sit

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
  - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #45 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 10/12/2022

Meeting Time: 8:02 am, Wednesday October 12, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, October 26, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

Review Previous Meeting Minutes:

**Old Business** / Action Items From Last Meeting: Final lab results w/ BTEX received and circulated by Clair.

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty started by saying they lost about a week due to rain. Prior to that they've just been backfilling clean area and hauling bad dirt off. Yesterday he had the loader backfilling and adding dirt to some of the puddled areas.

Faith asked Cory if he'd had a chance to review the emails Clair had sent yesterday. He's been off and away from him computer since last Friday. Dusty said she'd sent variance requests for the North wall, West wall boundaries, the monitor well area, and another side wall between two areas. She sent one variance request per email.

Cory asked the results of H-2, -3, -4 & -5. Dusty said those were all clean. These results are on the last page of the most recent lab results. Jenni mentioned the email had not included the pictures Dusty had previously sent showing vegetation regrowth outside the fence line. Cory asked if the variance request was for the top 4' and Dusty thought it was. Cory said those numbers look fine.

Moving on to the variance request for SW-72, up by the hot spot. Clair's email has the data in it. It's on the East side of Phase 2, 25' from Phase 1. Dusty found Clair's email to read. Cory asked what was so hard to sample? Dusty said it was not benched and a sheer 8' drop. Cory asked if they could use a backhoe? Dusty said they'd have to bench the sidewall back. The results are 436 so we'd talked about it and thought it would be OK. Cory said he has to defend his response and it wouldn't be vertically delineated. Dusty said the sample was collected at the bottom half of the wall. Cory is wondering about the area between SW-72 and SW-9 (in Phase 1). He's wondering if that is clean, or how much would you be leaving in place. Dusty said we'd need to get with Clair to respond. Cory said that at 8' 436 is fine. He has issues approving a variance in the middle of a site. He said to backfill and get a clean sample later. Other people have to review this too and we have to show that it doesn't go any further. Needs to be vertically delineated. He has to see the numbers so talk to Clair.

Moving to H-1. That is clean. Cory confirmed Dusty had been sent pictures of vegetation along this North side of the fence line also and said that should be OK. Dusty said he'd get with Clair about SW-72. He asked if the monitoring well variance was OK. Cory said he was fine with leaving that in place. It was for SW-71, -60, -70, & -69, sent on September 30<sup>th</sup>. Dusty read some of the figures from the email. Cory asked him to hold on; he was responding to the variance requests, so we had what we needed to move forward.

Weather Delays: Site was shut down for about a week with uncharacteristic rain for this time of year.

Two Week Look Ahead:

Moving to discuss SW-45 and -75, Dusty said he's going to take those out 4' down and 10'. There's a white rectangle on the KMZ about that far out East. He's going to expand SW-76 out and field screen to see how the results look for how far they need to go. HZ-7 was good. It's been too wet to expand. It's the area right under the old tank battery. The field screenings looked bad so they'll take it out further. Dusty asked their thoughts. Cory said it could be a lighter impacted area, these do weird things, it could have been right where a valve was by the tank, who knows, let the data drive you. If you can get it under the thresholds, you're past the deadline but you're close. Maybe you do a trench between SW-72 and SW-9 and dig a trench to check depth.

Faith asked when Clair could come sample again. Dusty said they needed it to be dry enough to get the machinery in place first for her to get in there and she's been busy. Possibly this week, but it's already Wednesday and they still need to dig. He'll check with her.

Faith asked if everyone had any comments. Jenni is good, meeting minutes are up to date. Dusty is good. Cory is good and he's approved all the emails we sent. Faith let us know of SLO change up and Ryan will be stepping down from remediation. His replacement got pneumonia though. Faith doesn't think she'll be involved with this one since we're getting close to finishing.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations:

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Ongoing sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Dusty to dig out Southwest old tank battery area more and another round of resampling for BH-200, 201, 205 and 206 and SW-75 and SW-76. Dusty and Clair to get game plan for sampling SW-72 further.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, October 26, 2022

Adjourn: 8:43 am

- \*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

- 51

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #46 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 10/26/2022

Meeting Time: 8:03 am, Wednesday October 26, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, November 9, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech

Review Previous Meeting Minutes:

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty started by saying the prior two weeks saw a ton of rain that impacted the site and the ability to work. This Monday was the first real day they're all back on site. Last week they were able to work a bit hauling the stockpile out. Monday they were able to start backfilling along the Western edge and Northern edge, and around the monitoring well where variances were approved. They're finishing the backfill that was needed in the deeper areas. They would have been much further along at this for today's call except for the rain. They're hauling and working now though.

They started digging out more at the old tank battery location in the SW corner. They dug out 4-6' on the South side wall and East side wall to add to the stockpile. They're right by the entrance and doghouse and telephone pole, so they're working carefully around that area. Faith asked if they would need to move the doghouse. Dusty said they may have to if they continue further East; it's a bit congested in that area.

Faith asked how far along they were with backfilling? Dusty said 75%, maybe 80%. They'd be a lot further if it hadn't been for the rain. They're filling the deeper areas now that were 15'; it takes some time.

Faith asked about the site conditions currently. Dusty said it was still drying out. It's wet, but not saturated anymore. Monday there was a small shower, but it didn't rain a lot. It's actually tightened the ground up a bit. The machines are running on it OK and compacted it in.

Faith asked about the condition of the lease road and if there were other companies using it? Dusty said it was OK – there's one large puddle they avoid. There's quite a bit of traffic out there, but they're usually not in the right places so they turn around. There's a lot of truck traffic and activity, fracking out there. Faith asked who it was. Dusty said it's over a hill so he's unsure, but once at the highway you can look back and see it in the distance. He hasn't driven that far back out to check out lease signs. Faith said if the road deteriorates too much from wear, we can ask some of the majors to clean it up if they're out there. Dusty said Merchant Livestock is out there with a private property sign and they want you to sign for surface use to cross. Faith said they're collecting tolls out there, but they're not putting it back into the road there. Dusty said he can check out lease signs; he thought Matador bought a bunch a land out there? Faith said yes although there may be issue with the sale, but she has nothing useful to state. Keep her informed if the lease road use becomes an issue to continue. Dusty said it's mostly guys coming out to do meter readings by our site.

Weather Delays: Site was shut down for about a week and a half from rain.

Two Week Look Ahead:

Faith asked Clair what sampling was still needed. Clair wasn't in front of her computer, but they need to resample the bottom holes that exceeded (old tank battery), SW-72 and 9 area, and SW-75 and SW-76. They're hoping to sample early next week. Dusty needs to dig out a bit more on the East side for Clair to sample. He should have it ready for her early next week.

Faith said it sounds like we have a plan that's reasonable for the next two weeks. Ryan said that someone from Merchant Livestock called him and said that Dufrane was putting contaminated soil back into the ground. Dusty said he had no idea, but he'd look into it. He didn't think that was the case. They haven't approached him. Ryan said Centennial and Mewbourne were in the area.

Faith asked if anyone had anything to add. Everyone is good. Meeting #45 minutes have been circulated for 48 hr review. Josh hasn't been on in a while. Dusty said he's up to date on everything and the plan is to just finish this out. Faith said she'd talked to him last about bonding and releases and that it was still her plan to release the bond when closure was approved.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations:

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Continued sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Dusty to dig out Southwest old tank battery area more and another round of resampling for BH-200, 201, 205 and 206 and SW-75 and SW-76, and SW-72 area. Hopefully they will resample early next week.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, November 9, 2022

Adjourn: 8:23 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Sit

Site outline

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excevate to 6'.
    - b) Final samples to the following closure criteria:
      - 1,000 mg/kg TPH
      - 7,000 mg/kg CI\*
  - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*Flan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #47 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 11/23/2022

Meeting Time: 8:03 am, Wednesday November 23, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, December 7, 2022

### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech

Review Previous Meeting Minutes:

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance: (Four-Week Performance)

Dusty reminded us that they'd struggled the last few weeks with rain delays, but they are finally back on track. They've excavated out more of the smaller old tank battery area - the southern wall SW-76 and SW-79, and the east side wall and floor (SW-75 and SW-83). They're at the southern edge border of the lease. There was about 1 week between excavation and samples coming back with data. Clair circulated soil results to everyone yesterday

They continued to backfill phase 2. SW-72 was delineated for Cory; Clair sent that data to Cory yesterday. All were under thresholds. That's being left open for now.

They backfilled the western side of the small tank batter where it's clean. They've been hauling dirt out, running 13-14 trucks at a time, then something breaks and they may go down to 8-9 trucks at a time. Dusty is using 4 different truck companies to haul off the stockpile of dirt. The liner and last bit of dirt on top will need to be hauled out. It's estimated to be around 3,000 yds left. Backfilling is approximately 93-95% complete, so they've been making good progress there. Trucks can run over areas now and they're using machines to smooth it out. It's filled with red soil and there will be caliche on top to finish it off. Caliche will need to be brought in.

Faith said that sounded good. She wanted to know about SW-81 and SW-82, the small inner wall area tank battery area with exceedances and the plan for that. Clair said those are above SLO and below OCD thresholds for chlorides. They can leave in place or expand. It's between 4-10', so it'd be expanding 10' down. Faith confirmed the exceedances were at 4'? Clair said they were at 4.5' because the top 4' is already gone. Faith is working from Michigan and using a smaller laptop to look at the kmz and table. She asked about results between here and SW-77 to the west/western edge of excavated 4'? Clair said 4.5'. Faith: there were exceedances at SW-77? Clair; Yes, most exceeded for chlorides and that's why they horizontally delineated and requested the variance there. Faith said where we're at with SW-81 and SW-82 is OK.

Clair said based on the recent results, they still need to do more digging and get the SW-72 variance. SW-75 was above chloride thresholds from surface to 10' and will be expanded out further east to 10' deep. SW-76, SW-79 and SW-83 exceeded at 4'. The doghouse is close to this area, but HZ-7 was clean. So top 4' needs to be expanded in these areas.

Faith asked if we had samples for the entire old tank battery area now. Clair said yes. And BH-210 exceeded for TPH. Dusty said the plan is to dig out a 400 square foot area at BH-210 and see what they get. Faith said it looks like there could have been a leak, or a hole in the liner there. It's right under the old battery and it's an old facility that could have had leaks through the years.

Weather Delays: Site was shut down for rain delays but has been back at it.

Two Week Look Ahead:

Dusty will move the doghouse about 15-20' over to excavate the SE corner out further 10' to the east. He needs to keep trucks moving through the area. He's been using the western side of the old battery area that's been backfilled as a path. It should take 2 days to dig out the remaining area with the excavator. He'll make sure there is good traffic flow to haul and dig. Then get with Clair to resample. They'll take Thanksgiving day and Friday off. Hopefully they can sample in a week to a week and a half. And keep moving dirt out.

We all agree it sounds like we're getting close! Hopefully Cory can review and approve the variance request for SW-72 soon.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

**Critical Path Considerations:** 

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Continued sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Dusty to dig out Southwest old tank battery area more and another round of resampling for BH-210 and SW-75 and SW-76, SW-78, SW-79, and SW-83 area. Confirm SW-72 variance request granted to backfill.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, December 7, 2022

Adjourn: 8:22 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - o SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.
- \*\*Plan may be subject to change depending on data from soil and water samples.\*\*
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_\_\_\_ ;

Site outline



Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
       STEX ND
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\* Flan may change subject to sample data from spill and water testing \*\*\*



## Progress Meeting #48 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 12/7/2022

Meeting Time: 8:01 am, Wednesday December 7, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, December 21, 2022

## **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

Review Previous Meeting Minutes:

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

SW-72 variance was granted via email. Dusty said they took off for Thanksgiving and that night it started raining out there. The rain turned into snow Friday and Saturday. They got 2-4" of snow. The pictures he'd emailed to everyone were from Sunday evening. He actually almost got stuck out there. It melted on Monday but it was sloppy. By Friday morning it was still too nasty for trucks. It rained again Sunday night, but not much. They were able to get out there Monday to haul dirt out.

They're mainly hauling dirt. Dusty was on his way to the site and it started raining on him. They can't get a break from the rain. He hadn't checked the forecast yet, but he was hoping they could continue hauling dirt. The snow really set them back. It's hard to report this.

Weather Delays: Site was shut down a week for rain delays but they've been back at it.

Two Week Look Ahead:

Faith agreed the weather slowed things down. She asked how much was left to haul. Dusty said 1500 yards across the road. It will be gone by next week and they'll build it back up when they dig the small pit out. It's 10' deep and 4' deep to the East and South.

Faith asked when they may be resampling. Dusty said hopefully by late next week. Clair said she needs a bit of lead time, but she should be able to schedule next week. Dusty asked to set it up for next Wednesday.

Cory asked what is still left to dig? Dusty responded the small tank battery area had to dig out the 4-6' area down to 10' at that BH-210. Then the further out East to 10' and further South 4' down. Cory said maybe 1000 cubic yards? Dusty said that sounds about right.

Faith chimed in that the weather was not looking good for Dusty. She asked if people were available on December 21 for the next meeting. Everyone is and Cory isn't sure.

Cory asked Clair to only show clean samples when she submits her final report. He said it will be cleaner and easier to review since there are over 200 samples.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

TTC	C 1'.'	D 11	
Unforeseen	Conditions	or Probl	eme
Omorescen	Contantons	01 1 1001	cillo.

Critical Path Considerations:

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Continued sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Dusty to dig out Southwest old tank battery area more and another round of resampling for BH-210 and SW-75 and SW-76, SW-78, SW-79, and SW-83 area.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, December 21, 2022

Adjourn: 8:14 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*\*



## Progress Meeting #49 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 12/21/2022

Meeting Time: 8:03 am, Wednesday December 21, 2022

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, January 4, 2022

### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

## Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty said they've dug out the tank battery areas and tested last Wednesday, the 14<sup>th</sup>. Everything but the tank battery area has been backfilled. They're graded to the point where it sheds water, but they won't cap it until everything is complete. Subgrade is complete. They continued to haul the spoils across the road. 1/3 of back containment is down, 2/3 left to go. They're stockpiling clean dirt across the road for backfill.

Faith asked if they took samples at all 7 places that needed it? Clair said yes. They haven't gotten the samples back but based on what they saw in the field, it looked pretty good. Faith said that once samples back, if they're good, you can backfill the old Southwest area? Dusty confirmed yes, that will be the end of the excavation; it will be capping and removing spoils at that point. He'd say they are 95% done. Hopefully there are no issues with testing. Clair said they did field screening with exsticks for salinity, and they looked OK. Hopefully by this time next week she'll be writing her report. Faith said that was great news!

She asked about the grade for the caliche cap. Dusty said subgrade is ready for the caliche cap. They'll backfill the current areas and then caliche. Faith said caliche in January then? Dusty said yes, it will be a lot. It will probably take a week and a half to haul it in.

Faith asked about the new tank battery location? Dusty said it will be the same as the KMZ he'd put together showing all the pipelines is what he'd propose. Not the KMZ with all the testing samples. It was in the Northeast corner, portion of undisturbed area North of Phase 1. Faith said she was going to need to check if they've done an ARC survey for the entire lease. Dusty thought they had done one for the entire lease. Faith said she'd get with Dusty about it to make sure they have that on file with the Cultural Committee. Dusty said 'undisturbed' meant they didn't excavate it, not virgin land. Faith said there is a new Cultural property rule that went into effect December 1. She thinks they should be fine, but they should discuss.

Weather Delays:

Two Week Look Ahead:

Faith went around the call to see if anything had anything to add. Ryan said it sounds like it's coming to a conclusion, which is good. He was out on vacation for our last meeting. Cory said he had no questions, we're getting there. He'd like the closure report for Christmas Last meeting he'd asked Clair not to include dirty samples in the tables and place an 'x' on lab reports for dirty samples. It takes him longer to review, so just clean samples. Clair said there will be a handful of

samples, SW-78 she thinks, where it was completely removed. They usually highlight those of their tables but she'll note that on the table so it doesn't look like she's removed something entirely. Cory said that was fine, and color coding is fine too. Clair said she'd highlight and list if it's been removed or in situ. Jenni was good. Dusty was good.

Faith thanked everyone for their work. It's been a lot of work. She asked Dusty about the holiday work crew and hours and if January 4<sup>th</sup> worked for the next meeting for everyone. Dusty said they'll work a half day Friday and Monday off. They'll be back to work the 27<sup>th</sup>, 28<sup>th</sup>, 29<sup>th</sup>, half day on the 30<sup>th</sup>, back to work Tuesday the 3rd. They'll continue to haul in clean dirt and out bad dirt and wait for the lab results. We'll plan on the next meeting for January 4<sup>th</sup>. Hopefully we'll get good lab results and no more excavation.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

**Critical Path Considerations:** 

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Continued sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Waiting on lab results for Southwest old tank battery area, BH-210 and SW-75 and SW-76, SW-78, SW-79, and SW-83 area.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, January 4, 2022

Adjourn: 8:23 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - o SLO to confirm and approve.

### A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.
- \*\*Plan may be subject to change depending on data from soil and water samples.\*\*
- \*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

Site outline

- - -

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*



# Progress Meeting #50 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 1/4/2023

Meeting Time: 8:06 am, Wednesday January 4, 2023

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

Next Meeting Date and Time: 8:00 am, January 18, 2023 or January 25, 2023

#### **SUMMARY**

- 1. Notice To Proceed Issued: <u>August 19, 2020</u> upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A
- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	dmcinturff@dufrane.com	Dufrane Construction

# **Review Previous Meeting Minutes:**

# **Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

#### Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

Dusty said the holidays slow played the work a bit. They continued to haul dirt in and out. They've graded to the slope of location to shed water; they just need to cap it with caliche. They haven't done any more excavation – the same area is still open. The size and location make it hard to maneuver around the site.

Clair sent samples and we're still not out of the woods. The South side of the tank battery is close to the tolerance, but we're 2' from the lease line, similar situation to the North and West side areas. We think we'll be able to request a variance for that. We had a good reading at a nearby delineation point (HZ-7). There's no vegetation regrowth though because it's just a caliche area out there. Faith asked if it's in the area where there are three pipeline ROW? Dusty said it was, it's along the road, which is over a pipeline ROW. It's not a real road, it's along part of the ROW and it's pretty rocky. Possibly an old ranch road, pretty rough. The results were only a little above tolerance though. Faith said to request the variance there.

Dusty continued that the East side also had higher results than we'd like. He's been in the field a lot and hasn't been able to be on his laptop much so he's not exactly sure of the results but it was in the top 4'. They're currently at 10' from the Centennial lease line. They may be able to dig out 4-5', maybe vertically delineate closer to the lease line, but it's already close. Faith wondered if Cory would allow a deferral or variance. Jenni jumped in to read email from Clair to reference the sidewalls with exceedances: SW-76 to South, but we have good HZ-7 down there so possibly ask for variance there; SW-75, -79 and -83 along the Eastern wall. Faith asked how much further Dusty thought he could dig and he said he's right up against the lease line to try to get an excavator in there. Faith asked if he could do deeper because she's thinking further ahead for root vegetation and veg regrowth. 8' is better, if we're able to get what you can down to 8' that's reasonable, then ask for a deferral or variance. She uncertain of which one because they have specific meanings to the OCD with regard to when it's dealt with – now or once the well is plugged. She's uncertain how Cory feels about it.

Weather Delays:

Two Week Look Ahead:

Faith asked Dusty to get with Clair and see what they think they'd be able to manage going deeper. Faith asked Jenni to circulate Clair's email with the lab results to everyone. She doesn't want to hold up the project in the field by not getting Dusty responses on how to move forward and we're very close to being complete in the field. She'd like to see Permian get this SWD back up and running. She thinks that the work we've already done will be good for regrowth/re veg efforts in the future.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

**Critical Path Considerations:** 

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

- 1. Phase 1 closeout tasks (Phase 1.5)
  - a. Phase 1 pit will be capped with an 8" caliche cap once both phases are complete. Continually remove spoil dirt to assist with Phase 2 excavation dirt accumulation.
  - b. Continued sampling in field chasing down hot spots. Results coming in and circulated upon receipt. Hopefully down to last round of resampling Phase 2.

Assign Follow Up Tasks For New Business:

Jenni circulate Clair's lab results for Southwest old tank battery area, BH-210 and SW-75 and SW-76, SW-78, SW-79, and SW-83 area. Need to address slightly higher results for SW-75, -76, -79, and -83 with OCD and field feasibility to remove.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, January 18, 2023 or January 25.

Adjourn: 8:23 am

\*Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

# **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

\_ . \_ ;

Site outline

Phase 1 Remediation Area



\*\*\*Plan may change subject to sample data from soil and water testing. \*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths
  - a) All areas not noted in key, excevate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
       STEX ND
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- 6. Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- - Pit location min 1' excavation
- - Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*Flan may change subject to sample data from spill and water testing \*\*\*\*



# FINAL Progress Meeting #51 Template

Project: Kaiser State #9 Contract: SW-330 Today Date: 1/18/2023

Meeting Time: 8:09 am, Wednesday January 18, 2023

Place: Zoom https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNaWHcyUmc5WXh2cEZLYW1ZZz09

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time: NONE** 

#### **SUMMARY**

1. Notice To Proceed Issued: <u>August 19, 2020</u> - upon Commissioner's signature date of SW-330 Easement re-issue contract Exhibit A

- 2. Original Contract Time for Phase 1 work plan: 90 days total (by November 16, 2020)
  - a. 45 days for excavation and final sampling
  - b. 60 days for back fill and clay membrane liner placement
- 3. Number of Contract Modifications to Date:
  - a. 4/14/2021; 1- SW-330 Amendment#1 adding acreage to include the new haul road location
- 4. Revised Contract Time for Phase 1 work plan:
- 5. Original Contract Substantial Completion Date:
  - a. November 17, 2020, missed
- 6. Revised Contract Substantial Completion Date:
  - a. July 12, 2021 (signed road acreage amendment 4/14/21 plus 90 days), missed
- 7. Delays: by Authorities Having Jurisdiction, Number-Log entries:
  - a. SLO- Rights of Ways for new haul road, 2/18/2021 amendment#1 sent to PWS. Executed 4-14-2021

# Sign In Sheet / Attendance:

(Name, phone number, email, and representing what entity)

	,	7 8 37	
Faith Crosby	505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
Ryan Mann	575/392-8736	rmann@slo.state.nm.us	NM State Land Office
Clair Gonzales	432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
Cory Smith	505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division

**Review Previous Meeting Minutes:** 

**Old Business** / Action Items From Last Meeting:

Assign Follow Up Tasks For Incomplete Old Business:

None

Safety:

Site Observations:

Submittal Log: Dusty's side. Faith will help as much as she can.

RFI Log: Dusty's side. Submit requests to Faith, the RFIs will be Dusty's record and Faith will solve/help as much as she can. Dusty will generate project numbers for the RFIs.

Corrective Action Log: Faith will keep this.

Change Orders: If access under SLO Easement SW-330 needs to be changed, this will be done by amendment after an RFI.

If Dufrane has change orders to their contract with PWS those will be handled on the Dufrane side.

## Collaborative section

Schedule: [contractor supply Gantt Chart]

Prior Two-Week Performance:

No prior Two-week performance available as Dusty is not on the call today.

Cory asked Claire about lab results chloride levels for SW-75, SW-76, SW-79, and SW-83. There is now an excavation proximity issue with east side lease boundaries, and Cory said we can use borehole data for SW-75 (CL = 1,020 mg/kg. at 0-4') and SW-83 (CL=1,070 mg/kg at 0-4'). SLO is in agreement.

Weather Delays:

None noted

Two Week Look Ahead:

Claire will put together a closure report with updated site maps, variance approval emails, bore hole data. Cory and Claire talked about submitting clean sample data and 'x-ing out' the few dirty results so data could still be seen. Cory said the closure request must be sent in separately for each open RP/incident. A deferral should be requested for reclamation and reseeding work until final site closure effort. Cory would like to see the report by the end of February 2023. Claire says it may be ready a bit sooner.

Contractor Staffing & Subcontractors: Permian Water Solutions make sure original contract with prime contractor includes specific language that explicitly states that all subcontractors and all subordinate sub-sub contractors -second and third tier subs – are contractually bound by the same terms and conditions as pertain between Owner and Contractor.

**Unforeseen Conditions or Problems:** 

Critical Path Considerations:

Commissioning:

Special Inspections:

Payment Schedule:

**New Business** / Comments / Questions / Grantee / Lessee / Contractor / Landowner / Agency / Participant Concerns:

Faith would like to receive regular weekly short email updates from Jenni and Dusty regarding ongoing site work.

Assign Follow Up Tasks For New Business:

Claire will submit a closure request/ report for all open incidents by the end of February to the OCD and SLO.

Verify Date and Time of Next Meeting:

None. This meeting will be considered the final bi-weekly progress meeting for this group. Thank you all for the last 2 years and all the effort. Thank you for committing to come to all the meetings, each of you.

Adjourn: 8:31 am

\*\*\*SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations\*\*\*

<sup>\*</sup>Permian Water Solutions LLC to publish minutes, giving 48 Hours To Correct

# **MEMORANDUM**

Subject: Kaiser State #9 Phase 2 Remediation Work Plan

## **Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - o Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - o Include photos, final samples etc.;
  - SLO to confirm and approve.

## A. Tasks:

- Submit new pad site plan for SLO review and approval.
- Remove any remaining equipment and debris in area.
- Excavate Phase 2 remediation areas to Map and Key listed depths.
  - i. All areas not noted in key, excavate to 6'.
- Requirements for final samples:
  - i. Floor samples to be taken in same location as previous samples.
  - ii. No less than 3 each cardinal sidewall samples around the perimeter.
  - iii. Samples shall meet the following criteria: 1,000 mg/kg TPH, 7,000 mg/kg Cl<sup>-</sup>, and BTEX ND.
  - iv. PWS shall give SLO 1 week notice prior to final samples being taken so that SLO staff may attend and take duplicate samples at PWS cost.
- Backfill non-blended soils and place a clay/bentonite mat at a minimum of 5'.
- Investigate off-pad spills and coordinate remediation and reclamation with SLO.
- Reclaim unused roads/pad areas in coordination with SLO.

## B. Timeline:

- All equipment/debris to be removed within 30 days.
- Excavation and final sampling to be completed with 60 days.
- Backfill and clay membrane liner placement to be completed within 60 days.
- The proposed timeline for the first four stages is no more than 150 days.

<sup>\*\*</sup>Plan may be subject to change depending on data from soil and water samples.\*\*

<sup>\*\*\*</sup>SLO approval does not relieve Permian Water Solutions of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, SLO approval does not relieve PWS of responsibility for compliance with any other federal, state, local laws and/or regulations.\*\*\*

# Kaiser State SWD #9

#### Phase 1 Work Plan Close-Out Tasks:

- 1. Installation of Test Well #2.
  - a) Determine source of groundwater contamination.
  - b) Develop monitoring and recovery well abatement program to remediate ground water and capture extent of plume.
- 2. Phase 1 Final Report.
  - a) Confirm all Phase 1 tasks were completed.
  - b) Include photos, final samples etc.
- 3. Conduct Phase 1 field inspection with SLO staff.

#### Map Key:

SI

Site outline

- · - P

Phase 1 Remediation Area



Test Well #2

\*\*\*Plan may change subject to sample data from soil and water testing.\*\*\*



# Kaiser State SWD #9

#### Phase 2 Work Plan Tasks:

- 1. Submit new pad site plan.
- 2. Remove any remaining equipment & debris on site.
- 3. Excavate Phase 2 remediation areas to Map Key listed depths.
  - a) All areas not noted in key, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum 5'.
- 5. Investigate off-pad spills and coordinate remediation with SLO.
- Reclaim off pad areas.

#### Map Key:

- - Completed/Out of scope areas
- - Areas of 15' excavation
- Pit location min 1' excavation
- Pasture spills at new temporary staging area location
- \*\*First four stages to take no more than 150 days.\*\*
- \*\*\*\*plan may change subject to sample data from spill and water testing \*\*\*





# Appendix D

Laboratory analysis

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Xenco, Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-5572-1

Laboratory Sample Delivery Group: New Mexico

Client Project/Site: PWS-Kaiser

Revision: 1

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

KRAMER

Authorized for release by: 9/13/2021 9:28:06 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS .....

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 2:28:53 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

6

\_\_\_\_\_

9

IU

12

13

Н

Client: Tetra Tech, Inc.

Project/Site: PWS-Kaiser

Laboratory Job ID: 880-5572-1

SDG: New Mexico

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	12
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

# **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

**Qualifiers** 

**GC VOA** Qualifier **Qualifier Description** 

Surrogate recovery exceeds control limits, high biased. S1+ Indicates the analyte was analyzed for but not detected. U

GC Semi VOA

Qualifier **Qualifier Description** 

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**General Chemistry** 

Qualifier **Qualifier Description** 

Sample was prepped or analyzed beyond the specified holding time

U Indicates the analyte was analyzed for but not detected.

**Glossary** 

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

DΙ Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

**EDL** Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit** 

**PRES** Presumptive **Quality Control** QC

**RER** Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

**RPD** Relative Percent Difference, a measure of the relative difference between two points

**TEF** Toxicity Equivalent Factor (Dioxin) TFO Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

# **Case Narrative**

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

Job ID: 880-5572-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-5572-1

# Receipt

The sample was received on 8/30/2021 2:38 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

## **GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 880-5572-2

Laboratory: Eurofins Xenco, Midland

**Narrative** 

Job Narrative 880-5572-2

#### Comments

No additional comments.

#### Receipt

The sample was received on 8/30/2021 2:38 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.6° C.

# **General Chemistry**

Method SM 2540C: The following sample was run outside of holding time at client's request: MW-1 (880-5572-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

Client Sample ID: MW-1

Lab Sample ID: 880-5572-1 Date Collected: 08/27/21 13:35

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	
Toluene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			09/01/21 22:06	
o-Xylene	< 0.00200	U	0.00200		mg/L			09/01/21 22:06	
Xylenes, Total	< 0.00400	U	0.00400		mg/L			09/01/21 22:06	
Total BTEX	<0.00400	U	0.00400		mg/L			09/01/21 22:06	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130					09/01/21 22:06	
1,4-Difluorobenzene (Surr)	106		70 - 130					09/01/21 22:06	
Analyte Gasoline Range Organics		Qualifier	(GC)  RL  4.66	MDL	Unit mg/L	<u>D</u>	Prepared 09/03/21 16:21	Analyzed 09/04/21 23:09	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <4.66 <4.66	Qualifier U	RL 4.66 4.66	MDL	mg/L	<u>D</u>	09/03/21 16:21 09/03/21 16:21	09/04/21 23:09 09/04/21 23:09	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<b>Result</b> <4.66	Qualifier U	RL 4.66	MDL	mg/L	<u>D</u>	09/03/21 16:21	09/04/21 23:09 09/04/21 23:09 09/04/21 23:09	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate	Result   <4.66   <4.66   <4.66   <4.66   <4.66	Qualifier U U U U	RL 4.66 4.66 4.66 Limits	MDL	mg/L mg/L mg/L	<u> </u>	09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 <b>Prepared</b>	09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 Analyzed	,
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result   <4.66   <4.66   <4.66   <4.66     <8   <4.66     <8   <4.66     <8   <4.66     <4   <4   <4   <4   <4   <4   <4	Qualifier U U U U	RL 4.66 4.66 4.66 4.66 Limits 70 - 130	MDL	mg/L mg/L mg/L	<u>D</u>	09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 <b>Prepared</b> 09/03/21 16:21	09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 Analyzed 09/04/21 23:09	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result   <4.66   <4.66   <4.66   <4.66   <4.66	Qualifier U U U U	RL 4.66 4.66 4.66 Limits	MDL	mg/L mg/L mg/L	<u>D</u>	09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 <b>Prepared</b> 09/03/21 16:21	09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl  Method: 300.0 - Anions, Ion C	Result   <4.66   <4.66   <4.66   <4.66     <4.66	Qualifier U U U Qualifier	RL 4.66 4.66 4.66 Limits 70 - 130 70 - 130		mg/L mg/L mg/L	<u>D</u>	09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 <b>Prepared</b> 09/03/21 16:21	09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 Analyzed 09/04/21 23:09	Dil Fa
Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl  Method: 300.0 - Anions, Ion C Analyte	Result   <4.66   <4.66   <4.66   <4.66     <4.66	Qualifier U U U Qualifier	RL 4.66 4.66 4.66 4.66 Limits 70 - 130		mg/L mg/L mg/L	<u>D</u>	09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 09/03/21 16:21 <b>Prepared</b> 09/03/21 16:21	09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 09/04/21 23:09 Analyzed 09/04/21 23:09	Dil Fa

500

mg/L

9590 H

09/10/21 15:13

Eurofins Xenco, Midland

**Total Dissolved Solids** 

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 880-5572-1

Project/Site: PWS-Kaiser

SDG: New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water Prep Type: Total/NA

			Percent	Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-5572-1	MW-1	131 S1+	106	
880-5572-1 MS	MW-1	113	121	
880-5572-1 MSD	MW-1	119	121	
LCS 880-7266/61	Lab Control Sample	108	115	
LCSD 880-7266/62	Lab Control Sample Dup	123	129	
MB 880-7266/66	Method Blank	75	104	
MB 880-7274/5-A	Method Blank	75	102	

BFB = 4-Bromofluorobenzene (Surr) DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Water Prep Type: Total/NA

			Percent	Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-5572-1	MW-1	109	115	
890-1210-J-1-A MS	Matrix Spike	99	102	
890-1210-J-1-B MSD	Matrix Spike Duplicate	110	111	
LCS 880-7525/2-A	Lab Control Sample	127	126	
LCSD 880-7525/3-A	Lab Control Sample Dup	112	109	
MB 880-7525/1-A	Method Blank	115	123	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

2

3

5

9

11

14

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

# Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7266/66

**Matrix: Water** 

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

Total BTEX

m-Xylene & p-Xylene

**Analysis Batch: 7266** 

Client Sample	e ID:	Meth	od Blank	
P	rep	Type:	Total/NA	

MB MB Result Qualifier RL **MDL** Unit D Prepared Dil Fac Analyzed <0.00200 U 0.00200 mg/L 09/01/21 21:40 <0.00200 U 0.00200 mg/L 09/01/21 21:40 1 <0.00200 U 0.00200 mg/L 09/01/21 21:40 <0.00400 U 0.00400 mg/L 09/01/21 21:40 <0.00200 U 0.00200 mg/L 09/01/21 21:40 <0.00400 U 0.00400 mg/L 09/01/21 21:40

mg/L

MR MR

<0.00400 U

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75	70 - 130		09/01/21 21:40	1
1,4-Difluorobenzene (Surr)	104	70 - 130		09/01/21 21:40	1

0.00400

Lab Sample ID: LCS 880-7266/61

**Matrix: Water** 

o-Xylene

**Analysis Batch: 7266** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

09/01/21 21:40

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Benzene 0.100 0.09753 mg/L 98 70 - 130 Toluene 0.100 0.09995 100 mg/L 70 - 130 Ethylbenzene 0.100 mg/L 0.1071 107 70 - 130 m-Xylene & p-Xylene 0.200 0.2108 mg/L 105 70 - 130 0.100 0.1044 104 70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	108	70 - 130
1,4-Difluorobenzene (Surr)	115	70 - 130

Lab Sample ID: LCSD 880-7266/62

**Matrix: Water** 

Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene

o-Xylene

**Analysis Batch: 7266** 

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Spike	LCSD	LCSD				%Rec.		RPD	
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
0.100	0.1139		mg/L		114	70 - 130	15	20	
0.100	0.1090		mg/L		109	70 - 130	9	20	
0.100	0.1173		mg/L		117	70 - 130	9	20	
0.200	0.2317		mg/L		116	70 - 130	9	20	
0.100	0 1146		ma/l		115	70 - 130	9	20	

mg/L

LCSD LCSD

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	129		70 - 130

Lab Sample ID: 880-5572-1 MS

**Matrix: Water** 

Analysis Batch: 7266

Alialysis Dalcii. 1200										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.100	0.1110		mg/L		111	70 - 130	

Eurofins Xenco, Midland

Client Sample ID: MW-1

Prep Type: Total/NA

Client: Tetra Tech, Inc. Project/Site: PWS-Kaiser Job ID: 880-5572-1 SDG: New Mexico

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-5572-1 MS

**Matrix: Water** 

Analyte

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

**Analysis Batch: 7266** 

Client Sample ID: MW-1 Prep Type: Total/NA

112

70 - 130

MS MS Spike %Rec. Added Result Qualifier Unit %Rec Limits 0.100 0.1117 mg/L 111 70 - 130 0.100 0.1142 mg/L 114 70 - 1300.200 0.2283 70 - 130 mg/L 114

mg/L

MS MS

Sample Sample

<0.00200 U

<0.00200 U

<0.00400 U

<0.00200 U

Result Qualifier

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1,4-Difluorobenzene (Surr)	121	70 - 130

Lab Sample ID: 880-5572-1 MSD

**Matrix: Water** 

**Analysis Batch: 7266** 

Client Sample ID: MW-1 Prep Type: Total/NA

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier RPD Limit Analyte Added Result Qualifier D %Rec Limits Unit Benzene <0.00200 U 0.100 0.1118 112 70 - 130 25 mg/L Toluene <0.00200 U 0.100 0.1097 mg/L 109 70 - 130 2 25 Ethylbenzene <0.00200 U 0.100 0.1121 mg/L 112 70 - 130 2 25 m-Xylene & p-Xylene 0.200 25 <0.00400 U 0.2246 mg/L 112 70 - 130 2 o-Xylene <0.00200 U 0.100 0.1104 mg/L 110 70 - 130 25

0.100

0.1115

MSD MSD

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	119	70 - 130
1,4-Difluorobenzene (Surr)	121	70 - 130

Lab Sample ID: MB 880-7274/5-A

**Matrix: Water** 

**Analysis Batch: 7266** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA Prep Batch: 7274

•	МВ	МВ						•	
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L		08/31/21 08:38	09/01/21 00:42	1
Toluene	<0.00200	U	0.00200		mg/L		08/31/21 08:38	09/01/21 00:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/L		08/31/21 08:38	09/01/21 00:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L		08/31/21 08:38	09/01/21 00:42	1
o-Xylene	<0.00200	U	0.00200		mg/L		08/31/21 08:38	09/01/21 00:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/L		08/31/21 08:38	09/01/21 00:42	1
Total BTEX	<0.00400	U	0.00400		mg/L		08/31/21 08:38	09/01/21 00:42	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75	70 - 130	08/31/21 08:38	09/01/21 00:42	1
1,4-Difluorobenzene (Surr)	102	70 - 130	08/31/21 08:38	09/01/21 00:42	1

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser

SDG: New Mexico

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-7525/1-A

**Matrix: Water** 

**Analysis Batch: 7537** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 7525

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<4.69	U	4.69		mg/L		09/03/21 16:21	09/04/21 21:03	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<4.69	U	4.69		mg/L		09/03/21 16:21	09/04/21 21:03	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<4.69	U	4.69		mg/L		09/03/21 16:21	09/04/21 21:03	1
Total TPH	<4.69	U	4.69		mg/L		09/03/21 16:21	09/04/21 21:03	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	<u>09/03/21 16:21</u>	09/04/21 21:03	1
o-Terphenyl	123		70 - 130	09/03/21 16:21	09/04/21 21:03	1

Lab Sample ID: LCS 880-7525/2-A

**Matrix: Water** 

**Analysis Batch: 7537** 

Spike LCS LCS %Rec. Limits Analyte Added Result Qualifier Unit D %Rec Gasoline Range Organics 93.8 93.19 mg/L 99 75 - 125 (GRO)-C6-C10 Diesel Range Organics (Over 93.8 103.9 mg/L 111 75 - 125

C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	127	70 - 130
o-Terphenyl	126	70 - 130

Lab Sample ID: LCSD 880-7525/3-A

**Matrix: Water** 

Analysis Batch: 7537

**Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

Prep Batch: 7525

Prep Type: Total/NA Prep Batch: 7525

Analysis Daten. 1001							i icp Daton. 702				
	Spike	LCSD	LCSD				%Rec.		RPD		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Gasoline Range Organics (GRO)-C6-C10	93.8	92.23		mg/L		98	75 - 125	1	20		
Diesel Range Organics (Over C10-C28)	93.8	104.2		mg/L		111	75 - 125	0	20		

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 890-1210-J-1-A MS

**Matrix: Water** 

**Analysis Batch: 7537** 

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 7525

<b>,</b>	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<4.53	U	91.5	76.12		mg/L		83	75 - 125	
Diesel Range Organics (Over C10-C28)	<4.53	U	91.5	89.74		mg/L		98	75 - 125	

Client: Tetra Tech, Inc. Project/Site: PWS-Kaiser

Job ID: 880-5572-1 SDG: New Mexico

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1210-J-1-A MS Client Sample ID: Matrix Spike **Matrix: Water Prep Type: Total/NA Analysis Batch: 7537** Prep Batch: 7525

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-1210-J-1-B MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 7537									Prep	Batcn:	7525
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<4.53	U	91.5	85.40		mg/L		93	75 - 125	11	20
Diesel Range Organics (Over C10-C28)	<4.53	U	91.5	99.28		mg/L		109	75 - 125	10	20

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 110 70 - 130 111 70 - 130 o-Terphenyl

# Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7318/3 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7318** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			08/31/21 15:24	1

Lab Sample ID: LCS 880-7318/4 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7318** 

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride		25.0	26 14		ma/l		105	90 - 110	

Lab Sample ID: LCSD 880-7318/5 **Client Sample ID: Lab Control Sample Dup Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7318** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	 25.0	25.60		mg/L		102	90 - 110	2	20

Lab Sample ID: 880-5594-A-1 MS **Client Sample ID: Matrix Spike Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7318** 

7 midily 010 = midili 1 0 10										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	9.96		25.0	34.47		mg/L		98	90 - 110	

Client: Tetra Tech, Inc. Project/Site: PWS-Kaiser

Job ID: 880-5572-1

SDG: New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5594-A-1 MSD

**Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 7318** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	9.96		25.0	34.95		mg/L		100	90 - 110	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 880-7774/1 **Client Sample ID: Method Blank Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 7774** 

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0		mg/L			09/10/21 15:13	1

Lab Sample ID: LCS 880-7774/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7774** 

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits D %Rec Total Dissolved Solids 1000 990.0 mg/L 99 80 - 120

Lab Sample ID: LCSD 880-7774/3 **Client Sample ID: Lab Control Sample Dup Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7774** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Total Dissolved Solids	1000	980.0		mg/L		98	80 - 120	1	10

Lab Sample ID: 880-5572-1 DU

**Matrix: Water** 

**Analysis Batch: 7774** 

7 maryolo Batom 7777	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Total Dissolved Solids	9590	H	 9590		mg/L		 	0	10

Eurofins Xenco, Midland

**Client Sample ID: MW-1** 

Prep Type: Total/NA

# **QC Association Summary**

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

# **GC VOA**

# **Analysis Batch: 7266**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5572-1	MW-1	Total/NA	Water	8021B	
MB 880-7266/66	Method Blank	Total/NA	Water	8021B	
MB 880-7274/5-A	Method Blank	Total/NA	Water	8021B	7274
LCS 880-7266/61	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-7266/62	Lab Control Sample Dup	Total/NA	Water	8021B	
880-5572-1 MS	MW-1	Total/NA	Water	8021B	
880-5572-1 MSD	MW-1	Total/NA	Water	8021B	

# Prep Batch: 7274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7274/5-A	Method Blank	Total/NA	Water	5035	

# **GC Semi VOA**

# Prep Batch: 7525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batc
880-5572-1	MW-1	Total/NA	Water	8015NM Aq Prep
MB 880-7525/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep
LCS 880-7525/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep
LCSD 880-7525/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep
890-1210-J-1-A MS	Matrix Spike	Total/NA	Water	8015NM Aq Prep
890-1210-J-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015NM Aq Prep

# **Analysis Batch: 7537**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5572-1	MW-1	Total/NA	Water	8015B NM	7525
MB 880-7525/1-A	Method Blank	Total/NA	Water	8015B NM	7525
LCS 880-7525/2-A	Lab Control Sample	Total/NA	Water	8015B NM	7525
LCSD 880-7525/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	7525
890-1210-J-1-A MS	Matrix Spike	Total/NA	Water	8015B NM	7525
890-1210-J-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B NM	7525

# HPLC/IC

# **Analysis Batch: 7318**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5572-1	MW-1	Total/NA	Water	300.0	
MB 880-7318/3	Method Blank	Total/NA	Water	300.0	
LCS 880-7318/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-7318/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-5594-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-5594-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

# **General Chemistry**

# **Analysis Batch: 7774**

Lab Sample ID 880-5572-1	Client Sample ID MW-1	Prep Type Total/NA	Matrix Water	Method SM 2540C	Prep Batch
MB 880-7774/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 880-7774/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 880-7774/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
880-5572-1 DU	MW-1	Total/NA	Water	SM 2540C	

# **Lab Chronicle**

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

Client Sample ID: MW-1

Lab Sample ID: 880-5572-1

**Matrix: Water** 

Date Collected: 08/27/21 13:35 Date Received: 08/30/21 14:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	7266	09/01/21 22:06	MR	XEN MID
Total/NA	Prep	8015NM Aq Prep			32.2 mL	3 mL	7525	09/03/21 16:21	DM	XEN MID
Total/NA	Analysis	8015B NM		1			7537	09/04/21 23:09	AJ	XEN MID
Total/NA	Analysis	300.0		50			7318	08/31/21 16:14	СН	XEN MID
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	7774	09/10/21 15:13	SC	XEN MID

# **Laboratory References:**

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser SDG: New Mexico

# **Laboratory: Eurofins Xenco, Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority		ıram 💮 💮 💮 💮 💮 💮 💮 💮 💮 💮 🤄 🤄 🤄 💮 🤄 🤄 💮 💮 💮 🤄 💮 💮 💮 💮 💮 💮 💮 💮 💮 💮 💮 💮 💮	Identification Number	Expiration Date	
Texas	NEL	AP	T104704400-20-21	06-30-22	
The following analyte	s are included in this report,	but the laboratory is r	not certified by the governing authority.	This list may include analytes for wh	
the agency does not	•	,,	g aansy.	This list may include analytes for the	
the agency does not of Analysis Method	•	Matrix	Analyte	The letting include analytes for wi	
0 ,	offer certification.	· ·	, , ,		

# **Method Summary**

Client: Tetra Tech, Inc.
Project/Site: PWS-Kaiser

Job ID: 880-5572-1 SDG: New Mexico

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN MID
5030B	Purge and Trap	SW846	XEN MID
8015NM Ag Prep	Microextraction	SW846	XEN MID

#### **Protocol References:**

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

2

3

4

9

11

12

13

14

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: PWS-Kaiser Job ID: 880-5572-1

SDG: New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-5572-1	MW-1	Water	08/27/21	08/30/21
			13:35	14:38

Project Number

2126-

MB-02230 1/4x1co

Boutine

□Rush

Pres. 7

5

ANALYSIS REQUEST

Turn Around

ANS-Kulser

Son

Project Name:

City State ZIP Address.

732-270-85-8

79701

Address City State ZIP

State of Project:

Program

UST/PST PRP Brownfields

RRC 🗌

Superfund 🗌

Work Order Comments

www.xenco.com

Email

Sonzales@ Ftratech-com

Deliverables

EDO [

ADaPT 🗌

Other:

Level IV

None NO

DI Water: H<sub>2</sub>O

Preservative Codes

Reporting Level II 🗌 Level III 📗 PST/UST 📗 TRRP 📗

Project Manager ompany Name

Totra 1915

CONZAles

Bill to (if different)

ompany Name

Sampler's Name Project Location

	ð
,	
:	<u></u>
	Ş
	Q
	Custody
	-
_	

Midland, TX (432) 704-5440, San Antonio, TX (210 EL Paso TX (915) 585-3443, Lubbock, TX (806) 7 Hobbs NM (575) 392-7550 Carlsbad, NM (575) Houston, TX (281) 240-4200, Dallas, TX (214) 9

Xenco

Environment Testing

880-5572 Chain of Custody
---------------------------

9	;
1	
	J
	Ö
-	~11
	T,
	P

		6			***************************************			
		4	1438 1					A
		2	8-30-2021	O.			mad 1	JOHN S. MI
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		· (Signature)	Received by: (Signature)	ture)	Relinquished by: (Signature)
	ions trol egotiated.	of Service. Eurofins Xenco, will be liable only for the cost of samples constitutes a vital purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco, will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be emforced unless previously negotiated.	rofins Xenco, its affiliates and senses incurred by the client if senses incurred by the client if senses incurred by the client if senses incurred by the client is a consistency.	ent company to Eu or any losses or expa ample submitted to	id purchase order from cl sume any responsibility for a charge of \$5 for each s	les constitutes a vali bles and shall not as: to each project and	e only for the cost of same of \$85.00 will be applied	of Service. Eurofins Xenco will be liab of Service. Eurofins Xenco will be liab
7471	U Hg 1631/2451/7470/7471	BRCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Sb As Ba Be Cd C	10 BRCKA	ICLP/SPLP6010	llyzeu	etal(s) to be allo	Notice (teacher of this decrease and ellevidence and in the decrease and i
J V Zn	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn U V Zn	Ca Cr Co Cu Fe Pb Mg Mn Mo	b As Ba Be B Cd	xas 11 Al S	TCI S (CS) S C		200.8 / 6020:	Total 200.7 / 6010
432-260-8634	432~							
lair Gonzales	Ca							
Contact	KB KB							
questions	For		< < < < < <	66	1335	6-27-21 1335	N	I'M M'
Sample Comments	Sai		TP. Br	Grab/ # of Comp Cont	Time Depth	Date Sampled	n Matrix	Sample Identification
NaOH+Ascorbic Acid SAPC	NaOH+A		H C Ex	D.W	╫	Corrected Temperature		Total Containers.
Zn Acetate+NaOH Zn	Zn Aceta		18 V1	_ أي	-	Temperature Reading	Yes No (N/A)	Sample Custody Seals.
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> NaSO <sub>3</sub>	Na <sub>2</sub> S <sub>2</sub> O <sub>2</sub>		0/			Correction Factor	Yes No (N/A)	Cooler Custody Seals.
NABIS	NaHSO , NABIS		5	TP8		Thermometer ID	(Yes No	Samples Received Intact:
	H, PO . HP		n)	eters	Wet ice (Yes)	Yes (No)	Temp Blank.	SAMPLE RECEIPT
Na HOS	H,50, H,		)	4:30pm	the lab, if received by 4:30pm			PO #
2	וויט וויט			ived by	TAT starts the day received by		Buch O. Smith	Sampler's Name 8
					Due Date		1. 14/11 00	. Josephan / V

Revised Date: 08/25/2020 Rev 2020.2

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 880-5572-1

SDG Number: New Mexico

Login Number: 5572 List Source: Eurofins Xenco, Midland

List Number: 1 Creator: Teel, Brianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

.

2

3

4

6

8

11

13

14

<6mm (1/4").

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Xenco, Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-1501-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

JURAMER

Authorized for release by: 11/8/2021 11:57:43 AM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS .....

Review your project results through

Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 9/1/2023 2:28:53 PM

7

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

6

0

9

1 1

12

10

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-1501-1 SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	21

# **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **Qualifiers**

GC	VOA
Qua	lifier

F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

**Qualifier Description** 

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation	These commonly used abbreviations may or may not be present in this report.							
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis							
%R	Percent Recovery							
CFL	Contains Free Liquid							
CFU	Colony Forming Unit							
CNF	Contains No Free Liquid							
DER	Duplicate Error Ratio (normalized absolute difference)							
Dil Fac	Dilution Factor							
DL	Detection Limit (DoD/DOE)							
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample							
DLC	Decision Level Concentration (Radiochemistry)							

MDA MDC

EDL

LOD

LOQ

MCL

MDC Minimum Detectable Concentration (Radiochemistry)
MDL Method Detection Limit
ML Minimum Level (Dioxin)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit
NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level"
Minimum Detectable Activity (Radiochemistry)

 NEG
 Negative / Absent

 POS
 Positive / Present

 PQL
 Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Xenco, Carlsbad

# **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-1501-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1501-1

#### Receipt

The samples were received on 10/29/2021 12:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

#### **GC VOA**

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS-1 (2) (890-1501-1) and DS-2 (3) (890-1501-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11233 and analytical batch 880-11381 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

1

2

3

5

6

9

10

12

13

14

Matrix: Solid

Lab Sample ID: 890-1501-1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: DS-1 (2)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 10:32	11/01/21 22:08	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 10:32	11/01/21 22:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 10:32	11/01/21 22:08	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 10:32	11/01/21 22:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 10:32	11/01/21 22:08	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 10:32	11/01/21 22:08	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	75		70 - 130				11/01/21 10:32	11/01/21 22:08	
1,4-Difluorobenzene (Surr)	200	S1+	70 - 130				11/01/21 10:32	11/01/21 22:08	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/03/21 12:38	
Method: 8015 NM - Diesel Range									
Analyte	Result	Qualifier	RL 49.9	MDL	Unit ma/Ka	<u>D</u>	Prepared	Analyzed 11/03/21 08:46	
		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/03/21 08:46	
Analyte	Result   <49.9	Qualifier U		MDL		<u>D</u>	<u> </u>		
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <49.9  ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u>D</u>	Prepared	11/03/21 08:46  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u> </u>	<u> </u>	11/03/21 08:46	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (D	Qualifier U  RO) (GC) Qualifier U	49.9		mg/Kg	<u> </u>	Prepared	11/03/21 08:46  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9  ge Organics (Di Result <49.9	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg	<u> </u>	Prepared 11/01/21 14:48	11/03/21 08:46  Analyzed  11/02/21 22:52	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/01/21 14:48 11/01/21 14:48	11/03/21 08:46  Analyzed  11/02/21 22:52  11/02/21 22:52	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/01/21 14:48 11/01/21 14:48 11/01/21 14:48	Analyzed 11/02/21 22:52 11/02/21 22:52	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/01/21 14:48 11/01/21 14:48 11/01/21 14:48 Prepared	Analyzed 11/02/21 22:52 11/02/21 22:52 11/02/21 22:52 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/01/21 14:48 11/01/21 14:48 11/01/21 14:48 Prepared 11/01/21 14:48	Analyzed 11/02/21 22:52 11/02/21 22:52 11/02/21 22:52 Analyzed 11/02/21 22:52	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg		Prepared 11/01/21 14:48 11/01/21 14:48 11/01/21 14:48 Prepared 11/01/21 14:48	Analyzed 11/02/21 22:52 11/02/21 22:52 11/02/21 22:52 Analyzed 11/02/21 22:52	Dil Fac

Client Sample ID: DS-2 (3)
Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 22:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 22:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 22:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 10:32	11/01/21 22:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 22:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 10:32	11/01/21 22:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				11/01/21 10:32	11/01/21 22:36	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1501-2

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-1501-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: DS-2 (3) Lab Sample ID: 890-1501-2

Date Collected: 10/25/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

Sample Depth: 3

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	172	S1+	70 - 130				11/01/21 10:32	11/01/21 22:36	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/03/21 12:38	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1290		250		mg/Kg			11/03/21 08:46	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		11/01/21 14:48	11/02/21 23:14	5
Diesel Range Organics (Over	1290		250		mg/Kg		11/01/21 14:48	11/02/21 23:14	5
C10-C28)									

o-Terphenyl	94	70 - 130			11/01/21 14:48	11/02/21 23:14	5
Method: 300.0 - Anions, Ion Chron	•						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Limits

%Recovery Qualifier

1980

 Chloride
 7010
 100
 mg/Kg
 11/07/21 02:39
 20

 Client Sample ID: DS-3 (2)
 Lab Sample ID: 890-1501-3

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 2

**Total TPH** 

Surrogate

<0.00199 <0.00199	U	0.00199						
<0.00100		0.00100		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
~0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
<0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
<0.00398	U	0.00398		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
<0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
<0.00398	U	0.00398		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
103		70 - 130				11/01/21 10:32	11/01/21 23:03	1
75		70 - 130				11/01/21 10:32	11/01/21 23:03	1
alculation								
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00398	U	0.00398		mg/Kg			11/03/21 12:38	1
	<0.00398 <0.00199 <0.00398  **Recovery  103 75  alculation  Result	<0.00398 U <0.00199 U <0.00398 U  **Recovery Qualifier  103 75	<0.00398 U 0.00398 <0.00199 U 0.00199 <0.00398 U 0.00398 *Recovery Qualifier Limits 70 - 130 75 70 - 130 alculation Result Qualifier RL	<0.00398 U 0.00398 <0.00199 U 0.00199 <0.00398 U 0.00398 *Recovery Qualifier Limits 103 75 70 - 130 alculation Result Qualifier RL MDL	<0.00398	<0.00398	<0.00398	<0.00398

Eurofins Xenco, Carlsbad

11/03/21 08:46

Prepared

Analyzed

Dil Fac

**Matrix: Solid** 

250

mg/Kg

Matrix: Solid

Lab Sample ID: 890-1501-3

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: DS-3 (2)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		11/01/21 14:48	11/02/21 23:37	5
Diesel Range Organics (Over C10-C28)	1980		250		mg/Kg		11/01/21 14:48	11/02/21 23:37	5
Oll Range Organics (Over C28-C36)	<250	U	250		mg/Kg		11/01/21 14:48	11/02/21 23:37	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/01/21 14:48	11/02/21 23:37	5
o-Terphenyl	109		70 - 130				11/01/21 14:48	11/02/21 23:37	5
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
A It A	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	rtoouit						•	•	

2

9

4 4

12

13

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-7749-A-1-C MS	Matrix Spike	86	71	
880-7749-A-1-E MSD	Matrix Spike Duplicate	87	115	
890-1501-1	DS-1 (2)	75	200 S1+	
890-1501-2	DS-2 (3)	86	172 S1+	
890-1501-3	DS-3 (2)	103	75	
LCS 880-11059/1-A	Lab Control Sample	91	100	
LCSD 880-11059/2-A	Lab Control Sample Dup	85	105	
MB 880-11059/5-A	Method Blank	63 S1-	133 S1+	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1495-A-1-H MS	Matrix Spike	99	99
890-1495-A-1-I MSD	Matrix Spike Duplicate	102	115
890-1501-1	DS-1 (2)	104	109
890-1501-2	DS-2 (3)	89	94
890-1501-3	DS-3 (2)	101	109
LCS 880-11158/2-A	Lab Control Sample	101	104
LCSD 880-11158/3-A	Lab Control Sample Dup	90	95
MB 880-11158/1-A	Method Blank	103	114

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-1501-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11059/5-A

**Matrix: Solid** 

**Analysis Batch: 11027** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11059

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 13:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 13:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 13:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 10:32	11/01/21 13:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 10:32	11/01/21 13:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 10:32	11/01/21 13:19	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	63	S1-	70 - 130	11/01/21 10:32	11/01/21 13:19	1
1,4-Difluorobenzene (Surr)	133	S1+	70 - 130	11/01/21 10:32	11/01/21 13:19	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 11059

Lab Sample ID: LCS 880-11059/1-A **Matrix: Solid** Analysis Batch: 11027

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09493 mg/Kg 95 70 - 130 Toluene 0.100 0.09238 mg/Kg 92 70 - 130 0.100 0.08996 90 Ethylbenzene mg/Kg 70 - 130 0.200 92 70 - 130 m-Xylene & p-Xylene 0.1834 mg/Kg 0.100 0.09109 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-11059/2-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Analysis Batch: 11027** 

Prep Type: 1	Γotal/NA
Prep Batcl	n: <b>11059</b>
%Rec.	RPD

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08648		mg/Kg		86	70 - 130	9	35
Toluene	0.100	0.08374		mg/Kg		84	70 - 130	10	35
Ethylbenzene	0.100	0.07988		mg/Kg		80	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1623		mg/Kg		81	70 - 130	12	35
o-Xylene	0.100	0.08108		mg/Kg		81	70 - 130	12	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1.4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-7749-A-1-C MS

**Matrix: Solid** 

Analysis Batch: 11027

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 11059

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F2 F1	0.101	0.03475	F1	mg/Kg		34	70 - 130	
Toluene	< 0.00202	U F2 F1	0.101	0.006187	F1	mg/Kg		6	70 - 130	

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1501-1 SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-7749-A-1-C MS

Matrix: Solid

Analysis Batch: 11027

MS Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 11059

Sample	Sample	Spike	MS	MS				%Rec.	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
<0.00202	U F2 F1	0.101	0.06604	F1	mg/Kg		66	70 - 130	
<0.00403	U F2 F1	0.202	0.1311	F1	mg/Kg		65	70 - 130	
<0.00202	U F2 F1	0.101	0.06867	F1	mg/Kg		68	70 - 130	
	Result <0.00202 <0.00403	•	Result         Qualifier         Added           <0.00202	Result         Qualifier         Added         Result           <0.00202	Result         Qualifier         Added         Result         Qualifier           <0.00202	Result         Qualifier         Added         Result         Qualifier         Unit           <0.00202	Result         Qualifier         Added         Result         Qualifier         Unit         D           <0.00202	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec           <0.00202	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits           <0.00202

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	86	70 - 130
1,4-Difluorobenzene (Surr)	71	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11059

Lab Sample ID: 880-7749-A-1-E MSD Matrix: Solid

Analysis Batch: 11027

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F2 F1	0.0996	0.05940	F2 F1	mg/Kg		59	70 - 130	52	35
Toluene	<0.00202	U F2 F1	0.0996	0.04594	F2 F1	mg/Kg		46	70 - 130	153	35
Ethylbenzene	<0.00202	U F2 F1	0.0996	0.03657	F2 F1	mg/Kg		37	70 - 130	57	35
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.199	0.07219	F2 F1	mg/Kg		36	70 - 130	58	35
o-Xylene	<0.00202	U F2 F1	0.0996	0.04080	F2 F1	mg/Kg		41	70 - 130	51	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-11158/1-A

Matrix: Solid

**Analysis Batch: 11193** 

Client Sample ID: Method Blank	
Prep Type: Total/NA	

Prep Batch: 11158

ricp Batch. 11100

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/01/21 14:48	11/02/21 20:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/01/21 14:48	11/02/21 20:41	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/01/21 14:48	11/02/21 20:41	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	11	1/01/21 14:48	11/02/21 20:41	1
o-Terphenyl	114		70 - 130	11	1/01/21 14:48	11/02/21 20:41	1

Lab Sample ID: LCS 880-11158/2-A

Matrix: Solid

**Analysis Batch: 11193** 

Diesel Range Organics (Over

Client Sample ID:	: Lab Control Sample
	Prep Type: Total/NA

70 - 130

99

Prep Batch: 11158

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 1000 999.0 100 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10

991.9

mg/Kg

C10-C28)

Eurofins Xenco, Carlsbad

1000

5

3

4

6

9

10

12

14

Job ID: 890-1501-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

LCS LCS

%Recovery Qualifier

101

Lab Sample ID: LCS 880-11158/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Surrogate

C10-C28)

1-Chlorooctane

**Analysis Batch: 11193** 

Prep Type: Total/NA

Prep Batch: 11158

Prep Batch: 11158

o-Terphenyl 104 70 - 130

Limits

70 - 130

Lab Sample ID: LCSD 880-11158/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** 

Prep Type: Total/NA Analysis Batch: 11193 Prep Batch: 11158

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 897.3 90 70 - 13011 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1021 102 mg/Kg 70 - 1303 20

LCSD LCSD Surrogate %Recovery Qualifier

Limits 90 70 - 130 1-Chlorooctane 95 70 - 130 o-Terphenyl

Lab Sample ID: 890-1495-A-1-H MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 11193** 

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 997 1026 mg/Kg 103 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 997 964.5 mg/Kg 95 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 99 o-Terphenyl 99 70 - 130

Lab Sample ID: 890-1495-A-1-I MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 11193** Prep Batch: 11158 Sample Sample MSD MSD RPD Spike %Rec.

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U 1000 1156 Gasoline Range Organics <49.9 mg/Kg 116 70 - 130 12 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1000 975.7 mg/Kg 95 70 - 130 20

C10-C28)

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 102 70 - 130 115 70 - 130 o-Terphenyl

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1501-1 SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11233/1-A

**Matrix: Solid** 

**Analysis Batch: 11381** 

Client Sample ID: Method Blank **Prep Type: Soluble** 

mg/Kg

92

90 - 110

Client Sample ID: Matrix Spike Duplicate

**Prep Type: Soluble** 

мв мв Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/07/21 01:48

229.5

Lab Sample ID: LCS 880-11233/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11381** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits

250

Lab Sample ID: LCSD 880-11233/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11381

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 233.0 mg/Kg 90 - 110

Lab Sample ID: 880-7551-A-2-E MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Chloride

**Analysis Batch: 11381** 

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits 12500 Chloride 17400 35790 F1 148 90 - 110 mg/Kg

Lab Sample ID: 880-7551-A-2-F MSD

**Matrix: Solid** 

**Analysis Batch: 11381** 

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 17400 F1 12500 35360 F1 mg/Kg 144 90 - 110 20

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **GC VOA**

## **Analysis Batch: 11027**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	8021B	11059
890-1501-2	DS-2 (3)	Total/NA	Solid	8021B	11059
890-1501-3	DS-3 (2)	Total/NA	Solid	8021B	11059
MB 880-11059/5-A	Method Blank	Total/NA	Solid	8021B	11059
LCS 880-11059/1-A	Lab Control Sample	Total/NA	Solid	8021B	11059
LCSD 880-11059/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11059
880-7749-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	11059
880-7749-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	11059

## Prep Batch: 11059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	5035	<u> </u>
890-1501-2	DS-2 (3)	Total/NA	Solid	5035	
890-1501-3	DS-3 (2)	Total/NA	Solid	5035	
MB 880-11059/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11059/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11059/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-7749-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-7749-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## **Analysis Batch: 11149**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	Total BTEX	
890-1501-2	DS-2 (3)	Total/NA	Solid	Total BTEX	
890-1501-3	DS-3 (2)	Total/NA	Solid	Total BTEX	

# **GC Semi VOA**

## Prep Batch: 11158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	8015NM Prep	
890-1501-2	DS-2 (3)	Total/NA	Solid	8015NM Prep	
890-1501-3	DS-3 (2)	Total/NA	Solid	8015NM Prep	
MB 880-11158/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11158/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11158/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1495-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1495-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## **Analysis Batch: 11193**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	8015B NM	11158
890-1501-2	DS-2 (3)	Total/NA	Solid	8015B NM	11158
890-1501-3	DS-3 (2)	Total/NA	Solid	8015B NM	11158
MB 880-11158/1-A	Method Blank	Total/NA	Solid	8015B NM	11158
LCS 880-11158/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11158
LCSD 880-11158/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11158
890-1495-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	11158
890-1495-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	11158

Eurofins Xenco, Carlsbad

Page 13 of 22

Released to Imaging: 9/1/2023 2:28:53 PM

2

3

4

6

Ω

9

10

12

# **QC Association Summary**

Client: Tetra Tech, Inc. Job ID: 890-1501-1 Project/Site: Kaiser SWD SDG: Lea County NM

# GC Semi VOA

## Analysis Batch: 11344

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
DS-1 (2)	Total/NA	Solid	8015 NM	
DS-2 (3)	Total/NA	Solid	8015 NM	
DS-3 (2)	Total/NA	Solid	8015 NM	
	DS-1 (2) DS-2 (3)	DS-1 (2) Total/NA DS-2 (3) Total/NA	DS-1 (2)         Total/NA         Solid           DS-2 (3)         Total/NA         Solid	DS-1 (2)         Total/NA         Solid         8015 NM           DS-2 (3)         Total/NA         Solid         8015 NM

## **HPLC/IC**

## Leach Batch: 11233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Soluble	Solid	DI Leach	<del></del> .
890-1501-2	DS-2 (3)	Soluble	Solid	DI Leach	
890-1501-3	DS-3 (2)	Soluble	Solid	DI Leach	
MB 880-11233/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11233/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11233/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-7551-A-2-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-7551-A-2-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## **Analysis Batch: 11381**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Soluble	Solid	300.0	11233
890-1501-2	DS-2 (3)	Soluble	Solid	300.0	11233
890-1501-3	DS-3 (2)	Soluble	Solid	300.0	11233
MB 880-11233/1-A	Method Blank	Soluble	Solid	300.0	11233
LCS 880-11233/2-A	Lab Control Sample	Soluble	Solid	300.0	11233
LCSD 880-11233/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11233
880-7551-A-2-E MS	Matrix Spike	Soluble	Solid	300.0	11233
880-7551-A-2-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	11233

Job ID: 890-1501-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: DS-1 (2) Lab Sample ID: 890-1501-1

Date Collected: 10/25/21 00:00 **Matrix: Solid** Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11059	11/01/21 10:32	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11027	11/01/21 22:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11149	11/03/21 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11344	11/03/21 08:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11158	11/01/21 14:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11193	11/02/21 22:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		1			11381	11/07/21 02:32	CH	XEN MID

Client Sample ID: DS-2 (3) Lab Sample ID: 890-1501-2 Date Collected: 10/25/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11059	11/01/21 10:32	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11027	11/01/21 22:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11149	11/03/21 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11344	11/03/21 08:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11158	11/01/21 14:48	DM	XEN MID
Total/NA	Analysis	8015B NM		5			11193	11/02/21 23:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		20			11381	11/07/21 02:39	CH	XEN MID

Client Sample ID: DS-3 (2) Lab Sample ID: 890-1501-3 Date Collected: 10/25/21 00:00 **Matrix: Solid** 

Dil Final Batch Batch Initial Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5035 5.02 g 5 mL 11059 11/01/21 10:32 MR XEN MID Total/NA Analysis 8021B 5 mL 5 mL 11027 11/01/21 23:03 MR XEN MID Total/NA Analysis Total BTEX 11149 11/03/21 12:38 A.I XEN MID 1 Total/NA Analysis 8015 NM 11344 11/03/21 08:46 ΑJ XEN MID Total/NA Prep 8015NM Prep 10.01 g 10 mL 11158 11/01/21 14:48 DM XEN MID Total/NA Analysis 8015B NM 5 11193 11/02/21 23:37 XEN MID ΑJ Soluble Leach DI Leach 5.05 g 50 mL 11233 11/02/21 12:00 CH XEN MID Soluble Analysis 300.0 10 11381 11/07/21 02:47 CH XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	it the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for wh
the agency does not of	fer certification.	•	, , ,	.,
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	-,
0 ,		Matrix Solid	Analyte Total TPH	

4

5

8

10

12

13

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1501-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Л

5

7

10

11

13

# Sample Summary

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1501-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-1501-1	DS-1 (2)	Solid	10/25/21 00:00	10/29/21 12:45	2
890-1501-2	DS-2 (3)	Solid	10/25/21 00:00	10/29/21 12:45	3
890-1501-3	DS-3 (2)	Solid	10/25/21 00:00	10/29/21 12:45	2

3

4

5

0

8

4.6

11

16

Tetra Tech, Inc.    Tetra Tech, Inc.	Relinquished by:	Relinquished by:						( LAB USE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Sampler Symbol   Samp		10/29/21 Date: Ti			DS-3 (2')	DS-2 (3')	DS-1 (2')		SAMPLE IDENTIFICATION				Dusty McInturff -	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Colair Gonzales   Fax   WATER   WATE	Received by:	Received by:  Received by:			10/25/2021	10/25/2021	10/25/2021		YEAR: 2020	SAMPLING		Sampler Signature:	াড	Project #:		Site Manager:	·
FILTERED (Y/N)  ANALYSIS REQUEST    Sample   Temperature   Sample   Temperature   Sample   Temperature   Sample   Temperature	Date:	Date: Time:						WATER SOIL HCL HNO <sub>3</sub> ICE	1	MATRIX		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	9)1W W8II Siteel: Site 100 Midland,Texas 79705 Tel (432) 882-4559 Fex (432) 882-3946
DEX USH: STANDARD  STANDAR	CCITCIO) HAND DELIVERED	ONLY Sample Temperature						FILTERE BTEX 80 TPH TX1 TPH 801 PAH 827 Total Met TCLP Me	D21B 1005 (15M (170C) tals A etals A	BTE Ext to GRO-	C35) DRO - 0 a Cd Cr	ORO - I	Hg				
	Rush Charges Authorized Special Report Limits or TRRP Report FEDEX UPS Tracking #:	STANDARD			×	×	×	RCI GC/MS V GC/MS S PCB's 80 NORM PLM (Asi Chloride Chloride General	/ol. 8 Semi. 082 / besto Su	260B / Vol. 8 608 s)	TDS mistry (s		ached l	ist)		r Specify Method N	

1089 N Canal St

**Eurofins Xenco, Carlsbad** 

Chain of Custody Record

🛟 eurofins

**Environment Testing** 

State Zip TX 79701 DS-2 (3) (890-1501-2) DS-1 (2) (890-1501-1) Sample Identification - Client ID (Lab ID) Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC.

attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. DS-3 (2) (890-1501-3) Project Name Kaiser SWD 432-704-5440(Tel) Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199 ossible Hazard Identification Shipping/Receiving /lidland Slient Information eliverable Requested 1 II III IV Other (specify) mpty Kit Relinquished by 211 W Florida Ave linquished by nquished by inquished by rofins Xenco (Sub Contract Lab) Custody Seal No O Date/Time TAT Requested (days) Due Date Requested 11/4/2021 Date/Time Primary Deliverable Rank 2 88000039 NO# Phone roject #: 10/25/21 10/25/21 10/25/21 Mountain Mountain Mountain Sample (C=comp, G=grab) Sample Preservation Code: Type Company Company Company Matrix Solid Solid Solid Kramer Jessica E-Mail essica kramer@eurofinset.com Field Filtered Sample (Yes or No) NELAP - Louisiana, NELAP - Texas ime Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month Perform MS/MSD (Yes or No) Special Instructions/QC Requirements 8016MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks. Received by: × × × 8021B/5035FP\_Calc BTEX × ×  $\times$ × 300\_ORGFM\_28D/DI\_LEACH Chloride ×  $\times$ × × × Total\_BTEX\_GCV Analysis Requested 8015MOD\_Calc ×  $\times$ × Disposal By Lab State of Origin: New Mexico Carrier Tracking No(s) Method of Shipment Ŝ 6 Date/Time 0 Archive For Total Number of containers 890-1501-1 Preservation ( COC No: 890-488 1 **±**0 ¬поо∞> Page 1 of 1 Ice
I DI Water
EDTA
EDA 2n Acetate
Nitric Acid
NaHSO4
MeOH
Ascorbic Acid 된 Special Instructions/Note Compan) Company M Hexane
V None
D AsNaO2
Na2O4S
Na2O4S
Na2SO3
Na2SC3
R Na2SC3
S H2SO4
T TSP Dodecahydrate
J Acetone
J Acetone Ver: 06/08/202 **Months** 

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-1501-1

SDG Number: Lea County NM

Login Number: 1501 List Source: Eurofins Xenco, Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

5

6

ŏ

10

12

13

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-1501-1 SDG Number: Lea County NM

List Source: Eurofins Xenco, Midland

List Creation: 11/01/21 08:46 AM

Creator: Kramer, Jessica

Login Number: 1501 List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6/2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Released to Imaging: 9/1/2023 2:28:53 PM

<6mm (1/4").



# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Xenco, Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-1770-1

Laboratory Sample Delivery Group: Lea County New Mexico Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

MEAMER

Authorized for release by: 1/4/2022 2:38:20 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

Review your project results through

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 2:28:53 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

**5** 

7

8

4 0

4.0

13

Client: Tetra Tech, Inc.

Laboratory Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	12
QC Sample Results	13
QC Association Summary	20
Lab Chronicle	23
Certification Summary	26
Method Summary	27
Sample Summary	28
Chain of Custody	29
Receipt Chacklists	30

2

3

4

6

8

10

11

13

# **Definitions/Glossary**

Job ID: 890-1770-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County New Mexico

**Qualifiers** 

**GC VOA** Qualifier

F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits S1-Surrogate recovery exceeds control limits, low biased. S1+ Surrogate recovery exceeds control limits, high biased.

Indicates the analyte was analyzed for but not detected.

**Qualifier Description** 

GC Semi VOA

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Qualifier Description F1 MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report. Listed under the "D" column to designate that the result is reported on a dry weight basis

Percent Recovery %R

CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac Dilution Factor

Detection Limit (DoD/DOE) DL

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

**Practical Quantitation Limit PQL** 

**PRES** Presumptive **Quality Control** QC

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) TEQ

**TNTC** Too Numerous To Count

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Job ID: 890-1770-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1770-1

#### Receipt

The samples were received on 12/28/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

#### **GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15736 and analytical batch 880-15788 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SW-3 (890-1770-2), SW-10 (890-1770-7) and (880-9746-A-1-D). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15746 and analytical batch 880-15825 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-15803 and analytical batch 880-15920 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

3

4

6

7

\_

10

10

13

Lab Sample ID: 890-1770-1

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Client Sample ID: SW-1

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/29/21 14:29	12/30/21 20:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/29/21 14:29	12/30/21 20:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				12/29/21 14:29	12/30/21 20:30	1
1,4-Difluorobenzene (Surr)	79		70 - 130				12/29/21 14:29	12/30/21 20:30	1
- Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/04/22 15:22	1
		O) (GC)							
Analyta			DI	MDI	Unit	n	Dronored	Anglyzad	Dil Eoo
<u> </u>		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 01/03/22 14:33	
Analyte Total TPH	Result	Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared		
Total TPH		Qualifier U		MDL		<u>D</u>	Prepared		
Total TPH	Result <49.9  ge Organics (Di	Qualifier U				<u>D</u>	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			01/03/22 14:33	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	Result <49.9  ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U F1	49.9		mg/Kg		Prepared	01/03/22 14:33  Analyzed	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D) Result <49.9  49.9	Qualifier U  RO) (GC) Qualifier U F1	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 12/29/21 15:34	01/03/22 14:33  Analyzed  12/31/21 21:44	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range	ge Organics (D) Result <49.9  49.9	Qualifier U  RO) (GC) Qualifier U F1  U F1	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 12/29/21 15:34	01/03/22 14:33  Analyzed  12/31/21 21:44	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34	01/03/22 14:33  Analyzed  12/31/21 21:44  12/31/21 21:44	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34 12/29/21 15:34	01/03/22 14:33  Analyzed 12/31/21 21:44 12/31/21 21:44	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34 12/29/21 15:34 Prepared	01/03/22 14:33  Analyzed  12/31/21 21:44  12/31/21 21:44  12/31/21 21:44  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1 U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34 12/29/21 15:34  Prepared 12/29/21 15:34	01/03/22 14:33  Analyzed  12/31/21 21:44  12/31/21 21:44  Analyzed  12/31/21 21:44	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1 U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34 12/29/21 15:34  Prepared 12/29/21 15:34	01/03/22 14:33  Analyzed  12/31/21 21:44  12/31/21 21:44  Analyzed  12/31/21 21:44	Dil Fac  1  Dil Fac

**Client Sample ID: SW-3** 

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130				12/29/21 14:29	12/30/21 20:50	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1770-2

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

**Client Sample ID: SW-3** Lab Sample ID: 890-1770-2

Date Collected: 12/23/21 00:00 Matrix: Solid Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

wetne	oa: 8021B -	volatile Org	janic Compo	ounas (GC)	(Continue	a)	
_			٠				

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104	70 - 130	12/29/21 14:29	12/30/21 20:50	1

## **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			_	01/04/22 15:22	1

Method: 8015 NM - Diesel Range	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			01/04/22 15:21	1

lotal II II	-00.0 0	30.0	mg/rtg			01/04/22 10:21	
Method: 8015B NM - Diesel Range	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0 U	50.0	ma/Ka		12/29/21 15:34	12/31/21 22:46	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	12/29/21 15:34	12/31/21 22:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	12/29/21 15:34	12/31/21 22:46	1
(GRO)-C6-C10	.00.0	J	00.0	g/ivg	12/20/21 10:01	12/01/21 22:10	·
Gasoline Range Organics	<50.0	U	50.0	mg/Kg	12/29/21 15:34	12/31/21 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	12/29/21 15	12/31/21 22:46	1
o-Terphenyl	116		70 - 130	12/29/21 15	34 12/31/21 22:46	1

Method: 300.0 - Anions, Ion	Chromatography - Soluble
A I4	DII 0III

Analyte		Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	341	4.95		mg/Kg	_		01/03/22 18:07	1

Client Sample ID: SW-6 Lab Sample ID: 890-1770-3 **Matrix: Solid** 

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Mothod: 9021D	Volatile Organie	Compounds (GC)
Melliou. Ouz ID -	voiatile Organic	Compounds (GC)

Method: 8021B - Volatile Orga	inic Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/29/21 14:29	12/30/21 21:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/29/21 14:29	12/30/21 21:10	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		12/29/21 14:29	12/30/21 21:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/29/21 14:29	12/30/21 21:10	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		12/29/21 14:29	12/30/21 21:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/29/21 14:29	12/30/21 21:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				12/29/21 14:29	12/30/21 21:10	1
1,4-Difluorobenzene (Surr)	104		70 - 130				12/29/21 14:29	12/30/21 21:10	1

١						
	1,4-Difluorobenzene (Surr)	104	70 - 130	12/29/21 14:29	12/30/21 21:10	1
	4-Bromofluorobenzene (Surr)	124	70 - 130	12/29/21 14:29	12/30/21 21:10	1

# **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg		_	01/04/22 15:22	1

Mathed COAFNM Diseas	D	(DDO) (OO)
Method: 8015 NM - Diesel	Range Organics	(DKO) (GC)

Analyte	Result Quali	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			01/04/22 15:21	1

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

**Client Sample ID: SW-6** 

Lab Sample ID: 890-1770-3 Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:06	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				12/29/21 15:34	12/31/21 23:06	1
o-Terphenyl	101		70 - 130				12/29/21 15:34	12/31/21 23:06	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4800		49.8		mg/Kg			01/03/22 17:31	10

**Client Sample ID: SW-7** Lab Sample ID: 890-1770-4

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 21:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 21:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 21:31	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/29/21 14:29	12/30/21 21:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 21:31	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/29/21 14:29	12/30/21 21:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				12/29/21 14:29	12/30/21 21:31	1
1,4-Difluorobenzene (Surr)	90		70 - 130				12/29/21 14:29	12/30/21 21:31	1
Method: Total BTEX - Total BTE)	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/04/22 15:22	1
•			0.00.0.		5 5			0 0	
Method: 8015 NM - Diesel Range			0.00 .0 .		3 3			0.00.0.22	
• ***	Organics (DR		RL	MDL	Unit	D	Prepared	Analyzed	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte	Organics (DR) Result <a href="https://www.eps.com/result-value-">&lt;49.9</a>	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR Result <49.9	O) (GC) Qualifier	RL		Unit	D_	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR Result <49.9	Qualifier U  RO) (GC) Qualifier	<b>RL</b> 49.9		Unit mg/Kg		<u> </u>	Analyzed 01/04/22 15:21	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <49.9 ge Organics (DI Result	Qualifier U  RO) (GC) Qualifier U  Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed 01/04/22 15:21 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <49.9 ge Organics (DI Result <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U  U	RL 49.9 RL 49.9		Unit mg/Kg  Unit mg/Kg		Prepared 12/29/21 15:34	Analyzed 01/04/22 15:21  Analyzed 12/31/21 23:27	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR Result <49.9 ge Organics (DR Result <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34	Analyzed 01/04/22 15:21  Analyzed 12/31/21 23:27 12/31/21 23:27	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR Result <49.9 ge Organics (DR Result <49.9 <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U  U	RL 49.9  RL 49.9  49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 12/29/21 15:34 12/29/21 15:34 12/29/21 15:34	Analyzed 01/04/22 15:21  Analyzed 12/31/21 23:27 12/31/21 23:27 12/31/21 23:27	Dil Fac  Dil Fac  1

**Matrix: Solid** 

01/03/22 17:39

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

**Client Sample ID: SW-7** Lab Sample ID: 890-1770-4

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30 Sample Depth: 0 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Dil Fac Analyte RL MDL Unit D Prepared Analyzed

50.0 Client Sample ID: SW-8 Lab Sample ID: 890-1770-5

mg/Kg

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

2400

Sample Depth: 0 - 4

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				12/29/21 14:29	12/30/21 21:51	1
1,4-Difluorobenzene (Surr)	89		70 - 130				12/29/21 14:29	12/30/21 21:51	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	_	mg/Kg			01/04/22 15:22	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 23:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 23:48	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				12/29/21 15:34	12/31/21 23:48	1
o-Terphenyl	116		70 - 130				12/29/21 15:34	12/31/21 23:48	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9820		50.0		mg/Kg			12/31/21 10:48	10

Lab Sample ID: 890-1770-6

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Client Sample ID: SW-9

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				12/29/21 14:29	12/30/21 22:12	1
1,4-Difluorobenzene (Surr)	75		70 - 130				12/29/21 14:29	12/30/21 22:12	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			01/04/22 15:22	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1
Method: 8015B NM - Diesel Rang	ge Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				12/29/21 15:34	01/01/22 00:09	1
o-Terphenyl	108		70 - 130				12/29/21 15:34	01/01/22 00:09	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							

**Client Sample ID: SW-10** 

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 22:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 22:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 22:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/29/21 14:29	12/30/21 22:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 22:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/29/21 14:29	12/30/21 22:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	167	S1+	70 - 130				12/29/21 14:29	12/30/21 22:32	1

5.01

380

mg/Kg

Eurofins Xenco, Carlsbad

12/31/21 10:57

Lab Sample ID: 890-1770-7

Matrix: Solid

2

4

6

8

10

12

1 <u>/</u>

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Client Sample ID: SW-10

Lab Sample ID: 890-1770-7

Parts Callanted to 10/20/24 20:202

Date Collected: 12/23/21 00:00

Date Received: 12/28/21 10:30

Matrix: Solid

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
--	------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	123	70 - 130	12/29/21 14:29	12/30/21 22:32	1

Method: Total	BTEX - Total	BTEX Calculation	าท

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTFX	<0.00402 U	0.00402	ma/Ka		·	01/04/22 15:22	1

Mothod: 2015 NM	Diccol Pango	Organice	(DPO) (GC)

Analyte	Result Qua	lifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0 U	50.0	ma/Ka			01/04/22 15:21	1	

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:30	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97	70 - 130	12/29/21 15:34	01/01/22 00:30	1
o-Terphenyl	113	70 - 130	12/29/21 15:34	01/01/22 00:30	1

Analyte	Result C	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Chloride	354		4.98		mg/Kg			12/31/21 11:05	1

Client Sample ID: SW-11 Lab Sample ID: 890-1770-8

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

	- ()								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/02/22 04:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/02/22 04:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/02/22 04:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/30/21 14:12	01/02/22 04:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/02/22 04:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/30/21 14:12	01/02/22 04:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130				12/30/21 14:12	01/02/22 04:00	1
1,4-Difluorobenzene (Surr)	89		70 - 130				12/30/21 14:12	01/02/22 04:00	1

Method:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401		ma/Ka			01/04/22 15:22	1

Analyte	Result Qual	ifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			01/04/22 15:21	1

Eurofins Xenco, Carlsbad

2

3

5

7

9

4.6

13

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

**Client Sample ID: SW-11** Lab Sample ID: 890-1770-8

Date Collected: 12/23/21 00:00 Matrix: Solid Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/29/21 15:34	01/01/22 00:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	01/01/22 00:50	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	01/01/22 00:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				12/29/21 15:34	01/01/22 00:50	1
o-Terphenyl	109		70 - 130				12/29/21 15:34	01/01/22 00:50	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-9746-A-1-B MS	Matrix Spike	124	79	
880-9746-A-1-C MSD	Matrix Spike Duplicate	116	92	
880-9746-A-6-G MS	Matrix Spike	127	111	
880-9746-A-6-H MSD	Matrix Spike Duplicate	127	106	
890-1770-1	SW-1	122	79	
890-1770-2	SW-3	131 S1+	104	
890-1770-3	SW-6	124	104	
890-1770-4	SW-7	128	90	
890-1770-5	SW-8	129	89	
890-1770-6	SW-9	126	75	
890-1770-7	SW-10	167 S1+	123	
890-1770-8	SW-11	156 S1+	89	
LCS 880-15736/1-A	Lab Control Sample	144 S1+	110	
LCS 880-15812/1-A	Lab Control Sample	121	0 S1-	
LCSD 880-15736/2-A	Lab Control Sample Dup	109	99	
LCSD 880-15812/2-A	Lab Control Sample Dup	143 S1+	117	
MD 000 45700/5 A	Method Blank	103	105	
MB 880-15736/5-A		90	87	

BFB = 4-Bromofluorobenzene (Surr) DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1770-1	SW-1	98	113	
890-1770-1 MS	SW-1	86	87	
890-1770-1 MSD	SW-1	87	88	
890-1770-2	SW-3	101	116	
890-1770-3	SW-6	90	101	
890-1770-4	SW-7	93	108	
890-1770-5	SW-8	100	116	
890-1770-6	SW-9	92	108	
890-1770-7	SW-10	97	113	
890-1770-8	SW-11	95	109	
LCS 880-15746/2-A	Lab Control Sample	112	108	
LCSD 880-15746/3-A	Lab Control Sample Dup	100	96	
MB 880-15746/1-A	Method Blank	108	132 S1+	

1CO = 1-Chlorooctane OTPH = o-Terphenyl

# **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1770-1 SDG: Lea County New Mexico Project/Site: Kaiser SWD

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15736/5-A

Analysis Batch: 15788

**Matrix: Solid** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15736

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	
Toluene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/29/21 14:29	12/30/21 14:42	
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/29/21 14:29	12/30/21 14:42	

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	 12/29/21 14:29	12/30/21 14:42	1
1,4-Difluorobenzene (Surr)	105		70 - 130	12/29/21 14:29	12/30/21 14:42	1

Lab Sample ID: LCS 880-15736/1-A

Matrix: Solid

**Analysis Batch: 15788** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15736

	<b>Spike</b>	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08657		mg/Kg		87	70 - 130	
Toluene	0.100	0.09264		mg/Kg		93	70 - 130	
Ethylbenzene	0.100	0.09669		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	0.200	0.2048		mg/Kg		102	70 - 130	
o-Xylene	0.100	0.1026		mg/Kg		103	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-15736/2-A

Matrix: Solid

Analysis Batch: 15788

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 15736

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.07239		mg/Kg		72	70 - 130	18	35	
Toluene	0.100	0.07560		mg/Kg		76	70 - 130	20	35	
Ethylbenzene	0.100	0.07364		mg/Kg		74	70 - 130	27	35	
m-Xylene & p-Xylene	0.200	0.1618		mg/Kg		81	70 - 130	23	35	
o-Xylene	0.100	0.08266		mg/Kg		83	70 - 130	22	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1.4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-9746-A-1-B MS

Matrix: Solid

Analysis Batch: 15788

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 15736

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.101	0.05309	F1	mg/Kg		53	70 - 130	
Toluene	<0.00200	U F1	0.101	0.06625	F1	mg/Kg		66	70 - 130	

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

# QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-9746-A-1-B MS

**Matrix: Solid** 

**Analysis Batch: 15788** 

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15736

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U 0.101 0.07124 71 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00399 UF1 0.202 0.1407 mg/Kg 70 70 - 130 <0.00200 U 0.101 0.07366 o-Xylene mg/Kg 73 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15736

Lab Sample ID: 880-9746-A-1-C MSD **Matrix: Solid** 

**Analysis Batch: 15788** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.100	0.05242	F1	mg/Kg		52	70 - 130	1	35
Toluene	<0.00200	U F1	0.100	0.06213	F1	mg/Kg		62	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.100	0.07132		mg/Kg		71	70 - 130	0	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1372	F1	mg/Kg		69	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.07030		mg/Kg		70	70 - 130	5	35

MSD MSD

Surrogate	%Recovery Qu	ıalifier Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1,4-Difluorobenzene (Surr)	92	70 - 130

Lab Sample ID: MB 880-15812/5-A

**Matrix: Solid** 

Analysis Batch: 15844

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 15812

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/01/22 21:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/01/22 21:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/01/22 21:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/30/21 14:12	01/01/22 21:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/30/21 14:12	01/01/22 21:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/30/21 14:12	01/01/22 21:46	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	12/30/21 14:12	01/01/22 21:46	1
1,4-Difluorobenzene (Surr)	87		70 - 130	12/30/21 14:12	01/01/22 21:46	1

Lab Sample ID: LCS 880-15812/1-A

**Matrix: Solid** 

Analysis Batch: 15844

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 15812

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09353		mg/Kg		94	70 - 130	
Toluene	0.100	0.08852		mg/Kg		89	70 - 130	
Ethylbenzene	0.100	0.07882		mg/Kg		79	70 - 130	
m-Xylene & p-Xylene	0.200	0.1608		mg/Kg		80	70 - 130	

Lab Sample ID: LCS 880-15812/1-A

**Matrix: Solid** 

Surrogate

**Matrix: Solid** 

Analysis Batch: 15844

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Job ID: 890-1770-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 15812

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits D o-Xylene 0.100 0.07679 70 - 130 mg/Kg

LCS LCS %Recovery Qualifier Limits 121 70 - 130 70 - 130

0 S1-

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15812

Prep Batch: 15812

**Analysis Batch: 15844** 

Lab Sample ID: LCSD 880-15812/2-A

Spike LCSD LCSD RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Benzene 0.100 0.07182 mg/Kg 72 70 - 130 26 35 Toluene 0.100 0.08616 mg/Kg 86 70 - 130 3 35 Ethylbenzene 0.100 0.08216 mg/Kg 82 70 - 130 4 35 35 m-Xylene & p-Xylene 0.200 0.1660 mg/Kg 83 70 - 130 o-Xylene

0.100 0.08149 mg/Kg 81 70 - 130

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 143 S1+ 70 - 130 1,4-Difluorobenzene (Surr) 117 70 - 130

Lab Sample ID: 880-9746-A-6-G MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 15844

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F1	0.0994	0.06266	F1	mg/Kg		63	70 - 130	
Toluene	<0.00202	U F2 F1	0.0994	0.06389	F1	mg/Kg		64	70 - 130	
Ethylbenzene	<0.00202	U F1	0.0994	0.06876	F1	mg/Kg		69	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1390		mg/Kg		70	70 - 130	
o-Xylene	<0.00202	U F1	0.0994	0.06885	F1	mg/Kg		69	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 127 70 - 130 1,4-Difluorobenzene (Surr) 111

Lab Sample ID: 880-9746-A-6-H MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 15844

Prep Batch: 15812

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F1	0.0998	0.06980		mg/Kg		70	70 - 130	11	35
Toluene	<0.00202	U F2 F1	0.0998	0.007273	F2 F1	mg/Kg		7	70 - 130	159	35
Ethylbenzene	<0.00202	U F1	0.0998	0.06958		mg/Kg		70	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1399		mg/Kg		70	70 - 130	1	35
o-Xylene	<0.00202	U F1	0.0998	0.06893	F1	mg/Kg		69	70 - 130	0	35

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Med Med

Lab Sample ID: 880-9746-A-6-H MSD

**Matrix: Solid** 

Analysis Batch: 15844

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Prep Batch: 15812

	IVI JUST IV	เจบ	
Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1.4-Difluorobenzene (Surr)	106		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-15746/1-A

**Matrix: Solid** 

**Analysis Batch: 15825** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15746

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 20:42	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 20:42	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 20:42	1
	440	440							
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane 70 - 130 12/29/21 15:34 12/31/21 20:42 108 12/31/21 20:42 o-Terphenyl 132 S1+ 70 - 130 12/29/21 15:34

Lab Sample ID: LCS 880-15746/2-A

**Matrix: Solid** 

**Analysis Batch: 15825** 

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 15746

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	941.7		mg/Kg		94	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1152		mg/Kg		115	70 - 130	
C10-C28)								

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	112	70 - 130
o-Terphenvl	108	70 - 130

Lab Sample ID: LCSD 880-15746/3-A

**Matrix: Solid** 

Analysis Batch: 15825

<b>Client Sample</b>	ID: Lab	Control	Sample	Dup
----------------------	---------	---------	--------	-----

Prep Type: Total/NA

Prep Batch: 15746

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	888.9		mg/Kg		89	70 - 130	6	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1107		mg/Kg		111	70 - 130	4	20
C10-C28)									

Surrogate	%Recovery G	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	96		70 - 130

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1770-1 MS

**Matrix: Solid** 

Analysis Batch: 15825

Client Sample ID: SW-1
Prep Type: Total/NA
Prep Batch: 15746

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 UF1 996 484.2 F1 mg/Kg 46 70 - 130 (GRO)-C6-C10 996 Diesel Range Organics (Over <49.9 UF1 456.9 F1 70 - 130 mg/Kg 46 C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-1770-1 MSD

**Matrix: Solid** 

**Analysis Batch: 15825** 

Client Sample	ID: SW-1
Pren Tyne:	Total/NA

Prep Batch: 15746

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U F1	999	495.1	F1	mg/Kg		47	70 - 130	2	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U F1	999	467.3	F1	mg/Kg		47	70 - 130	2	20
C10-C28)											

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 87 70 - 130 o-Terphenyl 88 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15755/1-A

**Matrix: Solid** 

Analysis Batch: 15821

Client Sample ID:	Method Blank
-------------------	--------------

**Prep Type: Soluble** 

MB MB

Analyte	Result	Qualifier	RL	MDL			Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/31/21 07:03	1

Lab Sample ID: LCS 880-15755/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15821

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 	250	249.8	-	ma/Ka		100	90 - 110	

Lab Sample ID: LCSD 880-15755/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15821

	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier U	lnit D	%Rec	Limits	RPD	Limit
Chloride	250	253.3	m	ng/Kg	101	90 - 110	1	20

Job ID: 890-1770-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-9745-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15821

Sample Sample MS MS %Rec. Spike Qualifier Analyte Result Added Result Qualifier %Rec Limits Unit D Chloride 274 2500 2976 mg/Kg 108 90 - 110

Lab Sample ID: 880-9745-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15821** 

Sample Sample Spike MSD MSD %Rec. RPD Qualifier Analyte Result Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 274 2500 2966 mg/Kg 108 90 - 110 n

Lab Sample ID: 880-9747-A-3-D MS Client Sample ID: Matrix Spike

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15821** 

MS MS Spike %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits

Chloride <5.04 U 252 262.9 mg/Kg 103 90 - 110

Lab Sample ID: 880-9747-A-3-E MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15821** 

MSD MSD RPD Sample Sample Spike %Rec. Qualifier Added Limit Analyte Result Result Qualifier Unit %Rec Limits RPD Chloride <5.04 252 259.9 101 90 - 110 20 mg/Kg

Lab Sample ID: MB 880-15803/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15920

MR MR Analyte Result Qualifier RL MDL Unit

Prepared Analyzed Dil Fac 5.00 Chloride <5.00 U mg/Kg 01/03/22 16:56

Lab Sample ID: LCS 880-15803/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15920** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Chloride 250 245.5 mg/Kg 90 - 110

Lab Sample ID: LCSD 880-15803/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 15920** 

LCSD LCSD RPD Spike %Rec. Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 250 239.6 mg/Kg 96 90 - 110 20

Lab Sample ID: 890-1770-1 MS Client Sample ID: SW-1 **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 15920** 

Spike MS MS %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 287 F1 250 527.7 mg/Kg 97 90 - 110

# **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1770-1 MSD **Client Sample ID: SW-1 Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15920

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	287	F1	250	505.3	F1	mg/Kg		88	90 - 110	4	20

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

# **GC VOA**

# Prep Batch: 15736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	5035	
890-1770-2	SW-3	Total/NA	Solid	5035	
890-1770-3	SW-6	Total/NA	Solid	5035	
890-1770-4	SW-7	Total/NA	Solid	5035	
890-1770-5	SW-8	Total/NA	Solid	5035	
890-1770-6	SW-9	Total/NA	Solid	5035	
890-1770-7	SW-10	Total/NA	Solid	5035	
MB 880-15736/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15736/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15736/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9746-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-9746-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 15788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8021B	15736
890-1770-2	SW-3	Total/NA	Solid	8021B	15736
890-1770-3	SW-6	Total/NA	Solid	8021B	15736
890-1770-4	SW-7	Total/NA	Solid	8021B	15736
890-1770-5	SW-8	Total/NA	Solid	8021B	15736
890-1770-6	SW-9	Total/NA	Solid	8021B	15736
890-1770-7	SW-10	Total/NA	Solid	8021B	15736
MB 880-15736/5-A	Method Blank	Total/NA	Solid	8021B	15736
LCS 880-15736/1-A	Lab Control Sample	Total/NA	Solid	8021B	15736
LCSD 880-15736/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15736
880-9746-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	15736
880-9746-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15736

## Prep Batch: 15812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-8	SW-11	Total/NA	Solid	5035	
MB 880-15812/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15812/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15812/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9746-A-6-G MS	Matrix Spike	Total/NA	Solid	5035	
880-9746-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 15844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-8	SW-11	Total/NA	Solid	8021B	15812
MB 880-15812/5-A	Method Blank	Total/NA	Solid	8021B	15812
LCS 880-15812/1-A	Lab Control Sample	Total/NA	Solid	8021B	15812
LCSD 880-15812/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15812
880-9746-A-6-G MS	Matrix Spike	Total/NA	Solid	8021B	15812
880-9746-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15812

## Analysis Batch: 16004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	Total BTEX	
890-1770-2	SW-3	Total/NA	Solid	Total BTEX	
890-1770-3	SW-6	Total/NA	Solid	Total BTEX	

Eurofins Xenco, Carlsbad

2

<u>ر</u>

Ω

9

10

12

13

\_\_\_\_\_

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

# **GC VOA (Continued)**

# **Analysis Batch: 16004 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-4	SW-7	Total/NA	Solid	Total BTEX	
890-1770-5	SW-8	Total/NA	Solid	Total BTEX	
890-1770-6	SW-9	Total/NA	Solid	Total BTEX	
890-1770-7	SW-10	Total/NA	Solid	Total BTEX	
890-1770-8	SW-11	Total/NA	Solid	Total BTEX	

## **GC Semi VOA**

# Prep Batch: 15746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8015NM Prep	
890-1770-2	SW-3	Total/NA	Solid	8015NM Prep	
890-1770-3	SW-6	Total/NA	Solid	8015NM Prep	
890-1770-4	SW-7	Total/NA	Solid	8015NM Prep	
890-1770-5	SW-8	Total/NA	Solid	8015NM Prep	
890-1770-6	SW-9	Total/NA	Solid	8015NM Prep	
890-1770-7	SW-10	Total/NA	Solid	8015NM Prep	
890-1770-8	SW-11	Total/NA	Solid	8015NM Prep	
MB 880-15746/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15746/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15746/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1770-1 MS	SW-1	Total/NA	Solid	8015NM Prep	
890-1770-1 MSD	SW-1	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 15825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8015B NM	15746
890-1770-2	SW-3	Total/NA	Solid	8015B NM	15746
890-1770-3	SW-6	Total/NA	Solid	8015B NM	15746
890-1770-4	SW-7	Total/NA	Solid	8015B NM	15746
890-1770-5	SW-8	Total/NA	Solid	8015B NM	15746
890-1770-6	SW-9	Total/NA	Solid	8015B NM	15746
890-1770-7	SW-10	Total/NA	Solid	8015B NM	15746
890-1770-8	SW-11	Total/NA	Solid	8015B NM	15746
MB 880-15746/1-A	Method Blank	Total/NA	Solid	8015B NM	15746
LCS 880-15746/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15746
LCSD 880-15746/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15746
890-1770-1 MS	SW-1	Total/NA	Solid	8015B NM	15746
890-1770-1 MSD	SW-1	Total/NA	Solid	8015B NM	15746

## Analysis Batch: 15912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8015 NM	_
890-1770-2	SW-3	Total/NA	Solid	8015 NM	
890-1770-3	SW-6	Total/NA	Solid	8015 NM	
890-1770-4	SW-7	Total/NA	Solid	8015 NM	
890-1770-5	SW-8	Total/NA	Solid	8015 NM	
890-1770-6	SW-9	Total/NA	Solid	8015 NM	
890-1770-7	SW-10	Total/NA	Solid	8015 NM	
890-1770-8	SW-11	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

3

4

6

8

9

13

1 /

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

### HPLC/IC

### Leach Batch: 15755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-3	SW-6	Soluble	Solid	DI Leach	
890-1770-4	SW-7	Soluble	Solid	DI Leach	
890-1770-5	SW-8	Soluble	Solid	DI Leach	
890-1770-6	SW-9	Soluble	Solid	DI Leach	
890-1770-7	SW-10	Soluble	Solid	DI Leach	
890-1770-8	SW-11	Soluble	Solid	DI Leach	
MB 880-15755/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15755/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15755/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9745-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9745-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-9747-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9747-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### Leach Batch: 15803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Soluble	Solid	DI Leach	
890-1770-2	SW-3	Soluble	Solid	DI Leach	
MB 880-15803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1770-1 MS	SW-1	Soluble	Solid	DI Leach	
890-1770-1 MSD	SW-1	Soluble	Solid	DI Leach	

### Analysis Batch: 15821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-3	SW-6	Soluble	Solid	300.0	15755
890-1770-4	SW-7	Soluble	Solid	300.0	15755
890-1770-5	SW-8	Soluble	Solid	300.0	15755
890-1770-6	SW-9	Soluble	Solid	300.0	15755
890-1770-7	SW-10	Soluble	Solid	300.0	15755
890-1770-8	SW-11	Soluble	Solid	300.0	15755
MB 880-15755/1-A	Method Blank	Soluble	Solid	300.0	15755
LCS 880-15755/2-A	Lab Control Sample	Soluble	Solid	300.0	15755
LCSD 880-15755/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15755
880-9745-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	15755
880-9745-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15755
880-9747-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	15755
880-9747-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15755

### Analysis Batch: 15920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Soluble	Solid	300.0	15803
890-1770-2	SW-3	Soluble	Solid	300.0	15803
MB 880-15803/1-A	Method Blank	Soluble	Solid	300.0	15803
LCS 880-15803/2-A	Lab Control Sample	Soluble	Solid	300.0	15803
LCSD 880-15803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15803
890-1770-1 MS	SW-1	Soluble	Solid	300.0	15803
890-1770-1 MSD	SW-1	Soluble	Solid	300.0	15803

Eurofins Xenco, Carlsbad

2

2

4

6

8

4.6

11

4.0

1 *1* 

М

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Client Sample ID: SW-1 Lab Sample ID: 890-1770-1

Date Collected: 12/23/21 00:00 Matrix: Solid
Date Received: 12/28/21 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 20:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/03/22 14:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	12/31/21 21:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	15803	12/30/21 12:27	CA	XEN MID
Soluble	Analysis	300.0		1			15920	01/03/22 17:31	CH	XEN MID

Client Sample ID: SW-3

Date Collected: 12/23/21 00:00

Lab Sample ID: 890-1770-2

Matrix: Solid

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 5.01 g 5 mL 15736 12/29/21 14:29 MR XEN MID Total/NA 8021B 5 mL 12/30/21 20:50 XEN MID Analysis 1 5 mL 15788 MR Total/NA Total BTEX 16004 01/04/22 15:22 XEN MID Analysis 1 A.I Total/NA Analysis 8015 NM 15912 01/04/22 15:21 XEN MID Total/NA XEN MID Prep 8015NM Prep 10.00 g 15746 12/29/21 15:34 DM 10 mL Total/NA Analysis 8015B NM 15825 12/31/21 22:46 AJ XEN MID Soluble XEN MID Leach DI Leach 5.05 g 50 mL 15803 12/30/21 12:27 CA Soluble Analysis 300.0 1 15920 01/03/22 18:07 CH XEN MID

Client Sample ID: SW-6

Date Collected: 12/23/21 00:00

Lab Sample ID: 890-1770-3

Matrix: Solid

Date Received: 12/28/21 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035		·	5.03 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 21:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	12/31/21 23:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		10			15821	01/03/22 17:31	CH	XEN MID

Client Sample ID: SW-7

Date Collected: 12/23/21 00:00

Lab Sample ID: 890-1770-4

Matrix: Solid

Date Received: 12/28/21 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 21:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

3

7

9

11

13

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1770-1

SDG: Lea County New Mexico

Lab Sample ID: 890-1770-4

Matrix: Solid

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

**Client Sample ID: SW-7** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	12/31/21 23:27	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		10			15821	01/03/22 17:39	CH	XEN MID

Client Sample ID: SW-8

Lab Sample ID: 890-1770-5

Date Collected: 12/23/21 00:00

Matrix: Solid

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 21:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	12/31/21 23:48	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		10			15821	12/31/21 10:48	CH	XEN MID

Client Sample ID: SW-9 Lab Sample ID: 890-1770-6

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 22:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	01/01/22 00:09	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		1			15821	12/31/21 10:57	CH	XEN MID

Client Sample ID: SW-10 Lab Sample ID: 890-1770-7

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 22:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.00 g	10 mL	15746 15825	12/29/21 15:34 01/01/22 00:30	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 24 of 31

Released to Imaging: 9/1/2023 2:28:53 PM

2

4

6

8

10

12

14

**Matrix: Solid** 

**Matrix: Solid** 

### **Lab Chronicle**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Client Sample ID: SW-10

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30 Lab Sample ID: 890-1770-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		1			15821	12/31/21 11:05	CH	XEN MID

Client Sample ID: SW-11 Lab Sample ID: 890-1770-8

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30 Matrix: Solid

nalyst Lab

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	15812	12/30/21 14:12	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15844	01/02/22 04:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	01/01/22 00:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		1			15821	12/31/21 11:14	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Released to Imaging: 9/1/2023 2:28:53 PM

3

6

ŏ

10

12

13

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

# Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	P	rogram	Identification Number	Expiration Date	
Texas		ELAP	T104704400-21-22	06-30-22	
The following analytes the agency does not of		ut the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for wh	
Analysis Method	Prep Method	Matrix	Analyte		
0045 1114		Solid	Total TPH		
8015 NM		Juliu	IOIAI IPH		

Δ

F

7

8

10

12

13

### **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

4

3

4

7

Q

10

12

13

Ш

## **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1770-1 SDG: Lea County New Mexico

2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1770-1	SW-1	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-2	SW-3	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-3	SW-6	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-4	SW-7	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-5	SW-8	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-6	SW-9	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-7	SW-10	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4
890-1770-8	SW-11	Solid	12/23/21 00:00	12/28/21 10:30	0 - 4

4

6

0

46

11

12

ORIGINAL COPY

Relingershed by:	Relingershed by:	Relingershed by:											( LAB USE )	LAB#		Comments:	Receiving Laboratory:		Invoice to:	Project Location: (county, state)	Project Name: 大	Client Name:	i		Analysis Request of Ch
Date: Time:		(O)	Date: Time:		SW-11 (0-4')	SW-10 (0-4')	SW-9 (0-4')	SW-8-(0-4¹)	SW-7 (0-4')	SW-6 (0-4')	SW-3 (0-4')	SW-1 (0-4')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions		Lea County, New Mexico	Kaiser SWD	Permian Water Solutions		Tetra Tech. Inc.	Analysis Request of Chain of Custody Record
	Received by:	(loe 1	Received by:		12/23/2021	12/23/2021	12/23/2021	12/23/2021	12/23/2021	12/23/2021	12/23/2021	12/23/2021	DATE	YEAR: 2020	SAMPLING		Sampler Signature:			Project #:		Site Manager:	090-		
Time:	Date: Lime:	300	Date: Time:		×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	iR	MATRIX PRESERVATIVE METHOD		Ezequiel Moreno			212C-MD-02230		Clair Gonzales	3-1770 Chain of Custody		
	Sample Temperature	MLY X	AB I CE REMARKS:		×	×	×	×	×	×	×	×	PAH 8 Total M	RED (N 8021B X1005 015M (270C detals / Metals Volatile	BTE (Ext to (GRO Ag As E Ag As	- DRO - Ba Cd Cr Ba Cd C	ORO -	Hg	>)			ANALYSIS REQUEST			
Rush Charges Aumonzed		STANDARD	(8)		×	×	×	×	×	×	×	×	GC/MS GC/MS PCB's NORM PLM (A Chlorid	8082 Asbesto le de Sal Wat	Vol. 8 7608 os)	TDS		ache	d lis	st)		r Specify Method No.)			Page 1 of
			-	-	+	-		-		-	_		Hold						-						

Page 29 of 31

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-1770-1

SDG Number: Lea County New Mexico

List Source: Eurofins Xenco, Carlsbad

Login Number: 1770 List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

**Eurofins Xenco, Carlsbad** 

<6mm (1/4").

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-1770-1

SDG Number: Lea County New Mexico

List Source: Eurofins Xenco, Midland

List Creation: 12/29/21 11:05 AM

Creator: Rodriguez, Leticia

Login Number: 1770 List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Xenco, Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-1502-1

Laboratory Sample Delivery Group: 212C-MD-02230

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 11/10/2021 1:19:33 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS .....

**Review your project** results through

**Have a Question?** Ask-Expert

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 2:28:53 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-1502-1 SDG: 212C-MD-02230

**Table of Contents** 

1
2
3
5
3
108
116
149
177
215
216
217
220
247

2

3

4

6

8

10

11

13

## **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

### **Qualifiers**

GC	<b>VOA</b>
Qua	lifier

F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected

**Qualifier Description** 

#### **GC Semi VOA**

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.
UDI 0//0	

### HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.
	indicates the analyte was analyzed for but not detected.

### **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Eurofins Xenco, Carlsbad

RPD

## **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

## **Glossary (Continued)**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

6

R

3

11

13

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-1502-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-1502-1

#### Receipt

The samples were received on 10/29/2021 12:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

#### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-3 (6) (890-1502-3), BH-4 (6) (890-1502-4), BH-5 (6) (890-1502-5), BH-6 (6) (890-1502-6), BH-8 (6) (890-1502-8), BH-9 (6) (890-1502-9), BH-10 (6) (890-1502-10), BH-12 (6) (890-1502-12) and BH-15 (6) (890-1502-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11075 and analytical batch 880-11206 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11109 and 880-11112 and analytical batch 880-11221 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-65 (15) (890-1502-65). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-11111 and analytical batch 880-11259 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-41 (15) (890-1502-41), BH-42 (15) (890-1502-42), BH-43 (15) (890-1502-43), BH-44 (15) (890-1502-44), BH-45 (15) (890-1502-45), BH-46 (15) (890-1502-46), BH-47 (15) (890-1502-47), BH-48 (15) (890-1502-48), BH-49 (15) (890-1502-49), BH-50 (15) (890-1502-50), BH-51 (15) (890-1502-51), BH-52 (15) (890-1502-52), BH-54 (15) (890-1502-54), BH-55 (15) (890-1502-55), BH-56 (15) (890-1502-56), (CCV 880-11259/51) and (MB 880-11111/5-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11113 and 880-11114 and analytical batch 880-11374 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SW-12 (10) (890-1502-103), SW-14 (15) (890-1502-105), SW-15 (15) (890-1502-106) and SW-25 (15) (890-1502-116). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-11258/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11445 and analytical batch 880-11449 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-57 (15) (890-1502-57), BH-58 (15) (890-1502-58), BH-59 (15) (890-1502-59), BH-60 (15) (890-1502-60), SW-29 (15) (890-1502-120), (CCV 880-11449/30) and (890-1520-A-1-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

9

3

4

**5** 

7

\_

10

12

13

14

Eurofins Xenco, Carlsbad 11/10/2021

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-1502-1 (Continued)

#### Laboratory: Eurofins Xenco, Carlsbad (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11223 and analytical batch 880-11317 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH-2 (6) (890-1502-2) and BH-20 (6) (890-1502-20). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-11356 and analytical batch 880-11323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH-61 (15) (890-1502-61), (890-1502-A-61-F MS) and (890-1502-A-61-G MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-11375 and analytical batch 880-11418 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11237 and analytical batch 880-11453 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11227 and analytical batch 880-11379 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11240 and analytical batch 880-11455 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11238 and 880-11238 and analytical batch 880-11454 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11242 and analytical batch 880-11456 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11236 and analytical batch 880-11452 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-11243 and analytical batch 880-11705 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

2

5

4

<del>ا</del>

10

12

13

| | 4

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-1502-1 (Continued)

Laboratory: Eurofins Xenco, Carlsbad (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

-

3

5

8

3

11

12

4 /

Lab Sample ID: 890-1502-1

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-1 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		11/01/21 11:05	11/03/21 00:47	1
Toluene	< 0.00199	U F1	0.00199		mg/Kg		11/01/21 11:05	11/03/21 00:47	1
Ethylbenzene	< 0.00199	U F1	0.00199		mg/Kg		11/01/21 11:05	11/03/21 00:47	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		11/01/21 11:05	11/03/21 00:47	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 00:47	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		11/01/21 11:05	11/03/21 00:47	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	118		70 - 130				11/01/21 11:05	11/03/21 00:47	
1,4-Difluorobenzene (Surr)	73		70 - 130				11/01/21 11:05	11/03/21 00:47	1
- Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/08/21 17:11	1
Analyte	Result	Qualifier	RL	ME	Unit				
			NL.	MDL	UIIIL	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	MIDL	mg/Kg	— <del>-</del>	Prepared	Analyzed 11/05/21 13:50	
- -				MIDL			Prepared		
- -	ge Organics (D			MDL	mg/Kg	D	Prepared Prepared		1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)	49.9		mg/Kg	=	<u> </u>	11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier U F1 F2	49.9		mg/Kg	=	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1 F2	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/02/21 11:44	11/05/21 13:50  Analyzed  11/03/21 11:42	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1 F2 U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 11:44 11/02/21 11:44	11/05/21 13:50  Analyzed 11/03/21 11:42 11/03/21 11:42	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U F1 F2 U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44	Analyzed 11/03/21 11:42 11/03/21 11:42 11/03/21 11:42	Dil Face  1  Dil Face  1  Dil Face
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U F1 F2 U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared	Analyzed 11/03/21 11:42 11/03/21 11:42 11/03/21 11:42 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 108 118	RO) (GC) Qualifier U F1 F2 U U	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44  Prepared 11/02/21 11:44	Analyzed 11/03/21 11:42 11/03/21 11:42 11/03/21 11:42 Analyzed 11/03/21 11:42	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  <49.9  <49.9   **Recovery  108  118  romatography -	RO) (GC) Qualifier U F1 F2 U U	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg	=	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44  Prepared 11/02/21 11:44	Analyzed 11/03/21 11:42 11/03/21 11:42 11/03/21 11:42 Analyzed 11/03/21 11:42	Dil Fac

Client Sample ID: BH-2 (6) Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 01:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 01:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				11/01/21 11:05	11/03/21 01:08	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-2

Matrix: Solid

Lab Sample ID: 890-1502-2

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-2 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B - Volatile Organ	nic Compounds	(GC)	(Continued)	
mothed collis	no compoundo	<b>, – – ,</b>	(00::::::::::::::::::::::::::::::::::::	

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	11/01/21 11:05	11/03/21 01:08	1

ı				
ı	Method:	Total RTFX	: - Total BTEX	Calculation
ı	mictilou.	TOTAL DIE	- IOLAI DIEA	Oulculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/08/21 17:11	1

1					
Moth	nod: 8015 NM	Diocal Bana	o Organica	IDDOVIC	105
INIELI	IOU. OU 15 INIVI	- Diesei Kang	e Organics	ין נטאטן	3C)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 12:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 12:43	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	DII Fac
1-Chlorooctane	119	70 - 130	11/02/21 11:44	11/03/21 12:43	1
o-Terphenyl	131 S1+	70 - 130	11/02/21 11:44	11/03/21 12:43	1

 $\label{eq:method:method:300.0-Anions, lon Chromatography - Soluble} \\$ 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	235		5.04		mg/Kg			11/06/21 06:09	1

Client Sample ID: BH-3 (6)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-3

Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B -	Volatile Organic	c Compounds (GC)

Michiga ouz ib - Volatile Orga	inc compounds	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 01:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 01:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				11/01/21 11:05	11/03/21 01:28	1
1,4-Difluorobenzene (Surr)	70		70 - 130				11/01/21 11:05	11/03/21 01:28	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/08/21 17:11	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0		mg/Kg			11/05/21 13:50	1

Eurofins Xenco, Carlsbad

2

3

4

6

8

10

10

Lab Sample ID: 890-1502-3

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-3 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:03	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:03	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				11/02/21 11:44	11/03/21 13:03	1
o-Terphenyl	117		70 - 130				11/02/21 11:44	11/03/21 13:03	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-4 (6) Lab Sample ID: 890-1502-4 Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 01:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 01:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 01:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				11/01/21 11:05	11/03/21 01:49	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130				11/01/21 11:05	11/03/21 01:49	1
Method: Total BTEX - Total BTEX Analyte		Qualifier	RL	MDI	Unit	D	Dronorod	Analyzed	Dil Fac
Total BTEX	<0.00399		0.00399	WIDE	mg/Kg	_ =	Prepared	11/08/21 17:11	
	<0.00399  Organics (DR	U				<u></u> 	Prepared		1
Total BTEX  Method: 8015 NM - Diesel Range	<0.00399  Organics (DR	O) (GC) Qualifier	0.00399		mg/Kg	<u> </u>		11/08/21 17:11	1 Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH	<0.00399  Organics (DR)  Result  <50.0	U O) (GC) Qualifier U	0.00399		mg/Kg	<u> </u>		11/08/21 17:11  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	<pre>colonome</pre>	U O) (GC) Qualifier U	0.00399	MDL	mg/Kg	<u> </u>		11/08/21 17:11  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	<pre>colonome</pre>	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	11/08/21 17:11  Analyzed  11/05/21 13:50	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics	<0.00399 Organics (DR) Result <50.0 e Organics (D) Result	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	11/08/21 17:11  Analyzed  11/05/21 13:50  Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00399  Organics (DR)  Result  <50.0  e Organics (D)  Result  <50.0	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00399  RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  11/02/21 11:44	Analyzed 11/03/21 13:50  Analyzed 11/03/21 13:23	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<0.00399  Organics (DR)  Result  <50.0  e Organics (D)  Result  <50.0  <50.0	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00399  RL 50.0  RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  11/02/21 11:44  11/02/21 11:44	Analyzed 11/05/21 13:50  Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:23	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<0.00399  Organics (DR)  Result  <50.0  e Organics (D)  Result  <50.0  <50.0	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00399  RL 50.0  RL 50.0  50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  11/02/21 11:44  11/02/21 11:44	Analyzed 11/05/21 13:50  Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:23 11/03/21 13:23	Dil Fac  1  Dil Fac  1  Dil Fac  1  Dil Fac  1  1  Dil Fac  1

Eurofins Xenco, Carlsbad

11/10/2021

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: BH-4 (6) Lab Sample ID: 890-1502-4 Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.9		5.05		mg/Kg			11/08/21 09:05	1

Client Sample ID: BH-5 (6) Lab Sample ID: 890-1502-5 Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 02:09	
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 02:09	
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 02:09	
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 11:05	11/03/21 02:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 02:09	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 11:05	11/03/21 02:09	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130				11/01/21 11:05	11/03/21 02:09	1
1,4-Difluorobenzene (Surr)	97		70 - 130				11/01/21 11:05	11/03/21 02:09	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/08/21 17:11	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.5		49.8		mg/Kg			11/05/21 13:50	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 13:43	1
Diesel Range Organics (Over C10-C28)	51.5		49.8		mg/Kg		11/02/21 11:44	11/03/21 13:43	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 13:43	1
Oil Nange Organics (Over 020-030)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
,	%Recovery	Qualifier	<b>Limits</b> 70 - 130				Prepared 11/02/21 11:44	Analyzed 11/03/21 13:43	Dil Fac
Surrogate		Qualifier							1
Surrogate 1-Chlorooctane	104		70 - 130				11/02/21 11:44	11/03/21 13:43	
Surrogate 1-Chlorooctane o-Terphenyl	104 117 omatography -		70 - 130	MDL	Unit	D	11/02/21 11:44	11/03/21 13:43	1

Lab Sample ID: 890-1502-6

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-6 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 02:29	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 02:29	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 02:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 02:29	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 02:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 02:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130				11/01/21 11:05	11/03/21 02:29	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 11:05	11/03/21 02:29	1
- Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/08/21 17:11	1
Analyte Total TPH		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U							
		Ü	50.0		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Ran	ge Organics (D		50.0		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang Analyte			50.0 <b>RL</b>	MDL		D	Prepared	11/05/21 13:50 Analyzed	
		RO) (GC) Qualifier		MDL		<u>D</u>	Prepared 11/02/21 11:44		Dil Fac
Analyte Gasoline Range Organics	Result	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result < 50.0	RO) (GC) Qualifier U	RL 50.0	MDL	Unit mg/Kg	<u>D</u>	11/02/21 11:44	Analyzed 11/03/21 14:03	Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44	Analyzed 11/03/21 14:03	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44	Analyzed 11/03/21 14:03 11/03/21 14:03 11/03/21 14:03	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared	Analyzed 11/03/21 14:03 11/03/21 14:03 11/03/21 14:03 Analyzed	Dil Face  1  1  1  Dil Face
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared 11/02/21 11:44	Analyzed 11/03/21 14:03 11/03/21 14:03 11/03/21 14:03  Analyzed 11/03/21 14:03	Dil Face  1  1  1  Dil Face
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared 11/02/21 11:44	Analyzed 11/03/21 14:03 11/03/21 14:03 11/03/21 14:03  Analyzed 11/03/21 14:03	Dil Fac

Client Sample ID: BH-7 (6) Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/01/21 11:05	11/03/21 02:50	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-7

Matrix: Solid

Lab Sample ID: 890-1502-7

Lab Sample ID: 890-1502-8

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-7 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B	Volatile Ore	ranic Com	nounds (C	C	(Continued)	
WELLIOU. OUZ ID	- voiatile Org	Janiic Com	poulius (C	3C) (	(Continueu)	

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	97	70 - 130	11/01/21 11:05	11/03/21 02:50	1

ı				
ı	Method:	Total RTFX	: - Total BTEX	Calculation
ı	mictilou.	TOTAL DIE	- IOLAI DIEA	Oulculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg	 	_	11/08/21 17:11	1

н				
П	Method: 8015 NM - Diesel	Dange Organica		
П	- Metriou, ou la Min - Diesei	Range Organics	יו נטאטו	961

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg		_	11/05/21 13:50	1

Method: 8015B NM - Diese	I Range Organics (D	RO) (GC)
--------------------------	---------------------	----------

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 14:23	1
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 14:23	1
C10-C28) OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	1	11/02/21 11:44	11/03/21 14:23	1
o-Terphenyl	115		70 - 130	1	11/02/21 11:44	11/03/21 14:23	1

### Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte		alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	546	5.00	mg/Kg			11/07/21 05:59	1

Client Sample ID: BH-8 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B - Volatile Organic Compounds (C	GC)	)
---	-----	---

Motifica. Coz ID Volutilo Orga	ino compoundo (	(33)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 03:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 03:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	146	S1+	70 - 130				11/01/21 11:05	11/03/21 03:10	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130				11/01/21 11:05	11/03/21 03:10	1

Mothod:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402		ma/Ka				11/08/21 17:11	1

	Method: 8015 NM -	- Diesel Range	<b>Organics</b>	(DRO)	(GC)
--	-------------------	----------------	-----------------	-------	------

Analyte	•	•	Result	Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0	m	g/Kg		-	11/05/21 13:50	1

Eurofins Xenco, Carlsbad

2

3

4

6

9

11

13

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Result Qualifier

1990

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-8

Analyzed

11/07/21 06:07

Client Sample ID: BH-8 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 14:43	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 14:43	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/02/21 11:44	11/03/21 14:43	1
o-Terphenyl	117		70 <sub>-</sub> 130				11/02/21 11:44	11/03/21 14:43	1

Client Sample ID: BH-9 (6)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-9

Matrix: Solid

RL

24.9

MDL Unit

mg/Kg

D

Prepared

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 03:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 03:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 03:31	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 03:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 03:31	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 03:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				11/01/21 11:05	11/03/21 03:31	1
1,4-Difluorobenzene (Surr)	93		70 - 130				11/01/21 11:05	11/03/21 03:31	1
Method: Total BTEX - Total BTEX		0 115	ъ.			_			D.: E
Analyte Total BTEX	<0.00401	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed 11/08/21 17:11	Dil Fac
		•	0.00401		mg/Kg			11/00/21 17.11	
Method: 8015 NM - Diesel Range (			0.00401		mg/Kg			11/00/21 17:11	,
Method: 8015 NM - Diesel Range (	Organics (DR		8.00401	MDL	Unit	D	Prepared	Analyzed	
	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Range (	Organics (DRO Result <49.9	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range ( Analyte Total TPH	Organics (DR Result <49.9	O) (GC) Qualifier	RL		Unit	D	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range ( Analyte Total TPH  Method: 8015B NM - Diesel Range	Organics (DR Result <49.9	Qualifier U RO) (GC) Qualifier	<b>RL</b> 49.9		Unit mg/Kg			Analyzed 11/05/21 13:50	Dil Fac
Method: 8015 NM - Diesel Range (Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Organics (DR Result <49.9 Organics (DI Result	Qualifier U  RO) (GC) Qualifier U	RL 		Unit mg/Kg		Prepared	Analyzed 11/05/21 13:50 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range (Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Organics (DR/Result <49.9  Organics (DR/Result <49.9)	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9 RL 49.9		Unit mg/Kg  Unit mg/Kg		Prepared 11/02/21 11:44	Analyzed  11/05/21 13:50  Analyzed  11/03/21 15:03	Dil Fac  Dil Fac
Method: 8015 NM - Diesel Range (Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Organics (DR/Result <49.9  Organics (DR/Result <49.9) <p>449.9</p>	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9 49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 11:44 11/02/21 11:44	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:03 11/03/21 15:03	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Range (Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Organics (DR/Result <49.9  Organics (DR/Result <49.9 <49.9 <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:03 11/03/21 15:03	1 Dil Fac 1 1 1 1 Dil Fac 1 1 1 1 Dil Fac 1 1

Eurofins Xenco, Carlsbad

2

3

\_

7

0

10

Dil Fac

12

13

H

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-9 (6) Lab Sample ID: 890-1502-9 Date Collected: 10/27/21 00:00

Matrix: Solid

Sample Depth: 6

Date Received: 10/29/21 12:45

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1980		25.0		mg/Kg			11/07/21 06:14	5

Lab Sample ID: 890-1502-10 Client Sample ID: BH-10 (6)

Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:51	
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:51	•
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:51	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 03:51	
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:51	•
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 03:51	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130				11/01/21 11:05	11/03/21 03:51	
1,4-Difluorobenzene (Surr)	105		70 - 130				11/01/21 11:05	11/03/21 03:51	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/08/21 17:11	,
Method: 8015 NM - Diesel Range									
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	,
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:23	•
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:23	,
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:23	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	106		70 - 130				11/02/21 11:44	11/03/21 15:23	
o-Terphenyl	118		70 - 130				11/02/21 11:44	11/03/21 15:23	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Rosult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
		Qualifici		IVIDE			- r repareu	Allalyzou	Diria

Lab Sample ID: 890-1502-11

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-11 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:13	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 05:13	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 05:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				11/01/21 11:05	11/03/21 05:13	1
1,4-Difluorobenzene (Surr)	76		70 - 130				11/01/21 11:05	11/03/21 05:13	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/08/21 17:11	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH					-				
-	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Ran			49.9		mg/Kg			11/05/21 13:50	1
- -	ge Organics (D		49.9 <b>RL</b>	MDL		D	Prepared	11/05/21 13:50 Analyzed	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC)  Qualifier		MDL		<u>D</u>	Prepared 11/02/21 11:44		Dil Fac
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)  Qualifier	RL	MDL	Unit	<u>D</u>	<u>.</u>	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	11/02/21 11:44	Analyzed 11/03/21 16:02	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44	Analyzed 11/03/21 16:02 11/03/21 16:02	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44	Analyzed 11/03/21 16:02 11/03/21 16:02 11/03/21 16:02	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared	Analyzed 11/03/21 16:02 11/03/21 16:02 11/03/21 16:02 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D  Result  <49.9  <49.9  <49.9  <89.9  80.9  80.9  80.9  10.9  12.3	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared 11/02/21 11:44	Analyzed 11/03/21 16:02 11/03/21 16:02 11/03/21 16:02  Analyzed 11/03/21 16:02	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  <49.9  <49.9   **Recovery  109  123  omatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared 11/02/21 11:44	Analyzed 11/03/21 16:02 11/03/21 16:02 11/03/21 16:02  Analyzed 11/03/21 16:02	Dil Face

Client Sample ID: BH-12 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130				11/01/21 11:05	11/03/21 05:34	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-12

**Matrix: Solid** 

2

3

**5** 

10

10

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Lab Sample ID: 890-1502-12

11/02/21 11:44 11/03/21 16:22 11/02/21 11:44 11/03/21 16:22

Client Sample ID: BH-12 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B	- Volatile Organi	c Compounds	(GC)	(Continued)
Method. 0021D	- voiatile Olyaili	c compounds	1001	(Continueu)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	11/01/21 11:05	11/03/21 05:34	1

ı				
ı	Method:	Total RTFX	: - Total BTEX	Calculation
ı	mictilou.	TOTAL DIE	- IOLAI DIEA	Oulculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg		•	11/08/21 17:11	1

П	Method: 8015 NM - Diese	Donge Organice /	DBO) (CC)
П	i Methou, ou la MM - Diese	Range Organics (	וטטו וטאט

Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

alyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
soline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
RO)-C6-C10									
esel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
0-C28)									
Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
rrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1	asoline Range Organics RO)-C6-C10 esel Range Organics (Over I0-C28) I Range Organics (Over C28-C36)	ssoline Range Organics <49.9 RO)-C6-C10 esel Range Organics (Over 49.9 10-C28) I Range Organics (Over C28-C36) <49.9	ssoline Range Organics <49.9 U  RO)-C6-C10 esel Range Organics (Over	Sasoline Range Organics   Capacitation   Capacita	Assoline Range Organics   Capacitation   Capacita	ssoline Range Organics	ssoline Range Organics	soline Range Organics	ssoline Range Organics

1-Chlorooctane	104	70 - 130	
o-Terphenyl	112	70 - 130	

Method: 300.0 - Anions, Ion Chro	matography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Chloride	1170	4.95	mg/Kg	11/07/21 06:51 1
Client Sample ID: BH-13 (6)				Lab Sample ID: 890-1502-13

Client Sample ID: BH-13 (6)
Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

lod: 8021B - Volatile Organic Compounds (GC)								
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
120		70 - 130				11/01/21 11:05	11/03/21 05:54	1
96		70 - 130				11/01/21 11:05	11/03/21 05:54	1
	Result   <0.00199   <0.00199   <0.00199   <0.00398   <0.00199   <0.00398   <0.00398   <0.00499   <0.00398   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499   <0.00499	Result   Qualifier	Result         Qualifier         RL           <0.00199	Result   Qualifier   RL   MDL	Result         Qualifier         RL         MDL         Unit           <0.00199	Result         Qualifier         RL         MDL         Unit         D           <0.00199	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00199	Result Qualifier         RL         MDL Unit         D mg/Kg         Prepared         Analyzed           <0.00199 U

Mothod:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		ma/Ka			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	•	•	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9	mg/			11/05/21 13:50	1

Eurofins Xenco, Carlsbad

2

\_\_\_\_\_\_

5

7

9

11

4.0

1 1

**Matrix: Solid** 

riones, canesa

Lab Sample ID: 890-1502-13

Lab Sample ID: 890-1502-14

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-13 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:42	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:42	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/02/21 11:44	11/03/21 16:42	1
o-Terphenyl	116		70 - 130				11/02/21 11:44	11/03/21 16:42	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			25.2		mg/Kg			11/07/21 14:10	5

Client Sample ID: BH-14 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 06:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 06:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				11/01/21 11:05	11/03/21 06:15	1
1,4-Difluorobenzene (Surr)	95		70 - 130				11/01/21 11:05	11/03/21 06:15	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 17:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 17:02	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				11/02/21 11:44	11/03/21 17:02	1
	113		70 <sub>-</sub> 130				11/02/21 11:44	11/03/21 17:02	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-14 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Lab Sample ID: 890-1502-14

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4450		24.9		mg/Kg			11/07/21 07:06	5

Client Sample ID: BH-15 (6) Lab Sample ID: 890-1502-15 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 6

Analyte

Total BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130				11/01/21 11:05	11/03/21 06:35	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/01/21 11:05	11/03/21 06:35	1

Method: 8015 NM - Diesel Range (	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/05/21 13:50	1
	O	DO) (OO)							

0.00399

MDL Unit

mg/Kg

Prepared

Analyzed

11/09/21 10:40

Result Qualifier

<0.00399 U

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 17:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 17:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				11/02/21 11:44	11/03/21 17:22	1
o-Terphenyl	123		70 - 130				11/02/21 11:44	11/03/21 17:22	1

Method: 300.0 - Anions, Ion Chromat	ography -	Soluble							
Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4220	F1	25.0	r	mg/Kg			11/07/21 07:13	5

Eurofins Xenco, Carlsbad

Dil Fac

Released to Imaging: 9/1/2023 2:28:53 PM

Lab Sample ID: 890-1502-16

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-16 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 06:55	
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 06:55	•
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 06:55	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 11:05	11/03/21 06:55	•
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 06:55	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 11:05	11/03/21 06:55	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 11:05	11/03/21 06:55	1
1,4-Difluorobenzene (Surr)	82		70 - 130				11/01/21 11:05	11/03/21 06:55	
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	
		O 11.C				_			5
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	<b>Result</b> <49.8		<b>RL</b> 49.8	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	
Total TPH  Method: 8015B NM - Diesel Range	<49.8 ge Organics (D	U (GC)	49.8		mg/Kg	<u> </u>	· ·	11/05/21 13:50	
Total TPH  Method: 8015B NM - Diesel Ran Analyte	<49.8  ge Organics (D	RO) (GC) Qualifier	49.8	MDL	mg/Kg	<u>D</u>	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range	<49.8 ge Organics (D	RO) (GC) Qualifier	49.8		mg/Kg	<u> </u>	· ·	11/05/21 13:50	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<49.8  ge Organics (D	RO) (GC) Qualifier	49.8		mg/Kg	<u> </u>	Prepared	11/05/21 13:50 Analyzed	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.8  ge Organics (Di Result <49.8	U RO) (GC) Qualifier U	49.8  RL 49.8		mg/Kg  Unit mg/Kg	<u> </u>	Prepared 11/02/21 11:44	11/05/21 13:50  Analyzed  11/03/21 17:42	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8  ge Organics (Di Result <49.8 <49.8	U RO) (GC) Qualifier U U	49.8  RL 49.8  49.8		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 11:44 11/02/21 11:44	11/05/21 13:50  Analyzed 11/03/21 17:42 11/03/21 17:42	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.8  ge Organics (Di Result <49.8 <49.8 <49.8	U RO) (GC) Qualifier U U	49.8 RL 49.8 49.8 49.8		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44	Analyzed 11/03/21 17:42 11/03/21 17:42 11/03/21 17:42	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<49.8 ge Organics (D) Result <49.8 <49.8 <49.8 %Recovery	U RO) (GC) Qualifier U U	49.8 RL 49.8 49.8 49.8 Limits		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44 Prepared	Analyzed 11/03/21 17:42 11/03/21 17:42 11/03/21 17:42 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<49.8 ge Organics (D) Result <49.8 <49.8 <49.8 <8ecovery 100 113	U RO) (GC) Qualifier U U Qualifier	49.8  49.8  49.8  49.8  49.8  Limits  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44  Prepared 11/02/21 11:44	Analyzed 11/03/21 17:42 11/03/21 17:42 11/03/21 17:42 Analyzed 11/03/21 17:42	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	49.8 ge Organics (D) Result <49.8 <49.8 <49.8 <8ecovery 100 113 omatography -	U RO) (GC) Qualifier U U Qualifier	49.8  49.8  49.8  49.8  49.8  Limits  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 11:44 11/02/21 11:44 11/02/21 11:44  Prepared 11/02/21 11:44	Analyzed 11/03/21 17:42 11/03/21 17:42 11/03/21 17:42 Analyzed 11/03/21 17:42	Dil Fac

Client Sample ID: BH-17 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 07:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 07:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 07:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 07:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 07:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 07:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/01/21 11:05	11/03/21 07:16	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-17

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-17

Lab Sample ID: 890-1502-18

Matrix: Solid

Client Sample ID: BH-17 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B	- Volatile Organic	Compounds (	(GC) (Continued)

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	11/01/21 11:05	11/03/21 07:16	1

N 0 - 41 1 -	T - 4 - 1	DTEV	T-4-1	DTEV	0-11-41
wetnoa:	iotai	RIFY -	- Iotai	RIFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	1	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg				11/09/21 10:40	1

l n	lothod.	OO4E NIM	Discol	Dongo	<b>Organics</b>	(DDO)	1CC	v
1 N	netriou.	· WIFE CLOO	- Diesei	Ranue	Organics	וטאטו	100	•

Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1

Mothod: 901ED	NM Diocol	Pango Ore	aniec /	DBO	(CC)
Method: 8015B	MINI - DIESEI	Range Org	janics (	DRO	(GC)

Analyte	Result	Qualifier	RL	MDL (	Jnit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	r	ng/Kg		11/02/21 11:44	11/03/21 18:03	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9	r	ng/Kg		11/02/21 11:44	11/03/21 18:03	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	r	ng/Kg		11/02/21 11:44	11/03/21 18:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				11/02/21 11:44	11/03/21 18:03	1

1-Chlorooctane	102	70 - 130
o-Terphenyl	113	70 - 130

o-Terphenyl	113	70 - 130	11/02/21 11:44	11/03/21 18:03	1
Method: 300.0 - Anions, Ion Chromatogra	phy - Soluble				

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3350	25.3	mg/Kg			11/07/21 07:43	5

Client Sample ID: BH-18 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

wethout ouz 16 - volatile Orga	nic Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				11/01/21 11:05	11/03/21 07:36	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/01/21 11:05	11/03/21 07:36	1

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402		ma/Ka			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	•	•	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9	mg/			11/05/21 13:50	1

Lab Sample ID: 890-1502-18

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-18 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/02/21 11:44	11/03/21 18:22	1
o-Terphenyl	107		70 - 130				11/02/21 11:44	11/03/21 18:22	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte									

Client Sample ID: BH-19 (6) Lab Sample ID: 890-1502-19 Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 07:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 07:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 07:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 07:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 07:57	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 07:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				11/01/21 11:05	11/03/21 07:57	1
1,4-Difluorobenzene (Surr)	81		70 - 130				11/01/21 11:05	11/03/21 07:57	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:42	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				11/02/21 11:44	11/03/21 18:42	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-19

Matrix: Solid

Client Sample ID: BH-19 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2060		24.8		mg/Kg			11/07/21 08:13	5

Client Sample ID: BH-20 (6) Lab Sample ID: 890-1502-20 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte

Total DTEV

Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				11/01/21 11:05	11/03/21 08:17	1
1,4-Difluorobenzene (Surr)	94		70 - 130				11/01/21 11:05	11/03/21 08:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel R	ange Organics (DF	RO) (GC)							
Total TPH	<49.8	U	49.8		mg/Kg			11/05/21 13:50	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Rai	nge Organics (DRO	O) (GC)							
Total BTEX	<0.00401	U	0.00401		mg/kg			11/09/21 10.40	

0.00404

MDL Unit

mg/Kg

Prepared

11/02/21 11:44

Analyzed

44/00/04 40:40

11/03/21 19:03

Result Qualifier

<49.8 U

(GRO)-C6-C10							
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg	11/02/21 11:44	11/03/21 19:03	1
C10-C28)							
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg	11/02/21 11:44	11/03/21 19:03	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	9	S1-	70 - 130		11/02/21 11:44	11/03/21 19:03	1
o-Terphenyl	10	S1-	70 - 130		11/02/21 11:44	11/03/21 19:03	1

49.8

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	449		4.95		mg/Kg			11/07/21 08:20	1

Lab Sample ID: 890-1502-21

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-21 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1 F2	0.00202		mg/Kg		11/01/21 12:05	11/02/21 18:15	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 18:15	1
Ethylbenzene	<0.00202	U F1	0.00202		mg/Kg		11/01/21 12:05	11/02/21 18:15	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403		mg/Kg		11/01/21 12:05	11/02/21 18:15	1
o-Xylene	<0.00202	U F1	0.00202		mg/Kg		11/01/21 12:05	11/02/21 18:15	1
Xylenes, Total	<0.00403	U F1	0.00403		mg/Kg		11/01/21 12:05	11/02/21 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				11/01/21 12:05	11/02/21 18:15	1
1,4-Difluorobenzene (Surr)	72		70 - 130				11/01/21 12:05	11/02/21 18:15	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1
Mathada 0045 NM - Diagal Danna	· Ourseiss (DD	0) (00)							
Method: 8015 NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
				WIDE			ricparca	Allulyzou	
Intal IPH	<49 9	U	49.9		ma/Ka			11/05/21 13:50	1
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Iotal IPH : Method: 8015B NM - Diesel Rang			49.9		mg/Kg			11/05/21 13:50	1
: Method: 8015B NM - Diesel Ran	ge Organics (D		49.9 <b>R</b> L	MDL			Prepared	11/05/21 13:50 Analyzed	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		<u>D</u>	Prepared 11/02/21 14:45		Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D	RO) (GC)  Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte	ge Organics (D Result <49.9	RO) (GC)  Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	11/02/21 14:45	Analyzed 11/03/21 11:27	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	11/02/21 14:45	Analyzed 11/03/21 11:27	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	D	11/02/21 14:45	Analyzed 11/03/21 11:27 11/03/21 11:27	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D  Result  <49.9  <49.9  <49.9  <89.9  80.9  80.9  80.9  10.3  12.3	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared 11/02/21 14:45	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27  Analyzed 11/03/21 11:27	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  <49.9  <49.9   **Recovery  103  123  omatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	D	11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared 11/02/21 14:45	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27  Analyzed 11/03/21 11:27	Dil Fac

Client Sample ID: BH-22 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				11/01/21 12:05	11/02/21 18:35	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-22

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-1502-1

Client Sample ID: BH-22 (6) Lab Sample ID: 890-1502-22 Date Collected: 10/27/21 00:00

Matrix: Solid

Sample Depth: 6

Date Received: 10/29/21 12:45

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
motification to a gaine compa	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	98	70 - 130	11/01/21 12:05	11/02/21 18:35	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg	 		11/09/21 10:40	1

ı					
ı	Method: 8015 NM - Γ	ligeal Range (	Irganice	(DRO) (G	C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		ma/Ka			11/05/21 13:50	1

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 12:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 12:32	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	76Recovery Qualifier	LIIIIII		Frepareu	Allalyzeu	DII Fac
1-Chlorooctane	103	70 - 130		11/02/21 14:45	11/03/21 12:32	1
o-Terphenyl	117	70 - 130	1	11/02/21 14:45	11/03/21 12:32	1
_						

### Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1220		4.96		mg/Kg			11/07/21 08:35	1

Client Sample ID: BH-23 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

motification of ga	ino compoundo (	(33)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:05	11/02/21 18:56	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:05	11/02/21 18:56	1

Method:	Total R	TFY - T	otal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401		ma/Ka				11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	•	•	Result	Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0	m	a/Ka		-	11/05/21 13:50	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-23

**Matrix: Solid** 

Lab Sample ID: 890-1502-23

Lab Sample ID: 890-1502-24

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-23 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 12:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 12:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/02/21 14:45	11/03/21 12:53	1
o-Terphenyl	106		70 - 130				11/02/21 14:45	11/03/21 12:53	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		5.05		mg/Kg			11/07/21 08:42	1

Client Sample ID: BH-24 (6)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 19:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 19:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 19:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 19:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 19:16	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				11/01/21 12:05	11/02/21 19:16	1
1,4-Difluorobenzene (Surr)	96		70 - 130				11/01/21 12:05	11/02/21 19:16	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
							-	11/00/01 10 10	
Total BTEX	< 0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
			0.00401		mg/Kg			11/09/21 10:40	1
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)		MDI			Drawarad		·
Method: 8015 NM - Diesel Range Analyte	Organics (DRO	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte	Organics (DR) Result <50.0	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR) Result <50.0  ge Organics (DI)	O) (GC) Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR) Result <50.0  ge Organics (DI)	Qualifier U  RO) (GC) Qualifier	RL		Unit mg/Kg			Analyzed 11/05/21 13:50	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR) Result <50.0  ge Organics (DI) Result	Qualifier U  RO) (GC) Qualifier U  Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed  11/05/21 13:50  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR) Result <50.0  ge Organics (DI) Result <50.0	Qualifier U  RO) (GC) Qualifier U  Qualifier U	RL 50.0		Unit mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:14	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR) Result <50.0  ge Organics (DI) Result <50.0	Qualifier U  RO) (GC) Qualifier U  U  U  U  U	RL 50.0		Unit mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:14	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR) Result <50.0  ge Organics (DI) Result <50.0 <50.0	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 50.0 FL 50.0 50.0		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:14 11/03/21 13:14	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	e Organics (DR) Result <50.0  ge Organics (DI) Result <50.0 <50.0 <50.0	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 50.0 50.0 50.0		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:14 11/03/21 13:14	Dil Fac  Dil Fac  1

Lab Sample ID: 890-1502-24

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-24 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	107		4.97		mg/Kg			11/07/21 08:49	1	

Client Sample ID: BH-25 (15) Lab Sample ID: 890-1502-25 Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Method: 8021B - Volatile Organic	Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/02/21 19:37	
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/02/21 19:37	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	122		70 - 130				11/01/21 12:05	11/02/21 19:37	
1,4-Difluorobenzene (Surr)	97		70 - 130				11/01/21 12:05	11/02/21 19:37	
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	
Analyte Total TPH		Qualifier U	<b>RL</b> 49.8	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fa
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 13:36	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 13:36	,
							11/02/21 14:45	11/03/21 13:36	
· · · · · · · · · · · · · · · · · · ·	<49.8	U	49.8		mg/Kg		11/02/21 14.45	11/03/21 13:30	
Oll Range Organics (Over C28-C36)	<49.8  **Recovery		49.8Limits		mg/Kg		Prepared	Analyzed	
Oll Range Organics (Over C28-C36)  Surrogate					mg/Kg				Dil Fa
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane	%Recovery		Limits		mg/Kg		Prepared	Analyzed	Dil Fa
Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl  Method: 300.0 - Anions, Ion Chro	%Recovery 107 122	Qualifier	Limits 70 - 130		mg/kg		Prepared 11/02/21 14:45	Analyzed 11/03/21 13:36	Dil Fa
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane o-Terphenyl	%Recovery 107 122 pmatography -	Qualifier	Limits 70 - 130	MDL	mg/kg	D	Prepared 11/02/21 14:45	Analyzed 11/03/21 13:36	Dil Fac

Released to Imaging: 9/1/2023 2:28:53 PM

Lab Sample ID: 890-1502-26

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-26 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 19:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 19:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 19:57	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/01/21 12:05	11/02/21 19:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 19:57	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/01/21 12:05	11/02/21 19:57	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/01/21 12:05	11/02/21 19:57	1
1,4-Difluorobenzene (Surr)	107		70 - 130				11/01/21 12:05	11/02/21 19:57	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/09/21 10:40	1
Analyte		Qualifier						A II	D0 E-
			RL	IVIDL	Unit ma/Ka	D	Prepared	Analyzed	
Total TPH	<50.0	U	50.0	MDL	mg/Kg	— —	Prepared	Analyzed 11/05/21 13:50	
Total TPH  Method: 8015B NM - Diesel Rang	<50.0	U (GC)	50.0		mg/Kg			11/05/21 13:50	
Total TPH  Method: 8015B NM - Diesel Rang Analyte	<50.0  ge Organics (D	RO) (GC) Qualifier	50.0		mg/Kg	D	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0	RO) (GC) Qualifier	50.0		mg/Kg			11/05/21 13:50	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	<50.0  ge Organics (Di Result <50.0	CODE (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 13:57	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0  ge Organics (D	CODE (GC) Qualifier U	50.0		mg/Kg		Prepared	11/05/21 13:50 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  ge Organics (Di Result <50.0	RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 13:57	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0  ge Organics (Di Result <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 13:57  11/03/21 13:57	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0  ge Organics (Di Result <50.0 <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/03/21 13:57 11/03/21 13:57 11/03/21 13:57	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<50.0  ge Organics (Digentification (Dig	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared	Analyzed 11/03/21 13:57 11/03/21 13:57 11/03/21 13:57 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <50.0 20.0 102 119	CONTROL (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared  11/02/21 14:45  11/02/21 14:45  11/02/21 14:45  Prepared  11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 13:57  11/03/21 13:57  11/03/21 13:57  Analyzed  11/03/21 13:57	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <50.0 <70.0 *Recovery 102 119 omatography -	CONTROL (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg		Prepared  11/02/21 14:45  11/02/21 14:45  11/02/21 14:45  Prepared  11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 13:57  11/03/21 13:57  11/03/21 13:57  Analyzed  11/03/21 13:57	Dil Fac

Client Sample ID: BH-27 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 20:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 20:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 20:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 20:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 20:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 20:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:05	11/02/21 20:17	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-27

Matrix: Solid

3

5

7

10

10

13

is Xenco, Carisbad

Lab Sample ID: 890-1502-27

Lab Sample ID: 890-1502-28

**Matrix: Solid** 

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-27 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85	70 - 130	11/01/21 12:05	11/02/21 20:17	1

### Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1

Method: 8015 NM -	Diesel Rand	ne Organics	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg				11/05/21 13:50	1

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 14:18	1
(GRO)-C6-C10 Diesel Range Organics (Over	<49.8	ш	49.8		mg/Kg		11/02/21 14:45	11/03/21 14:18	1
C10-C28)	140.0	J	40.0		mg/rtg		11/02/21 14.40	11/00/21 14:10	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Ourrogate	miccovery	Qualifici	Liiiit	rrepared	Analyzea
1-Chlorooctane	105		70 - 130	11/02/21 14:45	11/03/21 14:18
o-Terphenyl	120		70 - 130	11/02/21 14:45	11/03/21 14:18

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	372	4.98		mg/Kg			11/07/21 10:18	1

Client Sample ID: BH-28 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

Michiga ouz ib - Volatile Orga	inc compounds (	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130				11/01/21 12:05	11/02/21 20:38	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 12:05	11/02/21 20:38	1

Method:	Total RTF)	( - Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		ma/Ka			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	•	•	Result	Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0	m	g/Kg		-	11/05/21 13:50	1

Eurofins Xenco, Carlsbad

2

3

4

8

10

11

13

М

14/40/2024

Lab Sample ID: 890-1502-28

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-28 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 14:39	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 14:39	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/02/21 14:45	11/03/21 14:39	1
o-Terphenyl	120		70 - 130				11/02/21 14:45	11/03/21 14:39	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
		-	4.95		mg/Kg			11/07/21 10:26	

Client Sample ID: BH-29 (15) Lab Sample ID: 890-1502-29 Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 20:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 20:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 20:58	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:05	11/02/21 20:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:05	11/02/21 20:58	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:05	11/02/21 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/01/21 12:05	11/02/21 20:58	1
1,4-Difluorobenzene (Surr)	91		70 - 130				11/01/21 12:05	11/02/21 20:58	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1
· ''' -			0.00403		mg/Kg			11/09/21 10:40	1
Total BTEX  Method: 8015 NM - Diesel Range Analyte	Organics (DR		0.00403	MDL		D	Prepared	11/09/21 10:40  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	Organics (DR Result <49.9	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte	Organics (DR Result <49.9	O) (GC) Qualifier	RL		Unit	D	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Organics (DR Result <49.9	Qualifier U RO) (GC) Qualifier	<b>RL</b> 49.9		Unit mg/Kg			Analyzed 11/05/21 13:50	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Organics (DR/Result <a href="#">&lt;49.9</a> e Organics (D/Result <a href="#">&lt;49.9</a>	Qualifier U  RO) (GC) Qualifier U  Qualifier U	RL 49.9		Unit mg/Kg		Prepared 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:00	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Organics (DR/Result < 49.9  e Organics (D/Result Result )	Qualifier U  RO) (GC) Qualifier U  Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed 11/05/21 13:50 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Organics (DR/Result <49.9  e Organics (D/Result <49.9) <p>449.9</p>	Qualifier U  RO) (GC) Qualifier U  U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:00 11/03/21 15:00	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Organics (DR/Result <a href="#">&lt;49.9</a> e Organics (D/Result <a href="#">&lt;49.9</a>	Qualifier U  RO) (GC) Qualifier U  U  U  U  U	RL 49.9		Unit mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:00	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Organics (DR/Result <49.9  e Organics (D/Result <49.9) <p>449.9</p>	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:00 11/03/21 15:00	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Organics (DR/Result	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 15:00 11/03/21 15:00	Dil Fac  Dil Fac  1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-29 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-29

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		4.97		mg/Kg			11/07/21 10:33	1

Client Sample ID: BH-30 (15) Lab Sample ID: 890-1502-30 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 21:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 21:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 21:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/02/21 21:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 21:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/02/21 21:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130				11/01/21 12:05	11/02/21 21:19	1
1,4-Difluorobenzene (Surr)	70		70 - 130				11/01/21 12:05	11/02/21 21:19	1

Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 15:21	1

MDL Unit

Prepared

Analyzed

Result Qualifier

o-Ternhenyl	136	S1+	70 130		11/02/21 14:45	11/03/21 15:21	1
1-Chlorooctane	115		70 - 130		11/02/21 14:45	11/03/21 15:21	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	11/02/21 14:45	11/03/21 15:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg	11/02/21 14:45	11/03/21 15:21	1
(GRO)-C6-C10	.10.0		40.0		44/00/04 44 45	11/00/01 15 01	4

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		5.00		mg/Kg			11/07/21 10:56	1

Dil Fac

Lab Sample ID: 890-1502-31

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-31 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 23:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 23:07	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 23:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 23:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 23:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 23:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:05	11/02/21 23:07	1
1,4-Difluorobenzene (Surr)	111		70 - 130				11/01/21 12:05	11/02/21 23:07	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	Ü	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				11/02/21 14:45	11/03/21 16:03	1
o-Terphenyl	123		70 - 130				11/02/21 14:45	11/03/21 16:03	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method. 300.0 - Amons, fon Chir	omatograpity -								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-32 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/02/21 23:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/02/21 23:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				11/01/21 12:05	11/02/21 23:28	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-32

Lab Sample ID: 890-1502-32

Lab Sample ID: 890-1502-33

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-32 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
modification totaling organic compa	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93	70 - 130	11/01/21 12:05	11/02/21 23:28	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg		_	11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics	IUKU	11661

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:24	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9	1	mg/Kg		11/02/21 14:45	11/03/21 16:24	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	1	mg/Kg		11/02/21 14:45	11/03/21 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	123	70 - 130	11/02/21 14:4	11/03/21 16:24	1
o-Terphenyl	150 S1+	70 - 130	11/02/21 14:4	5 11/03/21 16:24	1

Method: 300.0 - Anions,	lon Chromatogra	phy - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	833		5.00		mg/Kg			11/07/21 11:10	1

Client Sample ID: BH-33 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021R - V	Volatila Organic	Compounds (GC)
MICHIOU. OUZ ID •	VUIALIIE OLUAIIIC	CUIIIDUUIIUS (GC)

inc compounds (	<b></b>							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
132	S1+	70 - 130				11/01/21 12:05	11/02/21 23:48	1
108		70 - 130				11/01/21 12:05	11/02/21 23:48	1
	Result   <0.00200   <0.00200   <0.00200   <0.00200   <0.00399   <0.00200   <0.00399   <0.00399	Result   Qualifier	Result   Qualifier   RL	Result   Qualifier   RL   MDL	Result         Qualifier         RL         MDL         Unit           <0.00200	Result         Qualifier         RL         MDL         Unit         D           <0.00200	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00200	Result Qualifier         RL         MDL Unit         D mg/Kg         Prepared         Analyzed           <0.00200 U

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399		ma/Ka			11/09/21 10:40	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-33 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-33

Lab Sample ID: 890-1502-34

Matrix: Solid

. Matrix: Solid

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	,
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				11/02/21 14:45	11/03/21 16:46	
o-Terphenyl	133	S1+	70 - 130				11/02/21 14:45	11/03/21 16:46	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	504		5.01		mg/Kg			11/07/21 11:18	1

Client Sample ID: BH-34 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				11/01/21 12:05	11/03/21 00:09	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:05	11/03/21 00:09	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 17:07	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 17:07	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130				11/02/21 14:45	11/03/21 17:07	1
o-Terphenyl	450	S1+	70 - 130				11/02/21 14:45	11/03/21 17:07	1

Lab Sample ID: 890-1502-34

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-34 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		4.98		mg/Kg			11/07/21 11:25	1

Client Sample ID: BH-35 (15) Lab Sample ID: 890-1502-35 Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/03/21 00:29	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				11/01/21 12:05	11/03/21 00:29	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:05	11/03/21 00:29	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 17:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 17:28	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/02/21 14:45	11/03/21 17:28	1
o-Terphenyl	132	S1+	70 - 130				11/02/21 14:45	11/03/21 17:28	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Amalusta	D14	Qualifier	D.	MDI	1114	D	Duamanad	Analyses	D:: F
Analyte	Result	Qualifier	RL	MDL	Unit	U	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1502-36

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-36 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				11/01/21 12:05	11/03/21 00:49	1
1,4-Difluorobenzene (Surr)	109		70 - 130				11/01/21 12:05	11/03/21 00:49	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	- <del>Kesuit</del> <49.8		49.8	WIDE	mg/Kg		- герагеи	11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 17:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 17:49	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				11/02/21 14:45	11/03/21 17:49	1
o-Terphenyl	110		70 - 130				11/02/21 14:45	11/03/21 17:49	1
Method: 300.0 - Anions, Ion Chro									
A I4 -	Daguile	Qualifier	RL	MDL	Hait	D	Prepared	Analyzed	Dil Fac
Analyte Chloride		Qualifier	4.99	MIDL	mg/Kg		Frepareu	11/07/21 11:55	1

Client Sample ID: BH-37 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 01:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 01:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 01:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 01:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 01:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 01:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:05	11/03/21 01:10	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-37

Lab Sample ID: 890-1502-37

11/02/21 14:45 11/03/21 18:11

Lab Sample ID: 890-1502-38

**Matrix: Solid** 

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-37 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Co	omnounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	101		70 - 130	11/01/21 12:05	11/03/21 01:10	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	11/09/21 10:40	1

н				
П	Method: 8015 NM - Diesel	Dange Organica		
П	- Metriou, ou la Min - Diesei	Range Organics	יו נטאטו	961

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyt	te	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoli	ne Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
(GRO)	)-C6-C10									
Diesel	Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
C10-C	228)									
Oll Ra	inge Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
Surro	gate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlo	prooctane	95		70 - 130				11/02/21 14:45	11/03/21 18:11	1

Method: 300.0 - Anions, Ion Chromatography - Solub	6

112

Analyte	Result Qual		MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4260	24.8	mg/Kg			11/07/21 12:02	5

70 - 130

Client Sample ID: BH-38 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

o-Terphenyl

Mothod: 9021R - V	Volatila Organic	Compounds (GC)
MICHIOU. OUZ ID •	VUIALIIE OLUAIIIC	CUIIIDUUIIUS (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:05	11/03/21 01:30	1
1,4-Difluorobenzene (Surr)	118		70 <sub>-</sub> 130				11/01/21 12:05	11/03/21 01:30	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg		_	11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	87.2	49.9	mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-38

Client: Tetra Tech, Inc.

Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-38 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:32	1
Diesel Range Organics (Over C10-C28)	87.2		49.9		mg/Kg		11/02/21 14:45	11/03/21 18:32	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				11/02/21 14:45	11/03/21 18:32	1
o-Terphenyl	117		70 - 130				11/02/21 14:45	11/03/21 18:32	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-39 (15) Lab Sample ID: 890-1502-39 Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/03/21 01:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/03/21 01:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:05	11/03/21 01:51	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:05	11/03/21 01:51	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
-									
Total BTEX	<0.00399	U	0.00399	_	mg/Kg			11/09/21 10:40	1
• <sup>***</sup> -			0.00399		mg/Kg			11/09/21 10:40	1
Total BTEX  Method: 8015 NM - Diesel Range Analyte	e Organics (DR		0.00399 RL	MDL		D	Prepared	11/09/21 10:40  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR) Result <a href="https://example.com/result-12">&lt;49.9</a>	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR) Result 49.9 ge Organics (DI)	O) (GC) Qualifier	RL	MDL MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	e Organics (DR) Result 49.9 ge Organics (DI)	Qualifier U RO) (GC) Qualifier	<b>RL</b>		Unit mg/Kg		<u> </u>	Analyzed 11/05/21 13:50	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR) Result 49.9 ge Organics (DI) Result	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg		Prepared	Analyzed 11/05/21 13:50 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR) Result 49.9 ge Organics (DI) Result	Qualifier U  RO) (GC) Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed 11/05/21 13:50 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR)  Result  <49.9  ge Organics (DI)  Result  <49.9  <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 18:53 11/03/21 18:53	Dil Fac  Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR) Result 49.9 ge Organics (DI) Result  49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9		Unit mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 18:53	Dil Fac  Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR)  Result  <49.9  ge Organics (DI)  Result  <49.9  <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 18:53 11/03/21 18:53	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR)  Result  <49.9  ge Organics (DI)  Result  <49.9  <49.9  <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/05/21 13:50  Analyzed 11/03/21 18:53 11/03/21 18:53	Dil Fac  Dil Fac  1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-39

Client Sample ID: BH-39 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	3300		25.0		mg/Kg	<del></del>		11/07/21 12:32	5	

Client Sample ID: BH-40 (15)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-40

Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/03/21 02:11	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	115		70 - 130				11/01/21 12:05	11/03/21 02:11	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:05	11/03/21 02:11	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	•								
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang									
Analyte		Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 19:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 19:15	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				11/02/21 14:45	11/03/21 19:15	1
o-Terphenyl	110		70 - 130				11/02/21 14:45	11/03/21 19:15	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1502-41

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-41 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:19	1
Toluene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:19	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:19	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399		mg/Kg		11/01/21 12:11	11/04/21 02:19	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:19	1
Xylenes, Total	<0.00399	U F2 F1	0.00399		mg/Kg		11/01/21 12:11	11/04/21 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				11/01/21 12:11	11/04/21 02:19	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:11	11/04/21 02:19	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
A I4 -									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<b>Result</b> <49.9		<b>RL</b> 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	
<u> </u>	<49.9	U		MDL		<u>D</u>	Prepared		
Total TPH	<49.9 ge Organics (D	U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang	<49.9 ge Organics (D	RO) (GC) Qualifier	49.9		mg/Kg	=	· ·	11/05/21 13:50	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<49.9  ge Organics (D  Result	RO) (GC) Qualifier	49.9		mg/Kg	=	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<pre><quad></quad></pre> quad > </td <td>U RO) (GC) Qualifier U</td> <td>49.9  RL 49.9</td> <td></td> <td>mg/Kg  Unit mg/Kg</td> <td> =</td> <td>Prepared 11/02/21 16:07</td> <td>11/05/21 13:50  Analyzed  11/03/21 11:27</td> <td>Dil Fac</td>	U RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 11:27	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9 ge Organics (D) Result <49.9 <49.9	U RO) (GC) Qualifier U U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 11:27  11/03/21 11:27	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 ge Organics (D) Result <49.9 <49.9 <49.9	U RO) (GC) Qualifier U U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	49.9 ge Organics (D) Result <49.9 <49.9 <49.9 %Recovery	U RO) (GC) Qualifier U U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<49.9 ge Organics (D) Result <49.9 <49.9 <49.9  **Recovery <96 <95	U RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27 Analyzed 11/03/21 11:27	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	49.9 ge Organics (D) Result <49.9 <49.9 <8ecovery 96 95 omatography -	U RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	Analyzed 11/03/21 11:27 11/03/21 11:27 11/03/21 11:27 Analyzed 11/03/21 11:27	Dil Fac  1  Dil Fac  1  1  Dil Fac  1  Dil Fac

Client Sample ID: BH-42 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				11/01/21 12:11	11/04/21 02:46	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-42

Lab Sample ID: 890-1502-42

Lab Sample ID: 890-1502-43

**Matrix: Solid** 

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-42 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
modification totaling organic compa	Julius (33)	( Continuou,

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	198	S1+	70 - 130	11/01/21 12:11	11/04/21 02:46	1

Method:	<b>Total BTFX</b>	- Total BTEX	Calculation
Mictilou.	TOTAL DIEN	- IOIGI DIEX	Oulculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg		_	11/09/21 10:40	1

Mothod: 8015 NM -	Diesal Pance	Organics (DRO) ((	201

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
Mictiliou. 00 10D	ITIN - DICSCI	itunge org	juilles	(DIXO)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	П	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
C10-C28)	140.0	J	40.0		mg/rtg		11/02/21 10:01	11/00/21 12:02	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 12:32	1

1-Chlorooctane	101	70 - 130
o-Terphenyl	105	70 - 130

o-Terphenyl	105	70 - 130			11/02/21 16:07	11/03/21 12:32	1
Method: 300.0 - Anions, Ion Chromatogr	aphy - Soluble						
Δnalvte	Result Qualifier	RI	MDI Unit	D	Prepared	Analyzed	Dil Fac

	Analyte	Result Qualifier	NL.	MDL OIII	 riepaieu	Allalyzeu	Dil Fac
l	Chloride	461	5.00	mg/Kg		11/07/21 12:54	1

Client Sample ID: BH-43 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Mathadi 0021D	Valatila	Organia Compoun	4~ (CC)

Wethou. 002 ID - Volatile Orga	•	. ,							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:11	11/04/21 03:14	1
1,4-Difluorobenzene (Surr)	215	S1+	70 - 130				11/01/21 12:11	11/04/21 03:14	1

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:40	1

Method. 0013 MM - Dieser Kange Organics (DRO) (GC)	Method: 8015 NM - Die	esel Range C	Organics (	DRO)	(GC)
--	-----------------------	--------------	------------	------	------

Analyte	Result	Qualifier	RL	MDL U	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	r	mg/Kg			11/05/21 13:50	1

Matrix: Solid

Lab Sample ID: 890-1502-43

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-43 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 12:53	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 12:53	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/02/21 16:07	11/03/21 12:53	1
o-Terphenyl	93		70 - 130				11/02/21 16:07	11/03/21 12:53	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-44 (15) Lab Sample ID: 890-1502-44

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:11	11/04/21 03:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:11	11/04/21 03:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:11	11/04/21 03:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:11	11/04/21 03:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:11	11/04/21 03:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:11	11/04/21 03:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				11/01/21 12:11	11/04/21 03:41	1
1,4-Difluorobenzene (Surr)	211	S1+	70 - 130				11/01/21 12:11	11/04/21 03:41	1
- Method: Total BTEX - Total BTEX	<b>Calculation</b>								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
- -		_, ,,							
•	•	, ,				_			
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fac
Analyte Total TPH		Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U		MDL MDL	mg/Kg	<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg	<u> </u>	<u> </u>	11/05/21 13:50	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result Ge Organics (D) Result <50.0	Qualifier U  RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg	<u> </u>	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 13:14	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U	50.0		mg/Kg	<u> </u>	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result Ge Organics (D) Result <50.0	Qualifier U  RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg	<u> </u>	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 13:14	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U  RO) (GC) Qualifier U  U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 16:07 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 13:14  11/03/21 13:14	1 Dil Fac 1 1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result	Qualifier U  RO) (GC) Qualifier U  U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07	Analyzed 11/03/21 13:14 11/03/21 13:14 11/03/21 13:14	Dil Fac

Lab Sample ID: 890-1502-44

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-44 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	465		5.00		mg/Kg			11/07/21 13:09	1

Client Sample ID: BH-45 (15) Lab Sample ID: 890-1502-45 Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 04:08	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:11	11/04/21 04:08	1
1,4-Difluorobenzene (Surr)	203	S1+	70 - 130				11/01/21 12:11	11/04/21 04:08	1
Method: Total BTEX - Total BTE	K Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	- <del>&lt;49.8</del>		49.8		mg/Kg	— <u>-</u>		11/05/21 13:50	
					0 0				
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 13:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 13:36	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
- · · · · · · · · · · · · · · · · · · ·	40-		70 - 130				11/02/21 16:07	11/03/21 13:36	1
	107								
1-Chlorooctane	107		70 - 130				11/02/21 16:07	11/03/21 13:36	•
	112	Soluble	70 - 130				11/02/21 16:07	11/03/21 13:36	1
1-Chlorooctane o-Terphenyl	112 omatography -	Soluble Qualifier	70 <sub>-</sub> 130	MDL	Unit	D	11/02/21 16:07 Prepared	11/03/21 13:36 Analyzed	Dil Fac

Lab Sample ID: 890-1502-46

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-46 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 04:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 04:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				11/01/21 12:11	11/04/21 04:35	1
1,4-Difluorobenzene (Surr)	226	S1+	70 - 130				11/01/21 12:11	11/04/21 04:35	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Analyte	D 14								
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0		<b>RL</b> 50.0	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/05/21 13:50	
<u> </u>	<50.0	U		MDL		<u>D</u>	Prepared		
Total TPH	<50.0	U				<u>D</u>	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang	<50.0	RO) (GC) Qualifier	50.0		mg/Kg	=		11/05/21 13:50	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0  ge Organics (D	RO) (GC) Qualifier	50.0		mg/Kg	=	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  ge Organics (Di Result <50.0	U RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg	=	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 13:57	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0  ge Organics (Di Result <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 13:57  11/03/21 13:57	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 ge Organics (Diameter) Result <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07	Analyzed 11/03/21 13:57 11/03/21 13:57 11/03/21 13:57	Dil Fac  1  1  Dil Fac  Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<50.0 ge Organics (Digital Result  <50.0 <50.0 <50.0 %Recovery	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared	Analyzed 11/03/21 13:57 11/03/21 13:57 11/03/21 13:57 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <60.0 *Recovery 106 107	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07  Prepared 11/02/21 16:07	Analyzed 11/03/21 13:57 11/03/21 13:57 11/03/21 13:57 Analyzed 11/03/21 13:57	1 Dil Fac 1 1
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <50.0 <60.0 %Recovery 106 107 comatography -	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07  Prepared 11/02/21 16:07	Analyzed 11/03/21 13:57 11/03/21 13:57 11/03/21 13:57 Analyzed 11/03/21 13:57	Dil Fac  1  1  1  Dil Fac  1

Client Sample ID: BH-47 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 05:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 05:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 05:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 05:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 05:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 05:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				11/01/21 12:11	11/04/21 05:03	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-47

2

4

9

10

12

1 /

. .

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Lab Sample ID: 890-1502-47

Lab Sample ID: 890-1502-48

**Matrix: Solid** 

Client Sample ID: BH-47 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Com	pounds (GC)	(Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	211	S1+	70 - 130	11/01/21 12:11	11/04/21 05:03	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg				11/09/21 10:40	1

l n	lothod.	OO4E NIM	Discol	Dongo	<b>Organics</b>	(DDO)	1CC	v
1 N	netriou.	· WIFE CLOO	- Diesei	Ranue	Organics	וטאטו	100	•

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg				11/05/21 13:50	1

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

A	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
0	Gasoline Range Organics	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 14:18	1
(	GRO)-C6-C10									
	Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 14:18	1
(	C10-C28)									
(	Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 14:18	1
S	Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	/ortecovery	Quanner	Lillia	rrepared	Allalyzeu	ווט
1-Chlorooctane	98		70 - 130	11/02/21 16:07	11/03/21 14:18	
o-Terphenyl	102		70 - 130	11/02/21 16:07	11/03/21 14:18	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result C	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Chloride	122		4.98		mg/Kg			11/08/21 05:00	1

Client Sample ID: BH-48 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mathad.	0024D	V-1-4:1-	O	Compounds	
wethod:	OUZID -	voiatile	Organic (	Jompounas.	166

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 05:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 05:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				11/01/21 12:11	11/04/21 05:30	1
1,4-Difluorobenzene (Surr)	220	S1+	70 - 130				11/01/21 12:11	11/04/21 05:30	1

Mothod:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		ma/Ka			11/09/21 10:40	1

	Method: 8015 NM -	- Diesel Range	<b>Organics</b>	(DRO)	(GC)
--	-------------------	----------------	-----------------	-------	------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	75.2	50.0	mg/Kg			11/05/21 13:50	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-48 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

_ab	Sample	e ID:	890-1	502-48

Matrix: Solid

A L .4 -	D14	O	D.	ME	1114	_	D	A II	D:: F
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 14:39	1
(GRO)-C6-C10									
Diesel Range Organics (Over	75.2		50.0		mg/Kg		11/02/21 16:07	11/03/21 14:39	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130				11/02/21 16:07	11/03/21 14:39	1
o-Terphenyl	111		70 - 130				11/02/21 16:07	11/03/21 14:39	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3050	•	24.9		mg/Kg			11/08/21 05:08	5

Lab Sample ID: 890-1502-49 Client Sample ID: BH-49 (15) Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 05:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 05:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 05:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				11/01/21 12:11	11/04/21 05:57	1
1,4-Difluorobenzene (Surr)	17	S1-	70 - 130				11/01/21 12:11	11/04/21 05:57	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:00	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 15:00	1
o-Terphenyl	106		70 - 130				11/02/21 16:07	11/03/21 15:00	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-49

Matrix: Solid

Client Sample ID: BH-49 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	472		4.95		mg/Kg			11/08/21 05:16	1

Client Sample ID: BH-50 (15) Lab Sample ID: 890-1502-50 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Benzene         0.0214           Toluene         0.0176           Ethylbenzene         0.00625	0.00198 0.00198 0.00198	mg/Kg mg/Kg	 11/01/21 12:11 11/01/21 12:11	11/04/21 06:24 11/04/21 06:24	1 1
		5 5	11/01/21 12:11	11/04/21 06:24	1
Ethylbenzene 0.00625	0.00198				
	0.00100	mg/Kg	11/01/21 12:11	11/04/21 06:24	1
m-Xylene & p-Xylene 0.0231	0.00396	mg/Kg	11/01/21 12:11	11/04/21 06:24	1
o-Xylene 0.0350	0.00198	mg/Kg	11/01/21 12:11	11/04/21 06:24	1
Xylenes, Total 0.0581	0.00396	mg/Kg	11/01/21 12:11	11/04/21 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepa	red	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	11591	S1+	70 - 130	11/01/21	12:11	11/04/21 06:24	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130	11/01/21	12:11	11/04/21 06:24	1

Method. Total BTEX - Total BTEX C	aiculation						
Analyte	Result Qualifier	r RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.103	0.00396	mg/Kg			11/09/21 10:40	1

wethod: 8015 NW - Diesei Range C	rganics (DRI	J) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:21	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				11/02/21 16:07	11/03/21 15:21	1

<u> </u>									
Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1330		4.99		mg/Kg			11/08/21 05:39	1

70 - 130

119

Eurofins Xenco, Carlsbad

11/03/21 15:21

11/02/21 16:07

o-Terphenyl

Lab Sample ID: 890-1502-51

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-51 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 08:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 08:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:11	11/04/21 08:10	1
1,4-Difluorobenzene (Surr)	199	S1+	70 - 130				11/01/21 12:11	11/04/21 08:10	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Analyte	D 14	O 11.C							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	<49.9		RL 49.9	MDL	mg/Kg	D	Prepared	Analyzed 11/05/21 13:50	
Total TPH	<49.9	U		MDL		<u>D</u>	Prepared		
Total TPH	<49.9  ge Organics (D	U				<u>D</u> 	Prepared		1
Total TPH  Method: 8015B NM - Diesel Range Analyte	<49.9  ge Organics (D	RO) (GC) Qualifier	49.9		mg/Kg	=	· ·	11/05/21 13:50	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<49.9  ge Organics (D	RO) (GC) Qualifier U	49.9		mg/Kg	=	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<pre>ge Organics (Di Result &lt;49.9</pre>	U RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 16:03	Dil Fac
Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	49.9 ge Organics (Display="2">Result <49.9 <49.9	U RO) (GC) Qualifier U U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 16:03  11/03/21 16:03	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 ge Organics (D) Result <49.9 <49.9 <49.9	U RO) (GC) Qualifier U U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 16:03	Dil Face 1 1 1 Dil Face
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	49.9 ge Organics (D) Result <49.9 <49.9 <49.9 %Recovery	U RO) (GC) Qualifier U U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 16:03 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	49.9 ge Organics (D) Result <49.9 <49.9 <49.9 **Recovery 101 106	U RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 16:03 Analyzed 11/03/21 16:03	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	49.9 ge Organics (D) Result <49.9 <49.9 %Recovery 101 106 omatography -	U RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 16:03 Analyzed 11/03/21 16:03	Dil Fac  1  Dil Fac  1  1  Dil Fac  1  Dil Fac

Client Sample ID: BH-52 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				11/01/21 12:11	11/04/21 08:36	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-52

2

5

7

9

111

13

ziico, Garisbac

Lab Sample ID: 890-1502-52

11/03/21 16:24

Lab Sample ID: 890-1502-53

**Matrix: Solid** 

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-52 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	233	S1+	70 - 130	11/01/21 12:11	11/04/21 08:36	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1

l n	lothod.	OO4E NIM	Discol	Dongo	<b>Organics</b>	(DDO)	1CC	v
1 N	netriou.	· WIFE CLOO	- Diesei	Ranue	Organics	וטאטו	100	•

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Mathadi 001ED	NM Discal Day	an Organian	(DBO) (CC)
Method: 8015B	nivi - Diesei Kai	ide Ordanics	IDKUI IGGI

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:24	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:24	1
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 16:24	

	1-Chlorooctane	101	70 - 130	11/02/21 16:07
Į	o-Terphenyl	103	70 - 130	11/02/21 16:07

Method: 300.0 - Anions, Ion	Chromatography - Soluble
A 1.4	D 11 0 110

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1410		24.9		mg/Kg			11/08/21 05:54	5

Client Sample ID: BH-53 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B -	Malatile O		d- (OO)
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Wethou. 002 ID - Volatile Orga	inc compounds	(00)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/03/21 08:30	11/04/21 11:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130				11/03/21 08:30	11/04/21 11:48	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg		_	11/09/21 10:40	1

Analyte	•	•	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9	mg/			11/05/21 13:50	1

Job ID: 890-1502-1

Lab Sample ID: 890-1502-53

Lab Sample ID: 890-1502-54

Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-53 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:46	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:46	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				11/02/21 16:07	11/03/21 16:46	1
o-Terphenyl	98		70 - 130				11/02/21 16:07	11/03/21 16:46	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-54 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 09:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 09:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 09:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 09:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 09:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 09:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				11/01/21 12:11	11/04/21 09:28	1
1,4-Difluorobenzene (Surr)	202	S1+	70 - 130				11/01/21 12:11	11/04/21 09:28	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 17:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 17:07	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/02/21 16:07	11/03/21 17:07	1
o-Terphenyl	100		70 - 130				11/02/21 16:07	11/03/21 17:07	1

Lab Sample ID: 890-1502-54

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-54 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

oumpie Beptili. 10									
Method: 300.0 - Anions, Ion Chro	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	508		5.01		mg/Kg			11/08/21 06:09	1

Client Sample ID: BH-55 (15) Lab Sample ID: 890-1502-55 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Analyte	c Compounds ( Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 09:54	
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 09:54	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:11	11/04/21 09:54	
1,4-Difluorobenzene (Surr)	191	S1+	70 - 130				11/01/21 12:11	11/04/21 09:54	
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fa
•									
-									
	• • •	, , ,							
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• • •	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/02/21 16:07	Analyzed 11/03/21 17:28	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>	<u>.</u>		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	11/02/21 16:07	11/03/21 17:28	Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	Result < 50.0 <50.0	Qualifier U U U	50.0	MDL	mg/Kg	<u>D</u>	11/02/21 16:07 11/02/21 16:07	11/03/21 17:28	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result <50.0 <50.0 <50.0	Qualifier U U U	50.0 50.0 50.0	MDL	mg/Kg	<u> </u>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07	11/03/21 17:28 11/03/21 17:28 11/03/21 17:28	Dil Fac
Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane o-Terphenyl	Result	Qualifier U U U	50.0 50.0 50.0 <i>Limits</i>	MDL	mg/Kg	<u> </u>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared	11/03/21 17:28 11/03/21 17:28 11/03/21 17:28 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  Qualifier	50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg	<u> </u>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	11/03/21 17:28 11/03/21 17:28 11/03/21 17:28 Analyzed 11/03/21 17:28	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  Qualifier	50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	11/03/21 17:28 11/03/21 17:28 11/03/21 17:28 Analyzed 11/03/21 17:28	Dil Fac

Lab Sample ID: 890-1502-56

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-56 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 10:20	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 10:20	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 10:20	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:11	11/04/21 10:20	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 10:20	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:11	11/04/21 10:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:11	11/04/21 10:20	1
1,4-Difluorobenzene (Surr)	115		70 - 130				11/01/21 12:11	11/04/21 10:20	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH		Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Rang			10.0		mg/rtg			11/00/21 10:00	
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8		49.8		mg/Kg		11/02/21 16:07	11/03/21 17:49	1
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 17:49	
C10-C28)									1
C10-C28) OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 17:49	
OII Range Organics (Over C28-C36)	<49.8 <i>%Recovery</i>		49.8		mg/Kg		11/02/21 16:07  Prepared	11/03/21 17:49  Analyzed	1
•					mg/Kg				Dil Fac
Oll Range Organics (Over C28-C36)  Surrogate	%Recovery		Limits		mg/Kg		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl  Method: 300.0 - Anions, Ion Chro	%Recovery 106 113  pmatography -	Qualifier  Soluble	Limits 70 - 130 70 - 130		mg/Kg		<b>Prepared</b> 11/02/21 16:07	Analyzed 11/03/21 17:49	1 1 <i>Dil Fac</i> 1
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane o-Terphenyl	%Recovery 106 113  pmatography -	Qualifier	Limits 70 - 130	MDL		<u>D</u> _	<b>Prepared</b> 11/02/21 16:07	Analyzed 11/03/21 17:49	1 <b>Dil Fac</b>

Client Sample ID: BH-57 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				11/04/21 11:11	11/05/21 00:32	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-57

Lab Sample ID: 890-1502-57

Lab Sample ID: 890-1502-58

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-57 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volati	le Organic Comp	ounds (GC)	(Continued)
modifical coaling foliati	io organico comp	,0000	( Continuou,

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	221	S1+	70 - 130	11/04/21 11:11	11/05/21 00:32	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO)	(GC)
incured to the Picsci Range Organics (Dixo)	$\cdot$

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/02/21 16:07	11/03/21 18:11	1

1-Chlorooctane	99	 70 - 130
o-Terphenyl	102	70 - 130

o-Terphenyl	102	70 - 130	11/02/21 16:07	11/03/21 18:11	1
Method: 300.0 - Anions, Ion Chromatogra	phy - Soluble				

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1190	4.99	mg/Kg		_	11/08/21 06:48	1

Client Sample ID: BH-58 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

motification volutile orga	ino compounds	(33)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				11/04/21 11:11	11/05/21 00:58	1
1,4-Difluorobenzene (Surr)	243	S1+	70 - 130				11/04/21 11:11	11/05/21 00:58	1

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402		ma/Ka			11/09/21 10:40	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-58

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-58 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:32	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:32	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				11/02/21 16:07	11/03/21 18:32	1
o-Terphenyl	93		70 - 130				11/02/21 16:07	11/03/21 18:32	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-59 (15)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-59

Matrix: Solid

Date Received: 10/29/21 12:45

Occupie Develop 45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/05/21 01:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/05/21 01:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/05/21 01:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/04/21 11:11	11/05/21 01:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/05/21 01:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/04/21 11:11	11/05/21 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				11/04/21 11:11	11/05/21 01:24	1
1,4-Difluorobenzene (Surr)	243	S1+	70 - 130				11/04/21 11:11	11/05/21 01:24	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:53	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				11/02/21 16:07	11/03/21 18:53	1

Eurofins Xenco, Carlsbad

2

3

\_

7

9

1 1

12

1 A

14

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-59 (15)

Lab Sample ID: 890-1502-59

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

 Method: 300.0 - Anions, Ion Chromatography - Soluble
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 1760
 24.9
 mg/Kg
 11/08/21 07:18
 5

Client Sample ID: BH-60 (15)

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	
Toluene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/04/21 11:11	11/05/21 01:51	
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/04/21 11:11	11/05/21 01:51	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	13	S1-	70 - 130				11/04/21 11:11	11/05/21 01:51	
1,4-Difluorobenzene (Surr)	230	S1+	70 - 130				11/04/21 11:11	11/05/21 01:51	
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Method: 8015 NM - Diesel Range	•	, ,				_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.8	U	49.8		mg/Kg			11/05/21 13:50	
Method: 8015B NM - Diesel Rang									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 19:15	
(GRO)-C6-C10								11/03/21 19.15	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 19:15	
Diesel Range Organics (Over	<49.8 <49.8		49.8 49.8		mg/Kg mg/Kg		11/02/21 16:07 11/02/21 16:07		
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)		U						11/03/21 19:15	
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.8	U	49.8				11/02/21 16:07	11/03/21 19:15 11/03/21 19:15	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<49.8 %Recovery	U	49.8				11/02/21 16:07  Prepared	11/03/21 19:15 11/03/21 19:15 Analyzed	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<49.8  **Recovery  88  87	U Qualifier	49.8 <i>Limits</i> 70 - 130				11/02/21 16:07  Prepared  11/02/21 16:07	11/03/21 19:15 11/03/21 19:15 <b>Analyzed</b> 11/03/21 19:15	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<pre>&lt;49.8  %Recovery 88 87  omatography -</pre>	U Qualifier	49.8 <i>Limits</i> 70 - 130	MDL	mg/Kg	<u>D</u>	11/02/21 16:07  Prepared  11/02/21 16:07	11/03/21 19:15 11/03/21 19:15 <b>Analyzed</b> 11/03/21 19:15	Dil Fa

Eurofins Xenco, Carlsbad

2

2

5

7

9

10

13

14

Lab Sample ID: 890-1502-61

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-61 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		11/01/21 12:13	11/03/21 05:47	1
Toluene	< 0.00199	U F1 F2	0.00199		mg/Kg		11/01/21 12:13	11/03/21 05:47	•
Ethylbenzene	< 0.00199	U F1 F2	0.00199		mg/Kg		11/01/21 12:13	11/03/21 05:47	1
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398		mg/Kg		11/01/21 12:13	11/03/21 05:47	1
o-Xylene	< 0.00199	U F1 F2	0.00199		mg/Kg		11/01/21 12:13	11/03/21 05:47	1
Xylenes, Total	<0.00398	U F1 F2	0.00398		mg/Kg		11/01/21 12:13	11/03/21 05:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	115		70 - 130				11/01/21 12:13	11/03/21 05:47	1
1,4-Difluorobenzene (Surr)	99		70 - 130				11/01/21 12:13	11/03/21 05:47	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Analyte Total TPH		Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg				
-					0 0			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)			0 0			11/05/21 13:50	1
		RO) (GC) Qualifier	RL	MDL		D	Prepared	11/05/21 13:50  Analyzed	Dil Fac
Analyte Gasoline Range Organics	Result		RL 49.9	MDL		<u>D</u>	Prepared 11/03/21 10:38		
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<b>Result</b> <49.9	Qualifier		MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<b>Result</b> <49.9	Qualifier U F1 F2 U F1 F2	49.9	MDL	Unit mg/Kg	<u>D</u>	11/03/21 10:38	Analyzed 11/03/21 21:06	Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 <49.9	Qualifier U F1 F2 U F1 F2	49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38	Analyzed 11/03/21 21:06	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result  <49.9 <49.9	Qualifier U F1 F2 U F1 F2 U	49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38	Analyzed 11/03/21 21:06 11/03/21 21:06 11/03/21 21:06	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U F1 F2 U F1 F2 U Qualifier	49.9 49.9 49.9 <b>Limits</b>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared	Analyzed 11/03/21 21:06 11/03/21 21:06 11/03/21 21:06 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier U F1 F2 U F1 F2 U Qualifier S1- S1-	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared 11/03/21 10:38	Analyzed 11/03/21 21:06 11/03/21 21:06 11/03/21 21:06  Analyzed 11/03/21 21:06	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U F1 F2 U F1 F2 U Qualifier S1- S1-	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared 11/03/21 10:38	Analyzed 11/03/21 21:06 11/03/21 21:06 11/03/21 21:06  Analyzed 11/03/21 21:06	Dil Face

Client Sample ID: BH-62 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 06:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 06:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 06:08	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 06:08	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 06:08	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 06:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:13	11/03/21 06:08	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-62

Lab Sample ID: 890-1502-62

11/03/21 10:38 11/03/21 22:16

Lab Sample ID: 890-1502-63

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-62 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Orga	nic Compounds	(GC) (C	Continued)
Welliod. 002 ID - Volalile Orga	inc compounds	100/10	Jonania Cu j

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103	70 - 130	11/01/21 12:13	11/03/21 06:08	1

Mothod:	Total RTEX	- Total BTE	<b>Calculation</b>
welliou.	TOTAL DIEV	- IUIAI DIE	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg		_	11/09/21 10:40	1

н				
П	Method: 8015 NM - Diesel	Dange Organica		
П	- Metriou, ou la Min - Diesei	Range Organics	יו נטאטו	961

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 22:16	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 22:16	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 22:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

	,,	 
1-Chlorooctane	93	70 - 130
o-Terphenyl	90	70 - 130

A Ld	D O	ъ.	MDI II!4	_	Danie and d	A II	D:: F
Method: 300.0 - Anions, Ion Chromatogra	phy - Soluble						
o-Terphenyl	90	70 - 130			11/03/21 10:38	11/03/21 22:16	1

Analyte	Result Qualifier	KL	MDL Unit	U	Prepared	Analyzed	DII Fac
Chloride	1480	25.2	mg/Kg			11/08/21 07:41	5

Client Sample ID: BH-63 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 06:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 06:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 06:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 06:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 06:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 06:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				11/01/21 12:13	11/03/21 06:28	1
1,4-Difluorobenzene (Surr)	102		70 - 130				11/01/21 12:13	11/03/21 06:28	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0		mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-63

Lab Sample ID: 890-1502-64

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-63 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 22:39	1
(GRO)-C6-C10	-50.0		50.0				44/00/04 40 00	44/00/04 00 00	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 22:39	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 22:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				11/03/21 10:38	11/03/21 22:39	1
o-Terphenyl	95		70 - 130				11/03/21 10:38	11/03/21 22:39	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-64 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 06:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 06:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 06:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 06:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 06:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 06:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				11/01/21 12:13	11/03/21 06:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130				11/01/21 12:13	11/03/21 06:48	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/05/21 13:50	1
- Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 23:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 23:00	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 23:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				11/03/21 10:38	11/03/21 23:00	1
	103		70 <sub>-</sub> 130				11/03/21 10:38	11/03/21 23:00	

Eurofins Xenco, Carlsbad

2

3

\_

0

TU

12

1 1

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

SDG: 212C-MD-02230

Client Sample ID: BH-64 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-64

. Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2760		24.9		mg/Kg			11/08/21 07:56	5

Client Sample ID: BH-65 (15)

Lab Sample ID: 890-1502-65

Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:09	
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:09	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:13	11/03/21 07:09	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:09	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:13	11/03/21 07:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130				11/01/21 12:13	11/03/21 07:09	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:13	11/03/21 07:09	1
· Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/03/21 23:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/03/21 23:21	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/03/21 23:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/03/21 10:38	11/03/21 23:21	1
o-Terphenyl	107		70 - 130				11/03/21 10:38	11/03/21 23:21	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
=							•		

Lab Sample ID: 890-1502-66

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-66 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 07:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 07:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 07:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:13	11/03/21 07:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 07:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:13	11/03/21 07:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				11/01/21 12:13	11/03/21 07:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130				11/01/21 12:13	11/03/21 07:29	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result		50.0 EL	MDL	mg/Kg	D	Prepared	11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 23:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 23:41	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 23:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				11/03/21 10:38	11/03/21 23:41	1
o-Terphenyl	112		70 - 130				11/03/21 10:38	11/03/21 23:41	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte Chloride	Result 522	Qualifier	RL 4.95	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/08/21 09:21	Dil Fac

Client Sample ID: BH-67 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				11/01/21 12:13	11/03/21 07:50	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-67

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-67 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

La	b S	Sa	mp	le	ID	:	89	0	)-1	5	0	2	-6	3	7
----	-----	----	----	----	----	---	----	---	-----	---	---	---	----	---	---

Lab Sample ID: 890-1502-68

**Matrix: Solid** 

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery Q	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	11/01/21 12:13	11/03/21 07:50	1

**Method: Total BTEX - Total BTEX Calculation** 

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total RTEX	<0.00397	0.00397	ma/Ka			11/09/21 10:40	

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

mothod. out of the Biodol Hango	rgamos (Bito) (	<b>55</b> )					
Analyte	Result Qua	alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	10.8</td <td>10.8</td> <td>ma/Ka</td> <td></td> <td></td> <td>11/05/21 13:50</td> <td>1</td>	10.8	ma/Ka			11/05/21 13:50	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 00:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 00:02	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102	70 - 130	11/03/21 10:38	11/04/21 00:02	1
o-Terphenyl	110	70 - 130	11/03/21 10:38	11/04/21 00:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	854		4.98		mg/Kg			11/08/21 09:29	1

Client Sample ID: BH-68 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B -	. Volatila	Organic (	Compounds	(GC)
Methou, ouz ib :	· voiatile	Oruanic C	JUHUUUHIUS	100

moundar coziz tolatile englished		()							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 08:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 08:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130				11/01/21 12:13	11/03/21 08:10	1
1,4-Difluorobenzene (Surr)	109		70 - 130				11/01/21 12:13	11/03/21 08:10	1

Mothod:	Total RTFX	. Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	I	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		ma/Ka				11/09/21 10:40	1

Method: 8015 NM - Diese	Range Organics	(DRO)	(GC)
Michiga. 00 10 Min - Diese	i italige Organics	(DITO)	(00)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-68

Client: Tetra Tech, Inc.

Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-68 (15) Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/04/21 00:23	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/04/21 00:23	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/04/21 00:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				11/03/21 10:38	11/04/21 00:23	1
o-Terphenyl -	98		70 - 130				11/03/21 10:38	11/04/21 00:23	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
· • ·									

Client Sample ID: BH-69 (15) Lab Sample ID: 890-1502-69 Date Collected: 10/28/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 08:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 08:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 08:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:13	11/03/21 08:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 08:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:13	11/03/21 08:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:13	11/03/21 08:30	1
1,4-Difluorobenzene (Surr)	103		70 - 130				11/01/21 12:13	11/03/21 08:30	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 00:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 00:44	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 00:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				11/03/21 10:38	11/04/21 00:44	1
o-Terphenyl	114		70 - 130				11/03/21 10:38	11/04/21 00:44	1

Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD

Client Sample ID: BH-69 (15) Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Client: Tetra Tech, Inc.

Lab Sample ID: 890-1502-69

Sample Depth: 15

Method: 300.0 - Anions, Ion Chror	natography - :	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	632		4.99		mg/Kg			11/08/21 09:44	1

Lab Sample ID: 890-1502-70 Client Sample ID: BH-70 (15)

Date Collected: 10/28/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 08:51	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 08:51	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	130		70 - 130				11/01/21 12:13	11/03/21 08:51	
1,4-Difluorobenzene (Surr)	102		70 - 130				11/01/21 12:13	11/03/21 08:51	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	•
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 01:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 01:05	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 01:05	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	97		70 - 130				11/03/21 10:38	11/04/21 01:05	1
o-Terphenyl	103		70 - 130				11/03/21 10:38	11/04/21 01:05	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1502-71

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-71 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
Ethylbenzene	0.00378		0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:13	11/03/21 10:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130				11/01/21 12:13	11/03/21 10:40	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
Mathadi 2015 NM Diagal Dansa	Overenies (DD	0) (00)							
Method: 8015 NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9				mg/Kg				
			49.9					11/05/21 13:50	1
- -			49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Ran			49.9		ilig/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D		49.9 <b>RL</b>	MDL		D	Prepared	11/05/21 13:50  Analyzed	
Analyte Gasoline Range Organics	ge Organics (D	RO) (GC)  Qualifier		MDL		<u>D</u>	Prepared 11/03/21 10:38		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC)  Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38	Analyzed 11/04/21 01:48 11/04/21 01:48	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	11/03/21 10:38	Analyzed 11/04/21 01:48	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38	Analyzed 11/04/21 01:48 11/04/21 01:48	
Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 99	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38	Analyzed 11/04/21 01:48 11/04/21 01:48 11/04/21 01:48	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared	Analyzed 11/04/21 01:48 11/04/21 01:48 11/04/21 01:48 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D  Result  <49.9  <49.9  <49.9  <89.9  80.9  80.9  80.9  107	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared 11/03/21 10:38	Analyzed 11/04/21 01:48 11/04/21 01:48 11/04/21 01:48  Analyzed 11/04/21 01:48	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  <49.9  <49.9   **Recovery  99  107  omatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared 11/03/21 10:38	Analyzed 11/04/21 01:48 11/04/21 01:48 11/04/21 01:48  Analyzed 11/04/21 01:48	Dil Fac

Client Sample ID: BH-72 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				11/01/21 12:13	11/03/21 11:00	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-72

**Matrix: Solid** 

Lab Sample ID: 890-1502-72

11/03/21 10:38

11/04/21 02:09

Lab Sample ID: 890-1502-73

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-72 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
---	--------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103	70 - 130	11/01/21 12:13	11/03/21 11:00	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	11/09/21 10:40	1

н				
П	Method: 8015 NM - Diesel	Dange Organica		
П	- Metriou, ou la Min - Diesei	Range Organics	יו נטאטו	961

Analyte	Result Qu	ualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/05/21 13:50	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU 13D	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane	115	70 - 130
o-Terphenyl	128	70 - 130

o-Terphenyl	128	70 - 130			11/03/21 10:38	11/04/21 02:09	1
Method: 300.0 - Anions, Ion Chromatogr	raphy - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

	Analyte	Result Qualifier	NL	MDL OIII	 riepaieu	Allalyzeu	Dil Fac
l	Chloride	692	4.95	mg/Kg		11/08/21 10:22	1

Client Sample ID: BH-73 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B -	Malatile O		
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				11/01/21 12:13	11/03/21 11:21	1
1,4-Difluorobenzene (Surr)	102		70 - 130				11/01/21 12:13	11/03/21 11:21	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1

Method: 8015 NM - Die	sel Range Organics (DRO) (GC)
-----------------------	-------------------------------

Analyte	Result	Qualifier	RL	MDL Un	it C	)	Prepared	Analyzed	Dil Fac	
Total TPH	58.5		49.9	mg	/Kg			11/05/21 13:50	1	

**Matrix: Solid** 

Lab Sample ID: 890-1502-73

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-73 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:31	1
Diesel Range Organics (Over C10-C28)	58.5		49.9		mg/Kg		11/03/21 10:38	11/04/21 02:31	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				11/03/21 10:38	11/04/21 02:31	1
o-Terphenyl	91		70 - 130				11/03/21 10:38	11/04/21 02:31	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-74 (15) Lab Sample ID: 890-1502-74

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 11:41	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 11:41	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 11:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 11:41	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 11:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 11:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130				11/01/21 12:13	11/03/21 11:41	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/01/21 12:13	11/03/21 11:41	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:52	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:52	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				11/03/21 10:38	11/04/21 02:52	1
o-Terphenyl	102		70 - 130				11/03/21 10:38	11/04/21 02:52	1

SDG: 212C-MD-02230

Job ID: 890-1502-1

Sample Depth: 15

Client Sample ID: BH-74 (15)	Lab Sample ID: 890-1502-74
Date Collected: 10/28/21 00:00	Matrix: Solid
Date Received: 10/29/21 12:45	

Method: 300.0 - Anions, Ion Chromatography - Soluble Dil Fac Analyte Result Qualifier RL MDL Unit D Prepared Analyzed 25.2 11/08/21 10:37 Chloride 2620 mg/Kg

Client Sample ID: BH-75 (15) Lab Sample ID: 890-1502-75 **Matrix: Solid** 

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:13	11/03/21 12:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130				11/01/21 12:13	11/03/21 12:02	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
<del>-</del>									
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
- Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
_	•	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	
Analyte		Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH	Result <50.0	Qualifier U				<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg			11/05/21 13:50	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0  ge Organics (D Result	Qualifier U  RO) (GC) Qualifier U	50.0		mg/Kg		Prepared	11/05/21 13:50 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  Ge Organics (D) Result <50.0	Qualifier U  RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 11/03/21 10:38	11/05/21 13:50  Analyzed  11/04/21 03:14	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  RO) (GC) Qualifier U  U	50.0 RL 50.0 50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/03/21 10:38 11/03/21 10:38	Analyzed 11/04/21 03:14 11/04/21 03:14	1 Dil Fac 1 1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U  U	50.0  RL 50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/03/21 10:38 11/03/21 10:38	Analyzed 11/04/21 03:14 11/04/21 03:14	

Eurofins Xenco, Carlsbad

Analyzed

11/08/21 10:45

RL

4.98

MDL Unit

mg/Kg

D

Prepared

Dil Fac

Analyte

Chloride

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

982 F1

Lab Sample ID: 890-1502-76

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-76 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:22	-
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:22	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:22	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 12:22	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:22	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 12:22	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	119		70 - 130				11/01/21 12:13	11/03/21 12:22	
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 12:13	11/03/21 12:22	
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	
Analyte Total TPH	<b>Result</b> <49.8	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
IOIAI IPH			40.0		m ~ // ~			11/05/01 12:50	
• •			49.8		mg/Kg			11/05/21 13:50	
	ge Organics (D	RO) (GC)							
Analyte	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		<u>D</u>	Prepared 11/03/21 10:38		Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>		Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.8	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	11/03/21 10:38	Analyzed 11/04/21 03:36	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.8	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	11/03/21 10:38	Analyzed 11/04/21 03:36	Dil Fa
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.8	RO) (GC) Qualifier U	RL 49.8	MDL	Unit mg/Kg mg/Kg	D	11/03/21 10:38 11/03/21 10:38	Analyzed 11/04/21 03:36 11/04/21 03:36	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.8 <49.8	RO) (GC) Qualifier U	RL 49.8 49.8 49.8	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38	Analyzed 11/04/21 03:36 11/04/21 03:36 11/04/21 03:36	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.8 <49.8 <49.8	RO) (GC) Qualifier U	RL 49.8 49.8 49.8 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared	Analyzed 11/04/21 03:36 11/04/21 03:36 11/04/21 03:36 Analyzed	Dil Fa
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	ge Organics (D Result <49.8 <49.8 <49.8	RO) (GC) Qualifier U U Qualifier	RL 49.8 49.8 49.8 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared 11/03/21 10:38	Analyzed 11/04/21 03:36 11/04/21 03:36 11/04/21 03:36  Analyzed 11/04/21 03:36	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D Result <49.8 <49.8 <49.8  %Recovery 93 96  omatography -	RO) (GC) Qualifier U U Qualifier	RL 49.8 49.8 49.8 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	D	11/03/21 10:38 11/03/21 10:38 11/03/21 10:38 Prepared 11/03/21 10:38	Analyzed 11/04/21 03:36 11/04/21 03:36 11/04/21 03:36  Analyzed 11/04/21 03:36	Dil Fa

Client Sample ID: BH-77 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130				11/01/21 12:13	11/03/21 12:42	1

Lab Sample ID: 890-1502-77

**Matrix: Solid** 

Job ID: 890-1502-1

Lab Sample ID: 890-1502-77

11/03/21 10:38 11/04/21 03:57

Lab Sample ID: 890-1502-78

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-77 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71	70 - 130	11/01/21 12:13	11/03/21 12:42	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1

Method: 8015 NM - Diesel	Range Organics (DRO) (GO	2)

Analyte	Result Qua	alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/05/21 13:50	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 03:57	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 03:57	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 03:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/03/21 10:38	11/04/21 03:57	1

_	
Mothod: 300 0 - Anione	Ion Chromatography - Soluble

105

metriod. 300.0 - Amoris, for orientatography - Soluble							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chlorido	1/120	24 9	ma/Ka			11/08/21 12:34	5

70 - 130

Client Sample ID: BH-78 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

o-Terphenyl

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:03	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:03	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:03	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:13	11/03/21 13:03	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:03	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:13	11/03/21 13:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				11/01/21 12:13	11/03/21 13:03	1
1,4-Difluorobenzene (Surr)	99		70 - 130				11/01/21 12:13	11/03/21 13:03	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00396	U	0.00396		ma/Ka			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-78

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-78 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				11/03/21 10:38	11/04/21 04:18	1
o-Terphenyl	112		70 - 130				11/03/21 10:38	11/04/21 04:18	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	426		4.95		mg/Kg			11/08/21 11:39	

Client Sample ID: BH-79 (15) Lab Sample ID: 890-1502-79 **Matrix: Solid** 

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 13:23	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 13:23	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 13:23	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 13:23	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 13:23	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 13:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:13	11/03/21 13:23	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 12:13	11/03/21 13:23	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:40	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/03/21 10:38	11/04/21 04:40	1
	103		70 <sub>-</sub> 130				11/03/21 10:38	11/04/21 04:40	1

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

Lab Sample ID: 890-1502-79

Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc.

Client Sample ID: BH-79 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	561		4.95		mg/Kg			11/08/21 11:46	1

Client Sample ID: BH-80 (15) Lab Sample ID: 890-1502-80 Matrix: Solid

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Method: 8021B - Volatile Organic	Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 13:44	
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 13:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:13	11/03/21 13:44	
1,4-Difluorobenzene (Surr)	106		70 - 130				11/01/21 12:13	11/03/21 13:44	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/09/21 10:40	
Method: 8015 NM - Diesel Range	Organics (DR)	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.8	U	49.8		mg/Kg			11/05/21 13:50	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 05:01	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 05:01	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 05:01	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	109		70 - 130				11/03/21 10:38	11/04/21 05:01	
o-Terphenyl	122		70 - 130				11/03/21 10:38	11/04/21 05:01	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fa
Allalyte	rtoouit	Quannon				_		·	

Lab Sample ID: 890-1502-81

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-81 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199		mg/Kg		11/01/21 12:16	11/03/21 17:55	1
Toluene	< 0.00199	U F2 F1	0.00199		mg/Kg		11/01/21 12:16	11/03/21 17:55	1
Ethylbenzene	< 0.00199	U F2 F1	0.00199		mg/Kg		11/01/21 12:16	11/03/21 17:55	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398		mg/Kg		11/01/21 12:16	11/03/21 17:55	1
o-Xylene	< 0.00199	U F2 F1	0.00199		mg/Kg		11/01/21 12:16	11/03/21 17:55	1
Xylenes, Total	<0.00398	U F2 F1	0.00398		mg/Kg		11/01/21 12:16	11/03/21 17:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130				11/01/21 12:16	11/03/21 17:55	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130				11/01/21 12:16	11/03/21 17:55	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
								Analyzeu	DII Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	
- -			49.9		mg/Kg	=			
Method: 8015B NM - Diesel Ran	ge Organics (D		49.9 RL	MDL			Prepared		1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL			<u> </u>	11/05/21 13:50	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	11/05/21 13:50 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/03/21 11:37	11/05/21 13:50  Analyzed  11/04/21 11:05	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37	11/05/21 13:50  Analyzed  11/04/21 11:05  11/04/21 11:05	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37	Analyzed 11/04/21 11:05 11/04/21 11:05 11/04/21 11:05	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared	Analyzed 11/04/21 11:05 11/04/21 11:05 11/04/21 11:05 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 91 101	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared 11/03/21 11:37	Analyzed 11/04/21 11:05 11/04/21 11:05 11/04/21 11:05 Analyzed 11/04/21 11:05	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  <49.9  <49.9   **Recovery  91  101  omatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared 11/03/21 11:37	Analyzed 11/04/21 11:05 11/04/21 11:05 11/04/21 11:05 Analyzed 11/04/21 11:05	Dil Fac

Client Sample ID: BH-82 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 18:15	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 18:15	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 18:15	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:16	11/03/21 18:15	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 18:15	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:16	11/03/21 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				11/01/21 12:16	11/03/21 18:15	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-82

Released to Imaging: 9/1/2023 2:28:53 PM

2

7

9

12

13

Matrix: Solid

Lab Sample ID: 890-1502-82

11/03/21 11:37

11/04/21 12:11

Lab Sample ID: 890-1502-83

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-82 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifie	er Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	83	70 - 130	11/01/21 12:16	11/03/21 18:15	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:40	1

Mothod: 8015 NM -	Diesal Pance	Organics (DRO) ((	201

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 12:11	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 12:11	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane	89	70 - 130
o-Terphenyl	102	70 - 130

o-Terphenyl	102	70 - 130	11/03/21 11:37	11/04/21 12:11	1
Method: 300.0 - Anions, Ion Chromatogra	aphy - Soluble				

Allalyte	Result Qualifier	KL	MDL OIII	 Frepareu	Allalyzeu	DII Fac
Chloride	306	4.98	mg/Kg		11/08/21 12:09	1

Client Sample ID: BH-83 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021R - V	Volatila Organic	Compounds (GC)
MICHIOU. OUZ ID •	VUIALIIE OLUAIIIC	CUIIIDUUIIUS (GC)

Wethou. 802 ID - Volatile Organ	•	•				_			
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:36	1
Ethylbenzene	0.00427		0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 18:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 18:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				11/01/21 12:16	11/03/21 18:36	1
1,4-Difluorobenzene (Surr)	90		70 - 130				11/01/21 12:16	11/03/21 18:36	1

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00427		0.00400		mg/Kg			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-83

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-83 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:32	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:32	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				11/03/21 11:37	11/04/21 12:32	1
o-Terphenyl	105		70 - 130				11/03/21 11:37	11/04/21 12:32	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-84 (15) Lab Sample ID: 890-1502-84 Date Collected: 10/28/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 18:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 18:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				11/01/21 12:16	11/03/21 18:56	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:16	11/03/21 18:56	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/03/21 11:37	11/04/21 12:55	1

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-84 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-84

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result Qualifie	r RL	MDL U	Init D	Prepared	Analyzed	Dil Fac			
Chloride	710	4.99	m	ng/Kg		11/08/21 12:25	1			

Client Sample ID: BH-85 (15) Lab Sample ID: 890-1502-85 **Matrix: Solid** 

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 15

T-4-I DTEV

(GRO)-C6-C10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/03/21 19:17	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:16	11/03/21 19:17	1

Iotal BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/05/21 13:50	1
_ Г									
Method: 8015B NM - Diesel Rar	ige Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:16	1

MDL Unit

Prepared

Analyzed

Diesel Range Organics (Over C10-C28)	<49.8 U	49.8	mg/Kg	11/03/21 11:37	11/04/21 13:16	1
Oll Range Organics (Over C28-C36)	<49.8 U	49.8	mg/Kg	11/03/21 11:37	11/04/21 13:16	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	93	70 - 130		11/03/21 11:37	11/04/21 13:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	656	F1	4.99		mg/Kg			11/09/21 12:52	1

Lab Sample ID: 890-1502-86

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-86 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				11/01/21 12:16	11/03/21 19:37	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:16	11/03/21 19:37	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T. L. LTDLL									
TOTAL TPH	<50.0	U	50.0		mg/Kg			11/08/21 15:54	
- -			50.0		mg/Kg			11/08/21 15:54	
- -	ge Organics (D		50.0 RL	MDL		D	Prepared	11/08/21 15:54  Analyzed	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		D	Prepared 11/03/21 11:37		Dil Fac
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <50.0	RO) (GC) Qualifier U	RL 50.0	MDL	Unit mg/Kg	<u>D</u>	11/03/21 11:37	Analyzed 11/04/21 13:38	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	RO) (GC) Qualifier U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 11:37	Analyzed 11/04/21 13:38	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37	Analyzed 11/04/21 13:38 11/04/21 13:38 11/04/21 13:38	Dil Face 1 1 1 Dil Face
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared	Analyzed 11/04/21 13:38 11/04/21 13:38 11/04/21 13:38 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <50.0 <50.0 <50.0 <80.0 %Recovery 93 110	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared 11/03/21 11:37	Analyzed 11/04/21 13:38 11/04/21 13:38 11/04/21 13:38  Analyzed 11/04/21 13:38	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <50.0  <50.0  <50.0   **Recovery  93  110  romatography -	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared 11/03/21 11:37	Analyzed 11/04/21 13:38 11/04/21 13:38 11/04/21 13:38  Analyzed 11/04/21 13:38	Dil Fac

Client Sample ID: BH-87 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 19:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 19:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 19:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/03/21 19:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 19:57	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/03/21 19:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:16	11/03/21 19:57	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-87

**Matrix: Solid** 

Lab Sample ID: 890-1502-87

Lab Sample ID: 890-1502-88

**Matrix: Solid** 

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-87 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volati	le Organic Comp	ounds (GC)	(Continued)
modifical coaling foliati	io organio comp	, o a a o , o o ,	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	11/01/21 12:16	11/03/21 19:57	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL Uni	it I	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg	/Kg			11/09/21 10:40	1

Mathadi COAE NIM Diagal	Danas Ornanias		/CCN
Method: 8015 NM - Diese	Range Organics	IDRUI	(GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg	]		11/08/21 15:54	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:59	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:59	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualitier	Limits	Prepared	Anaiyzea	DIIF
1-Chlorooctane	93	70 - 130	11/03/21 11:37	11/04/21 13:59	
o-Terphenyl	110	70 - 130	11/03/21 11:37	11/04/21 13:59	

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Chloride	1500		5.00		mg/Kg			11/09/21 13:22	1

Client Sample ID: BH-88 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				11/01/21 12:16	11/03/21 20:18	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:16	11/03/21 20:18	1

Method:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg		_	11/09/21 10:40	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/08/21 15:54	1

**Matrix: Solid** 

Lab Sample ID: 890-1502-88

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-88 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 14:20	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 14:20	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				11/03/21 11:37	11/04/21 14:20	1
o-Terphenyl	108		70 - 130				11/03/21 11:37	11/04/21 14:20	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			25.2		mg/Kg			11/09/21 13:30	5

Client Sample ID: BH-89 (15) Lab Sample ID: 890-1502-89

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 20:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 20:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 20:38	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:16	11/03/21 20:38	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/03/21 20:38	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:16	11/03/21 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:16	11/03/21 20:38	1
1,4-Difluorobenzene (Surr)	112		70 - 130				11/01/21 12:16	11/03/21 20:38	1
Method: Total BTEX - Total BTEX	<b>Calculation</b>								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 14:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 14:41	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/03/21 11:37	11/04/21 14:41	1
o-Terphenyl	107		70 <sub>-</sub> 130				11/03/21 11:37	11/04/21 14:41	1

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-89 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-89

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2630		24.9		mg/Kg			11/09/21 13:38	5

Client Sample ID: BH90 (RS ) (6)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-90

Matrix: Solid

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				11/01/21 12:16	11/03/21 20:59	1
1,4-Difluorobenzene (Surr)	126		70 - 130				11/01/21 12:16	11/03/21 20:59	1
- Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
- Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1

Total IPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
- Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:03	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/03/21 11:37	11/04/21 15:03	1
o-Terphenyl	112		70 - 130				11/03/21 11:37	11/04/21 15:03	1

Method: 300.0 - Anions, Ion Chroma	atography - 🤄	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		4.95		mg/Kg			11/09/21 14:01	1

Lab Sample ID: 890-1502-91

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-91 (RS) (6)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/03/21 22:48	1
1,4-Difluorobenzene (Surr)	111		70 - 130				11/01/21 12:16	11/03/21 22:48	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX - -	<0.00402		0.00402		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/03/21 11:37	11/04/21 15:46	1
o-Terphenyl	107		70 - 130				11/03/21 11:37	11/04/21 15:46	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte		Soluble Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

Client Sample ID: SW-1 (0-6) Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-92

**Matrix: Solid** 

Method: 8021B - Volatile Orga	nic Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 23:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 23:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				11/01/21 12:16	11/03/21 23:09	1

Sample Depth: 0 - 6

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: SW-1 (0-6) Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-1502-92

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	122		70 - 130				11/01/21 12:16	11/03/21 23:09	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	331		49.9		mg/Kg			11/08/21 15:54	•
Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:07	1
Diesel Range Organics (Over C10-C28)	331		49.9		mg/Kg		11/03/21 11:37	11/04/21 16:07	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:07	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	90		70 - 130				11/03/21 11:37	11/04/21 16:07	
o-Terphenyl	106		70 - 130				11/03/21 11:37	11/04/21 16:07	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
			25.1		mg/Kg			11/07/21 02:54	

Lab Sample ID: 890-1502-93 Client Sample ID: SW-2 (0-6) **Matrix: Solid** 

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				11/01/21 12:16	11/03/21 23:29	1
1,4-Difluorobenzene (Surr)	74		70 - 130				11/01/21 12:16	11/03/21 23:29	1
Method: Total BTEX - Total B	ΓEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.3		49.9		mg/Kg			11/08/21 15:54	

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Project/Site: Kaiser SWD

Client Sample ID: SW-2 (0-6)

Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45

Lab Sample ID: 890-1502-93

Matrix: Solid

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:29	1
Diesel Range Organics (Over C10-C28)	74.3		49.9		mg/Kg		11/03/21 11:37	11/04/21 16:29	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/03/21 11:37	11/04/21 16:29	1
o-Terphenyl	106		70 - 130				11/03/21 11:37	11/04/21 16:29	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.4		4.98		mg/Kg			11/07/21 03:16	1

Client Sample ID: SW-3 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-1502-94

Matrix: Solid

. Oona

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 23:49	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 23:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 23:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/03/21 23:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 23:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/03/21 23:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				11/01/21 12:16	11/03/21 23:49	1
1,4-Difluorobenzene (Surr)	97		70 - 130				11/01/21 12:16	11/03/21 23:49	1
- Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
· · · · · · · · · · · · · · · · · · ·									
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Total BTEX			0.00398		mg/Kg			11/09/21 10:40	1
	Organics (DR		0.00398	MDL	mg/Kg Unit	D	Prepared	11/09/21 10:40 Analyzed	1 Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		
Total BTEX  Method: 8015 NM - Diesel Range Analyte	Organics (DR) Result <a href="https://example.com/result-49.9">&lt; 49.9</a>	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	Organics (DR) Result 49.9 ge Organics (DI)	O) (GC) Qualifier	RL		Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte	Organics (DR) Result 49.9 ge Organics (DI)	Qualifier U RO) (GC) Qualifier	<b>RL</b> 49.9		Unit mg/Kg			Analyzed 11/08/21 15:54	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR Result <49.9 ge Organics (DI Result	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg		Prepared	Analyzed 11/08/21 15:54 Analyzed	Dil Fac Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <49.9 ge Organics (DI Result	Qualifier U  RO) (GC) Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed 11/08/21 15:54 Analyzed	Dil Fac Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <49.9 ge Organics (Di Result <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/03/21 11:37 11/03/21 11:37	Analyzed 11/08/21 15:54  Analyzed 11/04/21 16:51 11/04/21 16:51	Dil Fac  Dil Fac  1
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <49.9 ge Organics (Di Result <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9 RL 49.9		Unit mg/Kg  Unit mg/Kg		Prepared 11/03/21 11:37	Analyzed  11/08/21 15:54  Analyzed  11/04/21 16:51	Dil Fac  Dil Fac  1
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <49.9 ge Organics (Di Result <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/03/21 11:37 11/03/21 11:37	Analyzed 11/08/21 15:54  Analyzed 11/04/21 16:51 11/04/21 16:51	Dil Fac  Dil Fac  1
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	ge Organics (DR) Result <49.9  Georganics (Di) Result <49.9  <49.9	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.9  RL 49.9  49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/03/21 11:37 11/03/21 11:37	Analyzed 11/08/21 15:54  Analyzed 11/04/21 16:51 11/04/21 16:51	Dil Fac  Dil Fac  1  1  1

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-94

Matrix: Solid

Client Sample ID: SW-3 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45 **REMOVED FROM ANALYSIS TABLE** 

Sample Depth: 0 - 6

N	Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Α	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
С	hloride	1250		4.95		mg/Kg			11/07/21 03:24	1

Client Sample ID: SW-4 (0-6) Lab Sample ID: 890-1502-95 Matrix: Solid

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Comple Denthi 0 6

Method: 8021B - Volatile Organic	Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/04/21 00:10	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/04/21 00:10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130				11/01/21 12:16	11/04/21 00:10	
1,4-Difluorobenzene (Surr)	105		70 - 130				11/01/21 12:16	11/04/21 00:10	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			11/08/21 15:54	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 17:14	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 17:14	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 17:14	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	90		70 - 130				11/03/21 11:37	11/04/21 17:14	
o-Terphenyl	107		70 - 130				11/03/21 11:37	11/04/21 17:14	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
			4.99						

Lab Sample ID: 890-1502-96

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-5 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:16	11/04/21 00:30	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:16	11/04/21 00:30	1
Method: Total BTEX - Total BTE)	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/09/21 10:40	1
							Prepared	Analyzed	DII Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/08/21 15:54	1
-			49.8		mg/Kg				1
Total TPH  Method: 8015B NM - Diesel Ranç Analyte	ge Organics (D		49.8 <b>RL</b>	MDL			Prepared		1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC)  Qualifier		MDL		<u>D</u>		11/08/21 15:54	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC)  Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	11/08/21 15:54 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.8	RO) (GC) Qualifier U	<b>RL</b> 49.8	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 17:35	Dil Fac
: Method: 8015B NM - Diesel Rang	ge Organics (D Result <49.8	RO) (GC) Qualifier U	RL 49.8	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 17:35  11/04/21 17:35	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D) Result <49.8 <49.8	RO) (GC) Qualifier U	RL 49.8 49.8 49.8	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37	Analyzed 11/04/21 17:35 11/04/21 17:35 11/04/21 17:35	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D) Result <49.8 <49.8 <49.8 %Recovery	RO) (GC) Qualifier U	RL 49.8 49.8 49.8 Limits	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared	11/08/21 15:54  Analyzed  11/04/21 17:35  11/04/21 17:35  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D)  Result  <49.8  <49.8  <49.8   **Recovery  102  122	RO) (GC) Qualifier U U Qualifier	RL 49.8 49.8 49.8 49.8 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37 11/03/21 11:37  Prepared 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 17:35  11/04/21 17:35  Analyzed  11/04/21 17:35	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D) Result <49.8 <49.8 <49.8  49.8  MRecovery 102 122  comatography -	RO) (GC) Qualifier U U Qualifier	RL 49.8 49.8 49.8 49.8 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 11/03/21 11:37 11/03/21 11:37 11/03/21 11:37  Prepared 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 17:35  11/04/21 17:35  Analyzed  11/04/21 17:35	Dil Face  Dil Face  Dil Face  Dil Face  Dil Face  Dil Face

Client Sample ID: SW-6 (0-6) Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45 Sample Depth: 0 - 6

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-97

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 00:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 00:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 00:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/04/21 00:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 00:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/04/21 00:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:16	11/04/21 00:51	

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-6 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45 Sample Depth: 0 - 6 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-1502-97

Matrix: Solid

Solid

-

6

8

10

12

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130				11/01/21 12:16	11/04/21 00:51	
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	988		49.9		mg/Kg			11/08/21 15:54	
Mothod: 8015B NM - Diesel Rang	as Organics (DI	POV (GC)							
Method: 8015B NM - Diesel Ran Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Analyte Gasoline Range Organics		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/03/21 11:37	Analyzed 11/04/21 17:56	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier		MDL		<u>D</u>			
	<b>Result</b> <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	11/03/21 11:37	11/04/21 17:56	
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37	11/04/21 17:56 11/04/21 17:56	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9     988   <49.9	Qualifier U	49.9 49.9 49.9	MDL	mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37	11/04/21 17:56 11/04/21 17:56 11/04/21 17:56	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U	49.9 49.9 49.9 <i>Limits</i>	MDL	mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 <i>Prepared</i>	11/04/21 17:56 11/04/21 17:56 11/04/21 17:56 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  U  Qualifier	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	mg/Kg	<u>D</u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37 Prepared 11/03/21 11:37	11/04/21 17:56 11/04/21 17:56 11/04/21 17:56 Analyzed 11/04/21 17:56	Dil Fa

49.8

mg/Kg

Client Sample ID: SW-7 (0-6)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

Chloride

REMOVED FROM ANALYSIS TABLE

7870

Lab Sample ID: 890-1502-98

11/07/21 04:01

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/04/21 01:11	1
1,4-Difluorobenzene (Surr)	96		70 - 130				11/01/21 12:16	11/04/21 01:11	1
- Method: Total BTEX - Total B	ΓEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
- Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.9		49.9		mg/Kg			11/08/21 15:54	

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-7 (0-6)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 **REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-98

Matrix: Solid

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 18:17	1
(GRO)-C6-C10									
Diesel Range Organics (Over	86.9		49.9		mg/Kg		11/03/21 11:37	11/04/21 18:17	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				11/03/21 11:37	11/04/21 18:17	1
o-Terphenyl	109		70 - 130				11/03/21 11:37	11/04/21 18:17	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1502-99

**Matrix: Solid** 

Client Sample ID: SW-8 (0-6) Date Collected: 10/26/21 00:00

(GRO)-C6-C10

C10-C28)

**Diesel Range Organics (Over** 

Date Received: 10/29/21 12:45	ANAL	1313 IADI				
Sample Depth: 0 - 6						
Method: 8021B - Volatile Organic C	compounds (	(CC)				
Welliou. 602 1B - Volatile Organic C	ompounds (	(30)				
Analyte	Result	Qualifier	RL	MDL	Unit	

651

**REMOVED FROM** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				11/01/21 12:16	11/04/21 01:31	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 12:16	11/04/21 01:31	1

Mictilod. Total BTEX - Total BT	EX Galculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	651		49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Ra	inge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 18:39	1

Oll Range Organics (Over C28-C36)	<49.9 U	49.9	mg/Kg	11/03/21 11:37	11/04/21 18:39	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	91	70 - 130		11/03/21 11:37	11/04/21 18:39	1
o-Terphenyl	104	70 - 130		11/03/21 11:37	11/04/21 18:39	1

49.9

mg/Kg

Eurofins Xenco, Carlsbad

11/04/21 18:39

11/03/21 11:37

Page 86 of 248

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-8 (0-6)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 **REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-99

Matrix: Solid

Sample Depth: 0 - 6

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4070		25.0		mg/Kg			11/07/21 04:15	5

Client Sample ID: SW-9 (0-6)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Sample Depth: 0 - 6

REMOVED FROM **ANALYSIS TABLE** 

Lab Sample ID: 890-1502-100

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				11/01/21 12:16	11/04/21 01:52	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:16	11/04/21 01:52	1
- Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 19:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 19:01	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/03/21 11:37	11/04/21 19:01	1
o-Terphenyl	112		70 - 130				11/03/21 11:37	11/04/21 19:01	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Sample Depth: 0 - 6

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: SW-10 (0-6) Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-101

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Toluene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.00399		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Xylenes, Total	<0.00399	U F2 F1	0.00399		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				11/01/21 12:18	11/04/21 05:28	1
1,4-Difluorobenzene (Surr)	92		70 <sub>-</sub> 130				11/01/21 12:18	11/04/21 05:28	1

**Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00399 0.00399 mg/Kg 11/09/21 10:40

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <49.9 U 49.9 11/08/21 15:54 mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL MDL Dil Fac Unit D Prepared Analyzed <49.9 U \*1 Gasoline Range Organics 49.9 mg/Kg 11/03/21 13:15 11/04/21 11:05 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 49.9 mg/Kg 11/03/21 13:15 11/04/21 11:05 C10-C28) OII Range Organics (Over C28-C36) <49.9 U 49 9 11/03/21 13:15 11/04/21 11:05 mg/Kg Limits Prepared Analyzed Dil Fac Surrogate %Recovery Qualifier

70 - 130 11/03/21 13:15 11/04/21 11:05 1-Chlorooctane 100 100 70 - 130 11/03/21 13:15 11/04/21 11:05 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed 25.2 Chloride 4090 mg/Kg 11/07/21 04:30

Client Sample ID: SW-11 (0-6) Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45 Sample Depth: 0 - 6

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-102

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 05:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 05:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:18	11/04/21 05:49	1

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-11 (0-6)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Sample Depth: 0 - 6 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-1502-102

Matrix: Solid

4

5

7

10

12

4

14

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130				11/01/21 12:18	11/04/21 05:49	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	e Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 12:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 12:11	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/03/21 13:15	11/04/21 12:11	1
o-Terphenyl	104		70 - 130				11/03/21 13:15	11/04/21 12:11	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1060		4.99		mg/Kg			11/08/21 09:36	- 1

Client Sample ID: SW-12 (10)

Date Collected: 10/26/21 00:00

Lab Sample ID: 890-1502-103

Matrix: Solid

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130				11/01/21 12:18	11/04/21 06:09	1
1,4-Difluorobenzene (Surr)	113		70 - 130				11/01/21 12:18	11/04/21 06:09	1
- Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0		50.0		mg/Kg			11/08/21 15:54	

Lab Sample ID: 890-1502-103

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-12 (10)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:32	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:32	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/03/21 13:15	11/04/21 12:32	1
o-Terphenyl	98		70 - 130				11/03/21 13:15	11/04/21 12:32	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SW-13 (15)

Date Collected: 10/26/21 00:00

Lab Sample ID: 890-1502-104

Matrix: Solid

Date Received: 10/29/21 12:45

Date (Cecivea: 10/25/21 12:40

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 06:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 06:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 06:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:18	11/04/21 06:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 06:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:18	11/04/21 06:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/01/21 12:18	11/04/21 06:29	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:18	11/04/21 06:29	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	96.1		50.0		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:55	1
Diesel Range Organics (Over C10-C28)	96.1		50.0		mg/Kg		11/03/21 13:15	11/04/21 12:55	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				11/03/21 13:15	11/04/21 12:55	1
o-Terphenyl	83		70 <sub>-</sub> 130				11/03/21 13:15	11/04/21 12:55	1

Eurofins Xenco, Carlsbad

2

3

7

ŏ

10

12

13

Result Qualifier

Job ID: 890-1502-1 SDG: 212C-MD-02230

ah Sample ID: 890-1502-104

Lab Sample ID: 890-1502-104

Matrix: Solid

Client Sample ID: SW-13 (15)
Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1840		24.9		mg/Kg			11/08/21 09:57	5

Client Sample ID: SW-14 (15)

Date Collected: 10/26/21 00:00

Lab Sample ID: 890-1502-105

Matrix: Solid

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				11/01/21 12:18	11/04/21 06:50	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/01/21 12:18	11/04/21 06:50	1

Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
– Method: 8015 NM - Diesel Range C	organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.3		49.8		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared		
•	•	, , ,	RL	MDI	Unit	n	Propared		
Casalina Danga Organica		11*1		WIDE		_ <u>-</u>	<u>.</u>	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	MDL	mg/Kg		11/03/21 13:15	11/04/21 13:16	Dil Fac
5 5	<49.8 <b>56.3</b>	U *1					<u>.</u>		Dil Fac 1

RL

MDL Unit

Prepared

Analyzed

Dil Fac

,			0 0			
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	107	70 - 130		11/03/21 13:15	11/04/21 13:16	1
o-Terphenyl	106	70 - 130		11/03/21 13:15	11/04/21 13:16	1

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		5.00		mg/Kg			11/08/21 10:07	1

Lab Sample ID: 890-1502-106

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-15 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				11/01/21 12:18	11/04/21 07:10	1
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130				11/01/21 12:18	11/04/21 07:10	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DP	O) (GC)							
Analyte	•	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0		50.0		mg/Kg	— <u>-</u>		11/08/21 15:54	1
					5 5				
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 13:38	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 13:38	1
C10-C28) OII Range Organics (Over C28-C36)	<50.0	Ш	50.0		mg/Kg		11/03/21 13:15	11/04/21 13:38	1
On Range Organics (Over 020-030)	<b>\30.0</b>	U	30.0		mg/Rg		11/03/21 13.13	11/04/21 13.30	'
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
			70 - 130				11/03/21 13:15	11/04/21 13:38	
1-Chlorooctane	102		10 - 130						1
	102 100		70 - 130				11/03/21 13:15	11/04/21 13:38	
1-Chlorooctane	100	Soluble					11/03/21 13:15		•
1-Chlorooctane o-Terphenyl	100 omatography -	Soluble Qualifier		MDL	Unit	D	11/03/21 13:15 Prepared		Dil Fac

Client Sample ID: SW-16 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:18	11/04/21 07:31	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-107

**Matrix: Solid** 

2

3

-

7

10

12

13

Lab Sample ID: 890-1502-107

11/03/21 13:15 11/04/21 13:59

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-16 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
---	--------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108	70 - 130	11/01/21 12:18	11/04/21 07:31	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399		mg/Kg		_	11/09/21 10:40	1

н				
П	Method: 8015 NM - Diesel	Dange Organica		
П	- Metriou, ou la Min - Diesei	Range Organics	יו נטאטו	961

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg	]		11/08/21 15:54	1

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:59	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/03/21 13:15	11/04/21 13:59	1

o-Terphenyl	105	70 - 130
<del></del>		

Method: 300.0 - Anions, Ion Chron	matography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	_ D	Prepared	Analyzed	Dil Fac

Chloride	1170	4.96	mg/Kg	11/08/21 10:49 1
Client Sample ID: SW-17 (15)				Lab Sample ID: 890-1502-108

Client Sample ID: SW-17 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

### Method: 8021B - Volatile Organic Compounds (GC)

		/							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 07:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 07:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				11/01/21 12:18	11/04/21 07:51	1
1,4-Difluorobenzene (Surr)	105		70 - 130				11/01/21 12:18	11/04/21 07:51	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		ma/Ka			11/09/21 10:40	1

	Method: 8015 NM -	- Diesel Range	<b>Organics</b>	(DRO)	(GC)
--	-------------------	----------------	-----------------	-------	------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.1	50.0	mg/Kg			11/08/21 15:54	1

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

Lab Sample ID: 890-1502-108

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-17 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 14:20	1
Diesel Range Organics (Over C10-C28)	55.1		50.0		mg/Kg		11/03/21 13:15	11/04/21 14:20	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 14:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				11/03/21 13:15	11/04/21 14:20	1
o-Terphenyl	97		70 - 130				11/03/21 13:15	11/04/21 14:20	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2270	-	25.2		mg/Kg			11/08/21 11:00	5

Lab Sample ID: 890-1502-109 Client Sample ID: SW-18 (15) Date Collected: 10/26/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 08:11	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 08:11	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 08:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 08:11	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 08:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				11/01/21 12:18	11/04/21 08:11	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:18	11/04/21 08:11	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 14:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 14:41	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/03/21 13:15	11/04/21 14:41	1
o-Terphenyl	103		70 - 130				11/03/21 13:15	11/04/21 14:41	1

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: SW-18 (15) Lab Sample ID: 890-1502-109 Date Collected: 10/26/21 00:00

Matrix: Solid

Sample Depth: 15

Date Received: 10/29/21 12:45

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	826		4.98		mg/Kg			11/08/21 11:10	1

Client Sample ID: SW-19 (15) Lab Sample ID: 890-1502-110

Date Collected: 10/26/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:18	11/04/21 08:32	1
1,4-Difluorobenzene (Surr)	83		70 - 130				11/01/21 12:18	11/04/21 08:32	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	•					_			
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/03/21 13:15	11/04/21 15:03	1
o-Terphenyl	103		70 - 130				11/03/21 13:15	11/04/21 15:03	1
o-respiration									
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
	• • •	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1502-111

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-20 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 10:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 10:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 10:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:18	11/04/21 10:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 10:21	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:18	11/04/21 10:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:18	11/04/21 10:21	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:18	11/04/21 10:21	1
Method: Total BTEX - Total BTE	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1
		O) (GC)				_	_		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result   <49.9	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/08/21 15:54	
<u> </u>	<49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Total TPH	<49.9	Qualifier U				<u>D</u>	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang	<49.9	Qualifier U  RO) (GC) Qualifier	49.9		mg/Kg	=	<u> </u>	11/08/21 15:54	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<49.9  ge Organics (D	Qualifier U  RO) (GC) Qualifier U *1	49.9		mg/Kg	=	Prepared	11/08/21 15:54 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	qe Organics (Digital Result	Qualifier U  RO) (GC) Qualifier U *1	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/03/21 13:15	11/08/21 15:54  Analyzed  11/04/21 15:46	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9 ge Organics (Dispersion of the property of the	Qualifier U  RO) (GC) Qualifier U *1 U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:15 11/03/21 13:15	11/08/21 15:54  Analyzed  11/04/21 15:46  11/04/21 15:46	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 ge Organics (Display="2">Result <49.9 <49.9 <49.9	Qualifier U  RO) (GC) Qualifier U *1 U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15	Analyzed 11/04/21 15:46 11/04/21 15:46 11/04/21 15:46	Dil Face 1 1 1 Dil Face
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<49.9 ge Organics (Digital Result content of the content	Qualifier U  RO) (GC) Qualifier U *1 U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15 Prepared	Analyzed 11/04/21 15:46 11/04/21 15:46 11/04/21 15:46 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<49.9 ge Organics (D) Result <49.9 <49.9 <49.9  **Recovery 104 105	Qualifier U  RO) (GC) Qualifier U *1  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15  Prepared 11/03/21 13:15	Analyzed 11/04/21 15:46 11/04/21 15:46 11/04/21 15:46 Analyzed 11/04/21 15:46	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	qe Organics (D) Result <49.9 <49.9 <49.9 **Recovery 104 105 comatography -	Qualifier U  RO) (GC) Qualifier U *1  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15  Prepared 11/03/21 13:15	Analyzed 11/04/21 15:46 11/04/21 15:46 11/04/21 15:46 Analyzed 11/04/21 15:46	Dil Fac  1  Dil Fac  1  Dil Fac  1  Dil Fac

Client Sample ID: SW-21 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 10:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 10:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 10:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 10:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 10:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 10:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				11/01/21 12:18	11/04/21 10:41	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-112

Matrix: Solid

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-112

Client Sample ID: SW-21 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B.	Volatile Orga	nic Compounds	(GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	11/01/21 12:18	11/04/21 10:41	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			_	11/09/21 10:40	1

Method: 8015 NM - Diesel Range (	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
					-		

y	riodani danimo.			_		, <u>, _</u>	
Total TPH	154	49.9	mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Range	Organics (DRO) (GC)						
Analyto	Popult Qualifier	DI	MDI Unit	n	Dropared	Analyzod	Dil Eac

Analyte	Result	Qualifier	RL	MDL Un	it	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9	mg	/Kg	_	11/03/21 13:15	11/04/21 16:07	1
(GRO)-C6-C10									
Diesel Range Organics (Over	154		49.9	mg	/Kg		11/03/21 13:15	11/04/21 16:07	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg	/Kg		11/03/21 13:15	11/04/21 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	11/03/21 13	:15 11/04/21 16:07	1
o-Terphenyl	107		70 - 130	11/03/21 13	:15 11/04/21 16:07	1

Method: 300.0 - Anions, lor	Chromatography - Soluble
A I 4 -	DII OIII

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5770		50.1		mg/Kg			11/08/21 12:02	10

Client Sample ID: SW-22 (15)

Date Collected: 10/26/21 00:00

Lab Sample ID: 890-1502-113

Matrix: Solid

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B -	Malatile O		
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:01	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:01	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 11:01	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 11:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:18	11/04/21 11:01	1
1,4-Difluorobenzene (Surr)	97		70 - 130				11/01/21 12:18	11/04/21 11:01	1

ı						
ı	Mothod	Total	DTEV	Total	DTEV	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:58	1

Method: 8015 NM - Diese	Range Organics	(DRO)	(GC)
Michiga. 00 10 Min - Diese	i italige Organics	(DITO)	(00)

Analyte	•	•	Result	Qualifier	RL	MDL Unit	D	epared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9	mg/	 Kg		11/08/21 15:54	1

Eurofins Xenco, Carlsbad

2

3

0

\_

10

12

13

Н

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: SW-22 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-113

Lab Sample ID: 890-1502-114

Matrix: Solid

Matrix: Solid

Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:29	
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:29	•
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/03/21 13:15	11/04/21 16:29	
o-Terphenyl	108		70 - 130				11/03/21 13:15	11/04/21 16:29	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9240		49.8		mg/Kg			11/08/21 12:12	10

Client Sample ID: SW-23 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 11:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 11:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 11:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:18	11/04/21 11:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 11:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:18	11/04/21 11:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/01/21 12:18	11/04/21 11:22	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 12:18	11/04/21 11:22	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:58	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:51	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:51	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	104		70 - 130				11/03/21 13:15	11/04/21 16:51	1

Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD

Client Sample ID: SW-23 (15)

Lab Sample ID: 890-1502-114

Date Collected: 10/26/21 00:00
Date Received: 10/29/21 12:45

Matrix: Solid

Sample Depth: 15

Client: Tetra Tech, Inc.

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	1070		4.96		mg/Kg			11/08/21 12:43	1

Client Sample ID: SW-24 (15)

Lab Sample ID: 890-1502-115

Date Collected: 10/26/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:42	
Toluene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:42	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 11:42	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 11:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/01/21 12:18	11/04/21 11:42	1
1,4-Difluorobenzene (Surr)	114		70 - 130				11/01/21 12:18	11/04/21 11:42	1
Method: Total BTEX - Total BTE	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:58	1
Method: 8015 NM - Diesel Range	•					_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 17:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 17:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	107		70 - 130				11/03/21 13:15	11/04/21 17:14	1
1-Chlorooctane							11/03/21 13:15	11/04/21 17:14	
1-Chlorooctane o-Terphenyl	106		70 - 130				11/03/21 13.13	11/04/21 17.14	1
1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro		Soluble	70 - 130				11/03/21 10:10	11/04/21 17.14	1
o-Terphenyl	omatography -	Soluble Qualifier	70 <sub>-</sub> 130	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-1502-116

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-25 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 12:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 12:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 12:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130				11/01/21 12:18	11/04/21 12:03	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/01/21 12:18	11/04/21 12:03	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/09/21 10:58	1
Analyte Total TPH		Qualifier	RL 49.8	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg				
-								11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						11/08/21 15:54	1
		RO) (GC) Qualifier	RL	MDL		D	Prepared	11/08/21 15:54  Analyzed	1 Dil Fac
Analyte Gasoline Range Organics		Qualifier	RL 49.8	MDL		<u>D</u>	Prepared 11/03/21 13:15		Dil Fac
Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)	Result	Qualifier U *1		MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<b>Result</b> <49.8	Qualifier U *1	49.8	MDL	Unit mg/Kg	<u>D</u>	11/03/21 13:15	Analyzed 11/04/21 17:35	Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.8 <49.8	Qualifier U *1 U	49.8	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 13:15 11/03/21 13:15	Analyzed 11/04/21 17:35	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.8   <49.8   <49.8	Qualifier U *1 U	49.8 49.8 49.8	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/03/21 13:15 11/03/21 13:15 11/03/21 13:15	Analyzed 11/04/21 17:35 11/04/21 17:35 11/04/21 17:35	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U *1 U	49.8 49.8 49.8 <b>Limits</b>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 13:15 11/03/21 13:15 11/03/21 13:15 Prepared	Analyzed 11/04/21 17:35 11/04/21 17:35 11/04/21 17:35 Analyzed	Dil Face
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier U *1 U Qualifier	49.8 49.8 49.8  Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 13:15 11/03/21 13:15 11/03/21 13:15 Prepared 11/03/21 13:15	Analyzed 11/04/21 17:35 11/04/21 17:35 11/04/21 17:35  Analyzed 11/04/21 17:35	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U *1 U Qualifier	49.8 49.8 49.8  Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	11/03/21 13:15 11/03/21 13:15 11/03/21 13:15 Prepared 11/03/21 13:15	Analyzed 11/04/21 17:35 11/04/21 17:35 11/04/21 17:35  Analyzed 11/04/21 17:35	Dil Face  1  1  1  Dil Face

Client Sample ID: SW-26 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 12:23	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 12:23	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 12:23	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 12:23	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 12:23	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 12:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:18	11/04/21 12:23	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-117

**Matrix: Solid** 

Lab Sample ID: 890-1502-117

11/03/21 13:15 11/04/21 17:56

Lab Sample ID: 890-1502-118

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-26 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
mothodi coz iz rolatilo olgalilo compt	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifie	· Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96	70 - 130	11/01/21 12:18	11/04/21 12:23	1

Method: Tot	al BTEX - Tota	al BTEX Ca	alculation
mounou. Tot	u. D. L		aiouiutioii

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:58	1

Mothod: 8015 NM -	Diosal Panga	Organice	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg	 		11/08/21 15:54	1

Mothod: 901ED	NM Diocol	Pango Ore	aniec /	DBO	CC
Method: 8015B	MINI - DIESEI	Range Org	janics (	DRO	(GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9	mg/Kg		11/03/21 13:15	11/04/21 17:56	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		11/03/21 13:15	11/04/21 17:56	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/03/21 13:15	11/04/21 17:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			11/03/21 13:15	11/04/21 17:56	1

o-Terphenyl		103	
=			

Welliou. 300.0 - Allions, ion Chron	iatograpity -	Joiuble								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chlorida	447		4 95		ma/Ka			11/08/21 13:15	1	

70 - 130

Client Sample ID: SW-27 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 0024D	Valatila	Organia	Compoundo	(CC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00206		0.00201		mg/Kg		11/01/21 12:18	11/04/21 12:44	1
Toluene	0.00205		0.00201		mg/Kg		11/01/21 12:18	11/04/21 12:44	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 12:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:18	11/04/21 12:44	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:18	11/04/21 12:44	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:18	11/04/21 12:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/01/21 12:18	11/04/21 12:44	1
1,4-Difluorobenzene (Surr)	103		70 - 130				11/01/21 12:18	11/04/21 12:44	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00411		0.00402		mg/Kg			11/09/21 10:58	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/08/21 15:54	1

Lab Sample ID: 890-1502-118

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-27 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/03/21 13:15	11/04/21 18:17	1
o-Terphenyl	97		70 - 130				11/03/21 13:15	11/04/21 18:17	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SW-28 (15) Lab Sample ID: 890-1502-119 Date Collected: 10/26/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 13:04	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 13:04	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 13:04	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/01/21 12:18	11/04/21 13:04	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:18	11/04/21 13:04	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/01/21 12:18	11/04/21 13:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				11/01/21 12:18	11/04/21 13:04	1
1,4-Difluorobenzene (Surr)	107		70 - 130				11/01/21 12:18	11/04/21 13:04	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/09/21 10:58	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:39	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				11/03/21 13:15	11/04/21 18:39	1
o-Terphenyl	83		70 - 130				11/03/21 13:15	11/04/21 18:39	1

Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD

Date Received: 10/29/21 12:45

Client Sample ID: SW-28 (15) Lab Sample ID: 890-1502-119 Date Collected: 10/26/21 00:00

Matrix: Solid

Sample Depth: 15

Client: Tetra Tech, Inc.

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3280		25.0		mg/Kg			11/08/21 13:36	5

Client Sample ID: SW-29 (15) Lab Sample ID: 890-1502-120

**Matrix: Solid** 

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic	c Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 03:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 03:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 03:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/04/21 11:11	11/05/21 03:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 03:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/04/21 11:11	11/05/21 03:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130				11/04/21 11:11	11/05/21 03:36	1
1,4-Difluorobenzene (Surr)	215	S1+	70 - 130				11/04/21 11:11	11/05/21 03:36	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:58	1
		0) (00)							
Method: 8015 NM - Diesel Range	•	, , ,	ъ.			_			D.: E
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		11/03/21 13:15	11/04/21 19:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 19:01	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/03/21 13:15	11/04/21 19:01	1

Eurofins Xenco, Carlsbad

Analyzed

11/08/21 13:46

RL

5.00

MDL Unit

mg/Kg

D

Prepared

Dil Fac

Analyte

Chloride

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

416

Lab Sample ID: 890-1502-121

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-30 (RS) (6)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:40	
Toluene	<0.00200	U F1	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:40	•
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:40	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399		mg/Kg		11/01/21 11:07	11/01/21 23:40	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:40	1
Xylenes, Total	<0.00399	U F1	0.00399		mg/Kg		11/01/21 11:07	11/01/21 23:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130				11/01/21 11:07	11/01/21 23:40	
1,4-Difluorobenzene (Surr)	96		70 - 130				11/01/21 11:07	11/01/21 23:40	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:58	1
Analyte	Result	Qualifier	RL	MDI	Unit	D	Danamanad		
				WIDE			Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	WDL	mg/Kg	_ =	Prepared	11/08/21 15:54	
• •				MIDL			Prepared		
: Method: 8015B NM - Diesel Ran	ge Organics (D					<u>D</u>	Prepared		1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	49.9		mg/Kg	=	<u> </u>	11/08/21 15:54	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	49.9		mg/Kg	=	Prepared	11/08/21 15:54 Analyzed	Dil Fac
5 5 ,	ge Organics (D Result <49.9	RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/03/21 13:58	11/08/21 15:54  Analyzed  11/04/21 10:53	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:58 11/03/21 13:58	11/08/21 15:54  Analyzed  11/04/21 10:53  11/04/21 10:53	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:58 11/03/21 13:58 11/03/21 13:58	Analyzed 11/04/21 10:53 11/04/21 10:53 11/04/21 10:53	Dil Face  1  Dil Face  1  Dil Face
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:58 11/03/21 13:58 11/03/21 13:58 Prepared	Analyzed 11/04/21 10:53 11/04/21 10:53 11/04/21 10:53 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 90 108	RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:58 11/03/21 13:58 11/03/21 13:58 Prepared 11/03/21 13:58	Analyzed 11/04/21 10:53 11/04/21 10:53 11/04/21 10:53 Analyzed 11/04/21 10:53	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D Result <49.9 <49.9 <49.9  **Recovery 90 108  omatography -	RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 13:58 11/03/21 13:58 11/03/21 13:58 Prepared 11/03/21 13:58	Analyzed 11/04/21 10:53 11/04/21 10:53 11/04/21 10:53 Analyzed 11/04/21 10:53	Dil Fac

Client Sample ID: SW-31 (RS) (4)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				11/01/21 11:07	11/02/21 00:00	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-122

**Matrix: Solid** 

3

6

8

10

12

13

Lab Sample ID: 890-1502-122

11/03/21 13:58

11/04/21 11:55

Lab Sample ID: 890-1502-123

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-31 (RS) (4)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 4

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
mothodi coz iz rolatilo olgalilo compt	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95	70 - 130	11/01/21 11:07	11/02/21 00:00	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/09/21 10:58	1

Method: 8015 NM	- Diesel Range	Organice	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL Unit		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/	Kg			11/08/21 15:54	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 11:55	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 11:55	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 11:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				11/03/21 13:58	11/04/21 11:55	1

1-Chlorooctane	80	10 - 130
o-Terphenyl	93	70 - 130

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	109		4.99		mg/Kg			11/09/21 14:53	1

Client Sample ID: SW-32 (RS) (6)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

Michiga ouz ib - Volatile Orga	inc compounds	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:07	11/02/21 00:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:07	11/02/21 00:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:07	11/02/21 00:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 11:07	11/02/21 00:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:07	11/02/21 00:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 11:07	11/02/21 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130				11/01/21 11:07	11/02/21 00:21	1
1,4-Difluorobenzene (Surr)	78		70 - 130				11/01/21 11:07	11/02/21 00:21	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:58	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0		mg/Kg			11/08/21 15:54	1

**Matrix: Solid** 

Lab Sample ID: 890-1502-123

Lab Sample ID: 890-1502-124

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-32 (RS) (6)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:15	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:15	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				11/03/21 13:58	11/04/21 12:15	1
o-Terphenyl	83		70 - 130				11/03/21 13:58	11/04/21 12:15	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
	Popult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifici			O		opa. oa	,u.,u	

Client Sample ID: SW-33 (RS) (8)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/02/21 00:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/02/21 00:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/02/21 00:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:07	11/02/21 00:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/02/21 00:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:07	11/02/21 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				11/01/21 11:07	11/02/21 00:41	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/01/21 11:07	11/02/21 00:41	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:58	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/08/21 15:54	1
- Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:36	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				11/03/21 13:58	11/04/21 12:36	1
	80		70 <sub>-</sub> 130				11/03/21 13:58	11/04/21 12:36	1

Eurofins Xenco, Carlsbad

2

3

4

6

8

10

13

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-33 (RS) (8) Lab Sample ID: 890-1502-124

Date Collected: 10/28/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

Sample Depth: 8

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	831	F1	5.04		mg/Kg			11/09/21 15:08	1

\_

8

10

11

13

14

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1502-1	BH-1 (6)	118	73	
890-1502-1 MS	BH-1 (6)	111	105	
890-1502-1 MSD	BH-1 (6)	109	103	
890-1502-2	BH-2 (6)	120	98	
890-1502-3	BH-3 (6)	122	70	
890-1502-4	BH-4 (6)	124	67 S1-	
890-1502-5	BH-5 (6)	140 S1+	97	
890-1502-6	BH-6 (6)	136 S1+	104	
890-1502-7	BH-7 (6)	123	97	
890-1502-8		146 S1+	69 S1-	
	BH-8 (6)			
890-1502-9	BH-9 (6)	130	93	
890-1502-10	BH-10 (6)	136 S1+	105	
890-1502-11	BH-11 (6)	112	76	
890-1502-12	BH-12 (6)	137 S1+	98	
890-1502-13	BH-13 (6)	120	96	
890-1502-14	BH-14 (6)	130	95	
890-1502-15	BH-15 (6)	137 S1+	98	
890-1502-16	BH-16 (6)	110	82	
890-1502-17	BH-17 (6)	123	98	
890-1502-18	BH-18 (6)	127	98	
890-1502-19	BH-19 (6)	117	81	
890-1502-20	BH-20 (6)	113	94	
890-1502-21	BH-21 (6)	99	72	
890-1502-21 MS	BH-21 (6)	133 S1+	111	
890-1502-21 MSD	BH-21 (6)	113	104	
890-1502-22	BH-22 (6)	130	98	
890-1502-23	BH-23 (6)	116	100	
890-1502-24	BH-24 (6)	126	96	
890-1502-25	BH-25 (15)	122	97	
890-1502-26	BH-26 (15)	123	107	
890-1502-27	BH-27 (15)	112	85	
890-1502-28	BH-28 (15)	121	104	
890-1502-29	BH-29 (15)	123	91	
890-1502-30	BH-30 (15)	71	70	
890-1502-31	BH-31 (15)	114	111	
890-1502-32	BH-32 (15)	86	93	
890-1502-33		132 S1+		
390-1502-33 390-1502-34	BH-33 (15)		108	
	BH-34 (15)	124	100	
390-1502-35	BH-35 (15)	127	110	
390-1502-36	BH-36 (15)	128	109	
390-1502-37	BH-37 (15)	117	101	
890-1502-38	BH-38 (15)	129	118	
890-1502-39	BH-39 (15)	117	100	
890-1502-40	BH-40 (15)	115	100	
890-1502-41	BH-41 (15)	132 S1+	110	
890-1502-41 MS	BH-41 (15)	66 S1-	179 S1+	
890-1502-41 MSD	BH-41 (15)	70	216 S1+	
890-1502-42	BH-42 (15)	86	198 S1+	
890-1502-43	BH-43 (15)	88	215 S1+	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

Matrix: Solid				Prep Type: Total/NA
				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1502-44	BH-44 (15)	99	211 S1+	
890-1502-45	BH-45 (15)	88	203 S1+	
890-1502-46	BH-46 (15)	102	226 S1+	
890-1502-47	BH-47 (15)	86	211 S1+	
890-1502-48	BH-48 (15)	94	220 S1+	
890-1502-49	BH-49 (15)	91	17 S1-	
890-1502-50	BH-50 (15)	11591	65 S1-	
		S1+		
890-1502-51	BH-51 (15 )	112	199 S1+	
890-1502-52	BH-52 (15)	105	233 S1+	
890-1502-53	BH-53 (15)	114	99	
890-1502-53 MS	BH-53 (15)	124	100	
890-1502-53 MSD	BH-53 (15)	109	96	
890-1502-54	BH-54 (15)	90	202 S1+	
890-1502-55	BH-55 (15)	88	191 S1+	
890-1502-56	BH-56 (15)	116	115	
890-1502-57	BH-57 (15)	96	221 S1+	
890-1502-58	BH-58 (15)	112	243 S1+	
890-1502-59	BH-59 (15)	111	243 S1+	
890-1502-60	BH-60 (15)	13 S1-	230 S1+	
890-1502-61	BH-61 (15)	115	99	
890-1502-61 MS	BH-61 (15)	131 S1+	110	
890-1502-61 MSD	BH-61 (15)	134 S1+	100	
890-1502-62	BH-62 (15)	118	103	
890-1502-63	BH-63 (15)	124	102	
890-1502-64	BH-64 (15)	120	99	
890-1502-65	BH-65 (15)	134 S1+	101	
890-1502-66	BH-66 (15)	95	72	
890-1502-67	BH-67 (15)	115	100	
890-1502-68	BH-68 (15)	125	109	
890-1502-69	BH-69 (15)	129	103	
890-1502-70	BH-70 (15)	130	102	
890-1502-71	BH-71 (15)	116	97	
890-1502-72	BH-72 (15)	122	103	
890-1502-73	BH-73 (15)	130	102	
890-1502-74	BH-74 (15)	121	98	
890-1502-75	BH-75 (15)	88	79	
890-1502-76	BH-76 (15)	119	104	
890-1502-77	BH-77 (15)	82	71	
890-1502-78	BH-78 (15)	118	99	
890-1502-79	BH-79 (15)	129	104	
890-1502-80	BH-80 (15)	116	106	
890-1502-81	BH-81 (15)	80	69 S1-	
890-1502-81 MS	BH-81 (15)	118	103	
890-1502-81 MSD	BH-81 (15)	96	86	
890-1502-82	BH-82 (15)	105	83	
890-1502-83	BH-83 (15)	107	90	
890-1502-84	BH-84 (15)	126	101	
890-1502-85	BH-85 (15)	114	110	
890-1502-86	BH-86 (15)	115	100	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	. 3.33 Guirogate recovery (Acceptance Lillins)
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
502-87	BH-87 (15)	110	98	
02-88	BH-88 (15)	128	101	
502-89	BH-89 (15)	129	112	
502-90	BH90 (RS ) (6)	128	126	
502-91	BH-91 (RS ) (6)	114	111	
1502-91	SW-1 (0-6)	93	122	
1502-93	SW-2 (0-6)	108	74	
1502-94	SW-3 (0-6)	128	97 105	
1502-95	SW-4 (0-6)	133 S1+	105	
1502-96	SW-5 (0-6)	129	110	
502-97	SW-6 (0-6)	112	98	
1502-98	SW-7 (0-6)	114	96	
1502-99	SW-8 (0-6)	119	104	
502-100	SW-9 (0-6)	126	101	
1502-101	SW-10 (0-6)	111	92	
1502-101 MS	SW-10 (0-6)	123	99	
1502-101 MSD	SW-10 (0-6)	123	101	
502-102	SW-11 (0-6)	113	88	
502-103	SW-12 (10)	140 S1+	113	
502-104	SW-13 (15)	123	110	
02-105	SW-14 (15)	135 S1+	108	
502-106	SW-15 (15)	85	57 S1-	
502-107	SW-16 (15)	129	108	
1502-108	SW-17 (15)	122	105	
502-109	SW-18 (15)	118	101	
502-110	SW-19 (15)	88	83	
502-111	SW-20 (15)	116	101	
502-112	SW-21 (15)	126	111	
502-113	SW-22 (15)	116	97	
502-114	SW-23 (15)	123	104	
1502-115	SW-24 (15)	110	114	
1502-116	SW-25 (15)	134 S1+	108	
1502-117	SW-26 (15)	118	96	
1502-117	SW-27 (15)	121	103	
1502-116		128	107	
1502-119 1502-120	SW-28 (15)	128	215 S1+	
	SW-29 (15)	125 136 S1+		
-1502-121	SW-30 (RS) (6)		96	
-1502-121 MS	SW-30 (RS) (6)	122	97	
1502-121 MSD	SW-30 (RS) (6)	114	103	
1502-122	SW-31 (RS) (4)	109	95	
1502-123	SW-32 (RS) (6)	151 S1+	78	
1502-124	SW-33 (RS) (8)	142 S1+	98	
1520-A-1-B MS	Matrix Spike	101	103	
1520-A-1-C MSD	Matrix Spike Duplicate	61 S1-	204 S1+	
880-11075/1-A	Lab Control Sample	113	101	
880-11076/1-A	Lab Control Sample	106	87	
880-11109/1-A	Lab Control Sample	113	103	
880-11111/1-A	Lab Control Sample	87	223 S1+	
880-11112/1-A	Lab Control Sample	112	103	
880-11113/1-A	Lab Control Sample	115	105	

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

		DED.	DED74	Percent Surrogate Recovery (Acceptance Limits
h 0	Olient Ormale ID	BFB1 (70.120)	DFBZ1	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
S 880-11114/1-A	Lab Control Sample	114	106	
S 880-11388/1-A	Lab Control Sample	129	85	
S 880-11445/1-A	Lab Control Sample	103	230 S1+	
S 880-11449/3	Lab Control Sample	94	190 S1+	
SD 880-11075/2-A	Lab Control Sample Dup	107	106	
SD 880-11076/2-A	Lab Control Sample Dup	108	97	
SD 880-11109/2-A	Lab Control Sample Dup	128	103	
SD 880-11112/2-A	Lab Control Sample Dup	121	106	
SD 880-11113/2-A	Lab Control Sample Dup	116	107	
SD 880-11114/2-A	Lab Control Sample Dup	112	107	
SD 880-11388/2-A	Lab Control Sample Dup	105	102	
SD 880-11445/2-A	Lab Control Sample Dup	82	234 S1+	
SD 880-11449/4	Lab Control Sample Dup	95	198 S1+	
3 880-11021/5-A	Method Blank	106	101	
3 880-11075/5-A	Method Blank	120	97	
3 880-11076/5-A	Method Blank	115	93	
8 880-11109/5-A	Method Blank	120	106	
3 880-11111/5-A	Method Blank	58 S1-	189 S1+	
3 880-11112/5-A	Method Blank	117	106	
3 880-11113/5-A	Method Blank	117	107	
3 880-11114/5-A	Method Blank	116	105	
3 880-11207/5-A	Method Blank	107	71	
8 880-11258/5-A	Method Blank	54 S1-	182 S1+	
8 880-11388/5-A	Method Blank	96	99	
8 880-11445/5-A	Method Blank	65 S1-	196 S1+	
8 880-11449/8	Method Blank	63 S1-	187 S1+	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID			
LCSD 880-11111/2-A	Lab Control Sample Dup			
Surrogate Legend				
BFB = 4-Bromofluorobe	nzene (Surr)			
DFB7 = 1.4-Difluoroben	izene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1502-1	BH-1 (6)	108	118	
890-1502-1 MS	BH-1 (6)	122	114	
890-1502-1 MSD	BH-1 (6)	114	109	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

Matrix: Solid				Prep Type: Total/NA
				Percent Surrogate Recovery (Acceptance Limits)
		1001	ОТРН1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1502-2	BH-2 (6)	119	131 S1+	
890-1502-3	BH-3 (6)	105	117	
890-1502-4	BH-4 (6)	112	125	
890-1502-5	BH-5 (6)	104	117	
890-1502-6	BH-6 (6)	111	123	
890-1502-7	BH-7 (6)	103	115	
890-1502-8	BH-8 (6)	104	117	
890-1502-9	BH-9 (6)	111	122	
890-1502-10	BH-10 (6)	106	118	
890-1502-11	BH-11 (6)	109	123	
890-1502-12	BH-12 (6)	104	112	
890-1502-13	BH-13 (6)	103	116	
890-1502-14	BH-14 (6)	102	113	
890-1502-15	BH-15 (6)	111	123	
890-1502-16	BH-16 (6)	100	113	
890-1502-17	BH-17 (6)	102	113	
890-1502-18	BH-18 (6)	100	107	
890-1502-19	BH-19 (6)	105	115	
890-1502-20	BH-20 (6)	9 S1-	10 S1-	
890-1502-21	BH-21 (6)	103	123	
890-1502-21 MS	BH-21 (6)	89	94	
890-1502-21 MSD	BH-21 (6)	94	101	
890-1502-22	BH-22 (6)	103	117	
890-1502-23	BH-23 (6)	92	106	
890-1502-24	BH-24 (6)	109	123	
890-1502-25	BH-25 (15)	107	122	
890-1502-26	BH-26 (15)	102	119	
890-1502-27	BH-27 (15)	105	120	
890-1502-28	BH-28 (15)	104	120	
890-1502-29	BH-29 (15)	109	128	
890-1502-30	BH-30 (15)	115	136 S1+	
890-1502-31	BH-31 (15)	105	123	
890-1502-32	BH-32 (15)	123	150 S1+	
890-1502-33	BH-33 (15)	112	133 S1+	
890-1502-34	BH-34 (15)	124	152 S1+	
890-1502-35	BH-35 (15)	107	132 S1+	
890-1502-36	BH-36 (15)	95	110	
890-1502-37	BH-37 (15)	95 95	112	
890-1502-38	BH-38 (15)	95 95	117	
890-1502-39	BH-39 (15)	94	117	
890-1502-40	BH-40 (15)	91	110	
890-1502-41	BH-41 (15)	96	95	
890-1502-41 MS	BH-41 (15)	95	87	
890-1502-41 MSD	BH-41 (15)	96	87	
890-1502-42	BH-42 (15)	101	105	
890-1502-43	BH-43 (15)	94	93	
890-1502-44	BH-44 (15)	110	116	
890-1502-45	BH-45 (15)	107	112	
890-1502-46	BH-46 (15)	106	107	
890-1502-47	BH-47 (15)	98	102	

Eurofins Xenco, Carlsbad

2

3

5

3

40

13

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

Matrix: Solid				Prep Type: Total/N/
				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1502-48	BH-48 (15)	111	111	
890-1502-49	BH-49 (15)	101	106	
890-1502-50	BH-50 (15)	114	119	
890-1502-51	BH-51 (15 )	101	106	
890-1502-52	BH-52 (15)	101	103	
890-1502-53	BH-53 (15)	96	98	
890-1502-54	BH-54 (15)	99	100	
890-1502-55	BH-55 (15)	99	99	
890-1502-56	BH-56 (15)	106	113	
890-1502-57	BH-57 (15)	99	102	
890-1502-58	BH-58 (15)	93	93	
890-1502-59	BH-59 (15)	110	110	
890-1502-60	BH-60 (15)	88	87	
890-1502-61	BH-61 (15)	50 S1-	34 S1-	
890-1502-61 MS	BH-61 (15)	41 S1-	31 S1-	
890-1502-61 MSD	BH-61 (15)	75	61 S1-	
890-1502-62	BH-62 (15)	93	90	
890-1502-63	BH-63 (15)	95	95	
890-1502-64	BH-64 (15)	97	103	
890-1502-65	BH-65 (15)	99	107	
890-1502-66	BH-66 (15)	102	112	
890-1502-67	BH-67 (15)	102	110	
890-1502-68	BH-68 (15)	97	98	
890-1502-69		109	114	
890-1502-70	BH-69 (15) BH-70 (15)	97	103	
890-1502-71	BH-71 (15)	99	107	
890-1502-71	BH-72 (15)	115	128	
890-1502-73	BH-73 (15)	90	91	
890-1502-74	BH-74 (15)	98	102	
890-1502-74	BH-75 (15)	100	102	
890-1502-76	BH-76 (15)	93	96	
890-1502-77	BH-77 (15)	99	105	
890-1502-78	BH-78 (15)	108	112	
890-1502-79	BH-79 (15)	103	103	
890-1502-80	BH-80 (15)	109	122	
890-1502-81	BH-81 (15)	91	101	
890-1502-81 MS	BH-81 (15)	95	99	
890-1502-81 MSD	BH-81 (15)	95	97	
890-1502-82	BH-82 (15)	89	102	
890-1502-83	BH-83 (15)	91	105	
890-1502-84	BH-84 (15)	94	105	
890-1502-85	BH-85 (15)	93	106	
890-1502-86	BH-86 (15)	93	110	
890-1502-87	BH-87 (15)	93	110	
890-1502-88	BH-88 (15)	98	108	
890-1502-89	BH-89 (15)	92	107	
890-1502-90	BH90 (RS ) (6)	94	112	
890-1502-91	BH-91 (RS ) (6)	92	107	
890-1502-92	SW-1 (0-6)	90	106	
890-1502-93	SW-2 (0-6)	89	106	

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	ОТРН1	recent ourrogate necovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-1502-94	SW-3 (0-6)	89	106	
890-1502-95	SW-4 (0-6)	90	107	
890-1502-96	SW-5 (0-6)	102	122	
890-1502-97	SW-6 (0-6)	89	98	
890-1502-98	SW-7 (0-6)	91	109	
890-1502-99	SW-8 (0-6)	91	104	
890-1502-100	SW-9 (0-6)	94	112	
890-1502-101	SW-10 (0-6)	100	100	
890-1502-101 MS	SW-10 (0-6)	101	93	
890-1502-101 MSD	SW-10 (0-6)	109	97	
890-1502-102	SW-11 (0-6)	106	104	
890-1502-103	SW-12 (10)	101	98	
890-1502-104	SW-13 (15)	86	83	
890-1502-105	SW-14 (15)	107	106	
890-1502-106	SW-15 (15)	102	100	
890-1502-107	SW-16 (15)	106	105	
890-1502-108	SW-17 (15)	97	97	
890-1502-109	SW-18 (15)	103	103	
890-1502-110	SW-19 (15)	103	103	
890-1502-111	SW-20 (15)	103	105	
890-1502-112	SW-21 (15)	107	107	
890-1502-112	SW-22 (15)	107	107	
890-1502-114		104	101	
890-1502-114	SW-23 (15)	107	106	
890-1502-116	SW-24 (15) SW-25 (15)		105	
890-1502-117	·	104 104	103	
890-1502-117	SW-26 (15) SW-27 (15)	99	97	
890-1502-119		90	83	
890-1502-119	SW-28 (15) SW-29 (15)	103	99	
890-1502-121				
890-1502-121 MS	SW-30 (RS) (6)	90	108	
890-1502-121 MSD	SW-30 (RS) (6)	100 92	92	
	SW-30 (RS) (6)		84	
890-1502-122	SW-31 (RS) (4)	86	93	
890-1502-123	SW-32 (RS) (6)	84	83	
890-1502-124	SW-33 (RS) (8)	80	80	
LCS 880-11223/2-A	Lab Control Sample	116	109	
LCS 880-11255/2-A	Lab Control Sample	98	106	
LCS 880-11273/2-A	Lab Control Sample	84	80	
LCS 880-11356/2-A	Lab Control Sample	103	100	
LCS 880-11364/2-A	Lab Control Sample	81	89	
LCS 880-11375/2-A	Lab Control Sample	102	99	
LCS 880-11376/2-A	Lab Control Sample	108	88	
LCSD 880-11223/3-A	Lab Control Sample Dup	113	106	
LCSD 880-11255/3-A	Lab Control Sample Dup	100	108	
LCSD 880-11273/3-A	Lab Control Sample Dup	87	85	
LCSD 880-11356/3-A	Lab Control Sample Dup	87	84	
LCSD 880-11364/3-A	Lab Control Sample Dup	89	97	
LCSD 880-11375/3-A	Lab Control Sample Dup	92	85	
LCSD 880-11376/3-A	Lab Control Sample Dup	103	95	
MB 880-11223/1-A	Method Blank	108	113	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
MB 880-11255/1-A	Method Blank	98	115	
MB 880-11273/1-A	Method Blank	100	103	
MB 880-11356/1-A	Method Blank	110	109	
MB 880-11364/1-A	Method Blank	99	115	
MB 880-11375/1-A	Method Blank	112	123	
MB 880-11376/1-A	Method Blank	89	94	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Client: Tetra Tech, Inc. Job ID: 890-1502-1 SDG: 212C-MD-02230 Project/Site: Kaiser SWD

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-11021/5-A

**Matrix: Solid** 

Analysis Batch: 11022

Client	Sample	ID:	Method	Blank

**Prep Type: Total/NA** 

Prep Batch: 11021

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 08:33	11/01/21 12:08	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	11/01/21 08:	33 11/01/21 12:08	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/01/21 08:	33 11/01/21 12:08	1

Lab Sample ID: MB 880-11075/5-A **Client Sample ID: Method Blank** Matrix: Solid Prep Type: Total/NA

Analysis Batch: 11206 Prep Batch: 11075

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 00:26	1

мв мв

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	4-Bromofluorobenzene (Surr)	120		70 - 130	11/01/21 11:05	11/03/21 00:26	1
١	1,4-Difluorobenzene (Surr)	97		70 - 130	11/01/21 11:05	11/03/21 00:26	1

Lab Sample ID: LCS 880-11075/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11206

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07732		mg/Kg		77	70 - 130	
Toluene	0.100	0.07602		mg/Kg		76	70 - 130	
Ethylbenzene	0.100	0.07511		mg/Kg		75	70 - 130	
m-Xylene & p-Xylene	0.200	0.1537		mg/Kg		77	70 - 130	
o-Xylene	0.100	0.09253		mg/Kg		93	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifi	er Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-11075/2-A

Matrix: Solid								Prep Type: Total/NA					
Analysis Batch: 11206							Prep Batch: 11075						
	Spike	LCSD	LCSD				%Rec.		RPD				
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit				
Benzene	0.100	0.09604		mg/Kg		96	70 - 130	22	35				

Eurofins Xenco, Carlsbad

Client Sample ID: Lab Control Sample Dup

Prep Batch: 11075

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-11075/2-A

**Matrix: Solid** 

Analysis Batch: 11206

Client Sample ID	: Lab Contro	Sample Dup
------------------	--------------	------------

Prep Type: Total/NA Prep Batch: 11075

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.08281		mg/Kg		83	70 - 130	9	35
Ethylbenzene	0.100	0.08382		mg/Kg		84	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.1739		mg/Kg		87	70 - 130	12	35
o-Xylene	0.100	0.09914		mg/Kg		99	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-1502-1 MS

**Matrix: Solid** 

Analysis Batch: 11206

Client Sample ID: BH-1 (6) Prep Type: Total/NA

Prep Batch: 11075

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1	0.101	0.06514	F1	mg/Kg		65	70 - 130	
Toluene	<0.00199	U F1	0.101	0.05844	F1	mg/Kg		58	70 - 130	
Ethylbenzene	<0.00199	U F1	0.101	0.06080	F1	mg/Kg		60	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.06489	F1	mg/Kg		32	70 - 130	
o-Xylene	< 0.00199	U	0.101	0.07557		mg/Kg		74	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1,4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: 890-1502-1 MSD

**Matrix: Solid** 

**Analysis Batch: 11206** 

Client Sample ID: BH-1 (6)

Prep Type: Total/NA

Prep Batch: 11075

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1	0.0996	0.07109		mg/Kg		71	70 - 130	9	35
Toluene	<0.00199	U F1	0.0996	0.06473	F1	mg/Kg		65	70 - 130	10	35
Ethylbenzene	<0.00199	U F1	0.0996	0.06748	F1	mg/Kg		68	70 - 130	10	35
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.07381	F1	mg/Kg		37	70 - 130	13	35
o-Xylene	<0.00199	U	0.0996	0.08065		mg/Kg		80	70 - 130	7	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	109	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: MB 880-11076/5-A

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11076

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:07	11/01/21 23:18	1

Eurofins Xenco, Carlsbad

Page 117 of 248

Job ID: 890-1502-1

SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-11076/5-A

**Matrix: Solid** 

**Analysis Batch: 11022** 

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 11076

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 11:07	11/01/21 23:18	1

MD MD

MR MR

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	115	70 - 130	11/01/21 11:07	11/01/21 23:18	1		
1,4-Difluorobenzene (Surr)	93	70 - 130	11/01/21 11:07	11/01/21 23:18	1		

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-11076/1-A **Matrix: Solid** 

**Analysis Batch: 11022** 

Prep Type: Total/NA

Prep Batch: 11076

	<b>Spike</b>	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07785		mg/Kg		78	70 - 130	
Toluene	0.100	0.07783		mg/Kg		78	70 - 130	
Ethylbenzene	0.100	0.08142		mg/Kg		81	70 - 130	
m-Xylene & p-Xylene	0.200	0.1672		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.08586		mg/Kg		86	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	106	70 - 130
1,4-Difluorobenzene (Surr)	87	70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11076

Matrix: Solid Analysis Batch: 11022

Lab Sample ID: LCSD 880-11076/2-A

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08048		mg/Kg		80	70 - 130	3	35
Toluene	0.100	0.07699		mg/Kg		77	70 - 130	1	35
Ethylbenzene	0.100	0.07972		mg/Kg		80	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1619		mg/Kg		81	70 - 130	3	35
o-Xylene	0.100	0.08493		mg/Kg		85	70 - 130	1	35
Ethylbenzene m-Xylene & p-Xylene	0.100 0.200	0.07972 0.1619		mg/Kg mg/Kg		80	70 - 130 70 - 130	3	35 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	108		70 - 130		
1,4-Difluorobenzene (Surr)	97		70 - 130		

Lab Sample ID: 890-1502-121 MS Client Sample ID: SW-30 (RS) (6)

Matrix: Solid

Analysis Batch: 11022

Prep Type: Total/NA

Prep Batch: 11076

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.0990	0.04100	F1	mg/Kg		41	70 - 130	
Toluene	<0.00200	U F1	0.0990	0.04297	F1	mg/Kg		43	70 - 130	
Ethylbenzene	<0.00200	U F1	0.0990	0.04022	F1	mg/Kg		41	70 - 130	
m-Xylene & p-Xylene	<0.00399	U F1	0.198	0.09185	F1	mg/Kg		46	70 - 130	
o-Xylene	<0.00200	U F1	0.0990	0.04676	F1	mg/Kg		47	70 - 130	

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-1502-121 MS

**Matrix: Solid** 

**Analysis Batch: 11022** 

Client Sample ID: SW-30 (RS) (6) Prep Type: Total/NA

Prep Batch: 11076

MS MS

%Recovery Surrogate Qualifier Limits 4-Bromofluorobenzene (Surr) 122 70 - 130 1,4-Difluorobenzene (Surr) 97 70 - 130

Lab Sample ID: 890-1502-121 MSD Client Sample ID: SW-30 (RS) (6)

**Matrix: Solid** 

Analysis Batch: 11022

Prep Type: Total/NA

Prep Batch: 11076

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <0.00200 U F1 0.0996 0.05695 F1 57 70 - 13033 35 Benzene mg/Kg Toluene <0.00200 UF1 0.0996 0.05604 F1 mg/Kg 56 70 - 130 26 35 <0.00200 U F1 0.0996 0.05757 F1 mg/Kg 58 70 - 130 35 35 Ethylbenzene m-Xylene & p-Xylene <0.00399 UF1 0.199 0.1165 F1 mg/Kg 59 70 - 130 24 35 o-Xylene <0.00200 UF1 0.0996 0.06067 F1 mg/Kg 61 70 - 130 26 35

> MSD MSD Qualifier %Recovery

Limits Surrogate 4-Bromofluorobenzene (Surr) 114 70 - 130 1,4-Difluorobenzene (Surr) 103 70 - 130

Lab Sample ID: MB 880-11109/5-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 11109

**Analysis Batch: 11221** MR MR

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 11/01/21 12:05 11/02/21 17:47 mg/Kg Toluene <0.00200 U 0.00200 11/01/21 12:05 11/02/21 17:47 mg/Kg <0.00200 U 0.00200 11/01/21 12:05 11/02/21 17:47 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00400 0.00400 11/01/21 12:05 11/02/21 17:47 mg/Kg <0.00200 U 0.00200 11/01/21 12:05 11/02/21 17:47 o-Xylene mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 11/01/21 12:05 11/02/21 17:47

MB MB

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 70 - 130 120 11/01/21 12:05 4-Bromofluorobenzene (Surr) 11/02/21 17:47 1,4-Difluorobenzene (Surr) 106 70 - 130 11/01/21 12:05 11/02/21 17:47

Lab Sample ID: LCS 880-11109/1-A Client Sample ID: Lab Control Sample

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11221** Prep Batch: 11109

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09326 mg/Kg 93 70 - 130 0.09333 70 - 130 Toluene 0.100 mg/Kg 93 Ethylbenzene 0.100 0.1039 mg/Kg 104 70 - 130 0.200 103 0.2053 70 - 130 m-Xylene & p-Xylene mg/Kg o-Xylene 0.100 0.09913 mg/Kg 99 70 - 130

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 113

Eurofins Xenco, Carlsbad

Page 119 of 248 Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-1502-1 SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-11109/1-A

Lab Sample ID: LCSD 880-11109/2-A

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 11221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11109

LCS LCS

Surrogate %Recovery Qualifier Limits 1,4-Difluorobenzene (Surr) 103 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11109

**Analysis Batch: 11221** LCSD LCSD RPD Spike %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1108 mg/Kg 111 70 - 130 17 35 Toluene 0.100 0.1179 70 - 130 23 35 mg/Kg 118 Ethylbenzene 0.100 0.1173 mg/Kg 117 70 - 130 12 35 0.200 m-Xylene & p-Xylene 0.2363 mg/Kg 118 70 - 130 14 35 o-Xylene 0.100 0.1143 mg/Kg 114 70 - 130 14 35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	128	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Client Sample ID: BH-21 (6)

Lab Sample ID: 890-1502-21 MS **Matrix: Solid** 

**Analysis Batch: 11221** 

Prep Type: Total/NA

Prep Batch: 11109

Prep Batch: 11109

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F1 F2	0.100	0.05197	F1	mg/Kg		51	70 - 130	
Toluene	<0.00202	U	0.100	0.07531		mg/Kg		74	70 - 130	
Ethylbenzene	<0.00202	U F1	0.100	0.06742	F1	mg/Kg		67	70 - 130	
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1125	F1	mg/Kg		56	70 - 130	
o-Xylene	<0.00202	U F1	0.100	0.06405	F1	mg/Kg		64	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	
1.4-Difluorobenzene (Surr)	111		70 - 130	

Lab Sample ID: 890-1502-21 MSD Client Sample ID: BH-21 (6)

**Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 11221** 

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Benzene <0.00202 U F1 F2 0.101 70 - 130 0.08364 F2 mg/Kg 82 47 35 Toluene <0.00202 U 0.101 0.07898 mg/Kg 78 70 - 130 5 35 Ethylbenzene <0.00202 UF1 0.101 0.06977 F1 mg/Kg 69 70 - 130 35 0.202 0.1359 F1 67 70 - 130 m-Xylene & p-Xylene <0.00403 UF1 mg/Kg 19 35 o-Xylene <0.00202 UF1 0.101 0.06888 F1 mg/Kg 70 - 130 35

MSD MSD %Recovery Qualifier Limits Surrogate 113 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 104 70 - 130

#### QC Sample Results

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-11111/5-A

**Matrix: Solid** 

Analysis Batch: 11259

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11111

1

	MR	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 01:52	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 01:52	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	58	S1-	70 - 130	11/01/21 12:11	11/04/21 01:52	1
1,4-Difluorobenzene (Surr)	189	S1+	70 - 130	11/01/21 12:11	11/04/21 01:52	1

Lab Sample ID: LCS 880-11111/1-A

**Matrix: Solid** 

Analysis Batch: 11259

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 11111

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1068 mg/Kg 107 70 - 130 Toluene 0.100 0.1000 mg/Kg 100 70 - 130 0.100 0.08895 Ethylbenzene mg/Kg 89 70 - 130 0.200 92 70 - 130 m-Xylene & p-Xylene 0.1848 mg/Kg 0.100 70 - 130 o-Xylene 0.1111 mg/Kg 111

LCS LCS

Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	87		70 - 130	
1,4-Difluorobenzene (Surr)	223	S1+	70 - 130	

Lab Sample ID: LCSD 880-11111/2-A

**Matrix: Solid** 

Analysis Batch: 11259

Prep Type: Total/NA Prep Batch: 11111

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1167		mg/Kg					
Toluene	0.100	0.1109		mg/Kg					
Ethylbenzene	0.100	0.1068		mg/Kg					
m-Xylene & p-Xylene	0.200	0.2116		mg/Kg					
o-Xylene	0.100	0.1243		mg/Kg					

LCSD LCSD

%Recovery Qualifier Limits Surrogate

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-1502-41 MS

**Matrix: Solid** 

Analysis Batch: 11259

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11111

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F2 F1	0.101	0.01309	F1	mg/Kg	_	12	70 - 130	
Toluene	< 0.00200	U F2 F1	0.101	0.005176	F1	mg/Kg		4	70 - 130	

Eurofins Xenco, Carlsbad

Page 121 of 248

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Job ID: 890-1502-1 SDG: 212C-MD-02230

**Matrix: Solid** 

**Analysis Batch: 11259** 

Lab Sample ID: 890-1502-41 MS Client Sample ID: BH-41 (15) Prep Type: Total/NA

Prep Batch: 11111

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D 0.006767 F1 Ethylbenzene <0.00200 U F2 F1 0.101 6 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00399 UF1 0.202 <0.00403 U F1 mg/Kg 0 70 - 130 o-Xylene <0.00200 U F2 F1 0.101 0.01517 F1 70 - 130 mg/Kg 14

MS MS

Qualifier Surrogate %Recovery Limits 70 - 130 4-Bromofluorobenzene (Surr) 66 S1-70 - 130 1,4-Difluorobenzene (Surr) 179 S1+

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11111

**Matrix: Solid** 

**Analysis Batch: 11259** 

Lab Sample ID: 890-1502-41 MSD

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added RPD Limit Analyte Result Qualifier Unit %Rec Limits 0.0994 Benzene <0.00200 U F2 F1 0.02353 F2 F1 mg/Kg 23 70 - 130 57 35 Toluene <0.00200 U F2 F1 0.0994 0.01239 F2 F1 mg/Kg 12 70 - 130 82 35 Ethylbenzene <0.00200 U F2 F1 0.0994 0.01841 F2 F1 18 70 - 130 92 35 mg/Kg 0.199 3 NC 35 m-Xylene & p-Xylene <0.00399 UF1 0.006042 F1 mq/Kq 70 - 130 0.0994 <0.00200 U F2 F1 0.03039 F2 F1 30 70 - 130 67 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	70		70 - 130
1,4-Difluorobenzene (Surr)	216	S1+	70 - 130

Lab Sample ID: MB 880-11112/5-A

**Matrix: Solid** 

Analysis Batch: 11221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11112

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 05:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 05:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 05:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 05:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 05:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 05:19	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	11/01/21 12:1	3 11/03/21 05:19	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/21 12:1	3 11/03/21 05:19	1

Lab Sample ID: LCS 880-11112/1-A

**Matrix: Solid** 

**Analysis Batch: 11221** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11112

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08714		mg/Kg		87	70 - 130	
Toluene	0.100	0.09081		mg/Kg		91	70 - 130	
Ethylbenzene	0.100	0.09455		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1857		mg/Kg		93	70 - 130	

Client: Tetra Tech, Inc. Job ID: 890-1502-1 SDG: 212C-MD-02230 Project/Site: Kaiser SWD

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-11112/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11221** Prep Batch: 11112

	Spike	LUS	LUS				70Kec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
o-Xylene	0.100	0.09260		mg/Kg	_	93	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-11112/2-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11221** Prep Batch: 11112

Spike	LCSD	LCSD				%Rec.		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.100	0.09459		mg/Kg		95	70 - 130	8	35
0.100	0.09920		mg/Kg		99	70 - 130	9	35
0.100	0.1011		mg/Kg		101	70 - 130	7	35
0.200	0.1972		mg/Kg		99	70 - 130	6	35
0.100	0.09839		mg/Kg		98	70 - 130	6	35
	0.100 0.100 0.100 0.200	Added         Result           0.100         0.09459           0.100         0.09920           0.100         0.1011           0.200         0.1972	Added         Result         Qualifier           0.100         0.09459           0.100         0.09920           0.100         0.1011           0.200         0.1972	Added         Result         Qualifier         Unit           0.100         0.09459         mg/Kg           0.100         0.09920         mg/Kg           0.100         0.1011         mg/Kg           0.200         0.1972         mg/Kg	Added         Result         Qualifier         Unit         D           0.100         0.09459         mg/Kg           0.100         0.09920         mg/Kg           0.100         0.1011         mg/Kg           0.200         0.1972         mg/Kg	Added         Result         Qualifier         Unit         D         %Rec           0.100         0.09459         mg/Kg         95           0.100         0.09920         mg/Kg         99           0.100         0.1011         mg/Kg         101           0.200         0.1972         mg/Kg         99	Added         Result         Qualifier         Unit         D         %Rec         Limits           0.100         0.09459         mg/Kg         95         70 - 130           0.100         0.09920         mg/Kg         99         70 - 130           0.100         0.1011         mg/Kg         101         70 - 130           0.200         0.1972         mg/Kg         99         70 - 130	Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           0.100         0.09459         mg/Kg         95         70 - 130         8           0.100         0.09920         mg/Kg         99         70 - 130         9           0.100         0.1011         mg/Kg         101         70 - 130         7           0.200         0.1972         mg/Kg         99         70 - 130         6

m-Xylene & p-Xylene			0.200	0.1972	mg/Kg	99	70 - 130	6
o-Xylene			0.100	0.09839	mg/Kg	98	70 - 130	6
	LCSD	LCSD						
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)	121		70 - 130					

70 - 130

Lab Sample ID: 890-1502-61 MS Client Sample ID: BH-61 (15) Prep Type: Total/NA

**Matrix: Solid Analysis Batch: 11221** 

131 S1+

106

		Sample	Sample	Spike	MS	MS				%Rec.	
An	alyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ве	nzene	<0.00199	U F1 F2	0.100	0.02127	F1	mg/Kg		21	70 - 130	
Tol	uene	<0.00199	U F1 F2	0.100	0.03376	F1	mg/Kg		32	70 - 130	
Eth	nylbenzene	<0.00199	U F1 F2	0.100	0.03579	F1	mg/Kg		36	70 - 130	
m-	Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.06567	F1	mg/Kg		33	70 - 130	
o->	Kylene	<0.00199	U F1 F2	0.100	0.03476	F1	mg/Kg		34	70 - 130	

Surrogate	%Recovery	Qualifier	Limits					
	MS	MS						
o-Xylene	<0.00199	U F1 F2	0.100	0.03476	F1	mg/Kg	34	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.06567	F1	mg/Kg	33	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.100	0.03579	F1	mg/Kg	36	70 - 130

1,4-Difluorobenzene (Surr)	110	70 - 130	
Lab Sample ID: 890-1502-61 MSD			Client Sample ID: BH-61 (15)

70 - 130

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 11221** Prep Batch: 11112

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1 F2	0.0998	0.05929	F1 F2	mg/Kg		59	70 - 130	94	35
Toluene	<0.00199	U F1 F2	0.0998	0.06669	F1 F2	mg/Kg		65	70 - 130	66	35
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.07404	F2	mg/Kg		74	70 - 130	70	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.1347	F1 F2	mg/Kg		67	70 - 130	69	35
o-Xylene	<0.00199	U F1 F2	0.0998	0.07123	F2	mg/Kg		71	70 - 130	69	35

Eurofins Xenco, Carlsbad

Prep Batch: 11112

1,4-Difluorobenzene (Surr)

4-Bromofluorobenzene (Surr)

#### QC Sample Results

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-1502-61 MSD

**Matrix: Solid** 

Analysis Batch: 11221

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11112

MSD MSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 134 S1+ 70 - 130 1,4-Difluorobenzene (Surr) 100 70 - 130

Lab Sample ID: MB 880-11113/5-A Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 11374

Prep Type: Total/NA

Prep Batch: 11113

MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac <0.00200 U 0.00200 11/01/21 12:16 11/03/21 17:26 Benzene mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 11/01/21 12:16 11/03/21 17:26 <0.00200 U 0.00200 11/01/21 12:16 11/03/21 17:26 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 11/01/21 12:16 11/03/21 17:26 o-Xylene <0.00200 U 0.00200 mg/Kg 11/01/21 12:16 11/03/21 17:26 Xylenes, Total <0.00400 U 0.00400 mg/Kg 11/01/21 12:16 11/03/21 17:26

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117	70 - 130	11/01/21 12:16	11/03/21 17:26	1
1,4-Difluorobenzene (Surr)	107	70 - 130	11/01/21 12:16	11/03/21 17:26	1

Lab Sample ID: LCS 880-11113/1-A

**Matrix: Solid** 

Analysis Batch: 11374

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11113

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09035	-	mg/Kg		90	70 - 130	
Toluene	0.100	0.09580		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.1041		mg/Kg		104	70 - 130	
m-Xylene & p-Xylene	0.200	0.1993		mg/Kg		100	70 - 130	
o-Xylene	0.100	0.09761		mg/Kg		98	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	115	70 - 130
1,4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: LCSD 880-11113/2-A

Matrix: Solid

**Analysis Batch: 11374** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11113

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09227		mg/Kg		92	70 - 130	2	35
Toluene	0.100	0.09735		mg/Kg		97	70 - 130	2	35
Ethylbenzene	0.100	0.1026		mg/Kg		103	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1995		mg/Kg		100	70 - 130	0	35
o-Xylene	0.100	0.09796		mg/Kg		98	70 - 130	0	35

LCSD LCSD

%Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 116

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-11113/2-A

**Matrix: Solid** 

Analysis Batch: 11374

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11113

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1,4-Difluorobenzene (Surr) 107 70 - 130

Lab Sample ID: 890-1502-81 MS Client Sample ID: BH-81 (15)

**Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11374 Prep Batch: 11113

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F2 F1	0.0990	0.08474		mg/Kg		85	70 - 130	
Toluene	<0.00199	U F2 F1	0.0990	0.09027		mg/Kg		89	70 - 130	
Ethylbenzene	<0.00199	U F2 F1	0.0990	0.09777		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.198	0.1912		mg/Kg		96	70 - 130	
o-Xylene	< 0.00199	U F2 F1	0.0990	0.09409		mg/Kg		95	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	118	70 - 130
1.4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: 890-1502-81 MSD Client Sample ID: BH-81 (15)

**Matrix: Solid** 

**Analysis Batch: 11374** Prep Batch: 11113

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit Benzene <0.00199 U F2 F1 0.100 0.04227 F2 F1 41 70 - 130 35 mg/Kg

Toluene <0.00199 U F2 F1 0.100 0.04380 F2 F1 mg/Kg 42 70 - 130 69 35 Ethylbenzene <0.00199 U F2 F1 0.100 0.05968 F2 F1 mg/Kg 58 70 - 130 48 35 0.201 53 70 - 130 m-Xylene & p-Xylene <0.00398 U F2 F1 0.1091 F2 F1 mg/Kg 55 35 o-Xylene <0.00199 U F2 F1 0.100 0.04780 F2 F1 mg/Kg 48 70 - 130 35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

Lab Sample ID: MB 880-11114/5-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 11374** Prep Batch: 11114 MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Benzene 0.00200 11/01/21 12:18 11/04/21 05:00 <0.00200 U mg/Kg 11/01/21 12:18 Toluene <0.00200 U 0.00200 mg/Kg 11/04/21 05:00 Ethylbenzene <0.00200 U 0.00200 mg/Kg 11/01/21 12:18 11/04/21 05:00 <0.00400 U 0.00400 11/01/21 12:18 11/04/21 05:00 m-Xylene & p-Xylene mg/Kg o-Xylene <0.00200 U 0.00200 mg/Kg 11/01/21 12:18 11/04/21 05:00 <0.00400 U 0.00400 11/01/21 12:18 11/04/21 05:00 Xylenes, Total mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepai	red	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/01/21	12:18	11/04/21 05:00	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/01/21	12:18	11/04/21 05:00	1

Eurofins Xenco, Carlsbad

Prep Type: Total/NA

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-11114/1-A

**Matrix: Solid** 

Analysis Batch: 11374

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 11114

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09032 mg/Kg 90 70 - 130 Toluene 0.100 0.09084 mg/Kg 91 70 - 130 Ethylbenzene 0.100 0.09641 mg/Kg 70 - 130 96 0.200 0.1881 70 - 130 m-Xylene & p-Xylene mg/Kg 94 0.100 o-Xylene 0.09302 mg/Kg 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1.4-Difluorobenzene (Surr)	106		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11114

Prep Batch: 11114

**Matrix: Solid** Analysis Batch: 11374

Lab Sample ID: LCSD 880-11114/2-A

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08744		mg/Kg		87	70 - 130	3	35
Toluene	0.100	0.09130		mg/Kg		91	70 - 130	1	35
Ethylbenzene	0.100	0.09282		mg/Kg		93	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1809		mg/Kg		90	70 - 130	4	35
o-Xylene	0.100	0.09153		mg/Kg		92	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-1502-101 MS Client Sample ID: SW-10 (0-6) **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 11374** 

•	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00200	U F2 F1	0.100	0.05871	F1	mg/Kg		58	70 - 130
Toluene	<0.00200	U F2 F1	0.100	0.06635	F1	mg/Kg		66	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.100	0.07485		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.1433		mg/Kg		72	70 - 130
o-Xylene	<0.00200	U F2 F1	0.100	0.07000	F1	mg/Kg		69	70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	123	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 890-1502-101 MSD Client Sample ID: SW-10 (0-6)

Matrix: Solid

Analysis Ratch: 11374

Analysis Batch: 11374									Prep	Prep Batch: 11114			
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Benzene	<0.00200	U F2 F1	0.100	0.04046	F2 F1	mg/Kg		39	70 - 130	37	35		
Toluene	<0.00200	U F2 F1	0.100	0.04350	F2 F1	mg/Kg		43	70 - 130	42	35		
Ethylbenzene	<0.00200	U F2 F1	0.100	0.04739	F2 F1	mg/Kg		47	70 - 130	45	35		

Eurofins Xenco, Carlsbad

Prep Type: Total/NA

Page 126 of 248

Prep Type: Total/NA

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-1502-101 MSD Client Sample ID: SW-10 (0-6)

**Matrix: Solid** 

Analysis Batch: 11374											Batch: 11114	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.09484	F2 F1	mg/Kg		47	70 - 130	41	35	
o-Xylene	<0.00200	U F2 F1	0.100	0.04771	F2 F1	mg/Kg		47	70 - 130	38	35	

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 123 101 70 - 130 1,4-Difluorobenzene (Surr)

Lab Sample ID: MB 880-11207/5-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 11206** 

мв мв

Prep Type: Total/NA
Prep Batch: 11207

Result Qualifier MDL Unit Prepared Analyzed Dil Fac Benzene <0.00200 0.00200 11/02/21 09:20 11/02/21 13:33 mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 11/02/21 09:20 11/02/21 13:33 11/02/21 09:20 11/02/21 13:33 Ethylbenzene <0.00200 U 0.00200 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 11/02/21 09:20 11/02/21 13:33 mg/Kg 11/02/21 09:20 11/02/21 13:33 o-Xylene <0.00200 U 0.00200 mg/Kg <0.00400 U 0.00400 11/02/21 09:20 11/02/21 13:33 Xylenes, Total mg/Kg

MB MB Surrogate Qualifier Limits Prepared Analyzed Dil Fac %Recovery 70 - 130 11/02/21 09:20 4-Bromofluorobenzene (Surr) 107 11/02/21 13:33 1,4-Difluorobenzene (Surr) 71 70 - 130 11/02/21 09:20 11/02/21 13:33

Lab Sample ID: MB 880-11258/5-A

**Matrix: Solid** 

**Analysis Batch: 11259** 

	Client Sample ID: Method Blank
	Prep Type: Total/NA
	Prep Batch: 11258
MB MB	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/02/21 15:13	11/03/21 12:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/02/21 15:13	11/03/21 12:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/02/21 15:13	11/03/21 12:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/02/21 15:13	11/03/21 12:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/02/21 15:13	11/03/21 12:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/02/21 15:13	11/03/21 12:01	1

	INID	IVID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	54	S1-	70 - 130	11/02/21 15:13	11/03/21 12:01	1
1,4-Difluorobenzene (Surr)	182	S1+	70 - 130	11/02/21 15:13	11/03/21 12:01	1

MR MR

Lab Sample ID: MB 880-11388/5-A

**Matrix: Solid** 

**Analysis Batch: 11420** 

Client Sample ID: Method Blank
Prep Type: Total/NA

Prep Batch: 11388

	IVID	IVID						
Analyte	Result	Qualifier	RL	MDL Uni	it D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/	/Kg	11/04/21 08:30	11/04/21 11:26	1
Toluene	<0.00200	U	0.00200	mg/	/Kg	11/04/21 08:30	11/04/21 11:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/	/Kg	11/04/21 08:30	11/04/21 11:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/	/Kg	11/04/21 08:30	11/04/21 11:26	1

Eurofins Xenco, Carlsbad

Page 127 of 248

Lab Sample ID: MB 880-11388/5-A

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 11388

**Matrix: Solid** Analysis Batch: 11420

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/04/21 08:30	11/04/21 11:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/04/21 08:30	11/04/21 11:26	1
	***	***							

	==				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96	70 - 130	11/04/21 08:30	11/04/21 11:26	1
1,4-Difluorobenzene (Surr)	99	70 - 130	11/04/21 08:30	11/04/21 11:26	1

Lab Sample ID: LCS 880-11388/1-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 11420								p Batch: 11388	
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		

Benzene 0.100 0.07875 mg/Kg 79 70 - 130 Toluene 0.100 0.09099 mg/Kg 91 70 - 130 105 Ethylbenzene 0.100 0.1049 mg/Kg 70 - 130 m-Xylene & p-Xylene 0.200 0.1959 mg/Kg 98 70 - 130 0.100 0.1016 102 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	129	70 - 130
1,4-Difluorobenzene (Surr)	85	70 - 130

Lab Sample ID: LCSD 880-11388/2-A

**Matrix: Solid** 

**Analysis Batch: 11420** 

Client Sample ID: Lab	<b>Control Sample Dup</b>
	Prop Type: Total/NA

Prep Type: Total/NA

LCSD LCSD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit 78 35 Benzene 0.100 0.07843 mg/Kg 70 - 130 0 Toluene 0.100 0.07723 mg/Kg 77 70 - 130 16 35 Ethylbenzene 0.100 0.07689 mg/Kg 77 70 - 130 31 35 m-Xylene & p-Xylene 0.200 0.1621 mg/Kg 81 70 - 130 19 35 o-Xylene 0.100 0.08020 mg/Kg 70 - 130 24 35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Client Sample ID: BH-53 (15) Lab Sample ID: 890-1502-53 MS

**Matrix: Solid** 

Analysis Batch: 11420

Chefit Sample ID. Diri-33 (13)	
Prep Type: Total/NA	
Prep Batch: 11388	

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.0994	0.07316		mg/Kg		74	70 - 130	
Toluene	<0.00202	U	0.0994	0.07604		mg/Kg		75	70 - 130	
Ethylbenzene	<0.00202	U	0.0994	0.07655		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1626		mg/Kg		82	70 - 130	
o-Xylene	<0.00202	U	0.0994	0.08042		mg/Kg		81	70 - 130	

Eurofins Xenco, Carlsbad

Prep Batch: 11388 RPD

Job ID: 890-1502-1 SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-1502-53 MS

**Matrix: Solid** 

Analysis Batch: 11420

Client Sample ID: BH-53 (15)

Prep Type: Total/NA

Prep Batch: 11388

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 124 70 - 130 1,4-Difluorobenzene (Surr) 100 70 - 130

Lab Sample ID: 890-1502-53 MSD Client Sample ID: BH-53 (15)

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 11420

Prep Batch: 11388

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.0998	0.08660		mg/Kg		87	70 - 130	17	35
Toluene	<0.00202	U	0.0998	0.08136		mg/Kg		80	70 - 130	7	35
Ethylbenzene	<0.00202	U	0.0998	0.07768		mg/Kg		78	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1611		mg/Kg		81	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.08199		mg/Kg		82	70 - 130	2	35

MSD MSD

MS MS

Surrogate	%Recovery 0	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-11445/5-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 11449** Prep Batch: 11445

	MR	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/04/21 21:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/04/21 21:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/04/21 21:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/04/21 11:11	11/04/21 21:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/04/21 11:11	11/04/21 21:28	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		11/04/21 11:11	11/04/21 21:28	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	11/04/21 11:11	11/04/21 21:28	1
1,4-Difluorobenzene (Surr)	196	S1+	70 - 130	11/04/21 11:11	11/04/21 21:28	1

Lab Sample ID: LCS 880-11445/1-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11449** Prep Batch: 11445

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1225		mg/Kg		122	70 - 130	
Toluene	0.100	0.1133		mg/Kg		113	70 - 130	
Ethylbenzene	0.100	0.1054		mg/Kg		105	70 - 130	
m-Xylene & p-Xylene	0.200	0.2176		mg/Kg		109	70 - 130	
o-Xylene	0.100	0.1278		mg/Kg		128	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	103		70 - 130		

Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-1502-1 SDG: 212C-MD-02230

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-11445/1-A

**Matrix: Solid** 

**Analysis Batch: 11449** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11445

LCS LCS

Surrogate %Recovery Qualifier Limits 1,4-Difluorobenzene (Surr) 230 S1+ 70 - 130

Lab Sample ID: LCSD 880-11445/2-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 11449** 

Prep Type: Total/NA

Prep Batch: 11445

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.09174 mg/Kg 92 70 - 130 29 35 Toluene 0.100 0.08621 mg/Kg 86 70 - 130 27 35 Ethylbenzene 0.100 0.07899 mg/Kg 79 70 - 130 29 35 70 - 130 0.200 0.1558 m-Xylene & p-Xylene mg/Kg 78 33 35 o-Xylene 0.100 0.09402 mg/Kg 94 70 - 130 30 35

LCSD LCSD

Surrogate	%Recovery	%Recovery Qualifier			
4-Bromofluorobenzene (Surr)	82		70 - 130		
1,4-Difluorobenzene (Surr)	234	S1+	70 - 130		

Lab Sample ID: 890-1520-A-1-B MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 11449** 

Prep Type: Total/NA Prep Batch: 11445

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Benzene 0.00453 F1 0.0996 0.07184 F1 68 70 - 130 mg/Kg Toluene 0.00416 F1 F2 0.0996 0.002115 F1 mg/Kg -2 70 - 130 Ethylbenzene <0.00200 U F1 F2 0.0996 0.06456 F1 mg/Kg 65 70 - 130 <0.00399 U F1 F2 0.199 mg/Kg 64 70 - 130 m-Xylene & p-Xylene 0.1288 F1 o-Xylene <0.00200 U F1 F2 0.0996 0.08438 mg/Kg 70 - 130

MS MS

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: 890-1520-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 11449** 

Prep Type: Total/NA

Prep Batch: 11445

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.00453	F1	0.100	0.06470	F1	mg/Kg		60	70 - 130	10	35
Toluene	0.00416	F1 F2	0.100	0.03154	F1 F2	mg/Kg		27	70 - 130	175	35
Ethylbenzene	<0.00200	U F1 F2	0.100	0.02033	F1 F2	mg/Kg		20	70 - 130	104	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.01225	F1 F2	mg/Kg		5	70 - 130	165	35
o-Xylene	<0.00200	U F1 F2	0.100	0.01299	F1 F2	mg/Kg		13	70 - 130	147	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	61	S1-	70 - 130
1.4-Difluorobenzene (Surr)	204	S1+	70 - 130

Job ID: 890-1502-1 SDG: 212C-MD-02230

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-11449/8 **Matrix: Solid** 

Analysis Batch: 11449

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
Toluene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			11/04/21 15:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			11/04/21 15:47	1

	MB	MB					
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	63	S1-	70 - 130	_		11/04/21 15:47	1
1,4-Difluorobenzene (Surr)	187	S1+	70 - 130			11/04/21 15:47	1

Lab Sample ID: LCS 880-11449/3

Matrix: Solid

Analysis Batch: 11449

**Client Sample ID: Lab Control Sample Prep Type: Total/NA** 

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1209		mg/Kg		121	70 - 130	
Toluene	0.100	0.1145		mg/Kg		114	70 - 130	
Ethylbenzene	0.100	0.1064		mg/Kg		106	70 - 130	
m-Xylene & p-Xylene	0.200	0.2177		mg/Kg		109	70 - 130	
o-Xylene	0.100	0.1244		mg/Kg		124	70 - 130	
I and the second se								

	LCS		
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	190	S1+	70 - 130

Lab Sample ID: LCSD 880-11449/4

Matrix: Solid

Analysis Batch: 11449

**Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1235	mg/Kg		123	70 - 130	2	35
Toluene	0.100	0.1165	mg/Kg		117	70 - 130	2	35
Ethylbenzene	0.100	0.1076	mg/Kg		108	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2185	mg/Kg		109	70 - 130	0	35
o-Xylene	0.100	0.1273	mg/Kg		127	70 - 130	2	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	198	S1+	70 - 130

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-11223/1-A

**Matrix: Solid Analysis Batch: 11317**  Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 11223 MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 10:40	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 10:40	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 10:40	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 130				11/02/21 11:44	11/03/21 10:40	1

11/03/21 10:40 o-Terphenyl 113 70 - 130 11/02/21 11:44 Lab Sample ID: LCS 880-11223/2-A Client Sample ID: Lab Control Sample

**Analysis Batch: 11317** 

**Matrix: Solid** 

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 1194 119 70 - 130 mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over 1003 mg/Kg 100 70 - 130C10-C28)

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 116 70 - 130 o-Terphenyl 109 70 - 130

Lab Sample ID: LCSD 880-11223/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 11317** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1154		mg/Kg		115	70 - 130	3	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	986.8		mg/Kg		99	70 - 130	2	20
C10-C28)									

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 113 106 70 - 130 o-Terphenyl

Lab Sample ID: 890-1502-1 MS Client Sample ID: BH-1 (6)

Matrix: Solid

Matrix: Solid									Prep Type: Total/NA	
Analysis Batch: 11317									Prep Batch: 11223	
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U F1 F2	997	1550	F1	mg/Kg		155	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	997	1181		mg/Kg		116	70 - 130	
C10-C28)										

Eurofins Xenco, Carlsbad

Prep Type: Total/NA

Prep Batch: 11223

Prep Batch: 11223

Job ID: 890-1502-1 SDG: 212C-MD-02230

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1502-1 MS

**Matrix: Solid** 

**Analysis Batch: 11317** 

Client Sample ID: BH-1 (6) Prep Type: Total/NA

Prep Batch: 11223

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 890-1502-1 MSD Client Sample ID: BH-1 (6)

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 11317 Prep Batch: 11223

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics <49.9 U F1 F2 1000 1120 F2 112 70 - 130 32 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1000 1198 mg/Kg 20 117 70 - 130

C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	109		70 - 130

MB MB

Lab Sample ID: MB 880-11255/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 11321** 

Prep Type: Total/NA

Prep Batch: 11255

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 10:22	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 10:22	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 10:22	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 98 70 - 130 11/02/21 14:45 11/03/21 10:22 115 70 - 130 11/02/21 14:45 11/03/21 10:22 o-Terphenyl

Lab Sample ID: LCS 880-11255/2-A

**Matrix: Solid** 

**Analysis Batch: 11321** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA Prep Batch: 11255

•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	942.0		mg/Kg		94	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	1089		mg/Kg		109	70 - 130
C10_C28)							

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	98	70 - 130
o-Terphenvl	106	70 <sub>-</sub> 130

5

104

70 - 130

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-11255/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11321** Prep Batch: 11255

Spike LCSD LCSD RPD RPD Limit Analyte Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 1055 mg/Kg 105 70 - 130 11 20 (GRO)-C6-C10

1037

mg/Kg

1000

Diesel Range Organics (Over C10-C28)

LCSD LCSD Qualifier Limits Surrogate %Recovery 1-Chlorooctane 70 - 130 100 o-Terphenyl 108 70 - 130

Lab Sample ID: 890-1502-21 MS Client Sample ID: BH-21 (6)

**Matrix: Solid** 

Prep Type: Total/NA **Analysis Batch: 11321** Prep Batch: 11255

Spike MS MS %Rec. Sample Sample

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 101 Gasoline Range Organics <49.9 997 1011 mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 997 847.1 mg/Kg 85 70 - 130

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 89 70 - 130 o-Terphenyl 94 70 - 130

Lab Sample ID: 890-1502-21 MSD Client Sample ID: BH-21 (6)

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11321** Prep Batch: 11255

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit <49.9 U 1000 1099 110 Gasoline Range Organics 70 - 130 20 mg/Kg 8 (GRO)-C6-C10 1000 943.3 94 Diesel Range Organics (Over <49.9 U mg/Kg 70 - 130 11 20

C10-C28)

MSD MSD Qualifier Limits Surrogate %Recovery 1-Chlorooctane 94 70 - 130 70 - 130 101 o-Terphenyl

Lab Sample ID: MB 880-11273/1-A Client Sample ID: Method Blank

**Matrix: Solid Analysis Batch: 11323** 

<50.0 U

MB MB MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 11/02/21 16:07 11/03/21 10:22 mg/Kg (GRO)-C6-C10 11/03/21 10:22 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/02/21 16:07 C10-C28)

50.0

mg/Kg

Eurofins Xenco, Carlsbad

11/03/21 10:22

11/02/21 16:07

20

Prep Type: Total/NA

Prep Batch: 11273

OII Range Organics (Over C28-C36)

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-11273/1-A

**Matrix: Solid** 

Analysis Batch: 11323

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 11273

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	_	11/02/21 16:07	11/03/21 10:22	1
o-Terphenyl	103		70 - 130		11/02/21 16:07	11/03/21 10:22	1

Lab Sample ID: LCS 880-11273/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Analysis Batch: 11323

Prep Type: Total/NA Prep Batch: 11273

	Spi	ke LC:	S LCS				%Rec.	
Analyte	Adde	ed Resul	t Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	100	00 883.	1	mg/Kg		88	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	100	00 916.4	4	mg/Kg		92	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: LCSD 880-11273/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 11323** 

Prep Type: Total/NA

Prep Batch: 11273

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	879.9		mg/Kg		88	70 - 130	0	20
Diesel Range Organics (Over	1000	1024		mg/Kg		102	70 - 130	11	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	87	70 _ 130
o-Terphenvl	85	70 - 130

Lab Sample ID: 890-1502-41 MS Client Sample ID: BH-41 (15)

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 11323 Prep Batch: 11273

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1108		mg/Kg		111	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	897.0		mg/Kg		90	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	95	70 - 130
o-Terphenyl	87	70 - 130

### QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1502-41 MSD

**Analysis Batch: 11323** 

**Matrix: Solid** 

Client Sample ID: BH-41 (15) **Prep Type: Total/NA** 

Prep Batch: 11273

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1109		mg/Kg		111	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	910.8		mg/Kg		91	70 - 130	2	20

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: MB 880-11356/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 11323** Prep Batch: 11356

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 19:59	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 19:59	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 19:59	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110	70 - 130	11/03/21 10:38	11/03/21 19:59	1
o-Terphenyl	109	70 - 130	11/03/21 10:38	11/03/21 19:59	1

Lab Sample ID: LCS 880-11356/2-A

**Matrix: Solid** 

Analysis Batch: 11323

Client	Sample	ID:	Lab	Control	Sample
--------	--------	-----	-----	---------	--------

**Prep Type: Total/NA** 

Prep Batch: 11356

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	905.5		mg/Kg		91	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1094		mg/Kg		109	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
1-Chlorooctane	103	70 - 130
o-Terphenyl	100	70 - 130

Lab Sample ID: LCSD 880-11356/3-A

Released to Imaging: 9/1/2023 2:28:53 PM

Matrix: Solid

Analysis Batch: 11323

Prep Type: Total/NA

Prep Batch: 11356

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1023		mg/Kg		102	70 - 130	12	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	960.5		mg/Kg		96	70 - 130	13	20
C10-C28)									

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: BH-61 (15)

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11356

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-11356/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid Analysis Batch: 11323** 

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 87 70 - 130 o-Terphenyl 84 70 - 130

Lab Sample ID: 890-1502-61 MS

**Matrix: Solid** 

Analysis Batch: 11323

Prep Batch: 11356 Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <49.9 UF1 F2 997 482.0 F1 48 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U F1 F2 997 328.9 F1 mg/Kg 31 70 - 130C10-C28)

70 - 130

MS MS Surrogate %Recovery Qualifier Limits 41 S1 70 - 130 1-Chlorooctane

31 S1o-Terphenyl

Lab Sample ID: 890-1502-61 MSD

**Matrix: Solid** 

**Analysis Batch: 11323** 

Prep Batch: 11356 MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics <49.9 U F1 F2 1000 918.0 F2 mg/Kg 92 70 - 130 62 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U F1 F2 1000 633.8 F1 F2 mg/Kg 61 70 - 130 63 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 75 61 S1o-Terphenyl 70 - 130

Lab Sample ID: MB 880-11364/1-A

**Matrix: Solid** 

Analysis Batch: 11416

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 11364

мв мв Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 11/03/21 11:37 11/04/21 10:00 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/03/21 11:37 11/04/21 10:00 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/03/21 11:37 11/04/21 10:00

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 99 70 - 130 11/03/21 11:37 11/04/21 10:00 o-Terphenyl 115 70 - 130 11/03/21 11:37 11/04/21 10:00

### QC Sample Results

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-11364/2-A

Lab Sample ID: LCSD 880-11364/3-A

**Matrix: Solid Analysis Batch: 11416**  Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 11364

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 840.1 mg/Kg 84 70 - 130 (GRO)-C6-C10 1000 Diesel Range Organics (Over 883.5 88 70 - 130mg/Kg

C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	89		70 - 130

Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11416** Prep Batch: 11364 Spike LCSD LCSD %Rec. RPD

Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 Gasoline Range Organics 887.3 mg/Kg 89 70 - 130 5 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 925.6 mg/Kg 93 70 - 130 5 20

C10-C28)

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 89 70 - 130 o-Terphenyl 97 70 - 130

Lab Sample ID: 890-1502-81 MS Client Sample ID: BH-81 (15)

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11416** Prep Batch: 11364

Sample Sample Spike MS MS %Rec.

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U 997 100 Gasoline Range Organics 995.4 70 - 130 mg/Kg (GRO)-C6-C10 997 818.8 80 70 - 130 Diesel Range Organics (Over <49.9 L mg/Kg C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 95 70 - 130 99 70 - 130 o-Terphenyl

Lab Sample ID: 890-1502-81 MSD Client Sample ID: BH-81 (15)

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 11416** Prep Batch: 11364

MSD MSD RPD Sample Sample Spike Result Qualifier Added %Rec RPD Limit Analyte Result Qualifier Limits Unit D Gasoline Range Organics <49.9 U 1000 985.1 99 70 - 130 20 mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over <49.9 U 815.8 mg/Kg 79 70 - 1300 20

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 95

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1502-81 MSD

**Matrix: Solid** 

Analysis Batch: 11416

Client Sample ID: BH-81 (15)

Prep Type: Total/NA

Prep Batch: 11364

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 97 70 - 130

Lab Sample ID: MB 880-11375/1-A

**Matrix: Solid** 

**Analysis Batch: 11418** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11375

мв мв

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 11/03/21 13:15 11/04/21 10:00 (GRO)-C6-C10 50.0 Diesel Range Organics (Over <50.0 U mg/Kg 11/03/21 13:15 11/04/21 10:00 C10-C28) <50.0 U OII Range Organics (Over C28-C36) 50.0 mg/Kg 11/03/21 13:15 11/04/21 10:00

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	11/03/21 13	:15 11/04/21 10:00	1
o-Terphenyl	123		70 - 130	11/03/21 13	:15 11/04/21 10:00	1

Lab Sample ID: LCS 880-11375/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

**Analysis Batch: 11418** 

Prep Type: Total/NA

Prep Batch: 11375

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 976.2 mg/Kg 98 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1075 mg/Kg 107 70 - 130

C10-C28)

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
1-Chlorooctane	102	70 - 130
o-Terphenyl	99	70 - 130

Lab Sample ID: LCSD 880-11375/3-A

**Matrix: Solid** 

Analysis Batch: 11418

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11375

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	747.4	*1	mg/Kg		75	70 - 130	27	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	959.3		mg/Kg		96	70 - 130	11	20	
C10 C28)										

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	85		70 - 130

Eurofins Xenco, Carlsbad

Page 139 of 248 Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-1502-101 MS

Lab Sample ID: 890-1502-101 MSD

**Analysis Batch: 11418** 

**Matrix: Solid** 

Client Sample ID: SW-10 (0-6)

Prep Type: Total/NA Prep Batch: 11375

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U\*1 997 925.0 mg/Kg 91 70 - 130 (GRO)-C6-C10 997 908.6 Diesel Range Organics (Over <49.9 U mg/Kg 88 70 - 130 C10-C28)

Matrix: Solid

C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	93		70 - 130

Client Sample ID: SW-10 (0-6)

Prep Type: Total/NA

Prep Batch: 11375

**Analysis Batch: 11418** Sample Sample Spike MSD MSD %Rec. RPD Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits **RPD** Limit <49.9 U \*1 1000 1063 105 70 - 130 Gasoline Range Organics mg/Kg 14 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1000 979.4 mg/Kg 94 70 - 130 8 20

MSD MSD

Surrogate	%Recovery Qualifi	er Limits
1-Chlorooctane	109	70 - 130
o-Terphenvl	97	70 - 130

Lab Sample ID: MB 880-11376/1-A

**Matrix: Solid** 

Analysis Batch: 11414

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 11376

мв мв

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 09:53	1
<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 09:53	1
<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 09:53	1
	<50.0 <50.0	Result   Qualifier	<50.0 U 50.0 <50.0 U 50.0	<50.0 U 50.0 <50.0 U	<50.0 U 50.0 mg/Kg <50.0 U 50.0 mg/Kg	<50.0 U 50.0 mg/Kg <50.0 U 50.0 mg/Kg	<50.0 U	<50.0 U

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	11/03/21 13:58	11/04/21 09:53	1
o-Terphenyl	94		70 - 130	11/03/21 13:58	11/04/21 09:53	1

Lab Sample ID: LCS 880-11376/2-A

**Matrix: Solid** 

**Analysis Batch: 11414** 

Prep Type: Total/NA

Prep Batch: 11376

п									
		Spike	LCS	LCS				%Rec.	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Gasoline Range Organics	 1000	977.8		mg/Kg		98	70 - 130	
	(GRO)-C6-C10								
	Diesel Range Organics (Over	1000	838.1		mg/Kg		84	70 - 130	
ı	C10-C28)								

Job ID: 890-1502-1

SDG: 212C-MD-02230

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

LCS LCS

Lab Sample ID: LCS 880-11376/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 11414

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Prep Type: Total/NA

Prep Batch: 11376

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 108 70 - 130 o-Terphenyl 88 70 - 130

Lab Sample ID: LCSD 880-11376/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 11414

Prep Type: Total/NA

Prep Batch: 11376

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 965.5 97 70 - 13020 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 913.0 91 mg/Kg 70 - 1309 20

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-1502-121 MS Client Sample ID: SW-30 (RS) (6)

Matrix: Solid

**Analysis Batch: 11414** 

Prep Type: Total/NA Prep Batch: 11376

Sample Sample MS MS Spike Analyte Result Qualifier hahhA Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 997 1036 mg/Kg 101 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 997 863.0 mg/Kg 84 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 100 o-Terphenyl 92 70 - 130

Lab Sample ID: 890-1502-121 MSD Client Sample ID: SW-30 (RS) (6)

**Matrix: Solid** 

Analysis Batch: 11414

Prep Type: Total/NA

Prep Batch: 11376

Sample Sample MSD MSD RPD Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U 1000 954.6 93 Gasoline Range Organics <49.9 mg/Kg 70 - 130 8 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 1000 789.2 mg/Kg 77 70 - 130 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 92 70 - 130 84 70 - 130 o-Terphenyl

Job ID: 890-1502-1 SDG: 212C-MD-02230

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11227/1-A

**Matrix: Solid** 

**Analysis Batch: 11379** 

мв мв

Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/06/21 05:15

Lab Sample ID: LCS 880-11227/2-A

**Matrix: Solid** 

**Analysis Batch: 11379** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 266.7 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-11227/3-A

**Matrix: Solid** 

**Analysis Batch: 11379** 

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 267.5 250 mg/Kg 107 90 - 110

Lab Sample ID: 890-1499-A-1-H MS

**Matrix: Solid** 

**Analysis Batch: 11379** 

Sample Sample MS MS Spike %Rec. Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chloride 987 248 1189 F1 90 - 110 mg/Kg

Lab Sample ID: 890-1499-A-1-I MSD

**Matrix: Solid** 

**Analysis Batch: 11379** 

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 987 F1 1194 F1 Chloride 248 mg/Kg 84 90 - 110

Lab Sample ID: MB 880-11233/1-A

**Matrix: Solid** 

**Analysis Batch: 11381** 

мв мв

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 11/07/21 01:48

Lab Sample ID: LCS 880-11233/2-A

**Matrix: Solid** 

**Analysis Batch: 11381** 

LCS LCS %Rec. Spike Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 229.5 mg/Kg 92 90 - 110

Lab Sample ID: LCSD 880-11233/3-A

Released to Imaging: 9/1/2023 2:28:53 PM

**Matrix: Solid** 

**Analysis Batch: 11381** 

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 233.0 mg/Kg 93 90 - 110 20

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1502-92 MS Client Sample ID: SW-1 (0-6) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11381

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1430		1250	2745		mg/Kg		105	90 - 110	

Lab Sample ID: 890-1502-92 MSD Client Sample ID: SW-1 (0-6) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11381

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1430		1250	2746		mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-11236/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 11452

мв мв Analyte Result Qualifier MDL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 11/08/21 08:34 mg/Kg

Lab Sample ID: LCS 880-11236/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11452** 

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	249.1		mg/Kg	_	100	90 - 110	

Lab Sample ID: LCSD 880-11236/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11452

	Spike	LCSD	LUGD				MREC.		KFD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	249.5		mg/Kg		100	90 - 110	0	20	

Lab Sample ID: 890-1502-4 MS Client Sample ID: BH-4 (6) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11452

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	48.9		253	282.3		mg/Kg		92	90 - 110		_

Lab Sample ID: 890-1502-4 MSD Client Sample ID: BH-4 (6) **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11452** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	48.9		253	277.9		mg/Kg	_	91	90 - 110	2	20	

Lab Sample ID: 890-1502-111 MS Client Sample ID: SW-20 (15) **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 11452

Released to Imaging: 9/1/2023 2:28:53 PM

Analysis Daton. 11432										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1150		248	1264	4	mg/Kg		48	90 - 110	

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1502-111 MSD Client Sample ID: SW-20 (15) Matrix: Solid **Prep Type: Soluble** 

Analysis Batch: 11452

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	1150		248	1261	4	mg/Kg		46	90 - 110	0	20	

Lab Sample ID: MB 880-11237/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11453

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/07/21 05:07	1

Lab Sample ID: LCS 880-11237/2-A **Client Sample ID: Lab Control Sample** Matrix: Solid **Prep Type: Soluble** 

**Analysis Batch: 11453** 

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	236.9		mg/Kg	_	95	90 - 110	

Lab Sample ID: LCSD 880-11237/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11453** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	241.4		mg/Kg		97	90 - 110	2	20

Lab Sample ID: 890-1502-5 MS Client Sample ID: BH-5 (6) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11453

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	123		249	353.6		ma/Ka		93	90 110	

Lab Sample ID: 890-1502-5 MSD Client Sample ID: BH-5 (6) **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11453** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	123		249	352.1		mg/Kg		92	90 - 110	0	20	

Lab Sample ID: 890-1502-15 MS Client Sample ID: BH-15 (6)

**Matrix: Solid** 

**Analysis Batch: 11453** 

_	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	4220	F1	1250	5802	F1	ma/Ka		126	90 - 110

Lab Sample ID: 890-1502-15 MSD Client Sample ID: BH-15 (6) **Prep Type: Soluble** 

Matrix: Solid

Analysis Ratch: 11/153

Alialysis Dalcii. 11400											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	4220	F1	1250	5826	F1	mg/Kg		128	90 - 110	0	20

Eurofins Xenco, Carlsbad

**Prep Type: Soluble** 

Client Sample ID: Method Blank

**Prep Type: Soluble** 

Job ID: 890-1502-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11238/1-A

**Matrix: Solid** 

Analysis Batch: 11454

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	1	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg				11/07/21 09:27	1

Lab Sample ID: LCS 880-11238/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11454

	Spike	LCS LCS				%Rec.	
Analyte	Added	Result Qualifie	r Unit	D	%Rec	Limits	
Chloride	250	238.0	mg/Kg		95	90 - 110	

Lab Sample ID: LCSD 880-11238/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble** Analysis Batch: 11454

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit Limits Limit Chloride 250 234.9 mg/Kg 90 - 110

Lab Sample ID: 890-1502-25 MS Client Sample ID: BH-25 (15) **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 11454

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	447	F1	250	648.9	F1	mg/Kg	_	81	90 - 110	

Lab Sample ID: 890-1502-25 MSD Client Sample ID: BH-25 (15) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11454

	Sample	Sample	<b>эріке</b>	MISD	MISD				%Rec.		KPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	447	F1	250	656.3	F1	mg/Kg		84	90 - 110	1	20	

Lab Sample ID: 890-1502-35 MS Client Sample ID: BH-35 (15) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11454

-	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	333	F1	253	530.3	F1	ma/Ka	_	82	90 110		_

Lab Sample ID: 890-1502-35 MSD Client Sample ID: BH-35 (15) **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11454

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	333	F1	253	539.2	F1	mg/Kg		82	90 - 110	0	20	

Lab Sample ID: MB 880-11240/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 11455** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/08/21 04:07	1

Eurofins Xenco, Carlsbad

**Prep Type: Soluble** 

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-11240/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11455** 

Spike LCS LCS %Rec. Analyte Added Result Qualifier %Rec Limits Unit

Chloride 250 232.0 mg/Kg 93 90 - 110

Lab Sample ID: LCSD 880-11240/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11455** 

Spike LCSD LCSD %Rec. RPD Added Limits Limit Analyte Result Qualifier Unit D %Rec RPD Chloride 250 233.4 mg/Kg 93 90 - 110

Lab Sample ID: 890-1502-45 MS Client Sample ID: BH-45 (15)

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11455** 

MS MS %Rec. Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

Chloride F1 284 248 510.8 mg/Kg 90 - 110

Lab Sample ID: 890-1502-45 MSD Client Sample ID: BH-45 (15) **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11455** 

Sample Sample MSD MSD RPD Spike %Rec. Result Qualifier Result Qualifier Added %Rec RPD Limit Analyte Unit Limits Chloride 284 248 499.4 F1 87 90 - 110 20 mg/Kg

Lab Sample ID: 890-1502-55 MS Client Sample ID: BH-55 (15) **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11455** 

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 4680 F1 1250 5790 F1 Chloride mg/Kg 89 90 - 110

Lab Sample ID: 890-1502-55 MSD Client Sample ID: BH-55 (15) **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11455** 

Sample Spike MSD MSD %Rec. RPD Sample Result Qualifier Added RPD Analyte Result Qualifier Unit D %Rec Limits Limit Chloride 4680 F1 1250 5826 mg/Kg 90 - 110

Lab Sample ID: MB 880-11242/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 11456** 

мв мв

Dil Fac Analyte Result Qualifier RL MDL Unit Prepared Analyzed Chloride <5.00 5.00 mg/Kg 11/08/21 08:35

Lab Sample ID: LCS 880-11242/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11456** 

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride		250	236.3		mg/Kg		95	90 - 110	 

Eurofins Xenco, Carlsbad

**Prep Type: Soluble** 

Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-1502-1 SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-11242/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Analysis Batch: 11456

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	237.4		mg/Kg		95	90 - 110	0	20	

Lab Sample ID: 890-1502-65 MS Client Sample ID: BH-65 (15) **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 11456

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	823	F1	250	1040	F1	ma/Ka		87	90 - 110	-

Lab Sample ID: 890-1502-65 MSD Client Sample ID: BH-65 (15) Matrix: Solid **Prep Type: Soluble** 

Analysis Batch: 11456

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	823	F1	250	1044	F1	mg/Kg		89	90 - 110	0	20

Client Sample ID: BH-75 (15) Lab Sample ID: 890-1502-75 MS **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11456** 

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	982	F1	249	1200	F1	mg/Kg	_	88	90 - 110	

Lab Sample ID: 890-1502-75 MSD Client Sample ID: BH-75 (15) **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 11456

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	982	F1	249	1186	F1	ma/Ka		82	90 - 110	1	20	

Lab Sample ID: MB 880-11243/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11705** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/09/21 12:29	1

MR MR

Lab Sample ID: LCS 880-11243/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11705** 

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	251.9	-	mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-11243/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble** 

**Analysis Batch: 11705** 

_	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	253.1		mg/Kg		101	90 - 110	0	20

### **QC Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1502-85 MS

Client Sample ID: BH-85 (15)

Matrix: Solid

Prep Type: Soluble

**Analysis Batch: 11705** 

Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Chloride 656 F1 250 870.1 F1 mg/Kg 86 90 - 110

Lab Sample ID: 890-1502-85 MSD

Matrix: Solid

Client Sample ID: BH-85 (15)

Prep Type: Soluble

Analysis Batch: 11705

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Limits Limit Analyte Unit D %Rec RPD Chloride 656 F1 250 878.2 F1 mg/Kg 89 90 - 110

Lab Sample ID: 890-1502-124 MS Client Sample ID: SW-33 (RS) (8)

Matrix: Solid Prep Type: Soluble

Analysis Batch: 11705

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit Limits Chloride 831 F1 252 1043 F1 90 - 110 mg/Kg

Lab Sample ID: 890-1502-124 MSD

Matrix: Solid

Client Sample ID: SW-33 (RS) (8)

Prep Type: Soluble

Matrix. John

**Analysis Batch: 11705** 

Spike MSD MSD RPD Sample Sample %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec RPD Limit Limits 252 Chloride 831 F1 1043 F1 84 90 - 110 20 mg/Kg

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### **GC VOA**

### Prep Batch: 11021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-11021/5-A	Method Blank	Total/NA	Solid	5035	

#### **Analysis Batch: 11022**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	8021B	11076
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	8021B	11076
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	8021B	11076
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	8021B	11076
MB 880-11021/5-A	Method Blank	Total/NA	Solid	8021B	11021
MB 880-11076/5-A	Method Blank	Total/NA	Solid	8021B	11076
LCS 880-11076/1-A	Lab Control Sample	Total/NA	Solid	8021B	11076
LCSD 880-11076/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11076
890-1502-121 MS	SW-30 (RS) (6)	Total/NA	Solid	8021B	11076
890-1502-121 MSD	SW-30 (RS) (6)	Total/NA	Solid	8021B	11076

#### Prep Batch: 11075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	5035	
890-1502-2	BH-2 (6)	Total/NA	Solid	5035	
890-1502-3	BH-3 (6)	Total/NA	Solid	5035	
890-1502-4	BH-4 (6)	Total/NA	Solid	5035	
890-1502-5	BH-5 (6)	Total/NA	Solid	5035	
890-1502-6	BH-6 (6)	Total/NA	Solid	5035	
890-1502-7	BH-7 (6)	Total/NA	Solid	5035	
890-1502-8	BH-8 (6)	Total/NA	Solid	5035	
890-1502-9	BH-9 (6)	Total/NA	Solid	5035	
890-1502-10	BH-10 (6)	Total/NA	Solid	5035	
890-1502-11	BH-11 (6)	Total/NA	Solid	5035	
890-1502-12	BH-12 (6)	Total/NA	Solid	5035	
890-1502-13	BH-13 (6)	Total/NA	Solid	5035	
890-1502-14	BH-14 (6)	Total/NA	Solid	5035	
890-1502-15	BH-15 (6)	Total/NA	Solid	5035	
890-1502-16	BH-16 (6)	Total/NA	Solid	5035	
890-1502-17	BH-17 (6)	Total/NA	Solid	5035	
890-1502-18	BH-18 (6)	Total/NA	Solid	5035	
890-1502-19	BH-19 (6)	Total/NA	Solid	5035	
890-1502-20	BH-20 (6)	Total/NA	Solid	5035	
MB 880-11075/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11075/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11075/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-1 MS	BH-1 (6)	Total/NA	Solid	5035	
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	5035	

#### Prep Batch: 11076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	5035	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	5035	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	5035	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	5035	
MB 880-11076/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11076/1-A	Lab Control Sample	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

2

3

4

6

R

11

13

14

11/10/2021

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-11076/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-121 MS	SW-30 (RS) (6)	Total/NA	Solid	5035	
890-1502-121 MSD	SW-30 (RS) (6)	Total/NA	Solid	5035	

#### Prep Batch: 11109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-21	BH-21 (6)	Total/NA	Solid	5035	
890-1502-22	BH-22 (6)	Total/NA	Solid	5035	
890-1502-23	BH-23 (6)	Total/NA	Solid	5035	
890-1502-24	BH-24 (6)	Total/NA	Solid	5035	
890-1502-25	BH-25 (15)	Total/NA	Solid	5035	
890-1502-26	BH-26 (15)	Total/NA	Solid	5035	
890-1502-27	BH-27 (15)	Total/NA	Solid	5035	
890-1502-28	BH-28 (15)	Total/NA	Solid	5035	
890-1502-29	BH-29 (15)	Total/NA	Solid	5035	
890-1502-30	BH-30 (15)	Total/NA	Solid	5035	
890-1502-31	BH-31 (15)	Total/NA	Solid	5035	
890-1502-32	BH-32 (15)	Total/NA	Solid	5035	
890-1502-33	BH-33 (15)	Total/NA	Solid	5035	
890-1502-34	BH-34 (15)	Total/NA	Solid	5035	
890-1502-35	BH-35 (15)	Total/NA	Solid	5035	
890-1502-36	BH-36 (15)	Total/NA	Solid	5035	
890-1502-37	BH-37 (15)	Total/NA	Solid	5035	
890-1502-38	BH-38 (15)	Total/NA	Solid	5035	
890-1502-39	BH-39 (15)	Total/NA	Solid	5035	
890-1502-40	BH-40 (15)	Total/NA	Solid	5035	
MB 880-11109/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11109/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11109/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-21 MS	BH-21 (6)	Total/NA	Solid	5035	
890-1502-21 MSD	BH-21 (6)	Total/NA	Solid	5035	

### Prep Batch: 11111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-41	BH-41 (15)	Total/NA	Solid	5035	
890-1502-42	BH-42 (15)	Total/NA	Solid	5035	
890-1502-43	BH-43 (15)	Total/NA	Solid	5035	
890-1502-44	BH-44 (15)	Total/NA	Solid	5035	
890-1502-45	BH-45 (15)	Total/NA	Solid	5035	
890-1502-46	BH-46 (15)	Total/NA	Solid	5035	
890-1502-47	BH-47 (15)	Total/NA	Solid	5035	
890-1502-48	BH-48 (15)	Total/NA	Solid	5035	
890-1502-49	BH-49 (15)	Total/NA	Solid	5035	
890-1502-50	BH-50 (15)	Total/NA	Solid	5035	
890-1502-51	BH-51 (15)	Total/NA	Solid	5035	
890-1502-52	BH-52 (15)	Total/NA	Solid	5035	
890-1502-54	BH-54 (15)	Total/NA	Solid	5035	
890-1502-55	BH-55 (15)	Total/NA	Solid	5035	
890-1502-56	BH-56 (15)	Total/NA	Solid	5035	
MB 880-11111/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11111/1-A	Lab Control Sample	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

**GC VOA (Continued)** Prep Batch: 11076 (Continued)

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

# **GC VOA (Continued)**

### Prep Batch: 11111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-11111/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-41 MS	BH-41 (15)	Total/NA	Solid	5035	
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	5035	

#### Prep Batch: 11112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-61	BH-61 (15)	Total/NA	Solid	5035	
890-1502-62	BH-62 (15)	Total/NA	Solid	5035	
890-1502-63	BH-63 (15)	Total/NA	Solid	5035	
890-1502-64	BH-64 (15)	Total/NA	Solid	5035	
890-1502-65	BH-65 (15)	Total/NA	Solid	5035	
890-1502-66	BH-66 (15)	Total/NA	Solid	5035	
890-1502-67	BH-67 (15)	Total/NA	Solid	5035	
890-1502-68	BH-68 (15)	Total/NA	Solid	5035	
890-1502-69	BH-69 (15)	Total/NA	Solid	5035	
890-1502-70	BH-70 (15)	Total/NA	Solid	5035	
890-1502-71	BH-71 (15)	Total/NA	Solid	5035	
890-1502-72	BH-72 (15)	Total/NA	Solid	5035	
890-1502-73	BH-73 (15)	Total/NA	Solid	5035	
890-1502-74	BH-74 (15)	Total/NA	Solid	5035	
890-1502-75	BH-75 (15)	Total/NA	Solid	5035	
890-1502-76	BH-76 (15)	Total/NA	Solid	5035	
890-1502-77	BH-77 (15)	Total/NA	Solid	5035	
890-1502-78	BH-78 (15)	Total/NA	Solid	5035	
890-1502-79	BH-79 (15)	Total/NA	Solid	5035	
890-1502-80	BH-80 (15)	Total/NA	Solid	5035	
MB 880-11112/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11112/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11112/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-61 MS	BH-61 (15)	Total/NA	Solid	5035	
890-1502-61 MSD	BH-61 (15)	Total/NA	Solid	5035	

#### Prep Batch: 11113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-81	BH-81 (15)	Total/NA	Solid	5035	
890-1502-82	BH-82 (15)	Total/NA	Solid	5035	
890-1502-83	BH-83 (15)	Total/NA	Solid	5035	
390-1502-84	BH-84 (15)	Total/NA	Solid	5035	
390-1502-85	BH-85 (15)	Total/NA	Solid	5035	
890-1502-86	BH-86 (15)	Total/NA	Solid	5035	
890-1502-87	BH-87 (15)	Total/NA	Solid	5035	
390-1502-88	BH-88 (15)	Total/NA	Solid	5035	
890-1502-89	BH-89 (15)	Total/NA	Solid	5035	
390-1502-90	BH90 (RS) (6)	Total/NA	Solid	5035	
390-1502-91	BH-91 (RS) (6)	Total/NA	Solid	5035	
890-1502-92	SW-1 (0-6)	Total/NA	Solid	5035	
890-1502-93	SW-2 (0-6)	Total/NA	Solid	5035	
890-1502-94	SW-3 (0-6)	Total/NA	Solid	5035	
390-1502-95	SW-4 (0-6)	Total/NA	Solid	5035	
890-1502-96	SW-5 (0-6)	Total/NA	Solid	5035	
890-1502-97	SW-6 (0-6)	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

Page 151 of 248

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

## **GC VOA (Continued)**

### Prep Batch: 11113 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-98	SW-7 (0-6)	Total/NA	Solid	5035	
890-1502-99	SW-8 (0-6)	Total/NA	Solid	5035	
890-1502-100	SW-9 (0-6)	Total/NA	Solid	5035	
MB 880-11113/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11113/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11113/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	5035	
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	5035	

#### Prep Batch: 11114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-101	SW-10 (0-6)	Total/NA	Solid	5035	
890-1502-102	SW-11 (0-6)	Total/NA	Solid	5035	
890-1502-103	SW-12 (10)	Total/NA	Solid	5035	
890-1502-104	SW-13 (15)	Total/NA	Solid	5035	
890-1502-105	SW-14 (15)	Total/NA	Solid	5035	
890-1502-106	SW-15 (15)	Total/NA	Solid	5035	
890-1502-107	SW-16 (15)	Total/NA	Solid	5035	
890-1502-108	SW-17 (15)	Total/NA	Solid	5035	
890-1502-109	SW-18 (15)	Total/NA	Solid	5035	
890-1502-110	SW-19 (15)	Total/NA	Solid	5035	
890-1502-111	SW-20 (15)	Total/NA	Solid	5035	
890-1502-112	SW-21 (15)	Total/NA	Solid	5035	
890-1502-113	SW-22 (15)	Total/NA	Solid	5035	
890-1502-114	SW-23 (15)	Total/NA	Solid	5035	
890-1502-115	SW-24 (15)	Total/NA	Solid	5035	
890-1502-116	SW-25 (15)	Total/NA	Solid	5035	
890-1502-117	SW-26 (15)	Total/NA	Solid	5035	
890-1502-118	SW-27 (15)	Total/NA	Solid	5035	
890-1502-119	SW-28 (15)	Total/NA	Solid	5035	
MB 880-11114/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11114/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11114/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	5035	
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid	5035	

#### Analysis Batch: 11206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	8021B	11075
890-1502-2	BH-2 (6)	Total/NA	Solid	8021B	11075
890-1502-3	BH-3 (6)	Total/NA	Solid	8021B	11075
890-1502-4	BH-4 (6)	Total/NA	Solid	8021B	11075
890-1502-5	BH-5 (6)	Total/NA	Solid	8021B	11075
890-1502-6	BH-6 (6)	Total/NA	Solid	8021B	11075
890-1502-7	BH-7 (6)	Total/NA	Solid	8021B	11075
890-1502-8	BH-8 (6)	Total/NA	Solid	8021B	11075
890-1502-9	BH-9 (6)	Total/NA	Solid	8021B	11075
890-1502-10	BH-10 (6)	Total/NA	Solid	8021B	11075
890-1502-11	BH-11 (6)	Total/NA	Solid	8021B	11075
890-1502-12	BH-12 (6)	Total/NA	Solid	8021B	11075
890-1502-13	BH-13 (6)	Total/NA	Solid	8021B	11075

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### **GC VOA (Continued)**

### **Analysis Batch: 11206 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-14	BH-14 (6)	Total/NA	Solid	8021B	11075
890-1502-15	BH-15 (6)	Total/NA	Solid	8021B	11075
890-1502-16	BH-16 (6)	Total/NA	Solid	8021B	11075
890-1502-17	BH-17 (6)	Total/NA	Solid	8021B	11075
890-1502-18	BH-18 (6)	Total/NA	Solid	8021B	11075
890-1502-19	BH-19 (6)	Total/NA	Solid	8021B	11075
890-1502-20	BH-20 (6)	Total/NA	Solid	8021B	11075
MB 880-11075/5-A	Method Blank	Total/NA	Solid	8021B	11075
MB 880-11207/5-A	Method Blank	Total/NA	Solid	8021B	11207
LCS 880-11075/1-A	Lab Control Sample	Total/NA	Solid	8021B	11075
LCSD 880-11075/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11075
890-1502-1 MS	BH-1 (6)	Total/NA	Solid	8021B	11075
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	8021B	11075

#### Prep Batch: 11207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-11207/5-A	Method Blank	Total/NA	Solid	5035	_

#### **Analysis Batch: 11221**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
390-1502-21	BH-21 (6)	Total/NA	Solid	8021B	1110
890-1502-22	BH-22 (6)	Total/NA	Solid	8021B	1110
390-1502-23	BH-23 (6)	Total/NA	Solid	8021B	1110
390-1502-24	BH-24 (6)	Total/NA	Solid	8021B	1110
390-1502-25	BH-25 (15)	Total/NA	Solid	8021B	1110
390-1502-26	BH-26 (15)	Total/NA	Solid	8021B	1110
390-1502-27	BH-27 (15)	Total/NA	Solid	8021B	1110
390-1502-28	BH-28 (15)	Total/NA	Solid	8021B	1110
390-1502-29	BH-29 (15)	Total/NA	Solid	8021B	1110
390-1502-30	BH-30 (15)	Total/NA	Solid	8021B	1110
90-1502-31	BH-31 (15)	Total/NA	Solid	8021B	1110
390-1502-32	BH-32 (15)	Total/NA	Solid	8021B	1110
90-1502-33	BH-33 (15)	Total/NA	Solid	8021B	1110
90-1502-34	BH-34 (15)	Total/NA	Solid	8021B	1110
90-1502-35	BH-35 (15)	Total/NA	Solid	8021B	1110
90-1502-36	BH-36 (15)	Total/NA	Solid	8021B	1110
90-1502-37	BH-37 (15)	Total/NA	Solid	8021B	1110
90-1502-38	BH-38 (15)	Total/NA	Solid	8021B	1110
390-1502-39	BH-39 (15)	Total/NA	Solid	8021B	1110
90-1502-40	BH-40 (15)	Total/NA	Solid	8021B	1110
90-1502-61	BH-61 (15)	Total/NA	Solid	8021B	1111
90-1502-62	BH-62 (15)	Total/NA	Solid	8021B	1111
90-1502-63	BH-63 (15)	Total/NA	Solid	8021B	1111
90-1502-64	BH-64 (15)	Total/NA	Solid	8021B	1111
90-1502-65	BH-65 (15)	Total/NA	Solid	8021B	1111
90-1502-66	BH-66 (15)	Total/NA	Solid	8021B	1111
90-1502-67	BH-67 (15)	Total/NA	Solid	8021B	1111
90-1502-68	BH-68 (15)	Total/NA	Solid	8021B	1111
90-1502-69	BH-69 (15)	Total/NA	Solid	8021B	1111
90-1502-70	BH-70 (15)	Total/NA	Solid	8021B	1111
390-1502-71	BH-71 (15)	Total/NA	Solid	8021B	1111

Eurofins Xenco, Carlsbad

\_

4

6

8

1 N

4.0

13

14

Released to Imaging: 9/1/2023 2:28:53 PM Page 153 of 248 11/10/2021

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

## **GC VOA (Continued)**

### **Analysis Batch: 11221 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-72	BH-72 (15)	Total/NA	Solid	8021B	11112
890-1502-73	BH-73 (15)	Total/NA	Solid	8021B	11112
890-1502-74	BH-74 (15)	Total/NA	Solid	8021B	11112
890-1502-75	BH-75 (15)	Total/NA	Solid	8021B	11112
890-1502-76	BH-76 (15)	Total/NA	Solid	8021B	11112
890-1502-77	BH-77 (15)	Total/NA	Solid	8021B	11112
890-1502-78	BH-78 (15)	Total/NA	Solid	8021B	11112
890-1502-79	BH-79 (15)	Total/NA	Solid	8021B	11112
890-1502-80	BH-80 (15)	Total/NA	Solid	8021B	11112
MB 880-11109/5-A	Method Blank	Total/NA	Solid	8021B	11109
MB 880-11112/5-A	Method Blank	Total/NA	Solid	8021B	11112
LCS 880-11109/1-A	Lab Control Sample	Total/NA	Solid	8021B	11109
LCS 880-11112/1-A	Lab Control Sample	Total/NA	Solid	8021B	11112
LCSD 880-11109/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11109
LCSD 880-11112/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11112
890-1502-21 MS	BH-21 (6)	Total/NA	Solid	8021B	11109
890-1502-21 MSD	BH-21 (6)	Total/NA	Solid	8021B	11109
890-1502-61 MS	BH-61 (15)	Total/NA	Solid	8021B	11112
890-1502-61 MSD	BH-61 (15)	Total/NA	Solid	8021B	11112

#### Prep Batch: 11258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-11258/5-A	Method Blank	Total/NA	Solid	5035	

#### Analysis Batch: 11259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-41	BH-41 (15)	Total/NA	Solid	8021B	11111
890-1502-42	BH-42 (15)	Total/NA	Solid	8021B	11111
890-1502-43	BH-43 (15)	Total/NA	Solid	8021B	11111
890-1502-44	BH-44 (15)	Total/NA	Solid	8021B	11111
390-1502-45	BH-45 (15)	Total/NA	Solid	8021B	11111
890-1502-46	BH-46 (15)	Total/NA	Solid	8021B	11111
890-1502-47	BH-47 (15)	Total/NA	Solid	8021B	11111
890-1502-48	BH-48 (15)	Total/NA	Solid	8021B	11111
890-1502-49	BH-49 (15)	Total/NA	Solid	8021B	11111
390-1502-50	BH-50 (15)	Total/NA	Solid	8021B	11111
390-1502-51	BH-51 (15 )	Total/NA	Solid	8021B	11111
390-1502-52	BH-52 (15)	Total/NA	Solid	8021B	11111
390-1502-54	BH-54 (15)	Total/NA	Solid	8021B	11111
390-1502-55	BH-55 (15)	Total/NA	Solid	8021B	11111
390-1502-56	BH-56 (15)	Total/NA	Solid	8021B	11111
MB 880-11111/5-A	Method Blank	Total/NA	Solid	8021B	11111
MB 880-11258/5-A	Method Blank	Total/NA	Solid	8021B	11258
LCS 880-11111/1-A	Lab Control Sample	Total/NA	Solid	8021B	11111
LCSD 880-11111/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11111
390-1502-41 MS	BH-41 (15)	Total/NA	Solid	8021B	11111
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	8021B	11111

#### Analysis Batch: 11374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-81	BH-81 (15)	Total/NA	Solid	8021B	11113

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

## **GC VOA (Continued)**

### **Analysis Batch: 11374 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
890-1502-82	BH-82 (15)	Total/NA	Solid	8021B	1111
390-1502-83	BH-83 (15)	Total/NA	Solid	8021B	1111
890-1502-84	BH-84 (15)	Total/NA	Solid	8021B	1111
890-1502-85	BH-85 (15)	Total/NA	Solid	8021B	1111
890-1502-86	BH-86 (15)	Total/NA	Solid	8021B	1111
890-1502-87	BH-87 (15)	Total/NA	Solid	8021B	1111
890-1502-88	BH-88 (15)	Total/NA	Solid	8021B	1111
890-1502-89	BH-89 (15)	Total/NA	Solid	8021B	1111
890-1502-90	BH90 (RS) (6)	Total/NA	Solid	8021B	1111
890-1502-91	BH-91 (RS) (6)	Total/NA	Solid	8021B	1111
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8021B	1111
890-1502-93	SW-2 (0-6)	Total/NA	Solid	8021B	1111
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8021B	1111
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8021B	1111
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8021B	1111
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8021B	1111
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8021B	1111
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8021B	1111
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8021B	1111
890-1502-101	SW-10 (0-6)	Total/NA	Solid	8021B	1111
890-1502-102	SW-11 (0-6)	Total/NA	Solid	8021B	111
890-1502-103	SW-12 (10)	Total/NA	Solid	8021B	1111
890-1502-104	SW-13 (15)	Total/NA	Solid	8021B	1111
890-1502-105	SW-14 (15)	Total/NA	Solid	8021B	1111
890-1502-106	SW-15 (15)	Total/NA	Solid	8021B	1111
890-1502-107	SW-16 (15)	Total/NA	Solid	8021B	1111
890-1502-108	SW-17 (15)	Total/NA	Solid	8021B	1111
890-1502-109	SW-18 (15)	Total/NA	Solid	8021B	1111
890-1502-110	SW-19 (15)	Total/NA	Solid	8021B	111
890-1502-111	SW-20 (15)	Total/NA	Solid	8021B	1111
890-1502-112	SW-21 (15)	Total/NA	Solid	8021B	1111
890-1502-113	SW-22 (15)	Total/NA	Solid	8021B	1111
890-1502-114	SW-23 (15)	Total/NA	Solid	8021B	1111
890-1502-115	SW-24 (15)	Total/NA	Solid	8021B	111
890-1502-116	SW-25 (15)	Total/NA	Solid	8021B	1111
890-1502-117	SW-26 (15)	Total/NA	Solid	8021B	1111
890-1502-118	SW-27 (15)	Total/NA	Solid	8021B	111
890-1502-119	SW-28 (15)	Total/NA	Solid	8021B	111
MB 880-11113/5-A	Method Blank	Total/NA	Solid	8021B	1111
MB 880-11114/5-A	Method Blank	Total/NA	Solid	8021B	111
LCS 880-11113/1-A	Lab Control Sample	Total/NA	Solid	8021B	1111
LCS 880-11114/1-A	Lab Control Sample	Total/NA	Solid	8021B	1111
LCSD 880-11113/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1111
LCSD 880-11114/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1111
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	8021B	111
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8021B	111
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8021B	1111
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid		

Eurofins Xenco, Carlsbad

9

3

4

6

8

10

12

13

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

**GC VOA** 

Prep Batch: 11388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-53	BH-53 (15)	Total/NA	Solid	5035	
MB 880-11388/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11388/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11388/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-53 MS	BH-53 (15)	Total/NA	Solid	5035	
890-1502-53 MSD	BH-53 (15)	Total/NA	Solid	5035	

Analysis Batch: 11420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-53	BH-53 (15)	Total/NA	Solid	8021B	11388
MB 880-11388/5-A	Method Blank	Total/NA	Solid	8021B	11388
LCS 880-11388/1-A	Lab Control Sample	Total/NA	Solid	8021B	11388
LCSD 880-11388/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11388
890-1502-53 MS	BH-53 (15)	Total/NA	Solid	8021B	11388
890-1502-53 MSD	BH-53 (15)	Total/NA	Solid	8021B	11388

Prep Batch: 11445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-57	BH-57 (15)	Total/NA	Solid	5035	
890-1502-58	BH-58 (15)	Total/NA	Solid	5035	
890-1502-59	BH-59 (15)	Total/NA	Solid	5035	
890-1502-60	BH-60 (15)	Total/NA	Solid	5035	
890-1502-120	SW-29 (15)	Total/NA	Solid	5035	
MB 880-11445/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11445/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11445/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1520-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-1520-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 11449** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-57	BH-57 (15)	Total/NA	Solid	8021B	11445
890-1502-58	BH-58 (15)	Total/NA	Solid	8021B	11445
390-1502-59	BH-59 (15)	Total/NA	Solid	8021B	11445
390-1502-60	BH-60 (15)	Total/NA	Solid	8021B	11445
390-1502-120	SW-29 (15)	Total/NA	Solid	8021B	11445
MB 880-11445/5-A	Method Blank	Total/NA	Solid	8021B	11445
MB 880-11449/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-11445/1-A	Lab Control Sample	Total/NA	Solid	8021B	11445
LCS 880-11449/3	Lab Control Sample	Total/NA	Solid	8021B	
LCSD 880-11445/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11445
LCSD 880-11449/4	Lab Control Sample Dup	Total/NA	Solid	8021B	
390-1520-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	11445
890-1520-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	11445

**Analysis Batch: 11768** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	Total BTEX
890-1502-2	BH-2 (6)	Total/NA	Solid	Total BTEX
890-1502-3	BH-3 (6)	Total/NA	Solid	Total BTEX
890-1502-4	BH-4 (6)	Total/NA	Solid	Total BTEX

Eurofins Xenco, Carlsbad

11/10/2021

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### **GC VOA (Continued)**

#### **Analysis Batch: 11768 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
390-1502-5	BH-5 (6)	Total/NA	Solid	Total BTEX	
390-1502-6	BH-6 (6)	Total/NA	Solid	Total BTEX	
390-1502-7	BH-7 (6)	Total/NA	Solid	Total BTEX	
390-1502-8	BH-8 (6)	Total/NA	Solid	Total BTEX	
390-1502-9	BH-9 (6)	Total/NA	Solid	Total BTEX	
390-1502-10	BH-10 (6)	Total/NA	Solid	Total BTEX	
390-1502-11	BH-11 (6)	Total/NA	Solid	Total BTEX	
890-1502-12	BH-12 (6)	Total/NA	Solid	Total BTEX	
890-1502-13	BH-13 (6)	Total/NA	Solid	Total BTEX	
890-1502-14	BH-14 (6)	Total/NA	Solid	Total BTEX	
890-1502-15	BH-15 (6)	Total/NA	Solid	Total BTEX	
390-1502-16	BH-16 (6)	Total/NA	Solid	Total BTEX	
890-1502-17	BH-17 (6)	Total/NA	Solid	Total BTEX	
390-1502-18	BH-18 (6)	Total/NA	Solid	Total BTEX	
890-1502-19	BH-19 (6)	Total/NA	Solid	Total BTEX	
390-1502-20	BH-20 (6)	Total/NA	Solid	Total BTEX	
890-1502-21	BH-21 (6)	Total/NA	Solid	Total BTEX	
890-1502-22	BH-22 (6)	Total/NA	Solid	Total BTEX	
890-1502-23	BH-23 (6)	Total/NA	Solid	Total BTEX	
890-1502-24	BH-24 (6)	Total/NA	Solid	Total BTEX	
890-1502-25	BH-25 (15)	Total/NA	Solid	Total BTEX	
890-1502-26	BH-26 (15)	Total/NA	Solid	Total BTEX	
890-1502-27	BH-27 (15)	Total/NA	Solid	Total BTEX	
890-1502-28	BH-28 (15)	Total/NA	Solid	Total BTEX	
390-1502-29	BH-29 (15)	Total/NA	Solid	Total BTEX	
390-1502-30	BH-30 (15)	Total/NA	Solid	Total BTEX	
390-1502-31	BH-31 (15)	Total/NA	Solid	Total BTEX	
890-1502-32	BH-32 (15)	Total/NA	Solid	Total BTEX	
390-1502-33	BH-33 (15)	Total/NA	Solid	Total BTEX	
890-1502-34	BH-34 (15)	Total/NA	Solid	Total BTEX	
890-1502-35	BH-35 (15)	Total/NA	Solid	Total BTEX	
890-1502-36	BH-36 (15)	Total/NA	Solid	Total BTEX	
390-1502-37	BH-37 (15)	Total/NA	Solid	Total BTEX	
390-1502-38	BH-38 (15)	Total/NA	Solid	Total BTEX	
890-1502-39	BH-39 (15)	Total/NA	Solid	Total BTEX	
890-1502-40	BH-40 (15)	Total/NA	Solid	Total BTEX	
890-1502-41	BH-41 (15)	Total/NA	Solid	Total BTEX	
890-1502-42	BH-42 (15)	Total/NA	Solid	Total BTEX	
890-1502-43	BH-43 (15)	Total/NA	Solid	Total BTEX	
890-1502-44	BH-44 (15)	Total/NA	Solid	Total BTEX	
890-1502-45	BH-45 (15)	Total/NA	Solid	Total BTEX	
890-1502-46	BH-46 (15)	Total/NA	Solid	Total BTEX	
890-1502-47		Total/NA	Solid	Total BTEX	
	BH-47 (15)				
890-1502-48 800-1502-40	BH-48 (15)	Total/NA	Solid	Total BTEX Total BTEX	
890-1502-49	BH-49 (15)	Total/NA	Solid		
890-1502-50	BH-50 (15)	Total/NA	Solid	Total BTEX	
390-1502-51	BH-51 (15 )	Total/NA	Solid	Total BTEX	
890-1502-52	BH-52 (15)	Total/NA	Solid	Total BTEX	
890-1502-53	BH-53 (15)	Total/NA	Solid	Total BTEX	
890-1502-54	BH-54 (15)	Total/NA	Solid	Total BTEX	

Eurofins Xenco, Carlsbad

3

4

6

0

10

12

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### **GC VOA (Continued)**

#### **Analysis Batch: 11768 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-56	BH-56 (15)	Total/NA	Solid	Total BTEX	
390-1502-57	BH-57 (15)	Total/NA	Solid	Total BTEX	
390-1502-58	BH-58 (15)	Total/NA	Solid	Total BTEX	
390-1502-59	BH-59 (15)	Total/NA	Solid	Total BTEX	
390-1502-60	BH-60 (15)	Total/NA	Solid	Total BTEX	
390-1502-61	BH-61 (15)	Total/NA	Solid	Total BTEX	
390-1502-62	BH-62 (15)	Total/NA	Solid	Total BTEX	
390-1502-63	BH-63 (15)	Total/NA	Solid	Total BTEX	
390-1502-64	BH-64 (15)	Total/NA	Solid	Total BTEX	
390-1502-65	BH-65 (15)	Total/NA	Solid	Total BTEX	
390-1502-66	BH-66 (15)	Total/NA	Solid	Total BTEX	
390-1502-67	BH-67 (15)	Total/NA	Solid	Total BTEX	
390-1502-68	BH-68 (15)	Total/NA	Solid	Total BTEX	
390-1502-69	BH-69 (15)	Total/NA	Solid	Total BTEX	
390-1502-70	BH-70 (15)	Total/NA	Solid	Total BTEX	
390-1502-71	BH-71 (15)	Total/NA	Solid	Total BTEX	
390-1502-72	BH-72 (15)	Total/NA	Solid	Total BTEX	
390-1502-73	BH-73 (15)	Total/NA	Solid	Total BTEX	
390-1502-74	BH-74 (15)	Total/NA	Solid	Total BTEX	
390-1502-75	BH-75 (15)	Total/NA	Solid	Total BTEX	
390-1502-76	BH-76 (15)	Total/NA	Solid	Total BTEX	
390-1502-77	BH-77 (15)	Total/NA	Solid	Total BTEX	
390-1502-78	BH-78 (15)	Total/NA	Solid	Total BTEX	
390-1502-78 390-1502-79		Total/NA	Solid	Total BTEX	
390-1502-79 390-1502-80	BH-79 (15) BH-80 (15)	Total/NA	Solid	Total BTEX	
		Total/NA	Solid		
890-1502-81	BH-81 (15)			Total BTEX	
390-1502-82	BH-82 (15)	Total/NA	Solid	Total BTEX	
890-1502-83	BH-83 (15)	Total/NA	Solid	Total BTEX	
390-1502-84	BH-84 (15)	Total/NA	Solid	Total BTEX	
390-1502-85	BH-85 (15)	Total/NA	Solid	Total BTEX	
390-1502-86	BH-86 (15)	Total/NA	Solid	Total BTEX	
390-1502-87	BH-87 (15)	Total/NA	Solid	Total BTEX	
390-1502-88	BH-88 (15)	Total/NA	Solid	Total BTEX	
390-1502-89	BH-89 (15)	Total/NA	Solid	Total BTEX	
390-1502-90	BH90 (RS ) (6)	Total/NA	Solid	Total BTEX	
390-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	Total BTEX	
390-1502-92	SW-1 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-93	SW-2 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-94	SW-3 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-95	SW-4 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-96	SW-5 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-97	SW-6 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-98	SW-7 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-99	SW-8 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-100	SW-9 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-101	SW-10 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-102	SW-11 (0-6)	Total/NA	Solid	Total BTEX	
390-1502-103	SW-12 (10)	Total/NA	Solid	Total BTEX	
390-1502-104	SW-13 (15)	Total/NA	Solid	Total BTEX	
890-1502-105	SW-14 (15)	Total/NA	Solid	Total BTEX	
890-1502-106	SW-15 (15)	Total/NA	Solid	Total BTEX	

Eurofins Xenco, Carlsbad

2

3

4

6

0

10

12

13

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

**GC VOA (Continued)** 

### **Analysis Batch: 11768 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-107	SW-16 (15)	Total/NA	Solid	Total BTEX	
890-1502-108	SW-17 (15)	Total/NA	Solid	Total BTEX	
890-1502-109	SW-18 (15)	Total/NA	Solid	Total BTEX	
890-1502-110	SW-19 (15)	Total/NA	Solid	Total BTEX	
890-1502-111	SW-20 (15)	Total/NA	Solid	Total BTEX	
890-1502-112	SW-21 (15)	Total/NA	Solid	Total BTEX	
890-1502-113	SW-22 (15)	Total/NA	Solid	Total BTEX	
890-1502-114	SW-23 (15)	Total/NA	Solid	Total BTEX	
890-1502-115	SW-24 (15)	Total/NA	Solid	Total BTEX	
890-1502-116	SW-25 (15)	Total/NA	Solid	Total BTEX	
890-1502-117	SW-26 (15)	Total/NA	Solid	Total BTEX	
890-1502-118	SW-27 (15)	Total/NA	Solid	Total BTEX	
890-1502-119	SW-28 (15)	Total/NA	Solid	Total BTEX	
890-1502-120	SW-29 (15)	Total/NA	Solid	Total BTEX	
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	Total BTEX	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	Total BTEX	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	Total BTEX	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	Total BTEX	

**GC Semi VOA** 

### Prep Batch: 11223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-1	BH-1 (6)	Total/NA	Solid	8015NM Prep	
890-1502-2	BH-2 (6)	Total/NA	Solid	8015NM Prep	
390-1502-3	BH-3 (6)	Total/NA	Solid	8015NM Prep	
390-1502-4	BH-4 (6)	Total/NA	Solid	8015NM Prep	
390-1502-5	BH-5 (6)	Total/NA	Solid	8015NM Prep	
890-1502-6	BH-6 (6)	Total/NA	Solid	8015NM Prep	
890-1502-7	BH-7 (6)	Total/NA	Solid	8015NM Prep	
390-1502-8	BH-8 (6)	Total/NA	Solid	8015NM Prep	
390-1502-9	BH-9 (6)	Total/NA	Solid	8015NM Prep	
390-1502-10	BH-10 (6)	Total/NA	Solid	8015NM Prep	
390-1502-11	BH-11 (6)	Total/NA	Solid	8015NM Prep	
390-1502-12	BH-12 (6)	Total/NA	Solid	8015NM Prep	
390-1502-13	BH-13 (6)	Total/NA	Solid	8015NM Prep	
390-1502-14	BH-14 (6)	Total/NA	Solid	8015NM Prep	
390-1502-15	BH-15 (6)	Total/NA	Solid	8015NM Prep	
390-1502-16	BH-16 (6)	Total/NA	Solid	8015NM Prep	
390-1502-17	BH-17 (6)	Total/NA	Solid	8015NM Prep	
390-1502-18	BH-18 (6)	Total/NA	Solid	8015NM Prep	
390-1502-19	BH-19 (6)	Total/NA	Solid	8015NM Prep	
390-1502-20	BH-20 (6)	Total/NA	Solid	8015NM Prep	
MB 880-11223/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
CS 880-11223/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
.CSD 880-11223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
390-1502-1 MS	BH-1 (6)	Total/NA	Solid	8015NM Prep	
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

2

3

7

10

12

13

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA

Prep Batch: 11255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-21	BH-21 (6)	Total/NA	Solid	8015NM Prep	
890-1502-22	BH-22 (6)	Total/NA	Solid	8015NM Prep	
890-1502-23	BH-23 (6)	Total/NA	Solid	8015NM Prep	
890-1502-24	BH-24 (6)	Total/NA	Solid	8015NM Prep	
890-1502-25	BH-25 (15)	Total/NA	Solid	8015NM Prep	
890-1502-26	BH-26 (15)	Total/NA	Solid	8015NM Prep	
890-1502-27	BH-27 (15)	Total/NA	Solid	8015NM Prep	
890-1502-28	BH-28 (15)	Total/NA	Solid	8015NM Prep	
890-1502-29	BH-29 (15)	Total/NA	Solid	8015NM Prep	
890-1502-30	BH-30 (15)	Total/NA	Solid	8015NM Prep	
890-1502-31	BH-31 (15)	Total/NA	Solid	8015NM Prep	
890-1502-32	BH-32 (15)	Total/NA	Solid	8015NM Prep	
890-1502-33	BH-33 (15)	Total/NA	Solid	8015NM Prep	
890-1502-34	BH-34 (15)	Total/NA	Solid	8015NM Prep	
890-1502-35	BH-35 (15)	Total/NA	Solid	8015NM Prep	
890-1502-36	BH-36 (15)	Total/NA	Solid	8015NM Prep	
890-1502-37	BH-37 (15)	Total/NA	Solid	8015NM Prep	
890-1502-38	BH-38 (15)	Total/NA	Solid	8015NM Prep	
890-1502-39	BH-39 (15)	Total/NA	Solid	8015NM Prep	
890-1502-40	BH-40 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11255/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11255/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11255/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-21 MS	BH-21 (6)	Total/NA	Solid	8015NM Prep	
890-1502-21 MSD	BH-21 (6)	Total/NA	Solid	8015NM Prep	

### Prep Batch: 11273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-41	BH-41 (15)	Total/NA	Solid	8015NM Prep	
890-1502-42	BH-42 (15)	Total/NA	Solid	8015NM Prep	
890-1502-43	BH-43 (15)	Total/NA	Solid	8015NM Prep	
890-1502-44	BH-44 (15)	Total/NA	Solid	8015NM Prep	
890-1502-45	BH-45 (15)	Total/NA	Solid	8015NM Prep	
890-1502-46	BH-46 (15)	Total/NA	Solid	8015NM Prep	
890-1502-47	BH-47 (15)	Total/NA	Solid	8015NM Prep	
890-1502-48	BH-48 (15)	Total/NA	Solid	8015NM Prep	
890-1502-49	BH-49 (15)	Total/NA	Solid	8015NM Prep	
890-1502-50	BH-50 (15)	Total/NA	Solid	8015NM Prep	
890-1502-51	BH-51 (15 )	Total/NA	Solid	8015NM Prep	
890-1502-52	BH-52 (15)	Total/NA	Solid	8015NM Prep	
890-1502-53	BH-53 (15)	Total/NA	Solid	8015NM Prep	
890-1502-54	BH-54 (15)	Total/NA	Solid	8015NM Prep	
890-1502-55	BH-55 (15)	Total/NA	Solid	8015NM Prep	
890-1502-56	BH-56 (15)	Total/NA	Solid	8015NM Prep	
890-1502-57	BH-57 (15)	Total/NA	Solid	8015NM Prep	
890-1502-58	BH-58 (15)	Total/NA	Solid	8015NM Prep	
890-1502-59	BH-59 (15)	Total/NA	Solid	8015NM Prep	
890-1502-60	BH-60 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11273/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11273/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11273/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

Page 160 of 248

2

3

4

6

8

4.0

11

13

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

### Prep Batch: 11273 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-41 MS	BH-41 (15)	Total/NA	Solid	8015NM Prep	
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 11317**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	8015B NM	11223
890-1502-2	BH-2 (6)	Total/NA	Solid	8015B NM	11223
890-1502-3	BH-3 (6)	Total/NA	Solid	8015B NM	11223
890-1502-4	BH-4 (6)	Total/NA	Solid	8015B NM	11223
890-1502-5	BH-5 (6)	Total/NA	Solid	8015B NM	11223
890-1502-6	BH-6 (6)	Total/NA	Solid	8015B NM	11223
890-1502-7	BH-7 (6)	Total/NA	Solid	8015B NM	11223
890-1502-8	BH-8 (6)	Total/NA	Solid	8015B NM	11223
890-1502-9	BH-9 (6)	Total/NA	Solid	8015B NM	11223
890-1502-10	BH-10 (6)	Total/NA	Solid	8015B NM	11223
890-1502-11	BH-11 (6)	Total/NA	Solid	8015B NM	11223
890-1502-12	BH-12 (6)	Total/NA	Solid	8015B NM	11223
890-1502-13	BH-13 (6)	Total/NA	Solid	8015B NM	11223
890-1502-14	BH-14 (6)	Total/NA	Solid	8015B NM	11223
890-1502-15	BH-15 (6)	Total/NA	Solid	8015B NM	11223
890-1502-16	BH-16 (6)	Total/NA	Solid	8015B NM	11223
890-1502-17	BH-17 (6)	Total/NA	Solid	8015B NM	11223
890-1502-18	BH-18 (6)	Total/NA	Solid	8015B NM	11223
890-1502-19	BH-19 (6)	Total/NA	Solid	8015B NM	11223
890-1502-20	BH-20 (6)	Total/NA	Solid	8015B NM	11223
MB 880-11223/1-A	Method Blank	Total/NA	Solid	8015B NM	11223
LCS 880-11223/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11223
LCSD 880-11223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11223
890-1502-1 MS	BH-1 (6)	Total/NA	Solid	8015B NM	11223
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	8015B NM	11223

#### Analysis Batch: 11321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-21	BH-21 (6)	Total/NA	Solid	8015B NM	1125
890-1502-22	BH-22 (6)	Total/NA	Solid	8015B NM	1125
890-1502-23	BH-23 (6)	Total/NA	Solid	8015B NM	1125
890-1502-24	BH-24 (6)	Total/NA	Solid	8015B NM	1125
890-1502-25	BH-25 (15)	Total/NA	Solid	8015B NM	1125
890-1502-26	BH-26 (15)	Total/NA	Solid	8015B NM	1125
890-1502-27	BH-27 (15)	Total/NA	Solid	8015B NM	1125
890-1502-28	BH-28 (15)	Total/NA	Solid	8015B NM	1125
890-1502-29	BH-29 (15)	Total/NA	Solid	8015B NM	1125
890-1502-30	BH-30 (15)	Total/NA	Solid	8015B NM	1125
890-1502-31	BH-31 (15)	Total/NA	Solid	8015B NM	1125
890-1502-32	BH-32 (15)	Total/NA	Solid	8015B NM	1125
890-1502-33	BH-33 (15)	Total/NA	Solid	8015B NM	1125
890-1502-34	BH-34 (15)	Total/NA	Solid	8015B NM	1125
890-1502-35	BH-35 (15)	Total/NA	Solid	8015B NM	1125
890-1502-36	BH-36 (15)	Total/NA	Solid	8015B NM	1125
890-1502-37	BH-37 (15)	Total/NA	Solid	8015B NM	1125
890-1502-38	BH-38 (15)	Total/NA	Solid	8015B NM	1125

Eurofins Xenco, Carlsbad

Page 161 of 248

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

### **Analysis Batch: 11321 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-39	BH-39 (15)	Total/NA	Solid	8015B NM	11255
890-1502-40	BH-40 (15)	Total/NA	Solid	8015B NM	11255
MB 880-11255/1-A	Method Blank	Total/NA	Solid	8015B NM	11255
LCS 880-11255/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11255
LCSD 880-11255/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11255
890-1502-21 MS	BH-21 (6)	Total/NA	Solid	8015B NM	11255
890-1502-21 MSD	BH-21 (6)	Total/NA	Solid	8015B NM	11255

#### Analysis Batch: 11323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
390-1502-41	BH-41 (15)	Total/NA	Solid	8015B NM	11273
390-1502-42	BH-42 (15)	Total/NA	Solid	8015B NM	11273
390-1502-43	BH-43 (15)	Total/NA	Solid	8015B NM	11273
90-1502-44	BH-44 (15)	Total/NA	Solid	8015B NM	11273
90-1502-45	BH-45 (15)	Total/NA	Solid	8015B NM	11273
90-1502-46	BH-46 (15)	Total/NA	Solid	8015B NM	11273
90-1502-47	BH-47 (15)	Total/NA	Solid	8015B NM	11273
90-1502-48	BH-48 (15)	Total/NA	Solid	8015B NM	11273
90-1502-49	BH-49 (15)	Total/NA	Solid	8015B NM	11273
90-1502-50	BH-50 (15)	Total/NA	Solid	8015B NM	11273
90-1502-51	BH-51 (15 )	Total/NA	Solid	8015B NM	11273
90-1502-52	BH-52 (15)	Total/NA	Solid	8015B NM	11273
90-1502-53	BH-53 (15)	Total/NA	Solid	8015B NM	11273
90-1502-54	BH-54 (15)	Total/NA	Solid	8015B NM	11273
90-1502-55	BH-55 (15)	Total/NA	Solid	8015B NM	11273
90-1502-56	BH-56 (15)	Total/NA	Solid	8015B NM	11273
90-1502-57	BH-57 (15)	Total/NA	Solid	8015B NM	11273
90-1502-58	BH-58 (15)	Total/NA	Solid	8015B NM	11273
90-1502-59	BH-59 (15)	Total/NA	Solid	8015B NM	11273
90-1502-60	BH-60 (15)	Total/NA	Solid	8015B NM	11273
90-1502-61	BH-61 (15)	Total/NA	Solid	8015B NM	11356
90-1502-62	BH-62 (15)	Total/NA	Solid	8015B NM	11356
90-1502-63	BH-63 (15)	Total/NA	Solid	8015B NM	11356
90-1502-64	BH-64 (15)	Total/NA	Solid	8015B NM	11356
90-1502-65	BH-65 (15)	Total/NA	Solid	8015B NM	11356
90-1502-66	BH-66 (15)	Total/NA	Solid	8015B NM	11356
90-1502-67	BH-67 (15)	Total/NA	Solid	8015B NM	11356
90-1502-68	BH-68 (15)	Total/NA	Solid	8015B NM	11356
90-1502-69	BH-69 (15)	Total/NA	Solid	8015B NM	11356
90-1502-70	BH-70 (15)	Total/NA	Solid	8015B NM	11356
90-1502-71	BH-71 (15)	Total/NA	Solid	8015B NM	11356
90-1502-72	BH-72 (15)	Total/NA	Solid	8015B NM	11356
90-1502-73	BH-73 (15)	Total/NA	Solid	8015B NM	11356
90-1502-74	BH-74 (15)	Total/NA	Solid	8015B NM	11356
90-1502-75	BH-75 (15)	Total/NA	Solid	8015B NM	11356
90-1502-76	BH-76 (15)	Total/NA	Solid	8015B NM	11356
90-1502-77	BH-77 (15)	Total/NA	Solid	8015B NM	11356
90-1502-78	BH-78 (15)	Total/NA	Solid	8015B NM	11356
90-1502-79	BH-79 (15)	Total/NA	Solid	8015B NM	11356
90-1502-80	BH-80 (15)	Total/NA	Solid	8015B NM	11356
MB 880-11273/1-A	Method Blank	Total/NA	Solid	8015B NM	11273

Eurofins Xenco, Carlsbad

2

3

6

8

9

10

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

### **Analysis Batch: 11323 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-11356/1-A	Method Blank	Total/NA	Solid	8015B NM	11356
LCS 880-11273/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11273
LCS 880-11356/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11356
LCSD 880-11273/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11273
LCSD 880-11356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11356
890-1502-41 MS	BH-41 (15)	Total/NA	Solid	8015B NM	11273
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	8015B NM	11273
890-1502-61 MS	BH-61 (15)	Total/NA	Solid	8015B NM	11356
890-1502-61 MSD	BH-61 (15)	Total/NA	Solid	8015B NM	11356

#### Prep Batch: 11356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-61	BH-61 (15)	Total/NA	Solid	8015NM Prep	
890-1502-62	BH-62 (15)	Total/NA	Solid	8015NM Prep	
890-1502-63	BH-63 (15)	Total/NA	Solid	8015NM Prep	
890-1502-64	BH-64 (15)	Total/NA	Solid	8015NM Prep	
890-1502-65	BH-65 (15)	Total/NA	Solid	8015NM Prep	
890-1502-66	BH-66 (15)	Total/NA	Solid	8015NM Prep	
890-1502-67	BH-67 (15)	Total/NA	Solid	8015NM Prep	
890-1502-68	BH-68 (15)	Total/NA	Solid	8015NM Prep	
890-1502-69	BH-69 (15)	Total/NA	Solid	8015NM Prep	
890-1502-70	BH-70 (15)	Total/NA	Solid	8015NM Prep	
890-1502-71	BH-71 (15)	Total/NA	Solid	8015NM Prep	
890-1502-72	BH-72 (15)	Total/NA	Solid	8015NM Prep	
890-1502-73	BH-73 (15)	Total/NA	Solid	8015NM Prep	
890-1502-74	BH-74 (15)	Total/NA	Solid	8015NM Prep	
890-1502-75	BH-75 (15)	Total/NA	Solid	8015NM Prep	
890-1502-76	BH-76 (15)	Total/NA	Solid	8015NM Prep	
890-1502-77	BH-77 (15)	Total/NA	Solid	8015NM Prep	
890-1502-78	BH-78 (15)	Total/NA	Solid	8015NM Prep	
890-1502-79	BH-79 (15)	Total/NA	Solid	8015NM Prep	
890-1502-80	BH-80 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11356/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11356/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-61 MS	BH-61 (15)	Total/NA	Solid	8015NM Prep	
890-1502-61 MSD	BH-61 (15)	Total/NA	Solid	8015NM Prep	

#### Prep Batch: 11364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-81	BH-81 (15)	Total/NA	Solid	8015NM Prep	
890-1502-82	BH-82 (15)	Total/NA	Solid	8015NM Prep	
890-1502-83	BH-83 (15)	Total/NA	Solid	8015NM Prep	
890-1502-84	BH-84 (15)	Total/NA	Solid	8015NM Prep	
890-1502-85	BH-85 (15)	Total/NA	Solid	8015NM Prep	
890-1502-86	BH-86 (15)	Total/NA	Solid	8015NM Prep	
890-1502-87	BH-87 (15)	Total/NA	Solid	8015NM Prep	
890-1502-88	BH-88 (15)	Total/NA	Solid	8015NM Prep	
890-1502-89	BH-89 (15)	Total/NA	Solid	8015NM Prep	
890-1502-90	BH90 (RS) (6)	Total/NA	Solid	8015NM Prep	
890-1502-91	BH-91 (RS) (6)	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

Page 163 of 248

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

### Prep Batch: 11364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-93	SW-2 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8015NM Prep	
MB 880-11364/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11364/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11364/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	8015NM Prep	
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8015NM Prep	

### Prep Batch: 11375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-101	SW-10 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-102	SW-11 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-103	SW-12 (10)	Total/NA	Solid	8015NM Prep	
890-1502-104	SW-13 (15)	Total/NA	Solid	8015NM Prep	
890-1502-105	SW-14 (15)	Total/NA	Solid	8015NM Prep	
890-1502-106	SW-15 (15)	Total/NA	Solid	8015NM Prep	
890-1502-107	SW-16 (15)	Total/NA	Solid	8015NM Prep	
890-1502-108	SW-17 (15)	Total/NA	Solid	8015NM Prep	
890-1502-109	SW-18 (15)	Total/NA	Solid	8015NM Prep	
890-1502-110	SW-19 (15)	Total/NA	Solid	8015NM Prep	
890-1502-111	SW-20 (15)	Total/NA	Solid	8015NM Prep	
890-1502-112	SW-21 (15)	Total/NA	Solid	8015NM Prep	
890-1502-113	SW-22 (15)	Total/NA	Solid	8015NM Prep	
890-1502-114	SW-23 (15)	Total/NA	Solid	8015NM Prep	
890-1502-115	SW-24 (15)	Total/NA	Solid	8015NM Prep	
890-1502-116	SW-25 (15)	Total/NA	Solid	8015NM Prep	
890-1502-117	SW-26 (15)	Total/NA	Solid	8015NM Prep	
890-1502-118	SW-27 (15)	Total/NA	Solid	8015NM Prep	
890-1502-119	SW-28 (15)	Total/NA	Solid	8015NM Prep	
890-1502-120	SW-29 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11375/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11375/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11375/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid	8015NM Prep	

#### Prep Batch: 11376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	8015NM Prep	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	8015NM Prep	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	8015NM Prep	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	8015NM Prep	
MB 880-11376/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11376/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

Page 164 of 248

Eurofins Xenco, Carlsbad

11/10/2021

5

8

9

11

13

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

## GC Semi VOA (Continued)

### Prep Batch: 11376 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-11376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-121 MS	SW-30 (RS) (6)	Total/NA	Solid	8015NM Prep	
890-1502-121 MSD	SW-30 (RS) (6)	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 11414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	8015B NM	11376
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	8015B NM	11376
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	8015B NM	11376
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	8015B NM	11376
MB 880-11376/1-A	Method Blank	Total/NA	Solid	8015B NM	11376
LCS 880-11376/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11376
LCSD 880-11376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11376
890-1502-121 MS	SW-30 (RS) (6)	Total/NA	Solid	8015B NM	11376
890-1502-121 MSD	SW-30 (RS) (6)	Total/NA	Solid	8015B NM	11376

#### **Analysis Batch: 11416**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-81	BH-81 (15)	Total/NA	Solid	8015B NM	1136
890-1502-82	BH-82 (15)	Total/NA	Solid	8015B NM	1136
890-1502-83	BH-83 (15)	Total/NA	Solid	8015B NM	1136
890-1502-84	BH-84 (15)	Total/NA	Solid	8015B NM	1136
890-1502-85	BH-85 (15)	Total/NA	Solid	8015B NM	1136
890-1502-86	BH-86 (15)	Total/NA	Solid	8015B NM	1136
890-1502-87	BH-87 (15)	Total/NA	Solid	8015B NM	1136
890-1502-88	BH-88 (15)	Total/NA	Solid	8015B NM	1136
890-1502-89	BH-89 (15)	Total/NA	Solid	8015B NM	1136
890-1502-90	BH90 (RS) (6)	Total/NA	Solid	8015B NM	1136
890-1502-91	BH-91 (RS) (6)	Total/NA	Solid	8015B NM	1136
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-93	SW-2 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8015B NM	1136
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8015B NM	1136
MB 880-11364/1-A	Method Blank	Total/NA	Solid	8015B NM	1136
LCS 880-11364/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1136
LCSD 880-11364/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1136
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	8015B NM	1136
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8015B NM	1136

#### **Analysis Batch: 11418**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-101	SW-10 (0-6)	Total/NA	Solid	8015B NM	11375
890-1502-102	SW-11 (0-6)	Total/NA	Solid	8015B NM	11375
890-1502-103	SW-12 (10)	Total/NA	Solid	8015B NM	11375
890-1502-104	SW-13 (15)	Total/NA	Solid	8015B NM	11375
890-1502-105	SW-14 (15)	Total/NA	Solid	8015B NM	11375

Eurofins Xenco, Carlsbad

5

\_

9

11

13

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

### **Analysis Batch: 11418 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-106	SW-15 (15)	Total/NA	Solid	8015B NM	11375
890-1502-107	SW-16 (15)	Total/NA	Solid	8015B NM	11375
890-1502-108	SW-17 (15)	Total/NA	Solid	8015B NM	11375
890-1502-109	SW-18 (15)	Total/NA	Solid	8015B NM	11375
890-1502-110	SW-19 (15)	Total/NA	Solid	8015B NM	11375
890-1502-111	SW-20 (15)	Total/NA	Solid	8015B NM	11375
890-1502-112	SW-21 (15)	Total/NA	Solid	8015B NM	11375
890-1502-113	SW-22 (15)	Total/NA	Solid	8015B NM	11375
890-1502-114	SW-23 (15)	Total/NA	Solid	8015B NM	11375
890-1502-115	SW-24 (15)	Total/NA	Solid	8015B NM	11375
890-1502-116	SW-25 (15)	Total/NA	Solid	8015B NM	11375
890-1502-117	SW-26 (15)	Total/NA	Solid	8015B NM	11375
890-1502-118	SW-27 (15)	Total/NA	Solid	8015B NM	11375
890-1502-119	SW-28 (15)	Total/NA	Solid	8015B NM	11375
890-1502-120	SW-29 (15)	Total/NA	Solid	8015B NM	11375
MB 880-11375/1-A	Method Blank	Total/NA	Solid	8015B NM	11375
LCS 880-11375/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11375
LCSD 880-11375/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11375
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8015B NM	11375
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid	8015B NM	11375

#### Analysis Batch: 11598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
890-1502-1	BH-1 (6)	Total/NA	Solid	8015 NM	
890-1502-2	BH-2 (6)	Total/NA	Solid	8015 NM	
390-1502-3	BH-3 (6)	Total/NA	Solid	8015 NM	
390-1502-4	BH-4 (6)	Total/NA	Solid	8015 NM	
390-1502-5	BH-5 (6)	Total/NA	Solid	8015 NM	
390-1502-6	BH-6 (6)	Total/NA	Solid	8015 NM	
390-1502-7	BH-7 (6)	Total/NA	Solid	8015 NM	
390-1502-8	BH-8 (6)	Total/NA	Solid	8015 NM	
390-1502-9	BH-9 (6)	Total/NA	Solid	8015 NM	
390-1502-10	BH-10 (6)	Total/NA	Solid	8015 NM	
390-1502-11	BH-11 (6)	Total/NA	Solid	8015 NM	
390-1502-12	BH-12 (6)	Total/NA	Solid	8015 NM	
90-1502-13	BH-13 (6)	Total/NA	Solid	8015 NM	
90-1502-14	BH-14 (6)	Total/NA	Solid	8015 NM	
390-1502-15	BH-15 (6)	Total/NA	Solid	8015 NM	
390-1502-16	BH-16 (6)	Total/NA	Solid	8015 NM	
90-1502-17	BH-17 (6)	Total/NA	Solid	8015 NM	
90-1502-18	BH-18 (6)	Total/NA	Solid	8015 NM	
90-1502-19	BH-19 (6)	Total/NA	Solid	8015 NM	
90-1502-20	BH-20 (6)	Total/NA	Solid	8015 NM	
90-1502-21	BH-21 (6)	Total/NA	Solid	8015 NM	
90-1502-22	BH-22 (6)	Total/NA	Solid	8015 NM	
390-1502-23	BH-23 (6)	Total/NA	Solid	8015 NM	
90-1502-24	BH-24 (6)	Total/NA	Solid	8015 NM	
90-1502-25	BH-25 (15)	Total/NA	Solid	8015 NM	
90-1502-26	BH-26 (15)	Total/NA	Solid	8015 NM	
90-1502-27	BH-27 (15)	Total/NA	Solid	8015 NM	
390-1502-28	BH-28 (15)	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

2

3

4

6

8

10

4.0

13

14

Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

#### **Analysis Batch: 11598 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-29	BH-29 (15)	Total/NA	Solid	8015 NM	
390-1502-30	BH-30 (15)	Total/NA	Solid	8015 NM	
390-1502-31	BH-31 (15)	Total/NA	Solid	8015 NM	
390-1502-32	BH-32 (15)	Total/NA	Solid	8015 NM	
390-1502-33	BH-33 (15)	Total/NA	Solid	8015 NM	
390-1502-34	BH-34 (15)	Total/NA	Solid	8015 NM	
390-1502-35	BH-35 (15)	Total/NA	Solid	8015 NM	
390-1502-36	BH-36 (15)	Total/NA	Solid	8015 NM	
390-1502-37	BH-37 (15)	Total/NA	Solid	8015 NM	
390-1502-38	BH-38 (15)	Total/NA	Solid	8015 NM	
390-1502-39	BH-39 (15)	Total/NA	Solid	8015 NM	
390-1502-40	BH-40 (15)	Total/NA	Solid	8015 NM	
390-1502-41	BH-41 (15)	Total/NA	Solid	8015 NM	
390-1502-42	BH-42 (15)	Total/NA	Solid	8015 NM	
390-1502-43	BH-43 (15)	Total/NA	Solid	8015 NM	
390-1502-44	BH-44 (15)	Total/NA	Solid	8015 NM	
390-1502-45	BH-45 (15)	Total/NA	Solid	8015 NM	
390-1502-46	BH-46 (15)	Total/NA	Solid	8015 NM	
390-1502-47	BH-47 (15)	Total/NA	Solid	8015 NM	
390-1502-48	BH-48 (15)	Total/NA	Solid	8015 NM	
390-1502-49	BH-49 (15)	Total/NA	Solid	8015 NM	
390-1502-49 390-1502-50	BH-50 (15)	Total/NA	Solid	8015 NM	
	·	Total/NA			
890-1502-51	BH-51 (15 )		Solid	8015 NM	
390-1502-52	BH-52 (15)	Total/NA	Solid	8015 NM	
390-1502-53	BH-53 (15)	Total/NA	Solid	8015 NM	
390-1502-54	BH-54 (15)	Total/NA	Solid	8015 NM	
390-1502-55	BH-55 (15)	Total/NA	Solid	8015 NM	
390-1502-56	BH-56 (15)	Total/NA	Solid	8015 NM	
390-1502-57	BH-57 (15)	Total/NA	Solid	8015 NM	
390-1502-58	BH-58 (15)	Total/NA	Solid	8015 NM	
390-1502-59	BH-59 (15)	Total/NA	Solid	8015 NM	
390-1502-60	BH-60 (15)	Total/NA	Solid	8015 NM	
390-1502-61	BH-61 (15)	Total/NA	Solid	8015 NM	
390-1502-62	BH-62 (15)	Total/NA	Solid	8015 NM	
390-1502-63	BH-63 (15)	Total/NA	Solid	8015 NM	
390-1502-64	BH-64 (15)	Total/NA	Solid	8015 NM	
390-1502-65	BH-65 (15)	Total/NA	Solid	8015 NM	
390-1502-66	BH-66 (15)	Total/NA	Solid	8015 NM	
390-1502-67	BH-67 (15)	Total/NA	Solid	8015 NM	
390-1502-68	BH-68 (15)	Total/NA	Solid	8015 NM	
390-1502-69	BH-69 (15)	Total/NA	Solid	8015 NM	
390-1502-70	BH-70 (15)	Total/NA	Solid	8015 NM	
390-1502-71	BH-71 (15)	Total/NA	Solid	8015 NM	
390-1502-72	BH-72 (15)	Total/NA	Solid	8015 NM	
390-1502-73	BH-73 (15)	Total/NA	Solid	8015 NM	
390-1502-74	BH-74 (15)	Total/NA	Solid	8015 NM	
390-1502-75	BH-75 (15)	Total/NA	Solid	8015 NM	
390-1502-76	BH-76 (15)	Total/NA	Solid	8015 NM	
390-1502-77	BH-77 (15)	Total/NA	Solid	8015 NM	
390-1502-78	BH-78 (15)	Total/NA	Solid	8015 NM	
890-1502-79	BH-79 (15)	Total/NA	Solid	8015 NM	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

### GC Semi VOA (Continued)

### **Analysis Batch: 11598 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-80	BH-80 (15)	Total/NA	Solid	8015 NM	
890-1502-81	BH-81 (15)	Total/NA	Solid	8015 NM	
890-1502-82	BH-82 (15)	Total/NA	Solid	8015 NM	
890-1502-83	BH-83 (15)	Total/NA	Solid	8015 NM	
890-1502-84	BH-84 (15)	Total/NA	Solid	8015 NM	
890-1502-85	BH-85 (15)	Total/NA	Solid	8015 NM	
890-1502-86	BH-86 (15)	Total/NA	Solid	8015 NM	
890-1502-87	BH-87 (15)	Total/NA	Solid	8015 NM	
890-1502-88	BH-88 (15)	Total/NA	Solid	8015 NM	
890-1502-89	BH-89 (15)	Total/NA	Solid	8015 NM	
890-1502-90	BH90 (RS) (6)	Total/NA	Solid	8015 NM	
390-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	8015 NM	
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8015 NM	
390-1502-93	SW-2 (0-6)	Total/NA	Solid	8015 NM	
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8015 NM	
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8015 NM	
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8015 NM	
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8015 NM	
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8015 NM	
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8015 NM	
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8015 NM	
890-1502-101	SW-10 (0-6)	Total/NA	Solid	8015 NM	
890-1502-102	SW-11 (0-6)	Total/NA	Solid	8015 NM	
890-1502-103	SW-12 (10)	Total/NA	Solid	8015 NM	
890-1502-104	SW-13 (15)	Total/NA	Solid	8015 NM	
390-1502-105	SW-14 (15)	Total/NA	Solid	8015 NM	
390-1502-106	SW-15 (15)	Total/NA	Solid	8015 NM	
390-1502-107	SW-16 (15)	Total/NA	Solid	8015 NM	
390-1502-108	SW-17 (15)	Total/NA	Solid	8015 NM	
890-1502-109	SW-18 (15)	Total/NA	Solid	8015 NM	
890-1502-110	SW-19 (15)	Total/NA	Solid	8015 NM	
890-1502-111	SW-20 (15)	Total/NA	Solid	8015 NM	
890-1502-112	SW-21 (15)	Total/NA	Solid	8015 NM	
890-1502-113	SW-22 (15)	Total/NA	Solid	8015 NM	
890-1502-114	SW-23 (15)	Total/NA	Solid	8015 NM	
890-1502-115	SW-24 (15)	Total/NA	Solid	8015 NM	
890-1502-116	SW-25 (15)	Total/NA	Solid	8015 NM	
890-1502-117	SW-26 (15)	Total/NA	Solid	8015 NM	
890-1502-118	SW-27 (15)	Total/NA	Solid	8015 NM	
890-1502-119	SW-28 (15)	Total/NA	Solid	8015 NM	
890-1502-120	SW-29 (15)	Total/NA	Solid	8015 NM	
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	8015 NM	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	8015 NM	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	8015 NM	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	8015 NM	

#### HPLC/IC

Leach Batch: 11227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Soluble	Solid	DI Leach	

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

## **HPLC/IC** (Continued)

### Leach Batch: 11227 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-2	BH-2 (6)	Soluble	Solid	DI Leach	
890-1502-3	BH-3 (6)	Soluble	Solid	DI Leach	
MB 880-11227/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11227/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11227/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1499-A-1-H MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1499-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
_					

#### Leach Batch: 11233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-92	SW-1 (0-6)	Soluble	Solid	DI Leach	_
890-1502-93	SW-2 (0-6)	Soluble	Solid	DI Leach	
890-1502-94	SW-3 (0-6)	Soluble	Solid	DI Leach	
890-1502-95	SW-4 (0-6)	Soluble	Solid	DI Leach	
890-1502-96	SW-5 (0-6)	Soluble	Solid	DI Leach	
890-1502-97	SW-6 (0-6)	Soluble	Solid	DI Leach	
890-1502-98	SW-7 (0-6)	Soluble	Solid	DI Leach	
890-1502-99	SW-8 (0-6)	Soluble	Solid	DI Leach	
890-1502-100	SW-9 (0-6)	Soluble	Solid	DI Leach	
890-1502-101	SW-10 (0-6)	Soluble	Solid	DI Leach	
MB 880-11233/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11233/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11233/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-92 MS	SW-1 (0-6)	Soluble	Solid	DI Leach	
890-1502-92 MSD	SW-1 (0-6)	Soluble	Solid	DI Leach	

### Leach Batch: 11236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-4	BH-4 (6)	Soluble	Solid	DI Leach	
890-1502-102	SW-11 (0-6)	Soluble	Solid	DI Leach	
890-1502-103	SW-12 (10)	Soluble	Solid	DI Leach	
890-1502-104	SW-13 (15)	Soluble	Solid	DI Leach	
890-1502-105	SW-14 (15)	Soluble	Solid	DI Leach	
890-1502-106	SW-15 (15)	Soluble	Solid	DI Leach	
890-1502-107	SW-16 (15)	Soluble	Solid	DI Leach	
890-1502-108	SW-17 (15)	Soluble	Solid	DI Leach	
890-1502-109	SW-18 (15)	Soluble	Solid	DI Leach	
890-1502-110	SW-19 (15)	Soluble	Solid	DI Leach	
890-1502-111	SW-20 (15)	Soluble	Solid	DI Leach	
890-1502-112	SW-21 (15)	Soluble	Solid	DI Leach	
890-1502-113	SW-22 (15)	Soluble	Solid	DI Leach	
890-1502-114	SW-23 (15)	Soluble	Solid	DI Leach	
890-1502-115	SW-24 (15)	Soluble	Solid	DI Leach	
890-1502-116	SW-25 (15)	Soluble	Solid	DI Leach	
890-1502-117	SW-26 (15)	Soluble	Solid	DI Leach	
890-1502-118	SW-27 (15)	Soluble	Solid	DI Leach	
890-1502-119	SW-28 (15)	Soluble	Solid	DI Leach	
890-1502-120	SW-29 (15)	Soluble	Solid	DI Leach	
MB 880-11236/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11236/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11236/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

Page 169 of 248

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

### **HPLC/IC** (Continued)

### Leach Batch: 11236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-4 MS	BH-4 (6)	Soluble	Solid	DI Leach	
890-1502-4 MSD	BH-4 (6)	Soluble	Solid	DI Leach	
890-1502-111 MS	SW-20 (15)	Soluble	Solid	DI Leach	
890-1502-111 MSD	SW-20 (15)	Soluble	Solid	DI Leach	

#### Leach Batch: 11237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-5	BH-5 (6)	Soluble	Solid	DI Leach	
890-1502-6	BH-6 (6)	Soluble	Solid	DI Leach	
890-1502-7	BH-7 (6)	Soluble	Solid	DI Leach	
890-1502-8	BH-8 (6)	Soluble	Solid	DI Leach	
890-1502-9	BH-9 (6)	Soluble	Solid	DI Leach	
890-1502-10	BH-10 (6)	Soluble	Solid	DI Leach	
890-1502-11	BH-11 (6)	Soluble	Solid	DI Leach	
890-1502-12	BH-12 (6)	Soluble	Solid	DI Leach	
890-1502-13	BH-13 (6)	Soluble	Solid	DI Leach	
890-1502-14	BH-14 (6)	Soluble	Solid	DI Leach	
890-1502-15	BH-15 (6)	Soluble	Solid	DI Leach	
890-1502-16	BH-16 (6)	Soluble	Solid	DI Leach	
890-1502-17	BH-17 (6)	Soluble	Solid	DI Leach	
890-1502-18	BH-18 (6)	Soluble	Solid	DI Leach	
890-1502-19	BH-19 (6)	Soluble	Solid	DI Leach	
890-1502-20	BH-20 (6)	Soluble	Solid	DI Leach	
890-1502-21	BH-21 (6)	Soluble	Solid	DI Leach	
890-1502-22	BH-22 (6)	Soluble	Solid	DI Leach	
890-1502-23	BH-23 (6)	Soluble	Solid	DI Leach	
890-1502-24	BH-24 (6)	Soluble	Solid	DI Leach	
MB 880-11237/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11237/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11237/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-5 MS	BH-5 (6)	Soluble	Solid	DI Leach	
890-1502-5 MSD	BH-5 (6)	Soluble	Solid	DI Leach	
890-1502-15 MS	BH-15 (6)	Soluble	Solid	DI Leach	
890-1502-15 MSD	BH-15 (6)	Soluble	Solid	DI Leach	

#### Leach Batch: 11238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-25	BH-25 (15)	Soluble	Solid	DI Leach	
890-1502-26	BH-26 (15)	Soluble	Solid	DI Leach	
890-1502-27	BH-27 (15)	Soluble	Solid	DI Leach	
890-1502-28	BH-28 (15)	Soluble	Solid	DI Leach	
890-1502-29	BH-29 (15)	Soluble	Solid	DI Leach	
890-1502-30	BH-30 (15)	Soluble	Solid	DI Leach	
890-1502-31	BH-31 (15)	Soluble	Solid	DI Leach	
890-1502-32	BH-32 (15)	Soluble	Solid	DI Leach	
890-1502-33	BH-33 (15)	Soluble	Solid	DI Leach	
390-1502-34	BH-34 (15)	Soluble	Solid	DI Leach	
390-1502-35	BH-35 (15)	Soluble	Solid	DI Leach	
890-1502-36	BH-36 (15)	Soluble	Solid	DI Leach	
390-1502-37	BH-37 (15)	Soluble	Solid	DI Leach	
890-1502-38	BH-38 (15)	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

Page 170 of 248

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

# **HPLC/IC** (Continued)

## Leach Batch: 11238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-39	BH-39 (15)	Soluble	Solid	DI Leach	
890-1502-40	BH-40 (15)	Soluble	Solid	DI Leach	
890-1502-41	BH-41 (15)	Soluble	Solid	DI Leach	
890-1502-42	BH-42 (15)	Soluble	Solid	DI Leach	
890-1502-43	BH-43 (15)	Soluble	Solid	DI Leach	
890-1502-44	BH-44 (15)	Soluble	Solid	DI Leach	
MB 880-11238/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11238/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11238/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-25 MS	BH-25 (15)	Soluble	Solid	DI Leach	
890-1502-25 MSD	BH-25 (15)	Soluble	Solid	DI Leach	
890-1502-35 MS	BH-35 (15)	Soluble	Solid	DI Leach	
890-1502-35 MSD	BH-35 (15)	Soluble	Solid	DI Leach	

### Leach Batch: 11240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-45	BH-45 (15)	Soluble	Solid	DI Leach	
890-1502-46	BH-46 (15)	Soluble	Solid	DI Leach	
890-1502-47	BH-47 (15)	Soluble	Solid	DI Leach	
890-1502-48	BH-48 (15)	Soluble	Solid	DI Leach	
890-1502-49	BH-49 (15)	Soluble	Solid	DI Leach	
890-1502-50	BH-50 (15)	Soluble	Solid	DI Leach	
890-1502-51	BH-51 (15 )	Soluble	Solid	DI Leach	
890-1502-52	BH-52 (15)	Soluble	Solid	DI Leach	
890-1502-53	BH-53 (15)	Soluble	Solid	DI Leach	
890-1502-54	BH-54 (15)	Soluble	Solid	DI Leach	
890-1502-55	BH-55 (15)	Soluble	Solid	DI Leach	
890-1502-56	BH-56 (15)	Soluble	Solid	DI Leach	
890-1502-57	BH-57 (15)	Soluble	Solid	DI Leach	
890-1502-58	BH-58 (15)	Soluble	Solid	DI Leach	
890-1502-59	BH-59 (15)	Soluble	Solid	DI Leach	
890-1502-60	BH-60 (15)	Soluble	Solid	DI Leach	
890-1502-61	BH-61 (15)	Soluble	Solid	DI Leach	
890-1502-62	BH-62 (15)	Soluble	Solid	DI Leach	
890-1502-63	BH-63 (15)	Soluble	Solid	DI Leach	
890-1502-64	BH-64 (15)	Soluble	Solid	DI Leach	
MB 880-11240/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11240/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11240/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-45 MS	BH-45 (15)	Soluble	Solid	DI Leach	
890-1502-45 MSD	BH-45 (15)	Soluble	Solid	DI Leach	
890-1502-55 MS	BH-55 (15)	Soluble	Solid	DI Leach	
890-1502-55 MSD	BH-55 (15)	Soluble	Solid	DI Leach	

### Leach Batch: 11242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-65	BH-65 (15)	Soluble	Solid	DI Leach	
890-1502-66	BH-66 (15)	Soluble	Solid	DI Leach	
890-1502-67	BH-67 (15)	Soluble	Solid	DI Leach	
890-1502-68	BH-68 (15)	Soluble	Solid	DI Leach	
890-1502-69	BH-69 (15)	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

Page 171 of 248

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

# **HPLC/IC** (Continued)

## Leach Batch: 11242 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-70	BH-70 (15)	Soluble	Solid	DI Leach	_
890-1502-71	BH-71 (15)	Soluble	Solid	DI Leach	
890-1502-72	BH-72 (15)	Soluble	Solid	DI Leach	
890-1502-73	BH-73 (15)	Soluble	Solid	DI Leach	
890-1502-74	BH-74 (15)	Soluble	Solid	DI Leach	
890-1502-75	BH-75 (15)	Soluble	Solid	DI Leach	
890-1502-76	BH-76 (15)	Soluble	Solid	DI Leach	
890-1502-77	BH-77 (15)	Soluble	Solid	DI Leach	
890-1502-78	BH-78 (15)	Soluble	Solid	DI Leach	
890-1502-79	BH-79 (15)	Soluble	Solid	DI Leach	
890-1502-80	BH-80 (15)	Soluble	Solid	DI Leach	
890-1502-81	BH-81 (15)	Soluble	Solid	DI Leach	
890-1502-82	BH-82 (15)	Soluble	Solid	DI Leach	
890-1502-83	BH-83 (15)	Soluble	Solid	DI Leach	
890-1502-84	BH-84 (15)	Soluble	Solid	DI Leach	
MB 880-11242/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11242/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11242/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-65 MS	BH-65 (15)	Soluble	Solid	DI Leach	
890-1502-65 MSD	BH-65 (15)	Soluble	Solid	DI Leach	
890-1502-75 MS	BH-75 (15)	Soluble	Solid	DI Leach	
890-1502-75 MSD	BH-75 (15)	Soluble	Solid	DI Leach	

### Leach Batch: 11243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-85	BH-85 (15)	Soluble	Solid	DI Leach	
890-1502-86	BH-86 (15)	Soluble	Solid	DI Leach	
890-1502-87	BH-87 (15)	Soluble	Solid	DI Leach	
890-1502-88	BH-88 (15)	Soluble	Solid	DI Leach	
890-1502-89	BH-89 (15)	Soluble	Solid	DI Leach	
890-1502-90	BH90 (RS) (6)	Soluble	Solid	DI Leach	
890-1502-91	BH-91 (RS ) (6)	Soluble	Solid	DI Leach	
890-1502-121	SW-30 (RS) (6)	Soluble	Solid	DI Leach	
890-1502-122	SW-31 (RS) (4)	Soluble	Solid	DI Leach	
890-1502-123	SW-32 (RS) (6)	Soluble	Solid	DI Leach	
890-1502-124	SW-33 (RS) (8)	Soluble	Solid	DI Leach	
MB 880-11243/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11243/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11243/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-85 MS	BH-85 (15)	Soluble	Solid	DI Leach	
890-1502-85 MSD	BH-85 (15)	Soluble	Solid	DI Leach	
890-1502-124 MS	SW-33 (RS) (8)	Soluble	Solid	DI Leach	
890-1502-124 MSD	SW-33 (RS) (8)	Soluble	Solid	DI Leach	

### **Analysis Batch: 11379**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Soluble	Solid	300.0	11227
890-1502-2	BH-2 (6)	Soluble	Solid	300.0	11227
890-1502-3	BH-3 (6)	Soluble	Solid	300.0	11227
MB 880-11227/1-A	Method Blank	Soluble	Solid	300.0	11227
LCS 880-11227/2-A	Lab Control Sample	Soluble	Solid	300.0	11227

Eurofins Xenco, Carlsbad

Page 172 of 248

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

# **HPLC/IC (Continued)**

## **Analysis Batch: 11379 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-11227/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11227
890-1499-A-1-H MS	Matrix Spike	Soluble	Solid	300.0	11227
890-1499-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	11227

### **Analysis Batch: 11381**

Prep Batch	Method	Matrix	Prep Type	Client Sample ID	Lab Sample ID
11233	300.0	Solid	Soluble	SW-1 (0-6)	890-1502-92
11233	300.0	Solid	Soluble	SW-2 (0-6)	890-1502-93
11233	300.0	Solid	Soluble	SW-3 (0-6)	890-1502-94
11233	300.0	Solid	Soluble	SW-4 (0-6)	890-1502-95
11233	300.0	Solid	Soluble	SW-5 (0-6)	890-1502-96
11233	300.0	Solid	Soluble	SW-6 (0-6)	890-1502-97
11233	300.0	Solid	Soluble	SW-7 (0-6)	890-1502-98
11233	300.0	Solid	Soluble	SW-8 (0-6)	890-1502-99
11233	300.0	Solid	Soluble	SW-9 (0-6)	890-1502-100
11233	300.0	Solid	Soluble	SW-10 (0-6)	890-1502-101
11233	300.0	Solid	Soluble	Method Blank	MB 880-11233/1-A
11233	300.0	Solid	Soluble	Lab Control Sample	LCS 880-11233/2-A
11233	300.0	Solid	Soluble	Lab Control Sample Dup	LCSD 880-11233/3-A
11233	300.0	Solid	Soluble	SW-1 (0-6)	890-1502-92 MS
11233	300.0	Solid	Soluble	SW-1 (0-6)	890-1502-92 MSD

### Analysis Batch: 11452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-4	BH-4 (6)	Soluble	Solid	300.0	11230
890-1502-102	SW-11 (0-6)	Soluble	Solid	300.0	11230
890-1502-103	SW-12 (10)	Soluble	Solid	300.0	11230
890-1502-104	SW-13 (15)	Soluble	Solid	300.0	11230
890-1502-105	SW-14 (15)	Soluble	Solid	300.0	11236
890-1502-106	SW-15 (15)	Soluble	Solid	300.0	11230
890-1502-107	SW-16 (15)	Soluble	Solid	300.0	11230
890-1502-108	SW-17 (15)	Soluble	Solid	300.0	11236
890-1502-109	SW-18 (15)	Soluble	Solid	300.0	11236
890-1502-110	SW-19 (15)	Soluble	Solid	300.0	11236
890-1502-111	SW-20 (15)	Soluble	Solid	300.0	11236
890-1502-112	SW-21 (15)	Soluble	Solid	300.0	11236
890-1502-113	SW-22 (15)	Soluble	Solid	300.0	11230
890-1502-114	SW-23 (15)	Soluble	Solid	300.0	11236
890-1502-115	SW-24 (15)	Soluble	Solid	300.0	11236
890-1502-116	SW-25 (15)	Soluble	Solid	300.0	11236
890-1502-117	SW-26 (15)	Soluble	Solid	300.0	11236
890-1502-118	SW-27 (15)	Soluble	Solid	300.0	11230
890-1502-119	SW-28 (15)	Soluble	Solid	300.0	11236
890-1502-120	SW-29 (15)	Soluble	Solid	300.0	11230
MB 880-11236/1-A	Method Blank	Soluble	Solid	300.0	11230
LCS 880-11236/2-A	Lab Control Sample	Soluble	Solid	300.0	11236
LCSD 880-11236/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11236
890-1502-4 MS	BH-4 (6)	Soluble	Solid	300.0	11236
890-1502-4 MSD	BH-4 (6)	Soluble	Solid	300.0	11236
890-1502-111 MS	SW-20 (15)	Soluble	Solid	300.0	11236
890-1502-111 MSD	SW-20 (15)	Soluble	Solid	300.0	11236

Eurofins Xenco, Carlsbad

2

3

<u>J</u>

g

. .

12

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

## HPLC/IC

### Analysis Batch: 11453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-5	BH-5 (6)	Soluble	Solid	300.0	11237
890-1502-6	BH-6 (6)	Soluble	Solid	300.0	11237
890-1502-7	BH-7 (6)	Soluble	Solid	300.0	11237
890-1502-8	BH-8 (6)	Soluble	Solid	300.0	11237
890-1502-9	BH-9 (6)	Soluble	Solid	300.0	11237
890-1502-10	BH-10 (6)	Soluble	Solid	300.0	11237
890-1502-11	BH-11 (6)	Soluble	Solid	300.0	11237
890-1502-12	BH-12 (6)	Soluble	Solid	300.0	11237
890-1502-13	BH-13 (6)	Soluble	Solid	300.0	11237
890-1502-14	BH-14 (6)	Soluble	Solid	300.0	11237
890-1502-15	BH-15 (6)	Soluble	Solid	300.0	11237
890-1502-16	BH-16 (6)	Soluble	Solid	300.0	11237
890-1502-17	BH-17 (6)	Soluble	Solid	300.0	11237
890-1502-18	BH-18 (6)	Soluble	Solid	300.0	11237
890-1502-19	BH-19 (6)	Soluble	Solid	300.0	11237
890-1502-20	BH-20 (6)	Soluble	Solid	300.0	11237
890-1502-21	BH-21 (6)	Soluble	Solid	300.0	11237
890-1502-22	BH-22 (6)	Soluble	Solid	300.0	11237
890-1502-23	BH-23 (6)	Soluble	Solid	300.0	11237
890-1502-24	BH-24 (6)	Soluble	Solid	300.0	11237
MB 880-11237/1-A	Method Blank	Soluble	Solid	300.0	11237
LCS 880-11237/2-A	Lab Control Sample	Soluble	Solid	300.0	11237
LCSD 880-11237/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11237
890-1502-5 MS	BH-5 (6)	Soluble	Solid	300.0	11237
890-1502-5 MSD	BH-5 (6)	Soluble	Solid	300.0	11237
890-1502-15 MS	BH-15 (6)	Soluble	Solid	300.0	11237
890-1502-15 MSD	BH-15 (6)	Soluble	Solid	300.0	11237

### Analysis Batch: 11454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-25	BH-25 (15)	Soluble	Solid	300.0	11238
890-1502-26	BH-26 (15)	Soluble	Solid	300.0	11238
890-1502-27	BH-27 (15)	Soluble	Solid	300.0	11238
890-1502-28	BH-28 (15)	Soluble	Solid	300.0	11238
890-1502-29	BH-29 (15)	Soluble	Solid	300.0	11238
890-1502-30	BH-30 (15)	Soluble	Solid	300.0	11238
890-1502-31	BH-31 (15)	Soluble	Solid	300.0	11238
890-1502-32	BH-32 (15)	Soluble	Solid	300.0	11238
890-1502-33	BH-33 (15)	Soluble	Solid	300.0	11238
890-1502-34	BH-34 (15)	Soluble	Solid	300.0	11238
890-1502-35	BH-35 (15)	Soluble	Solid	300.0	11238
890-1502-36	BH-36 (15)	Soluble	Solid	300.0	11238
890-1502-37	BH-37 (15)	Soluble	Solid	300.0	11238
890-1502-38	BH-38 (15)	Soluble	Solid	300.0	11238
890-1502-39	BH-39 (15)	Soluble	Solid	300.0	11238
890-1502-40	BH-40 (15)	Soluble	Solid	300.0	11238
890-1502-41	BH-41 (15)	Soluble	Solid	300.0	11238
890-1502-42	BH-42 (15)	Soluble	Solid	300.0	11238
890-1502-43	BH-43 (15)	Soluble	Solid	300.0	11238
890-1502-44	BH-44 (15)	Soluble	Solid	300.0	11238
MB 880-11238/1-A	Method Blank	Soluble	Solid	300.0	11238

Eurofins Xenco, Carlsbad

2

3

4

6

8

10

12

13

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

# **HPLC/IC (Continued)**

## Analysis Batch: 11454 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-11238/2-A	Lab Control Sample	Soluble	Solid	300.0	11238
LCSD 880-11238/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11238
890-1502-25 MS	BH-25 (15)	Soluble	Solid	300.0	11238
890-1502-25 MSD	BH-25 (15)	Soluble	Solid	300.0	11238
890-1502-35 MS	BH-35 (15)	Soluble	Solid	300.0	11238
890-1502-35 MSD	BH-35 (15)	Soluble	Solid	300.0	11238

### **Analysis Batch: 11455**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-45	BH-45 (15)	Soluble	Solid	300.0	11240
890-1502-46	BH-46 (15)	Soluble	Solid	300.0	11240
890-1502-47	BH-47 (15)	Soluble	Solid	300.0	11240
890-1502-48	BH-48 (15)	Soluble	Solid	300.0	11240
890-1502-49	BH-49 (15)	Soluble	Solid	300.0	11240
890-1502-50	BH-50 (15)	Soluble	Solid	300.0	11240
890-1502-51	BH-51 (15 )	Soluble	Solid	300.0	11240
890-1502-52	BH-52 (15)	Soluble	Solid	300.0	11240
890-1502-53	BH-53 (15)	Soluble	Solid	300.0	11240
890-1502-54	BH-54 (15)	Soluble	Solid	300.0	11240
890-1502-55	BH-55 (15)	Soluble	Solid	300.0	11240
890-1502-56	BH-56 (15)	Soluble	Solid	300.0	11240
890-1502-57	BH-57 (15)	Soluble	Solid	300.0	11240
890-1502-58	BH-58 (15)	Soluble	Solid	300.0	11240
890-1502-59	BH-59 (15)	Soluble	Solid	300.0	11240
890-1502-60	BH-60 (15)	Soluble	Solid	300.0	11240
890-1502-61	BH-61 (15)	Soluble	Solid	300.0	11240
890-1502-62	BH-62 (15)	Soluble	Solid	300.0	11240
890-1502-63	BH-63 (15)	Soluble	Solid	300.0	11240
890-1502-64	BH-64 (15)	Soluble	Solid	300.0	11240
MB 880-11240/1-A	Method Blank	Soluble	Solid	300.0	11240
LCS 880-11240/2-A	Lab Control Sample	Soluble	Solid	300.0	11240
LCSD 880-11240/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11240
890-1502-45 MS	BH-45 (15)	Soluble	Solid	300.0	11240
890-1502-45 MSD	BH-45 (15)	Soluble	Solid	300.0	11240
890-1502-55 MS	BH-55 (15)	Soluble	Solid	300.0	11240
890-1502-55 MSD	BH-55 (15)	Soluble	Solid	300.0	11240

### Analysis Batch: 11456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-1502-65	BH-65 (15)	Soluble	Solid	300.0	11242
890-1502-66	BH-66 (15)	Soluble	Solid	300.0	11242
890-1502-67	BH-67 (15)	Soluble	Solid	300.0	11242
890-1502-68	BH-68 (15)	Soluble	Solid	300.0	11242
890-1502-69	BH-69 (15)	Soluble	Solid	300.0	11242
890-1502-70	BH-70 (15)	Soluble	Solid	300.0	11242
890-1502-71	BH-71 (15)	Soluble	Solid	300.0	11242
890-1502-72	BH-72 (15)	Soluble	Solid	300.0	11242
890-1502-73	BH-73 (15)	Soluble	Solid	300.0	11242
890-1502-74	BH-74 (15)	Soluble	Solid	300.0	11242
890-1502-75	BH-75 (15)	Soluble	Solid	300.0	11242
890-1502-76	BH-76 (15)	Soluble	Solid	300.0	11242

Eurofins Xenco, Carlsbad

2

3

6

8

10

11

2

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

## **HPLC/IC (Continued)**

## **Analysis Batch: 11456 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-77	BH-77 (15)	Soluble	Solid	300.0	11242
890-1502-78	BH-78 (15)	Soluble	Solid	300.0	11242
890-1502-79	BH-79 (15)	Soluble	Solid	300.0	11242
890-1502-80	BH-80 (15)	Soluble	Solid	300.0	11242
890-1502-81	BH-81 (15)	Soluble	Solid	300.0	11242
890-1502-82	BH-82 (15)	Soluble	Solid	300.0	11242
890-1502-83	BH-83 (15)	Soluble	Solid	300.0	11242
890-1502-84	BH-84 (15)	Soluble	Solid	300.0	11242
MB 880-11242/1-A	Method Blank	Soluble	Solid	300.0	11242
LCS 880-11242/2-A	Lab Control Sample	Soluble	Solid	300.0	11242
LCSD 880-11242/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11242
890-1502-65 MS	BH-65 (15)	Soluble	Solid	300.0	11242
890-1502-65 MSD	BH-65 (15)	Soluble	Solid	300.0	11242
890-1502-75 MS	BH-75 (15)	Soluble	Solid	300.0	11242
890-1502-75 MSD	BH-75 (15)	Soluble	Solid	300.0	11242

### Analysis Batch: 11705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-85	BH-85 (15)	Soluble	Solid	300.0	11243
890-1502-86	BH-86 (15)	Soluble	Solid	300.0	11243
890-1502-87	BH-87 (15)	Soluble	Solid	300.0	11243
890-1502-88	BH-88 (15)	Soluble	Solid	300.0	11243
890-1502-89	BH-89 (15)	Soluble	Solid	300.0	11243
890-1502-90	BH90 (RS) (6)	Soluble	Solid	300.0	11243
890-1502-91	BH-91 (RS ) (6)	Soluble	Solid	300.0	11243
890-1502-121	SW-30 (RS) (6)	Soluble	Solid	300.0	11243
890-1502-122	SW-31 (RS) (4)	Soluble	Solid	300.0	11243
890-1502-123	SW-32 (RS) (6)	Soluble	Solid	300.0	11243
890-1502-124	SW-33 (RS) (8)	Soluble	Solid	300.0	11243
MB 880-11243/1-A	Method Blank	Soluble	Solid	300.0	11243
LCS 880-11243/2-A	Lab Control Sample	Soluble	Solid	300.0	11243
LCSD 880-11243/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11243
890-1502-85 MS	BH-85 (15)	Soluble	Solid	300.0	11243
890-1502-85 MSD	BH-85 (15)	Soluble	Solid	300.0	11243
890-1502-124 MS	SW-33 (RS) (8)	Soluble	Solid	300.0	11243
890-1502-124 MSD	SW-33 (RS) (8)	Soluble	Solid	300.0	11243

Eurofins Xenco, Carlsbad

Client Sample ID: BH-1 (6)

Lab Sample ID: 890-1502-1 Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 00:47	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 11:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11227	11/02/21 11:52	СН	XEN MID
Soluble	Analysis	300.0		5			11379	11/06/21 06:01	CH	XEN MID

Client Sample ID: BH-2 (6) Lab Sample ID: 890-1502-2

Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 01:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 12:43	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11227	11/02/21 11:52	CH	XEN MID
Soluble	Analysis	300.0		1			11379	11/06/21 06:09	CH	XEN MID

Client Sample ID: BH-3 (6) Lab Sample ID: 890-1502-3 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 01:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 13:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11227	11/02/21 11:52	CH	XEN MID
Soluble	Analysis	300.0		1			11379	11/06/21 06:17	CH	XEN MID

Client Sample ID: BH-4 (6) Lab Sample ID: 890-1502-4

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 01:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID

Eurofins Xenco, Carlsbad

Client Sample ID: BH-4 (6) Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-4

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 13:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 09:05	CH	XEN MID

Client Sample ID: BH-5 (6) Lab Sample ID: 890-1502-5

Date Collected: 10/27/21 00:00 **Matrix: Solid** Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 02:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 13:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 05:30	CH	XEN MID

Client Sample ID: BH-6 (6) Lab Sample ID: 890-1502-6 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 02:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 14:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 05:52	CH	XEN MID

Client Sample ID: BH-7 (6) Lab Sample ID: 890-1502-7

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 02:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.05 g	10 mL	11223 11317	11/02/21 11:44 11/03/21 14:23	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 178 of 248

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-7 (6)

Lab Sample ID: 890-1502-7

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 05:59	CH	XEN MID

Client Sample ID: BH-8 (6) Lab Sample ID: 890-1502-8

**Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 03:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 14:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 06:07	CH	XEN MID

Client Sample ID: BH-9 (6) Lab Sample ID: 890-1502-9

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 03:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 15:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 06:14	CH	XEN MID

Client Sample ID: BH-10 (6) Lab Sample ID: 890-1502-10

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 03:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 15:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 06:36	CH	XEN MID

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

Released to Imaging: 9/1/2023 2:28:53 PM

Client Sample ID: BH-11 (6)

Lab Sample ID: 890-1502-11 Date Collected: 10/27/21 00:00 Matrix: Solid Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 05:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 16:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 06:44	CH	XEN MID

Client Sample ID: BH-12 (6) Lab Sample ID: 890-1502-12 Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11075	11/01/21 11:05	KL	XEN MI
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 05:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MI
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MI
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MI
Total/NA	Analysis	8015B NM		1			11317	11/03/21 16:22	AJ	XEN MI
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MII
Soluble	Analysis	300.0		1			11453	11/07/21 06:51	CH	XEN MI

Client Sample ID: BH-13 (6) Lab Sample ID: 890-1502-13 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11075	11/01/21 11:05	KL	XEN MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 05:54	MR	XEN MIC
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 14:10	CH	XEN MID

Client Sample ID: BH-14 (6) Lab Sample ID: 890-1502-14 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 06:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Client Sample ID: BH-14 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-14

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 17:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11237	11/02/21 12:31	СН	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 07:06	CH	XEN MID

Client Sample ID: BH-15 (6) Lab Sample ID: 890-1502-15 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 06:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 17:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 07:13	CH	XEN MID

Client Sample ID: BH-16 (6) Lab Sample ID: 890-1502-16 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 06:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 17:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 07:35	CH	XEN MID

Lab Sample ID: 890-1502-17 Client Sample ID: BH-17 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 07:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	11223 11317	11/02/21 11:44 11/03/21 18:03	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 181 of 248

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Client Sample ID: BH-17 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-17

Matrix: Solid

Job ID: 890-1502-1

SDG: 212C-MD-02230

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 07:43	CH	XEN MID

Client Sample ID: BH-18 (6) Lab Sample ID: 890-1502-18

Date Collected: 10/27/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 07:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 18:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 08:05	CH	XEN MID

Client Sample ID: BH-19 (6) Lab Sample ID: 890-1502-19

Date Collected: 10/27/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 07:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 18:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 08:13	CH	XEN MID

Client Sample ID: BH-20 (6) Lab Sample ID: 890-1502-20

Date Collected: 10/27/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 08:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:20	CH	XEN MID

Eurofins Xenco, Carlsbad

2

5

6

7

9

10

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-21 (6)

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-21 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 18:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 11:27	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:27	CH	XEN MID

Client Sample ID: BH-22 (6) Lab Sample ID: 890-1502-22 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.02 g 5 mL 11109 11/01/21 12:05 KL XEN MID Total/NA 8021B 5 mL 11/02/21 18:35 XEN MID Analysis 1 5 mL 11221 MR 11/09/21 10:40 Total/NA Total BTEX 11768 XEN MID Analysis A.I 1 Total/NA Analysis 8015 NM 11598 11/05/21 13:50 XEN MID Total/NA XEN MID Prep 8015NM Prep 10.02 g 11255 11/02/21 14:45 DM 10 mL Total/NA Analysis 8015B NM 11321 11/03/21 12:32 AJ XEN MID Soluble XEN MID Leach DI Leach 5.04 g 50 mL 11237 11/02/21 12:31 CH

Client Sample ID: BH-23 (6) Lab Sample ID: 890-1502-23 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

11453

11/07/21 08:35

CH

1

Date Received: 10/29/21 12:45

Analysis

300.0

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 18:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 12:53	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:42	CH	XEN MID

Lab Sample ID: 890-1502-24 Client Sample ID: BH-24 (6) Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Released to Imaging: 9/1/2023 2:28:53 PM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 19:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

XEN MID

Client Sample ID: BH-24 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-24

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 13:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:49	CH	XEN MID

Client Sample ID: BH-25 (15)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-25

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 19:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 13:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11238	11/02/21 12:34	СН	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 09:49	CH	XEN MID

Client Sample ID: BH-26 (15)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-26

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 19:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 13:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 10:11	CH	XEN MID

Client Sample ID: BH-27 (15)

Lab Sample ID: 890-1502-27

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 20:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.05 g	10 mL	11255 11321	11/02/21 14:45 11/03/21 14:18	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 184 of 248

**Matrix: Solid** 

2

3

5

7

9

10

14

Client Sample ID: BH-27 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-27

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 10:18	CH	XEN MID

Client Sample ID: BH-28 (15) Lab Sample ID: 890-1502-28

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 20:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 14:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 10:26	CH	XEN MID

Client Sample ID: BH-29 (15) Lab Sample ID: 890-1502-29

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 20:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 10:33	CH	XEN MID

Client Sample ID: BH-30 (15) Lab Sample ID: 890-1502-30

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 21:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 15:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 10:56	CH	XEN MID

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD Client Sample ID: BH-31 (15)

Client: Tetra Tech, Inc.

Lab Sample ID: 890-1502-31

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 23:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 16:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:03	CH	XEN MID

Lab Sample ID: 890-1502-32

Date Collected: 10/27/21 00:00

Client Sample ID: BH-32 (15)

Date Received: 10/29/21 12:45

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 23:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 16:24	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:10	CH	XEN MID

Client Sample ID: BH-33 (15)

Lab Sample ID: 890-1502-33

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 **Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 23:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 16:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:18	CH	XEN MID

Client Sample ID: BH-34 (15)

Lab Sample ID: 890-1502-34

Date Collected: 10/27/21 00:00

**Matrix: Solid** 

Date	Rece	ived:	10/29/21	12:45
------	------	-------	----------	-------

Γ	D-4-h	D-4-b		Dil.	11411	F:1	D-4-b	D		
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 00:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 186 of 248

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

SDG: 2

Client Sample ID: BH-34 (15)

Date Collected: 10/27/21 00:00

Lab Samp

Lab Sample ID: 890-1502-34

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 17:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:25	CH	XEN MID

Client Sample ID: BH-35 (15)

Lab Sample ID: 890-1502-35

Date Collected: 10/27/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab 5035 Total/NA Prep 4.99 g 5 mL 11109 11/01/21 12:05 KL XEN MID Total/NA Analysis 8021B 5 mL 5 mL 11221 11/03/21 00:29 MR XEN MID 1 Total/NA Total BTEX Analysis 1 11768 11/09/21 10:40 AJ XEN MID Total/NA 8015 NM 11/05/21 13:50 XEN MID Analysis 11598 AJ Total/NA Prep 8015NM Prep 10.00 g 10 mL 11255 11/02/21 14:45 DM XEN MID Total/NA Analysis 8015B NM 11321 11/03/21 17:28 XEN MID AJ1 Soluble Leach DI Leach 4.95 g 50 mL 11238 11/02/21 12:34 CH XEN MID Soluble Analysis 300.0 1 11454 11/07/21 11:33 CH XEN MID

Client Sample ID: BH-36 (15)

Lab Sample ID: 890-1502-36

Date Collected: 10/27/21 00:00
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 00:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 17:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:55	CH	XEN MID

Client Sample ID: BH-37 (15)

Lab Sample ID: 890-1502-37

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 01:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	11255 11321	11/02/21 14:45 11/03/21 18:11	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 187 of 248

3

4

5

7

9

11

13

**Matrix: Solid** 

Client Sample ID: BH-37 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-37

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 12:02	CH	XEN MID

Client Sample ID: BH-38 (15) Lab Sample ID: 890-1502-38

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 01:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 18:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 12:25	CH	XEN MID

Client Sample ID: BH-39 (15) Lab Sample ID: 890-1502-39

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 01:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 18:53	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 12:32	CH	XEN MID

Client Sample ID: BH-40 (15) Lab Sample ID: 890-1502-40

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 02:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 19:15	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 12:39	CH	XEN MID

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

SDG: 212C-MD-02230

Client Sample ID: BH-41 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-41

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 02:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 11:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 12:47	CH	XEN MID

Lab Sample ID: 890-1502-42

Client Sample ID: BH-42 (15) Date Collected: 10/27/21 00:00

**Matrix: Solid** 

Date Received: 10/29/21 12:45

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.00 g 5 mL 11111 11/01/21 12:11 KL XEN MID Total/NA 8021B 5 mL 11/04/21 02:46 XEN MID Analysis 1 5 mL 11259 MR Total/NA Total BTEX 11768 11/09/21 10:40 XEN MID Analysis A.I 1 Total/NA Analysis 8015 NM 11598 11/05/21 13:50 XEN MID Total/NA XEN MID Prep 8015NM Prep 10.02 g 11273 11/02/21 16:07 DM 10 mL Total/NA Analysis 8015B NM 11323 11/03/21 12:32 AJ XEN MID Soluble 11/02/21 12:34 XEN MID Leach DI Leach 5 g 50 mL 11238 CH Soluble Analysis 300.0 11454 11/07/21 12:54 CH XEN MID

Client Sample ID: BH-43 (15)

Lab Sample ID: 890-1502-43 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 03:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 12:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 13:02	CH	XEN MID

Client Sample ID: BH-44 (15)

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 03:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-44

Page 189 of 248

Client Sample ID: BH-44 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-44

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 13:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 13:09	CH	XEN MID

Lab Sample ID: 890-1502-45 Client Sample ID: BH-45 (15) Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 04:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 13:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 04:30	CH	XEN MID

Client Sample ID: BH-46 (15) Lab Sample ID: 890-1502-46 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 04:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 13:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 04:53	CH	XEN MID

Lab Sample ID: 890-1502-47 Client Sample ID: BH-47 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 05:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.05 g	10 mL	11273 11323	11/02/21 16:07 11/03/21 14:18	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

11/10/2021

**Matrix: Solid** 

Page 190 of 248

Client Sample ID: BH-47 (15)

Lab Sample ID: 890-1502-47 Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 05:00	CH	XEN MID

Client Sample ID: BH-48 (15) Lab Sample ID: 890-1502-48

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 05:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 14:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 05:08	CH	XEN MID

Client Sample ID: BH-49 (15) Lab Sample ID: 890-1502-49

Date Collected: 10/27/21 00:00 **Matrix: Solid** Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 05:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 15:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 05:16	CH	XEN MID

Client Sample ID: BH-50 (15) Lab Sample ID: 890-1502-50

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 06:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 15:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 05:39	CH	XEN MID

Eurofins Xenco, Carlsbad

Client Sample ID: BH-51 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-51

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 08:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 16:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 05:46	CH	XEN MID

Client Sample ID: BH-52 (15) Lab Sample ID: 890-1502-52 Date Collected: 10/27/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 08:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 16:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 05:54	CH	XEN MID

Client Sample ID: BH-53 (15) Lab Sample ID: 890-1502-53 Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11388	11/03/21 08:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11420	11/04/21 11:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 16:46	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 06:02	CH	XEN MID

Client Sample ID: BH-54 (15) Lab Sample ID: 890-1502-54 Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Released to Imaging: 9/1/2023 2:28:53 PM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 09:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 192 of 248

**Matrix: Solid** 

Client Sample ID: BH-54 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-54

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 17:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 06:09	CH	XEN MID

Lab Sample ID: 890-1502-55 Client Sample ID: BH-55 (15) Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 09:54	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 17:28	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 06:17	CH	XEN MID

Client Sample ID: BH-56 (15) Lab Sample ID: 890-1502-56 Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 10:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 17:49	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 06:40	CH	XEN MID

Lab Sample ID: 890-1502-57 Client Sample ID: BH-57 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11445	11/04/21 11:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11449	11/05/21 00:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	11273 11323	11/02/21 16:07 11/03/21 18:11	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 193 of 248

Client Sample ID: BH-57 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-57

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	11240	11/02/21 12:39	СН	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 06:48	CH	XEN MID

Client Sample ID: BH-58 (15) Lab Sample ID: 890-1502-58

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11445	11/04/21 11:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11449	11/05/21 00:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 18:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 07:11	CH	XEN MID

Client Sample ID: BH-59 (15) Lab Sample ID: 890-1502-59

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11445	11/04/21 11:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11449	11/05/21 01:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 18:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 07:18	CH	XEN MID

Client Sample ID: BH-60 (15) Lab Sample ID: 890-1502-60

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11445	11/04/21 11:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11449	11/05/21 01:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 19:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 07:26	CH	XEN MID

Eurofins Xenco, Carlsbad

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-61 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Lab Sample ID: 890-1502-61

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 05:47	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 21:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		10			11455	11/08/21 07:33	CH	XEN MID

Client Sample ID: BH-62 (15) Lab Sample ID: 890-1502-62 Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 11112 Total/NA 4.96 g 5 mL 11/01/21 12:13 KL XEN MID Total/NA 8021B 5 mL 11/03/21 06:08 XEN MID Analysis 1 5 mL 11221 MR 11/09/21 10:40 Total/NA Total BTEX 11768 XEN MID Analysis A.I 1 Total/NA Analysis 8015 NM 11598 11/05/21 13:50 XEN MID Total/NA XEN MID Prep 8015NM Prep 10.02 g 11356 11/03/21 10:38 DM 10 mL Total/NA Analysis 8015B NM 11323 11/03/21 22:16 AJ XEN MID Soluble XEN MID Leach DI Leach 4.96 g 50 mL 11240 11/02/21 12:39 CH Soluble Analysis 300.0 5 11455 11/08/21 07:41 CH XEN MID

Client Sample ID: BH-63 (15) Lab Sample ID: 890-1502-63 Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 06:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 22:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 07:49	CH	XEN MID

Lab Sample ID: 890-1502-64 Client Sample ID: BH-64 (15) Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 06:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 195 of 248

Released to Imaging: 9/1/2023 2:28:53 PM

**Matrix: Solid** 

**Matrix: Solid** 

Client Sample ID: BH-64 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-64

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 23:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 07:56	CH	XEN MID

Client Sample ID: BH-65 (15)

Lab Sample ID: 890-1502-65

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 07:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 23:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 08:58	CH	XEN MID

Client Sample ID: BH-66 (15)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-66

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 07:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 23:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 09:21	CH	XEN MID

Client Sample ID: BH-67 (15)

Lab Sample ID: 890-1502-67

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 07:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.05 g	10 mL	11356 11323	11/03/21 10:38 11/04/21 00:02	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 196 of 248

2

<u>ی</u>

5

7

0

10

12

14

Client Sample ID: BH-67 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-67

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	11242	11/02/21 12:43	СН	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 09:29	CH	XEN MID

Client Sample ID: BH-68 (15)

Lab Sample ID: 890-1502-68

Date Collected: 10/28/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 08:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 00:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 09:36	CH	XEN MID

Client Sample ID: BH-69 (15)

Lab Sample ID: 890-1502-69

Date Collected: 10/28/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 08:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 00:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 09:44	CH	XEN MID

Client Sample ID: BH-70 (15)

Lab Sample ID: 890-1502-70

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 08:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 01:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:07	CH	XEN MID

Eurofins Xenco, Carlsbad

2

3

6

8

9

11

13

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-71

Matrix: Solid

Client Sample ID: BH-71 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 10:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 01:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:15	CH	XEN MID

Client Sample ID: BH-72 (15)

Lab Sample ID: 890-1502-72

Date Collected: 10/28/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 11:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 02:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:22	CH	XEN MID

Client Sample ID: BH-73 (15)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-73

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 11:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 02:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 10:30	CH	XEN MID

Client Sample ID: BH-74 (15)

Lab Sample ID: 890-1502-74

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 11:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 198 of 248

Client Sample ID: BH-74 (15)

Lab Sample ID: 890-1502-74 Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 02:52	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 10:37	CH	XEN MID

Client Sample ID: BH-75 (15) Lab Sample ID: 890-1502-75

Date Collected: 10/28/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 12:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 03:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:45	CH	XEN MID

Client Sample ID: BH-76 (15) Lab Sample ID: 890-1502-76 Date Collected: 10/28/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 12:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 03:36	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:08	CH	XEN MID

Lab Sample ID: 890-1502-77 Client Sample ID: BH-77 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 12:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	11356 11323	11/03/21 10:38 11/04/21 03:57	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 199 of 248

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Lab Sample ID: 890-1502-77

Matrix: Solid

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Client Sample ID: BH-77 (15)

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 12:34	CH	XEN MID

Client Sample ID: BH-78 (15) Lab Sample ID: 890-1502-78

Date Collected: 10/28/21 00:00 **Matrix: Solid** Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 13:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 04:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:39	CH	XEN MID

Client Sample ID: BH-79 (15) Lab Sample ID: 890-1502-79

Date Collected: 10/28/21 00:00 **Matrix: Solid** Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 13:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 04:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:46	CH	XEN MID

Client Sample ID: BH-80 (15) Lab Sample ID: 890-1502-80

Date Collected: 10/28/21 00:00 Matrix: Solid Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 13:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 05:01	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:54	CH	XEN MID

Eurofins Xenco, Carlsbad

Client Sample ID: BH-81 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-81

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 17:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 11:05	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:02	CH	XEN MID

Client Sample ID: BH-82 (15) Lab Sample ID: 890-1502-82

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 18:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 12:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:09	CH	XEN MID

Client Sample ID: BH-83 (15) Lab Sample ID: 890-1502-83 Date Collected: 10/28/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 18:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 12:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:17	CH	XEN MID

Client Sample ID: BH-84 (15) Lab Sample ID: 890-1502-84 Date Collected: 10/28/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Released to Imaging: 9/1/2023 2:28:53 PM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 18:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 201 of 248

Client Sample ID: BH-84 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-84

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 12:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:25	CH	XEN MID

Client Sample ID: BH-85 (15)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-85

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 19:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 13:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 12:52	CH	XEN MID

Client Sample ID: BH-86 (15)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-86

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 19:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 13:38	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 13:15	CH	XEN MID

Client Sample ID: BH-87 (15)

Lab Sample ID: 890-1502-87

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 19:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.05 g	10 mL	11364 11416	11/03/21 11:37 11/04/21 13:59	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 202 of 248

Released to Imaging: 9/1/2023 2:28:53 PM

2

4

5

7

9

11

13

14/40/2024

Client Sample ID: BH-87 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-87

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Soluble DI Leach Leach 5 g 50 mL 11243 11/02/21 12:46 СН XEN MID 300.0 11/09/21 13:22 Soluble Analysis 1 11705 CH XEN MID

Client Sample ID: BH-88 (15) Lab Sample ID: 890-1502-88

Date Collected: 10/28/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 20:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 14:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		5			11705	11/09/21 13:30	CH	XEN MID

Client Sample ID: BH-89 (15)

Lab Sample ID: 890-1502-89

Date Collected: 10/28/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 20:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 14:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		5			11705	11/09/21 13:38	CH	XEN MID

Client Sample ID: BH90 (RS ) (6) Lab Sample ID: 890-1502-90

Date Collected: 10/28/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 20:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 15:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 14:01	CH	XEN MID

Eurofins Xenco, Carlsbad

2

3

Ē

6

8

10

12

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: BH-91 (RS) (6)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-91

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 22:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 15:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 14:08	CH	XEN MID

Client Sample ID: SW-1 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-92

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 23:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 02:54	CH	XEN MID

Client Sample ID: SW-2 (0-6) Lab Sample ID: 890-1502-93 Date Collected: 10/25/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 23:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 16:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		1			11381	11/07/21 03:16	CH	XEN MID

Client Sample ID: SW-3 (0-6) Lab Sample ID: 890-1502-94 Date Collected: 10/25/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 23:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 204 of 248

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: SW-3 (0-6) Lab Sample ID: 890-1502-94

Matrix: Solid

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 16:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		1			11381	11/07/21 03:24	CH	XEN MID

Client Sample ID: SW-4 (0-6) Lab Sample ID: 890-1502-95 Date Collected: 10/25/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 00:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 17:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		1			11381	11/07/21 03:46	CH	XEN MID

Lab Sample ID: 890-1502-96 Client Sample ID: SW-5 (0-6) Date Collected: 10/25/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 00:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 17:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 03:53	CH	XEN MID

Lab Sample ID: 890-1502-97 Client Sample ID: SW-6 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 00:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	11364 11416	11/03/21 11:37 11/04/21 17:56	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 205 of 248

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1 SDG: 212C-MD-02230

Lab Sample ID: 890-1502-97

Matrix: Solid

Client Sample ID: SW-6 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	11233	11/02/21 12:00	СН	XEN MID
Soluble	Analysis	300.0		10			11381	11/07/21 04:01	CH	XEN MID

Client Sample ID: SW-7 (0-6)

Lab Sample ID: 890-1502-98

Date Collected: 10/26/21 00:00 Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 01:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 18:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		10			11381	11/07/21 04:08	CH	XEN MID

Client Sample ID: SW-8 (0-6)

Lab Sample ID: 890-1502-99

Date Collected: 10/26/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 01:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 18:39	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 04:15	CH	XEN MID

Client Sample ID: SW-9 (0-6)

Lab Sample ID: 890-1502-100

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 01:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 19:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 04:23	CH	XEN MID

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

4

5

7

9

10

13

4/40/0004

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: SW-10 (0-6)

Lab Sample ID: 890-1502-101 Date Collected: 10/26/21 00:00

**Matrix: Solid** 

Date Received: 10/29/21 12:45

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 05:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 11:05	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 04:30	CH	XEN MID

Client Sample ID: SW-11 (0-6)

Lab Sample ID: 890-1502-102 Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 11114 Total/NA 5.00 g 5 mL 11/01/21 12:18 KL XEN MID Total/NA 8021B 5 mL 11/04/21 05:49 XEN MID Analysis 1 5 mL 11374 MR 11/09/21 10:40 Total/NA Total BTEX 11768 XEN MID Analysis A.I 1 Total/NA Analysis 8015 NM 11598 11/08/21 15:54 XEN MID Total/NA XEN MID Prep 8015NM Prep 10.02 g 11375 11/03/21 13:15 DM 10 mL Total/NA Analysis 8015B NM 11418 11/04/21 12:11 AJ XEN MID Soluble XEN MID Leach DI Leach 5.01 g 50 mL 11236 11/02/21 12:22 CH Soluble Analysis 300.0 1 11452 11/08/21 09:36 CH XEN MID

Client Sample ID: SW-12 (10)

Lab Sample ID: 890-1502-103 Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 06:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 12:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 09:46	CH	XEN MID

Client Sample ID: SW-13 (15)

Lab Sample ID: 890-1502-104 Date Collected: 10/26/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Datah	Duamanad		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035		- 1 actor	4.98 q	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 06:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 207 of 248

Job ID: 890-1502-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-13 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-104

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 12:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		5			11452	11/08/21 09:57	CH	XEN MID

Client Sample ID: SW-14 (15) Lab Sample ID: 890-1502-105

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 06:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 13:16	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 10:07	CH	XEN MID

Client Sample ID: SW-15 (15) Lab Sample ID: 890-1502-106 Date Collected: 10/26/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 07:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 13:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 10:39	CH	XEN MID

Lab Sample ID: 890-1502-107 Client Sample ID: SW-16 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 07:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.05 g	10 mL	11375 11418	11/03/21 13:15 11/04/21 13:59	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 208 of 248

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-16 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-107

Matrix: Solid

Job ID: 890-1502-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	11236	11/02/21 12:22	СН	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 10:49	CH	XEN MID

Client Sample ID: SW-17 (15) Lab Sample ID: 890-1502-108

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 07:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 14:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		5			11452	11/08/21 11:00	CH	XEN MID

Client Sample ID: SW-18 (15) Lab Sample ID: 890-1502-109

Date Collected: 10/26/21 00:00

**Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 08:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 14:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 11:10	CH	XEN MID

Client Sample ID: SW-19 (15) Lab Sample ID: 890-1502-110

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 08:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 15:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 11:20	CH	XEN MID

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

Job ID: 890-1502-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-20 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Lab Sample ID: 890-1502-111

**Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 4.96 g 5 mL 11114 11/01/21 12:18 KL XEN MID 8021B Total/NA Analysis 1 5 mL 5 mL 11374 11/04/21 10:21 MR XEN MID Total/NA Analysis Total BTEX 11768 11/09/21 10:40 ΑJ XEN MID Total/NA 8015 NM XEN MID Analysis 1 11598 11/08/21 15:54 AJ Total/NA 8015NM Prep 10 mL 11375 11/03/21 13:15 XEN MID Prep 10.03 g DM Total/NA Analysis 8015B NM 11418 11/04/21 15:46 ΑJ XEN MID Soluble DI Leach 5.05 g 50 mL 11236 11/02/21 12:22 CH XEN MID Leach Soluble Analysis 300.0 11452 11/08/21 11:31 CH XEN MID

Client Sample ID: SW-21 (15) Lab Sample ID: 890-1502-112 Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 10:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10			11452	11/08/21 12:02	CH	XEN MID

Client Sample ID: SW-22 (15) Lab Sample ID: 890-1502-113

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 11:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 16:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10			11452	11/08/21 12:12	CH	XEN MID

Lab Sample ID: 890-1502-114 Client Sample ID: SW-23 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Г										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 11:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 210 of 248

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-23 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-114

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 16:51	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	11236	11/02/21 12:22	СН	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 12:43	СН	XEN MID

Client Sample ID: SW-24 (15) Lab Sample ID: 890-1502-115

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 11:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 17:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		5			11452	11/08/21 12:54	CH	XEN MID

Client Sample ID: SW-25 (15) Lab Sample ID: 890-1502-116 Date Collected: 10/26/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 12:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 17:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10			11452	11/08/21 13:04	CH	XEN MID

Lab Sample ID: 890-1502-117 Client Sample ID: SW-26 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 12:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	11375 11418	11/03/21 13:15 11/04/21 17:56	DM AJ	XEN MID XEN MID

Eurofins Xenco, Carlsbad

Page 211 of 248

**Matrix: Solid** 

11/10/2021

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-26 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-117

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 13:15	CH	XEN MID

Client Sample ID: SW-27 (15)

Lab Sample ID: 890-1502-118

Date Collected: 10/26/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 12:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 18:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10			11452	11/08/21 13:25	CH	XEN MID

Client Sample ID: SW-28 (15) Lab Sample ID: 890-1502-119

Date Collected: 10/26/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 13:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 18:39	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		5			11452	11/08/21 13:36	CH	XEN MID

Client Sample ID: SW-29 (15)

Lab Sample ID: 890-1502-120

Date Collected: 10/26/21 00:00 Matrix: Solid
Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11445	11/04/21 11:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11449	11/05/21 03:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 19:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11236	11/02/21 12:22	СН	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 13:46	CH	XEN MID

Eurofins Xenco, Carlsbad

2

3

4

5

7

9

11

13

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-30 (RS) (6)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-121

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11076	11/01/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11022	11/01/21 23:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11376	11/03/21 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11414	11/04/21 10:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 14:45	CH	XEN MID

Client Sample ID: SW-31 (RS) (4)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-122

Matrix: Solid

Date Received: 10/29/21 12:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	11076	11/01/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11022	11/02/21 00:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11376	11/03/21 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11414	11/04/21 11:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 14:53	CH	XEN MID

Client Sample ID: SW-32 (RS) (6)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Lab Sample	ID: 890-1502-123
------------	------------------

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11076	11/01/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11022	11/02/21 00:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11376	11/03/21 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11414	11/04/21 12:15	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 15:01	CH	XEN MID

Client Sample ID: SW-33 (RS) (8)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

11/05/21 10:01	OH	ALIV MID	
Lab Sample	e ID: 89	90-1502-124	
		Matrix: Solid	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11076	11/01/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11022	11/02/21 00:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID

Eurofins Xenco, Carlsbad

Page 213 of 248

### **Lab Chronicle**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-33 (RS) (8)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-124

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11376	11/03/21 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11414	11/04/21 12:36	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 15:08	CH	XEN MID

### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Q

9

10

12

11

### **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

### Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	P	rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-21-22	06-30-22
The following analytes the agency does not of		ut the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for wh
Analysis Method	Prep Method	Matrix	Analyte	
0045 1114		Solid	Total TPH	
8015 NM		Juliu	IOIAI IPH	

Eurofins Xenco, Carlsbad

3

4

6

8

10

12

13

14

### **Method Summary**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1502-1	BH-1 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-2	BH-2 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-3	BH-3 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-4	BH-4 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-5	BH-5 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-6	BH-6 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-7	BH-7 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-8	BH-8 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-9	BH-9 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-10	BH-10 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-11	BH-11 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-12	BH-12 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-13	BH-13 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-14	BH-14 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-15	BH-15 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-16	BH-16 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-17	BH-17 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-18	BH-18 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-19	BH-19 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-20	BH-20 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-21	BH-21 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-22	BH-22 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-23	BH-23 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-24	BH-24 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-25	BH-25 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-26	BH-26 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-27	BH-27 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-28	BH-28 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-29	BH-29 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-30	BH-30 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-31	BH-31 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-32	BH-32 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-33	BH-33 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-34	BH-34 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-35	BH-35 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-36	BH-36 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-37	BH-37 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-38	BH-38 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-39	BH-39 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-40	BH-40 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-41	BH-41 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-42	BH-42 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-43	BH-43 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-44	BH-44 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-45	BH-45 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-46	BH-46 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-47	BH-47 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-48	BH-48 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-49	BH-49 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-50	BH-50 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-51	BH-51 (15 )	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-52	BH-52 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-53	BH-53 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-54	BH-54 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
500 1002-0 <del>4</del>	DIT 07 (10)	- · · · · · · · · · · · · · · · · · · ·	10121121 00.00	10/20/21 12.40	

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1 SDG: 212C-MD-02230

C-MD-02230

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1502-55	BH-55 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-56	BH-56 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-57	BH-57 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-58	BH-58 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-59	BH-59 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-60	BH-60 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-61	BH-61 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-62	BH-62 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-63	BH-63 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-64	BH-64 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-65	• •	Solid	10/27/21 00:00	10/29/21 12:45	15
	BH-65 (15)				
890-1502-66	BH-66 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-67	BH-67 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-68	BH-68 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-69	BH-69 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-70	BH-70 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-71	BH-71 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-72	BH-72 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-73	BH-73 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-74	BH-74 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-75	BH-75 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-76	BH-76 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-77	BH-77 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-78	BH-78 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-79	BH-79 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-80	BH-80 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-81	BH-81 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-82	BH-82 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-83	BH-83 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-84	BH-84 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-85	BH-85 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-86		Solid		10/29/21 12:45	15
	BH-86 (15)		10/28/21 00:00		
890-1502-87	BH-87 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-88	BH-88 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-89	BH-89 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
890-1502-90	BH90 (RS ) (6)	Solid	10/28/21 00:00	10/29/21 12:45	6
890-1502-91	BH-91 (RS) (6)	Solid	10/28/21 00:00	10/29/21 12:45	6
890-1502-92	SW-1 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-93	SW-2 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-94	SW-3 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-95	SW-4 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-96	SW-5 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-97	SW-6 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-98	SW-7 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-99	SW-8 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-100	SW-9 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-101	SW-10 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-102	SW-11 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-103	SW-12 (10)	Solid	10/26/21 00:00	10/29/21 12:45	10
		Solid			15
890-1502-104	SW-13 (15)		10/26/21 00:00	10/29/21 12:45	
890-1502-105	SW-14 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-106	SW-15 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-107	SW-16 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-108	SW-17 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1 SDG: 212C-MD-02230

-02230	

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1502-109	SW-18 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-110	SW-19 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-111	SW-20 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-112	SW-21 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-113	SW-22 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-114	SW-23 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-115	SW-24 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-116	SW-25 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-117	SW-26 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-118	SW-27 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-119	SW-28 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-120	SW-29 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-121	SW-30 (RS) (6)	Solid	10/28/21 00:00	10/29/21 12:45	6
890-1502-122	SW-31 (RS) (4)	Solid	10/28/21 00:00	10/29/21 12:45	4
890-1502-123	SW-32 (RS) (6)	Solid	10/28/21 00:00	10/29/21 12:45	6
890-1502-124	SW-33 (RS) (8)	Solid	10/28/21 00:00	10/29/21 12:45	8

.

5

9

10

12

14

	Relinquished by:		Relinquished by:	Trad !	Relinquished by:											( LAB USE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4	Analysis Requ
	Date: Time:		Date: Time:	March 10/29/21 12:45	Ţį,	BH-10 (6')	BH-9 (6')	BH-8 (6')	BH-7 (6')	BH-6 (6')	BH-5 (6')	BH-4 (6')	BH-3 (6')	BH-2 (6')	BH-1 (6')		SAMPLE IDENTIFICATION			y: Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
ORIGINAL COPY	Received by:		Received by:	(Yælis	Received by:	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	1	
γο	Date: Time:		V Date: Time:	P 10.29.21 1245	Date: Time;	×	×	×	×	×	×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE METHOD		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	890-1502 Chain of Custody	
(Circle) HAND DELIVERED FEDEX UPS Tracking #:	Z·2 Special Report Limits or TRRP Report	Z, L	Sample Temperature	ONLY	LAB USE REMARK	×	×	×	×	×	×	×	×	×		# CONT. FILTERE BTEX 80 TPH TX: TPH 801 PAH 827 Total Me TCLP Me TCLP VO TCLP Se RCI GC/MS \ GC/MS \ PCB's 8 NORM PLM (As Chloride Chloride General Anion/C	ED (Y)  21B  1005  5M ( 70C  tals A  latile:  Water  Semi. V	BTE (Ext to GRO - Ag As B S solutiles S 2008 / Vol. 8 7 608	C35) DRO - ( a Cd Cr Ba Cd Cr C624 270C/62  TDS mistry (s	Pb Se Pb Se	Hg Hg	st)	no di	7 7		Page1
	ort		12 m													Hold										1 of 13

Page 221 of 248

Page 222 of 248

Relinquished by:		Relinquished by:	May how	Reinquished by:												( LAB USE )	LAB #		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Date: Time:		Date: Time:		74:21  2 46 11		C1. (c)	BH-39 (15')	вн-38 (15')	BH-37 (15')	ВН-36 (15')	вн-35 (15')	BH-34 (15')	BH-33 (15')	BH-32 (15')	BH-31 (15')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Received by:		Received by:	MAN	Vecesian phy.	10/27/2021	014114041	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	DATE	1EAN. 2020	SAMPLING		Samplet Signature.		Project #:		Site Manager:	
Date: Ilme:		Date: Time:	7	- iā	×		×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO: ICE None	3	MATRIX	1	Ezequiel Moreno		212C-MD-02230		Clair Gonzales	90 W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 682-4559 Fex (432) 682-3946
Special	Rush Ch	Sample Temperature	1	LAB USE	X X BEIMARKS:	I	×	×	×	×	×	×	×	×	×	TPH 8 PAH 8 Total M TCLP TCLP TCLP RCI GC/M	RED 8021 FX100 8015M 82700 Metals Metal Volat Semi	(Y/N) B B' 15 (Ext I ( GRO) S Ag As S Ag A iles Volatil	3 / 624	ORO - r Pb Se Cr Pb S	Hg Hg		_	ANALYSIS REQUEST	
Special Report Limits or TRRP Report	Rush Charges Authorized	AUSH: Salid bay 24 in 40 in 72 in	24 6- 48 6-	STANDARD		<	×	×	×	×	×	×	×	×	×	PCB's NORM PLM ( Chloric Chloric General	808 Asbe de de ral W	stos) Sulfat	emistry (		tached	list)		pecify Method No.)	

Page 223 of 248

Relinquished by:  Relinquished by:	Relinquished by:  Relinquished by:	Relinquished by:	Relinguished by:												( LAB USE )	LAB#			Comments:	Receiving Laboratory: Eurofin		Project Location: Lea Co	Project Name: Kaiser SWD	Client Name: Permia	T	Analysis Request of Chain of Custody Record
		Date: Time:	> 10/29/21 12:45	Date: Time:	BH-50 (15')	BH-49 (15')	BH-48 (15')	BH-47 (15')	ВН-46 (15')	BH-45 (15')	BH-44 (15')	BH-43 (15')	BH-42 (15')	BH-41 (15')		SAMPLE IDENTIFICATION				Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	SWD	Permian Water Solutions	Tetra Tech, Inc.	of Custody Record
-		Received by:	lloe live	Received by:	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	10/27/2021	DATE	TEAN 2020		SAMPLING		Sampler Signature:		Project #:		Site Manager:		
,		De	D 00:	Da	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL	R	+	MATRIX		Ezequie		212C-M		Clair Gonzales	90 NW Wall Sifeet, S Midland, Texas 79705 Tel (432) 682-4559 [432) 682-394	
Date: Time:	ļ	Date: Time:	0.29.21	Date: Time:	×	×	×	×	×	×	×	×	×	×	HNO <sub>3</sub> ICE None		- me no co	PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		ales	901VY Wall Sifeet, Sie 100 90land,1exas 79705 el (432) 682-4559 Eax 1432) 682-3946	
-		(0)	1848												# CON	RED	(Y/N	1)	V 0000							
		Sample Temperature	0	<u></u>	×	×	×	×	×	×	×	×	×	×	TPH 1	X100	)5 (E	xt to			Mac			ANA		
		empera	ONLY	LAB USE	Ě	×	×	×	×	×	×	×	×	×	PAH 8	32700	:		- DRO -				_	ANALYSIS		
		ture													TCLP	Metal	s Ag		Ba Cd Cr Ba Cd C							
]				REMARKS	E										TCLP		_	atiles	3				;	REQUEST		
	Rush Charges Authorized	RUSH.	ú	SXS:		$\vdash$									RCI GC/MS	S Vol.	826	50B	/ 624				(	SO .		
,	harge	- 1	7	5	F										GC/MS PCB's				3270C/62	25			_	necify		
1	s Auth	Same Day	3												NORM PLM (		stos)									D
1	orized	24 H			×	×	×	×	×	×	×	×	×	×	Chloric	ie	Sulf		TDS					Method		Page
RP R		IT 48 TIF													Gener	al W	ater	Che	mistry (s	ee att	ached l	ist)	-	2		
Special Report Limits or TRRP Report					E			-							Anion/	Catio	on B	alan	ice					0		5
		7 Nr			$\vdash$	-	+-	+	-	-		$\vdash$	$\vdash$	-												와 I
					-					1																16

Page 224 of 248

Page 225 of 248

Page 226 of 248

Tel (432) 682-4559 Fax (432) 682-3946 Site Manager: Clair Gonzales Project #: 212C MD-02230
22. 22. 27. 27. 27. 27. 27. 27. 27. 27.

Page 227 of 248

Page 228 of 248

	Relinquished by:		Relinquished by:		17	Relinquished by:											( LAB USE )	LAB #		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	The section of the se
	Date: Time:		Date: lime:		M:21 12/8/2101	Date: Time:	SW-9 (0-6')	SW-8 (0-6')	SW-7 (0-6')	SW-6 (0-6')	SW-5 (0-6')	SW-4 (0-6')	SW-3 (0-6')	SW-2 (0-6')	SW-1 (0-6')	BH-91 (RS) (6')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
	Received by:		xecewed by:		() A/I	Received by:	10/26/2021	10/26/2021	10/26/2021	10/25/2021	10/25/2021	10/25/2021	10/25/2021	10/25/2021	10/25/2021	10/28/2021	DATE	TEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
					5		×	×	×	×	×	×	×	×	×	×	WATE SOIL	R	MATRIX		Ezequ		212C-		Clair Gonzales	901W Wall Sireet Midland,Texas 797 Tell (432) 682-4559
	Date: I ime:		Date: Time.	ľ	12.67	Date: Time:	×	×	×	×	×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE None		METHOD		Ezequiel Moreno		212C-MD-02230		ızales	901W Wall Sireet, Sie 100 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
					シヒワ												# CON	RED	(Y/N)							
			Sample Temperature		0	LAI	×	×	×	×	×	×	×	×	×	×	TPH T	X100	5 (Ext			MPO			ANAL	
			emperat		ONLY	AB USE	×	×	×	×	×	×	×	×	×	<u>×</u>	PAH 8	32700	:	Ba Cd C					ANALYSIS	
			ure	_			F		F									Meta	s Ag A	Ba Cd C					REQUEST	
- 1					×	REMARKS:		F		F	-	F				F			Volatile	s				_	JEST	
	pecial F	Rush Charges Authorized		RUSH Same Day 24 hr	STA	Ś:	F		+			F			F		GC/MS		8260E	8 / 624 8270C/6	25				CO.	
100	Report L	arges £		Same	STANDARD		F	F	F			F		F		#	PCB's	808							pecify	
Tunking #.	Limits c	\uthoriz	,	Jak C	8	,	×	×	×	×	×	×	×	×	×	×	PLM (/	Asbe	stos)						Method	,
†	r TRRF	ed.					Ë	<u> </u>	<u> </u>	Ë	Ë	Ë		Ë	<u> </u>		Chlori	de	Sulfate	TDS emistry (	see att	ached I	ist)			
	Special Report Limits or TRRP Report		:	48			E		+	-		F		F	+				on Bala				1		20	
	4		j	72 17					+	F	F	F	F	F	F	+	1									
- 1							<u>L</u>									1_	1									1 #

Page 229 of 248

TCLP Semi Volatiles	Tech, Inc.	Relinquished by:		Relinquished by:	1101	カノ	Relinquished by:											( LAB USE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
TIME	Clair Gonzales   Clai					77		SW-19 (15')		SW-17 (15')	SW-16 (15')	SW-15 (15')	SW-14 (15')	SW-13 (15')	SW-12 (10')	SW-11 (0-6')	SW-10 (0-6')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	
Date:   Time:   Date:   Data:   Date:   Date:   Date:   Date:   Date:   Date:   Date:   Data	ANALYSIS REQUEST   Tal (43) 802-3655   Fax	Received by:		Received by:			Received by:	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021		YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
None	ANALYSIS REQUEST   ANALYSIS REQUEST   ANALYSIS REQUEST   ANALYSIS REQUEST	D			2010		0	×	×	×	×	×	×	×	×	×	×	SOIL	R	MATRIX		Ezequi		212C-N		Clair Gona	901W Wal Midland,Tex Tel (432) 68
Sample	Sample   Temperature   Sample   Temperature   Sample   Temperature   Sample   Temperature   Sample				5	2		×	×	×	×	×	×	×	×	×	×	HNO <sub>3</sub>		PRESERVATIVE METHOD		el Moreno		MD-02230		zales	p 9
TCLP Semi Volatiles	TCLP Semi Volatiles				Z	N																					
TCLP Semi Volatiles	RUSH   Same Day   Sa			Sample Temperat		ONLY	I AB USE											TPH T TPH 80 PAH 83	X1005 015M 270C	(Ext to	C35) - DRO - C	ORO -				ANALYSIS	
RCI	STANDARD   STANDARD	1 1 1																TCLP N TCLP V	letals 'olatile	Ag As	Ba Cd Cr					REQUES	
NORM  PLM (Asbestos)  X X X X X X X X X X X Chloride  Chloride Sulfate TDS	Authorized  Anion/Cation Balance	Special Report	Rush Charges			STAND/	KS:											GC/MS GC/MS PCB's	Semi	. Vol. 8		5				70	
	General Water Chemistry (see attached list)  Anion/Cation Balance	Limits or TRR	Authorized			RD		×	×	×	×	×	×	×	×	×	×	PLM (A Chlorid Chlorid	e S	ulfate							

Page 230 of 248

	Relinquished by:		Relinquished by:	Kind h	Relinquished by:											( LAB USE )	LAB#			Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
	Date: Time:		Date: Time:	Colored 12:46	Date: Time:	SW-29 (15')	SW-28 (15')	SW-27 (15')	SW-26 (15')	SW-25 (15')	SW-24 (15')	SW-23 (15')	SW-22 (15')	SW-21 (15')	SW-20 (15')		SAMPLE IDENTIFICATION				Eurofins Xenco	Dusty Mointurff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
	Received by:		Received by:	- ClueCiv	Received by:	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	10/26/2021	DATE	The state of the s	SAMPLING			Sampler Signature:		Project #:		Site Manager:	
				12.52.01		×	×	×	×	×	×	×	×	×	×	WATE SOIL	R	- 22	2000		Ezequi		212C-1		Clair Gonzales	901W Wall S(feet, S) Midland,Texas 79705 Tel (432) 682-4559 Tel (432) 682-394
	Date: Time:		Date: Time:	õ	Date: Time:	×	×	×	×	×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE None	3	метнор	PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		zales	901W Wall Sifeet, Ste 100 Mdland,Texas 79705 'el (432) 682-4569 Fax (432) 682-3946
				St.												# CON	RED	(Y/N)	_ل_							
יכיייין איניים טבו ואכםבט			Sample Temperature	0	5	Ě	×	×	×	×	×	×	×	×	×	BTEX TPH T	TX10	05 (Ex	t to C						ANA	
			Temper	ONLY	LAB USE	Ě	×	×	×	×	×	×	×	×	×	TPH 8			0 - 0	DRO -	ORO -	MRO)			ANALYSIS	
2			ature.		m	F		F	F		_					Total N										
ά			7	] [	REV				1	F					L	TCLP	Vola	ites							REQUEST	
EEDEX	IJ <sub>Sp€</sub>	∐ <sub>Rus</sub>	XUSE:	] ≽	2											RCI										
	cial R	sh Cha	1	ר	o∓a S:			-	+-	+	-	-	+	-	+	GC/MS				524 70C/62	25				0 0 0	
UPS T	eport	rges ,	Same Day				1	1	1	F		F	-	-		PCB's		2 / 60	В						pecify	
Tracking	Limits	Rush Charges Authorized	- 1		ם כ		上									PLM (	Asbe	stos)							200	
#	or TR	rized	4	2		×	×	×	×	×	×	<del> </del> ×	×	×	×	Chlori	ide	Sulfa		TDS					Wethod	
	Special Report Limits or TRRP Report		9			F		1	+	F	F	-	-		F	Gener					see att	ached	list)		Z	
	eport		1	i 3			1	上	1	$\pm$	1	1			1										-	
			111			-	+-	+	+	+	+-	+	+	+	+	$\vdash$										
						L									_											

	Relinquisned by:		Reinquished by:	KI	Relinquished by:										( LABIUSE )	LAB#		Comments:	neceiving Laboratory:	TVOICE TO	(county, state)	Froject Name:	Cient Name:	Ħ	Analysis Reques
	Date: Time:		Date: Time:	Mr. 21 12102191 19.10	<u>-</u> !						SW-33 (RS) (8')	SW-32 (RS) (6')	SW-31 (RS) (4')	SW-30 (RS) (6')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
	Received by:		Received by:	Clip Co	Received by:						10/28/2021	10/28/2021	10/28/2021	10/28/2021	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project#:		Site Manager:		
				x40 10:0							×	×	×	×	TIME WATER SOIL	?	IG MATRIX				212		Clair G	Midlan Tel (4:	dilla
	Date: Time:		Date: Time:	10-29-21 11	Date: Time:						×	×	×	×	HCL HNO <sub>3</sub> ICE None		X PRESERVATIVE METHOD		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	Midland, Texas 79705  Tel (432) 682-4559 Fax (432) 682-3946	A Wall Street
	:			1045											# CONT		RS								
(Circle			Samp					-			×	×	×	×	BTEX 80			X 8260B					≩		
(Circle) HAND DELIVERED			Sample Temperature	ONLY	AB U			#	1		×	×	×	×	TPH 80	15M (			RO - 1	MRO)			ANALYSIS		
D DEL			peratur	~	S	Н		$\perp$				-			PAH 82 Total Me		ng As B	a Cd Cr F	Pb Se	Hg					
VERE	<del></del>		CD		70	H	-	7	+						TCLP M			Ba Cd Cr	Pb Se	Hg		_ =	REQUEST		
				l ×	REMARKS:			士	1						TCLP Se								JES.		
FEDEX	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH. Same Day 24 hr	U	KS:	$\vdash$		+	+	_	_			-	RCI GC/MS \	/ol. 8	3260B /	624				_ 5	7.0		
UPS	al Re	Char	g	A				$\perp$	丰						GC/MS	Semi.	Vol. 8	270C/625	5						
	port L	ges A	ame t	STANDARD		H	$\vdash$	-	+-	$\vdash$	-				PCB's 8 NORM	082 /	608								
Tracking #:	imits	uthor	Эау	ć	í			1	1						PLM (As		os)						28 0 **		Page
*	or TR	zed	2 <del>4</del> 111			$\vdash$	$\vdash$	+	+-	-	×	×	×	×	Chloride Chloride		ulfate	TDS	<del></del>			— <u> </u>			ē
	RP F		48 11					$\downarrow$	#						General	Wate	er Che	mistry (se	ee atta	iched li	st)	:	Z		
	leport						$\vdash$	+	+-	+	-	-	$\vdash$		Anion/C	ation	Balan	ce				;			13
			12111	-				1																	으
						_	$\sqcup$	+	+	-	-	<u> </u>	_	_	111.12										
Ш							Ш		_l				L		Hold										<u></u>

Page 232 of 248

11/10/2021

Chain of Custody Record
🐝 eurofins

1089 N Canal St.  Carlsbad NM 88220  Phone 575-988-3199 Fax 575-988-3199  Client Information (Sub Contract Lab)  Client Contact:  Phone	Chain	of Cus	Chain of Custody Record	eco	ď												eurotins	Environment Testing America	esting
Sub Contract Lab)	-										100								
			Lab PM Kramer	M er Je	Jessica			1		l	Carrie	Carrier Tracking No(s)	ng No(	<u>«</u>		<b>~</b> 0	COC No: 890-488 1		
Shipping/Receiving			E-Mail jessic	essica kramer@eurofinset com	ner@	eurof	inset	S S S			State o	State of Origin New Mexico	٥٦			~ 7	Page Page 1 of 14		
Company Eurofins Xenco				Accreditations Required (See not NELA)	tations P - Lo	Requir	ed (Se	77 0	): - Texas	as						~ <u>-</u>	Job #: 890-1502-1		
Address Due Date Requested 11/4/2021	ested							Ana	lysis	Rec	alysis Requested	ed					Preservation Codes	1	
City TAT Requested (days) Midland	(days)			1 2 Cgr.				-	-							jiji S	A HCL B NaOH C Zn Acetate	N Hexane N None	
State Zip: TX, 79701				er por esta de la companya dela companya dela companya dela companya de la compan	ТРН											J. Lendinsk	D Nitric Acid E NaHSO4	P Na2O4S Q Na2SO3	
Phone: PO #: 432-704-5440(Tel)				) Legis	D) Full		le			************						personalit seessaalit	G Amchlor		
Email WO#:				0000,000,000,000	p (MO		Chloric									institution			9
Project Name:         Project #:           Kaiser SWD         88000039					_S_Pre		EACH					,				Sail Store	L EDA	W pH 4-5 Z other (specify)	-
Site: SSOW#				03640703100970	015NM			v 								104 DE	Other:		
		Sample Type	Matrix (w=water	iltered : m MS/M	8/MM_DC	5035FP_0	RGFM_28	STEX_GC DD_Calc	DD_Calc							Number			
Sample Identification - Client ID (Lab ID) Sample Date	Time	G=grab)	D=waste/oii, BT=Tissue, A=Alr)	100000000000000000000000000000000000000	8015		3	1	10010							Tota	Special I	Special Instructions/Note	e.
	X	Preserva	Preservation Code:	×		Ĺ.,	laye	i e			bootsta	-4/8			basica,	X			
BH-1 (6) (890-1502-1) 10/27/21	Mountain		Solid		×	×	×	×	×							٥			
BH-2 (6) (890-1502-2) 10/27/21	Mountain		Solid		×	×	×	×	×							*			
BH-3 (6) (890-1502-3) 10/27/21	Mountain		Solid		×	×	×	×	×							4			
BH-4 (6) (890-1502-4) 10/27/21	Mountain		Solid		×	×	×	×	×							أنفر			
BH-5 (6) (890-1502-5) 10/27/21	Mountain		Solid		×	×	×	×	×							4			
BH-6 (6) (890-1502-6) 10/27/21	Mountain	_	Solid		×	×	×	×	×										
BH-7 (6) (890-1502-7) 10/27/21	Mountain	_	Solid		×	×	×	×	×				, u			إخاد	:		
BH-8 (6) (890-1502-8) 10/27/21	Mountain		Solid		×	×	×	×	×							*			
BH-9 (6) (890-1502-9) 10/27/21	Mountain		Solid		×	×	×	×	×							*			
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody if the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	hip of method, ar e samples must t Custody attesting	nalyte & accredi be shipped back g to said compli	tation compliand to the Eurofins	e upon Xenco L s Xenco	out sub LC lab	contra	ct labo / or oth	ratorie: ler inst	s. This ruction	s will be	e shipm provid	ent is f	orward y chan	ed und	er chai accred	n-of-cu itation	ıstody If the labora status should be br	itory does not curren ought to Eurofins Xe	ntly inco LLC
Possible Hazard Identification Unconfirmed				Sa	∐ple R	Disp eturn	le Disposal ( A f Return To Client	(A fe	e ma	□be	<b>assessed if san</b> Disposal By Lab	sed if	sam <sub>l</sub>	oles a	□re re	taine Archi	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Disposal By Lab Archive For Mon	1 month) Months	
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank	erable Rank	2		Sp	Special Instructions/QC	Instru	ction		Requ	Requirements	nts								
linquished by:	Date			Time		>	3	<b> </b>			Ш	Method of Shipment:	of Shi	pment:					
Relinquished by Date/Time  Relinquished by Date/Time			Company		Receive Receive	Dy Dy		1	(2)	3	0	TO	Date Date	Date/Time Date/Time	+	61	X	Company	
Relinquished by Date/Time			Company		Rede	Received by							D.	Date/Time	, e			Company	
Custody Seals Intact: Custody Seal No					Coole	r Temi	Cooler Temperature(s)	o° (s) e	and	)ther R	and Other Remarks		기	5		$\forall$	1		

Ver 06/08/2021

💸 eurofins

Environment Testing America

1089 N Canal St Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 **Chain of Custody Record** 

	Sampler			l ah PM	1		ı			5				l		2221	
Client Information (Sub Contract Lab)				Kram	Kramer Jessica	ω				<u>a</u>	Camer Tracking No(s)	cking N	(s)			890-488 2	
Shipping/Receiving	Phone			E-Mail jessic	E-Mail jessica kramer@eurofinset co	⊉eurofi	nset c	en l		Ne Sta	State of Origin New Mexico	g gi				Page: Page 2 of 14	
Eurofins Xenco					Accreditations Required (See NELAP - Louisiana NEI	s Requin	ed (See NE	<sup>note)</sup> LAP - Texas	Texas	ŀ						Job#: 890-1502-1	
1211 W Florida Ave	Due Date Requested 11/4/2021	e C						Analysis Requested	sis R		sted	İ				Preservation Codes	ies
City Midland	TAT Requested (days):	ays):			adlista Olaska		_						-	$\dashv$			
State Zip. TX 79701					TPH						************				<del>angganana.</del>	C Zn Acetate D Nitric Acid E NaHSO4	O AsNaO2 P Na2O4S O Na2SO3
Phone: 432-704-5440(Tel)	PO#				marrigari Basak marangi		e										
Email	# OW				o)		hlorid						······		(	H Ascorbic Acid	T TSP Dodecahydrate U Acetone V MCAA
Project Name: Kaiser SWD	Project #: 88000039				s or N		ACH								ainers	K EDTA L EDA	
Site	SSOW#				) (Ye		DI_LE								cont	Other:	
					SMSC									· · · · · · · · · · · · · · · · · · ·	er of		
		?	Sample Type	(W=water S=solid,	Filten orm M: MOD_N	3/6036F	DRGFM BTEX_	NOD_C					*************		Numb		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G≔grab) <sub>вт</sub>	<u>こ</u>	Perf	1	<del> </del>								Total	Special In	pecial Instructions/Note.
RH.10 (8) (800.1503.10)		X	Preservation Code:	n Code:	X	)-cop	- 600	100	- Kroper	90000	and mode and mode			-	X		
BH-11 (6) (890-1502-11)	10/2//21	Mountain		2 Volid	: ×	+		+	-	+	T		-	+	1 900		
BH-12 (6) (890-1502-12)	10/27/21	Mountain		C C	( )	+-	+	+	_	+			+	+	14		
BH-13 (6) (890-1502-13)	10/27/21	Mountain		Solid	× ;	×   ;	×   ;	× ;		-			_	+	× / "		1994
BH-14 (6) (890-1502-14)	10/27/21	Mountain		Solid	×	×	-+	-					_		-		
BH-15 (6) (890-1502 15)	10/27/21	Mountain		Solid	×	×	×	×		-	1		$\dashv$	+	e44.		
BH-16 (6) (890-1502-16)	10/27/21	Mountain		Solid	×	×	×	×							-a.		
BH-17 (6) (890-1502-17)	10/27/21	Mountain		Solid	×	×	×	×		-					ا رحب		***************************************
BH-18 (6) (890-1502-18)	10/27/21	Mountain		Solid	×	×	×	×							-		
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC.	c places the ownership being analyzed the sa the signed Chain of Cus	of method ana amples must be stody attesting	lyte & accreditation shipped back to to said complican	on compliance the Eurofins >	upon out su tenco LLC la Xenco LLC.	bcontrac	t labora or other	tories. T	This san	nple ship be prov	oment is	forwar Iny cha	ded una	der cha accrec	in-of-c	custody If the laborate	ories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC
Possible Hazard Identification Unconfirmed					Sample Disposal ( A	Dispo	sal (	4 fee r	nay be	asse	ssed	if san	ples	⊒re r	tain	fee may be assessed if samples are retained longer than 1	than 1 month)
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank	able Rank 2			Special Instructions/QC Requirements	al Instructions/QC	tions/	C Re	quiren	nents	nts	у сар		l	Arcr	Archive For	Months
Empty Kit Relinquished by		Date			Time	\$	•	,			Meth	Method of Shipment	ipmen				Name and Address of the Owner, which the Party of the Par
Kelinquished by	Date/Time		င	Company	Receiv			图	3	A	M		Date/Time	ų.			Company
Kelinquished by	Date/Time		ç	Company	Réceiv	sived by	•						Date/Time	ġ.			Company
1	Date/Time <sup>,</sup>		Co	Company	Rec	Received by							Date/Time:	Œ.			Company
					Coo	Cooler Temperature(s) °C and Other Remarks	erature(	s) °C an	d Other	Reman	ŝ						

Citalii of Custouy Record	Chain of Custody Bosond
	🔅 eurofins

State Zip TX 79701 BH-25 (15) (890-1502-25) BH 20 (6) (890-1502-20) BH-19 (6) (890-1502-19) Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco
attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. BH-26 (15) (890-1502-26) BH-24 (6) (890-1502-24) BH-23 (6) (890-1502-23) BH-21 (6) (890-1502-21) Possible Hazard Identification BH-27 (15) (890-1502-27) BH-22 (6) (890-1502-22) Sample Identification - Client ID (Lab ID Kaiser SWD 432-704-5440(Tel) Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 Deliverable Requested I II III IV Other (specify) Midland 1211 W Florida Ave linquished by linquished by: npty Kit Relinquished by oject Name: urofins Xenco inquished by npping/Receiving lient Information (Sub Contract Lab) Custody Seal S Project # 88000039 Date/Time Primary Deliverable Rank. 2 Due Date Requested 11/4/2021 Phone Jate/Time FAT Requested (days) Sample Date 10/27/21 10/27/21 Time 10/27/21 10/27/21 10/27/21 10/27/21 0/27/21 10/27/21 0/27/21 Date Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Sample G=grab) (C=comp, Type Preservation Code: BT=Tissue, A≃Ai Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid jessica kramer@eurofinset com Kramer Jessica NELAP - Louisiana NELAP - Texas Ime Perform MS/MSD (Yes or No) Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Special Instructions/QC Requirements 8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH  $\times$ × × × × × × Cooler Temperature(s) °C and Other Remarks  $\times$  $\times$ × ×  $\times$ × × × × 8021B/5035FP\_Calc BTEX × × × × × × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × Total BTEX GCV × × × × × × × × × Analysis Requested 8015MOD\_Calc × × ×  $\times$  $\times$ × × × × State of Origin
New Mexico Carrier Tracking No(s) Date/Time Total Number of containers -print. . 2000) . درې**ند**ندو يقت Page 3 of 14 A HCL
A NACH
A Zn Acetate
C Zn Acetate
D Nitric Acid
E NAHSO4
F Mach
G Amethor
H Ascorbic Acid
I Ice
J Di Water
K EDTA
L EDA COC No: 890-488 3 Preservation Codes 890-1502-1 Special Instructions/Note Q K O F U > > N TOZZ N Hexane
N None
N None
D AsNAO2
P Na2O4S
P Na2SO3
D Na2SO3
S H2SO4
T TSP Dodecahydrate
L Acetone Company Company MCAA / pH 4-5 other (specify) Months E

Environment Testing

Ver: 06/08/2021

## **Chain of Custody Record**

🖏 eurofins

Environment Testing

Project Name Kaiser SWD Midland BH-35 (15) (890-1502-35) BH-34 (15) (890-1502-34) BH-33 (15) (890-1502-33) BH-28 (15) (890-1502-28) State Zip BH-36 (15) (890-1502-36) BH-32 (15) (890-1502-32) BH-31 (15) (890-1502-31) BH-30 (15) (890-1502-30) BH-29 (15) (890-1502-29) Sample Identification - Client ID (Lab ID) Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 tote: Since laboratory accreditations are subject to change. Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody natiralin accreditation in the State of Origin listed above for analysis/fests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status intension in mediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. 432-704-5440(Tel) 1211 W Florida Ave impty Kit Relinquished by Deliverable Requested I II III IV Other (specify) ossible Hazard Identification elinquished by: linquished by rconfirmed lient Information (Sub Contract Lab) rofins Xenco ipping/Receiving Custody Seal No Project #: 88000039 Date/Time: Primary Deliverable Rank 2 ₩0 # Due Date Requested 11/4/2021 Phone FAT Requested (days) 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 Date Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Time (C=comp, G=grab Preservation Code: Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid jessica.kramer@eurofinset.com Kramer Jessica Time Accreditations Required (See note)
NELAP - Louisiana NELAP - Texas Special Instructions/QC Requirements Perform MS/MSD (Yes or No) Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Received by 8015MOD\_NM/8016NM\_S\_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks ×  $\times$  $\times$ × ×  $\times$  $\times$ × × Return To Client × × × 8021B/5035FP\_Calc BTEX × × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × × × × × × × × × × × ×  $\times$ × Total\_BTEX\_GCV Analysis Requested 8015MOD\_Calo × × × × × Disposal By Lab State of Origin: New Mexico Carrier Tracking No(s) Date/Time Date/Time Date/Time Archive For Total Number of containers 4 (mar) A HCL
B NaOH
C Zn Acetate
D Nitric Acid
E NaHSO4
F MeOH
G Annohlor
H Ascorbiic Acid
J I low
D Nitric Acid
L EDTA
L EDA COC No 890-488 4 Preservation Codes Page 4 of 14 890-1502-1 If the laboratory does not currently should be brought to Eurofins Xenco Special Instructions/Note N \ < C - I O T O T O Z Z Company Company Ver: 06/08/2021 4 Mone
4 None
5 NaNaO2
5 Na2O4S
5 Na2SO3
6 NaSSCO3
6 H2SO4
6 TSP Dodecahydrate
7 Acetone
6 Acetone
7 MCAA other (specify) **Vionths** 

mpty Kit Relinquished by

linquished by

elinquished by:

Custody Seals Intact:

Custody Seal No

Ύes

∆ No

linquished by

Date/Time

Company Company

Company

Cooler Temperature(s) °C and Other Remarks

Date/Time Date/Time Date/Time

Company

Company

Ver: 06/08/2021

Date

lime

Nethod of Shipment

13 14

### 🐝 eurofins |

Environment Testing

### **Eurofins Xenco, Carlsbad** 1089 N Canal St. Chain of Custody Record

Project Name: Kaiser SWD State Zip TX 79701 BH-45 (15) (890-1502-45) BH-44 (15) (890-1502-44) BH-43 (15) (890-1502-43) BH-41 (15) (890-1502-41) BH-40 (15) (890-1502-40) BH-39 (15) (890-1502-39) BH-38 (15) (890-1502-38) BH-37 (15) (890-1502-37) Sample Identification - Client ID (Lab ID) BH-42 (15) (890-1502-42) Phone. 575-988-3199 Fax. 575-988-3199 vote Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody if the laboratory does not currently naintian accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC. Client Information (Sub Contract Lab Carlsbad NM 88220 ossible Hazard Identification 132-704-5440(Tel) Midland 1211 W Florida Ave Deliverable Requested 1 II III IV urofins Xenco ipping/Receiving confirmed Other (specify) 88000039 Primary Deliverable Rank #OW Phone TAT Requested (days): Sampler Sample Date 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Sample Time (C=comp, G=grab) Sample Type Preservation Code: Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid jessica kramer@eurofinset com Lab PM E-Mail Kramer Jessica Field Filtered Sample (Yes or No) Accreditations Required (See note):
NELAP - Louisiana NELAP - Texas Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Perform MS/MSD (Yes or No) Special Instructions/QC Requirements × × × × × × 8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH × × × × × × ×  $\times$  $\times$  $\times$ × 8021B/6035FP\_Calc BTEX × × × × × × × × × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × × × × Total BTEX GCV  $\times$ × × Analysis Requested × × × × 8016MOD\_Caic × × × × × State of Origin New Mexico Tracking No(s) → Total Number of containers **4** -, (A) - No. 6 ``کسی وكالمتب -A HCL B NaOH C Zn Acetate D Nitric Acid F MeNSO4 F MeOH G Amchlor H Ascorbic Acid I Ice J DI Water K EDTA COC No 890-488 5 Preservation Co 890-1502-1 Page 5 of 14 Special Instructions/Note N ≶ < ⊂ - σποποκς M Hexane
A None
A NaPa
A NaPa
A Na204S
A Na2503
A Na25203
A Na25203
A Na25203
A Na25204
A TSP Dodecahydrate MCAA PH 4-5 other (specify) Months Acetone

Company

# **Chain of Custody Record**

5 0 0 5 0 0
euro:
fins

1089 N Canal St.				<u>-</u>		_													٠.	r O	္မ်ဴိန္ eurofins				
Carlsbad NM 88220 Phone: 575-988-3199 Fax 575-988-3199		Chain of Custody Record	sno to	tody k	ecc	ora														,			Environment Testing America	nent Tesi	ding.
Client Information (Sub Contract Lab)	Sampler			Lab PM Kramer	- 1	Jessica	_						Carrier Tracking No(s)	Trac	king I	lo(s)				800	COC No 890-488 6				
Shipping/Receiving	Phone			E-Mail jessic	E-Mail jessica kramer@eurofinset com	mer@	)eurc	ofinse	cor	3			State of Origin.  New Mexico	of One	8 🗏					Page.	Page. Page 6 of 14				
Company Eurofins Xenco					Accreditations Required (See n NELAP - Louisíana NEL	Accreditations Required (See note) NELAP - Louisiana NELAP	s Requ	iired (t	See n	0 5	Texas	" [		l	- 1	ı		ı		990 # do #	Job #: 890-1502-1				
1211 W Florida Ave	Due Date Requested 11/4/2021	ed							≥	nalysis Requested	Sis.	Rea	ues	e		l				Pres	Preservation Codes	Codes			
City Midland	TAT Requested (days):	ays):			-41														u diladi		NaOH	77	Vi Hexane	, v	
State Zip: TX, 79701	- 1				er kombitusii L	TPH	•												- Messella relia	m で C	Nitric Acid	0 7 0	Na2O4S	w W N	
Phone: 432-704-5440(Tel)	PO#:				<u> </u>	) Full		е											and a land to a		MeOH Amchlor		Na2S2C H2SO4	33	
Email	WO#				No. 17 Contraction	(MO		hlorid											above-sette-end		(scorbic Aci		Acetone	TSP Dodecahydrate Acetone	ate
Project Name Kaiser SWD	Project#				a Carrows and the same	S_Pre	X	ACH C											monthly Day		EDTA	N < -	N pH 4-5 other (specify)	vecify)	
Site	SSOW#:					016NM_	Caic BT	D/DI_LE	V										Contractor State of	Other:	7				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp,	Matrix (W=water S=solid, O=waste/oil,	ield Filtered erform MS/M	016MOD_NM/8	021B/5036FP_	00_ORGFM_28	otal_BTEX_GC	016MOD_Calc				· · · · · · · · · · · · · · · · · · ·					otal Number						
	X	$\langle$	1.34	Preservation Code:	$\stackrel{\times}{\times}$		a.vox	-steed	,,,,,,			nutra del	أستفط			9	e de la		X			V			
BH-46 (15) (890-1502-46)	10/27/21	Mountain		Solid		×	×	×	×	×															
BH-47 (15) (890-1502-47)	10/27/21	Mountain		Solid		×	×	×	×	×															
BH-48 (15) (890-1502-48)	10/27/21	Mountain		Solid		×	×	×	×	×									-25						
BH-49 (15) (890-1502-49)	10/27/21	Mountain		Solid		×	×	×	×	×									<i>&amp;</i>						
BH-50 (15) (890-1502-50)	10/27/21	Mountain		Solid		×	×	×	×	×									-4				-		
BH-51 (15) (890-1502-51)	10/27/21	Mountain		Solid		×	×	×	×	×									-						
BH-52 (15) (890-1502-52)	10/27/21	Mountain		Solid		×	×	×	×	×									186		***************************************				
BH-53 (15) (890-1502-53)	10/27/21	Mountain		Solid		×	×	×	×	×									-						
BH-54 (15) (890-1502-54)	10/27/21	Mountain		Solid		×	×	×	×	×									444		-				
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/maintx being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC.	blaces the ownership being analyzed the sa e signed Chain of Cu	of method ana amples must be stody attesting	lyte & accredit shipped back to said complic	ation compliand to the Eurofins bance to Eurofir	e upon Xenco I	out suf	bcontr	act lat	orato ther in	ries nstruc	This s	ill be	shipm orovid	ent is	forwa ny ch	rded	under to ac	chain	-or-cı	ıstod statu	y If the lat	oratory	does not ht to Eurofi	currently ins Xenco LLC	Б
Possible Hazard Identification					Sa	Sample Disposal ( A	Dis	osa	(A	fee	\_\mu_	_be a	ses	ed i	i sa	nple	_a ≥	Je.	aine	0 0	fee may be assessed if samples are retained longer than 1	n 1 m	month)		
Deliverable Requested         IV Other (specify)	Primary Deliverable Rank	able Rank 2			Sp	Special Instructions/Q	ial Instructions/Q	uctio		C R	Requirements	men ,	ents	9	10	ľ	ı	-  ,	dictive . C.	ď	9		MOHUS	ľ	
Empty Kit Relinquished by		Date			Time.		5	-	ı		ı		╛	Method of Shipment.	d of S	hipm	ent.	and the same of th	١				Tecconomics		
Relinquished by	Date/Time <sup>.</sup>			Company	ſ	Receiv	yd by	Ť	No.		Z	즤	$\geqslant$	$ \sigma $		Date/Time	Time	1					Company		
Relinquished by	Date/Time			Company		Rece.	ed-by	1	1	t						Date/Time	Time						Company		
Relinquished by	Date/Time			Company		(8)	eceived by	Ž								Date/	Date/Time			- 1			Company		
Custody Seals Infact Custody Seal No  A Yes A No						Cool	Cooler Temperature(s	nperat	ure(s)	°C ar	and Other Remarks	er Re	narks												
							ı				l		İ		1			1		I				-	

Ver: 06/08/2021

Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199

Eurofins Xenco, Carlsbad

Chain of Custody Record

State Zip TX 79701 BH-55 (15) (890-1502-55) Project Name Kaiser SWD BH-63 (15) (890-1502-63) BH-62 (15) (890-1502-62) BH-61 (15) (890-1502-61) BH-60 (15) (890-1502-60) BH-59 (15) (890-1502-59) BH-58 (15) (890-1502-58) BH-57 (15) (890-1502-57) BH-56 (15) (890-1502-56) Sample Identification - Client ID (Lab ID Midland 1211 W Florida Ave 432-704-5440(Tel) elinquished by elinquished by ossible Hazard Identification ote Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody islating analyses for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status tention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. Custody Seals Intact. mpty Kit Relinquished by eliverable Requested I II III IV Other (specify) linquished by lient Information (Sub Contract Lab) rofins Xenco nipping/Receiving Custody Seal No Project #: 88000039 Phone WO# PO# Date/Time Primary Deliverable Rank TAT Requested (days) Due Date Requested 11/4/2021 Sample Date 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 10/27/21 Date Mountain Mountain Mountair Mountain Mountain Mountain Mountain Mountain Mountain Sample (C=comp, Sample Type Preservation Code: Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Lab PM Kramer Jessica E-Mail: essica.kramer@eurofinset.com Time Accreditations Required (See note)
NELAP - Louisiana NELAP - Texas Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Refurn To Client Disposal By Lah Archive For Mon Refeived by × × × × × × × × × 8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks Return To Client × × × × × × × × 8021B/5035FP Calc BTEX × × × × × × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × × × × × × Total\_BTEX\_GCV × Analysis Requested × 8015MOD\_Calc × × × × × × × × Disposal By Lab State of Origin New Mexico Carrier Tracking No(s) Date/Time Archive For 4 æ. -977. 9**20**4 Total Number of containers , and the same of COC No 890-488 7 Page: Page 7 of 14 Preservation 890-1502-1 lce
J DI Water
C EDTA
L EDA NaOH

Zn Acetate

Nitric Acid

NaHSO4

MeOH

Amchlor Ascorbic Acid If the laboratory does not currently should be brought to Eurofins Xenco N ≶ < ⊂ Company M Hexane
V None
D AsNaO2
D ASNaO2
D Na2SO3
D Na2SO3
R Na2SEO3
R Na2SEO4
T TSP Dodecahydrate
J Acetone
MCAA Ver: 06/08/2021 Company other (specify)

💸 eurofins

Environment Testing

Eurofins Xenco, Carlsbad 1089 N Canal St Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199

# **Chain of Custody Record**

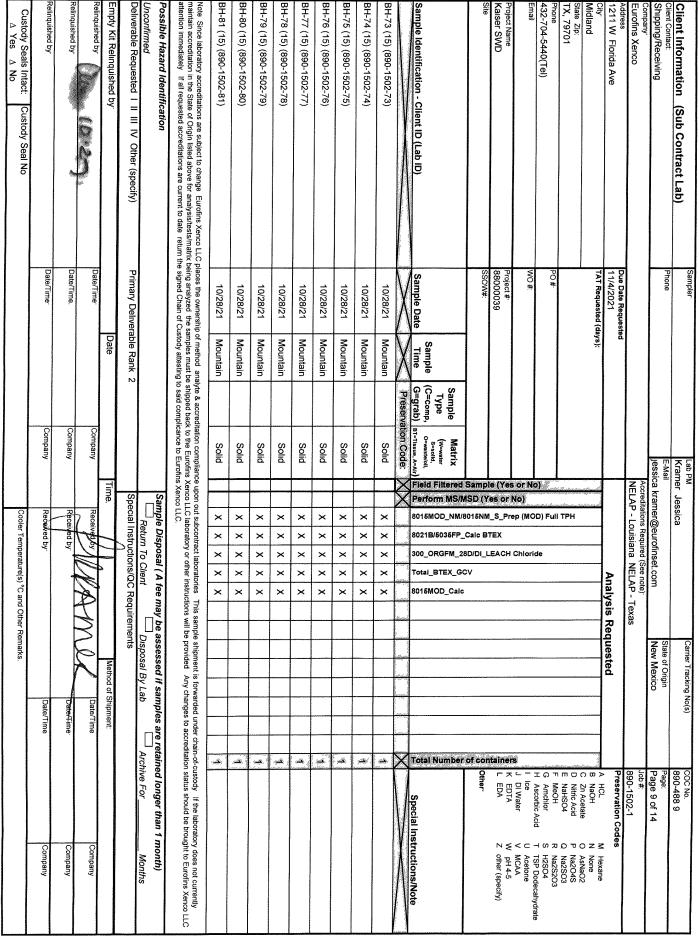
					l	l	١	l		l		ĺ								İ	
Client Information (Sub Contract Lab)	Sampler:			Krame	Lab PM Kramer Jessica	essica	ឃ					ဂ္ဂ	Carrier Tracking No(s)	racking	No(s)			<del></del>	COC No 890-488 8		
Client Contact: Shipping/Receiving	Phone			E-Mail jessic	E-Mail lessica kramer@eurofinset com	ımer(	@eur	ofinse	t con			zg	State of Origin New Mexico	origin	Í			77 70	Page: Page 8 of 14		
Company Eurofins Xenco					Accreditations Required (See note)  NELAP - Louisiana, NELAP -	P - L	s Req	uired (	See no	P e	Texas						J		Job #: 890-1502-1		
Address 1211 W Flonda Ave	Due Date Requested 11/4/2021	ā							₽	Analys	'SiS R	egu	Requested	٦					Preservation Codes	Se	
City Midland	TAT Requested (days):	ys):				and the second				_		-	$\dashv$	$\dashv$							Hexane None
State, Zip: TX 79701					house the state of	TPH						····						<u> </u>	D Nitric Acid E NaHSO4	OPO Na Na 3	Na2SO3
Phone 432-704-5440(TeI)	PO#:				1.01.00	D) Full		ie										Gellinstelere			Na2S2O3 H2SO4
Email	WO#				000000000000000000000000000000000000000	nerkstettuas.		Chloric										West comme	I Ice J DI Water		Acetone MCAA
Project Name Kaiser SWD	Project #					1001110000	ΈX	EACH										L. Ametrica Services	K EDTA L EDA	Z oth	pH 4-5 other (specify)
	SSOW#:				colif (wattoo	(0.34) friestell	ic BT	DI_LI										Service Ser	Other:		
					in theman	Control	_Cal	28D/	cv	c							30v	rof			
		<u>}</u>	Sample Type	Matrix (w=water S=solid,	Filtere	MOD_NW	B/5035FF	ORGFM_	_BTEX_C	MOD_Ca								Numbe			
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) BT=TISSUE, A=A	BT=Tissue, A=Air)	Sir a tracement	3 34.55	802	300	Tota	801		1	-					Tota	Special Ins	struct	pecial Instructions/Note:
BH-64 (15) (890-1502-64)	10/27/21	Mountain		Solid	- 3	×	×	×	×	×	line.		-	-	- 10			-  2		An and a second	
BH-65 (15) (890-1502-65)	10/27/21	Mountain		Solid	-	×	×	×	×	×	_		$\dashv$		$\neg \uparrow$			*1	A SPORTER METALS		
BH-66 (15) (890-1502-66)	10/27/21	Mountain		Solid		×	×	×	×	×	_		$\dashv$	$\dashv$	$\neg$			( <b>4</b>			
BH-67 (15) (890-1502-67)	10/27/21	Mountain		Solid		×	×	×	×	×	$\dashv$							<b>A</b>	Antipolitica Company Company Company		***************************************
BH-68 (15) (890-1502-68)	10/28/21	Mountain		Solid		×	×	×	×	×					1			4			
BH-69 (15) (890-1502-69)	10/28/21	Mountain		Solid		×	×	×	×	×		_						, <b>30</b>	111111111111111111111111111111111111111		
BH-70 (15) (890-1502-70)	10/28/21	Mountain		Solid		×	×	×	×	×	_										
BH-71 (15) (890-1502-71)	10/28/21	Mountain		Solid		×	×	×	×	×								e <b>5</b> .	ALL MANAGEMENT AND AND AND AND AND AND AND AND AND AND		
BH-72 (15) (890-1502-72)	10/28/21	Mountain		Solid		×	×	×	×	×								رفت.			
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	nco LLC places the ownership of method analyte & accreditation compliance upon out sus/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC is return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	of method ana imples must be stody attesting	alyte & accreditates shipped back to to said complicate	ion compliand the Eurofins nce to Eurofin	e upon Xenco s Xenc	orro	ubcont aborato	ract lat	orator ther in	ies. T structi	his sar ons wi	nple si II be pr	nipmer ovided	t is for Any	warded	l under	chain	of-cu ation s	istody If the laborato	ory does	not currently Eurofins Xenco LLC
Possible Hazard Identification Unconfirmed					S	Sample Disposal ( A fee	e Dis	posa	le Disposal (Af		nay b	e ass	assessed if san Disposal By Lah	dif s	ampl	es ar		aine	may be assessed if samples are retained longer than 1 month)	monti	nth) Months
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank	ible Rank 2	10		S	Special Instructions/QC R	Inst	uctio	ns/Q	Re	equirements	nents		ŀ	-			l	Transmission of the state of th	1	
Empty Kit Relinquished by		Date			Time:			2	١	١	1	1	3	Method of Shipment:	Shipr	nent:	١				MATRICE STATE OF THE PARTY OF T
Relinquished by	Date/Time		C	Company		Rec	Received	7	The same	D	Z	اح	1	B	Date	Date/Time				Company	any
Reinquished by	Date/Time		0	Company		- R	Received	by:	ŀ		ĺ	Ī			Date	Date/Time:				Company	any
Relinquished by	Date/Time		C	Company		Re e	Received by	δ				Ì		İ	Date	Date/Time				Company	any
Custody Seals Intact. Custody Seal No						င္ပ	ler Te	mpera	ure(s)	°C an	Cooler Temperature(s) °C and Other Remarks	Rem	s s		ŀ	l		. [			

eurofins Environment Testing

Ver 06/08/2021

**Eurofins Xenco, Carlsbad** 1089 N Canal St

### Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 Sampler Chain of Custody Record 🐝 eurofins Environment Testing



Ver: 06/08/2021

1089 N Canal St. Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 **Eurofins Xenco, Carlsbad Chain of Custody Record** eurofins Environment Testing

Oliont Information (Cub Contract Lab)	Callipic			7	-												200	
Client Contact: (Sub Contract Lab)	Phone:			Kram E-Mail	Kramer Jessica E-Mail	sica					Sta	State of Origin	ğ.			890-	890-488 TU	
Company.				Jessic	Accreditations Required (See not	creditations Required (See note)	equired	(See n	e) =	ı	F	New Mexico	Š			Job #	Page 10 of 14	
Address	Thus hate Requests	ì			NELAP - Louisiana, NELAP - Texas	רַטָּנ רַטָּנ	Siana	N	7	exas				l		89	890-1502-1	
1211 W Florida Ave	Due Date Requested 11/4/2021	ă						≥	nalys	nalysis Requested	eque	sted				. P	Preservation Codes	`
City Midland	TAT Requested (days):	ıys):			gelden en en en en en en en en en en en en e		$\dashv$	$\dashv$			$\dashv$	$\neg$		_		0 00 >	NaOH	
State Zip: TX 79701	<u></u> I				llingituses.	TPH				<del></del>							Nitric Acid	P Na2O4S Q Na2SO3
Phone: 432-704-5440(TeI)	PO#					) Fuli	e	1									MeOH Amchlor	
Email	WO #-					p (MOI	Chlorid			<del></del>				·		1	ASCORDIC ACIO Ice DI Water	U Acetone V MCAA
Project Name Kaiser SN/D	Project #				*X2******										72.	「 ス	EDTA EDA	W pH 4-5 Z other (specify)
Cita:	86000039				SE Y										45/	Janes I	!	
Site:	SSOW#:				ON NORSESSEEDS			ev –								of col Other	ēr.	
			Sample	Matrix (₩=water	iltered n MS/N	D_NM/8	035FP GFM_28	TEX_G	D_Calc						W V	umber		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab)	O=waste/oli, BT=Tissue, A=Air)	565T-571FB			Total	8015							Tota	Special in	Special Instructions/Note
	X	$\langle$	93.5	determine	7000						- 4					X		
BH-82 (15) (890-1502-82)	10/28/21	Mountain		Solid		×	×	×	×							-48)		
BH-83 (15) (890-1502-83)	10/28/21	Mountain		Solid		×	×	×	×		$\dashv$	$\dashv$		_	77,000		And the second s	
BH-84 (15) (890-1502-84)	10/28/21	Mountain		Solid		×	×	×	×							4		
BH-85 (15) (890-1502-85)	10/28/21	Mountain		Solid		×	×	×	×			7			1	-40-	***************************************	
BH-86 (15) (890-1502-86)	10/28/21	Mountain		Solid		×	×	×	×	_								
BH-87 (15) (890-1502-87)	10/28/21	Mountain		Solid		×	×	×	×	_	$\dashv$	$\neg \dagger$		4		خم		
BH-88 (15) (890-1502-88)	10/28/21	Mountain		Solid		×	×	×	×						_			
ВН-89 (15) (890-1502-89)	10/28/21	Mountain		Solid		×	×	×	×	-				_			-	
вн90 (RS) (6) (890-1502-90)	10/28/21	Mountain		Solid		×	×	×	×	_						, <b>26.</b>		
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laborato maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other it attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	places the ownership being analyzed the sa he signed Chain of Cu	of method ana amples must be stody attesting	alyte & accredite e shipped back to said complic	ation compliance to the Eurofins ance to Eurofin	e upon o Xenco Ll s Xenco	ut subc LC labo	ontract I	aborato r other i	nies T	his sam ons will	ıple shi be pro	pment	is forw Any ch	rded un	der chain- accredita	of-custo	dy If the labora	arship of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC of Custody attesting to said complicance to Eurofins Xenco LLC.
Possible Hazard Identification Unconfirmed					San	Sample Disposal ( A	le Disposal ( A f Return To Client	al (A	fee n	nay bo	asse	SSec	ifsa	nples	□ reta	ined I	fee may be assessed if samples are retained longer than 1 month)	f month)
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank	able Rank 2	2		Spe	Special Instructions/Q	struct	ons/C	C Re	C Requirements	nents	ents	1	ľ		2000	9	THE COUNTY
Empty Kit Relinquished by		Date			Time		$\leq$				ı	Met	od of	Method of Shipment.		amaconum		
Relinquished by	Date/Time			Company		Receiv	of P	B	B	\$	0	M		Date/Time	ъe.		A CONTRACTOR OF THE PARTY OF TH	Company
Relinquished by	Date/Time			Company		Recei	wed by:							Date/Time	ne			Company
Relinquished by	Date/Time			Company		Received by:	ed by:							Date/Time	ne:			Company
Custody Seals Intact. Custody Seal No  ∆ Yes ∆ No						Cooler	Cooler Temperature(s)	ature(s	റ്	and Other Remarks	Rema	Š	ı					

Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 1089 N Canal St

Eurofins Xenco, Carlsbad

# Chain of Custody Record

### 💸 eurofins

**Environment Testing** 

State Zip: TX 79701 SW-8 (0-6) (890-1502-99) SW-7 (0-6) (890-1502-98) SW-6 (0-6) (890-1502-97) SW-5 (0-6) (890-1502-96) SW-4 (0-6) (890-1502-95) BH-91 (RS) (6) (890-1502-91) Sample Identification - Client ID (Lab ID) Project Name Kaiser SWD SW-3 (0-6) (890-1502-94) SW-2 (0-6) (890-1502-93) SW-1 (0-6) (890-1502-92) Shipping/Receiving 432-704-5440(Tel) Eurofins Xenco Client Information (Sub Contract Lab) ≘mpty Kit Relir Possible Hazard Identification ttention immediately If all requested accreditations are current to date retum the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC. Vote Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently native to be consistent of the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC Midland 1211 W Florida Ave telinquished by elinquished by Deliverable Requested I III IV Other (specify) Custody Seals Intact: Yes iguished by õ Custody Seal No Phone: Date/Time ۷ O Sampler Date/Time Due Date Requested Date/Time Primary Deliverable Rank 2 88000039 TAT Requested (days): 1/4/2021 Sample Date 10/25/21 10/26/21 10/25/21 10/25/21 10/28/21 10/25/21 10/25/21 10/26/21 10/25/21 Date Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Sample (C=comp, Sample Preservation Code: Type Company Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid jessica kramer@eurofinset com Kramer Jessica Accreditations Required (See note)
NELAP - Louisiana NELAP - Texas Time Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) 8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH × ×  $\times$  $\times$ × × × × × Cooler Temperature(s) °C and Other Remarks Return To Client ×  $\times$ × 8021B/6036FP\_Calc BTEX × × × × × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × × × × Total\_BTEX\_GCV × × × × × × Analysis Requested × × × 8015MOD\_Calc × × × × × × Disposal By Lab State of Origin New Mexico Carrier Tracking No(s) ethod of Shipment Date/Time Archive For Æ, Total Number of containers -19° وخليج وفلكو بكنو مكلك COC No. 890-488 11 Preservation Codes 390-1502-1 Page 11 of 14 A HCL
NACHAE
NACHAE
NITRIC ACID
NITRIC ACID
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE
NACHAE Special Instructions/Note Company Company None

AsklaC2

Na2O4S

Na2SO3

Na2SO3

Na2SCO3

S H2SO4

T TSP Dodecahydrate Ver: 06/08/2021 Acetone MCAA other (specify)

Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199

State, Zip TX 79701

Midland

Eurofins Xenco, Carlsbad

1089 N Canal St.

### Chain of Custody Record

Project Name<sup>.</sup> Kaiser SWD SW-13 (15) (890-1502-104) SW-10 (0-6) (890-1502-101) SW-9 (0-6) (890-1502-100) SW-17 (15) (890-1502-108) SW-16 (15) (890-1502-107) SW-14 (15) (890-1502-105) SW-12 (10) (890-1502-103) SW-11 (0-6) (890-1502-102 432-704-5440(Tel) Possible Hazard Identification SW-15 (15) (890-1502-106) Sample Identification - Client ID (Lab ID) Shipping/Receiving Client Information (Sub Contract Lab) tote: Since laboratory accreditations are subject to change. Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently naintain accreditation in the State of Origin listed above for analysis/fests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory or other instructions will be provided. elinquished by 211 W Florida Ave elinquished by elinquished by: eliverable Requested I II III IV Other (specify) mpty Kit Relinquished by urofins Xenco Custody Seals Intact:

Δ Yes Δ No confirmed Custody Seal No Date/Time Primary Deliverable Rank Project #: 88000039 Due Date Requested 11/4/2021 「AT Requested (days) hone Sample Date 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Sample (C=Comp Sample Preservation Code: Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid jessica kramer@eurofinset com E-Mail Kramer Jessica IIme Accreditations Required (See note)

NELAP - Louisiana NELAP - Texas Perform MS/MSD (Yes or No) Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Special Instructions/QC Requirements Cooler Temperature(s) °C and Other Remarks 8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH × × ×  $\times$ × × × × × × × × × 8021B/6035FP\_Calc BTEX × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × × × × × × × × × × × × × × Total BTEX GCV Analysis Requested × × × × × × 8015MOD\_Calo × × × State of Origin New Mexico Method of Shipm Date/Time Time Total Number of containers وعظمور , <del>proje</del> إكسا 1 -A HCL
B NaChel
C Zn Acetale
D Nitric Acid
E NaBO4
F MeOH
G Annohor
H Ascorbic Acid
I loe
J Dl Water
K EDTA
L EDA COC No 890-488 12 Preservation 890-1502-1 Page 12 of 14 Special Instructions/Note Company M Hexane
M None
AsNaO2
AsNaO2S
Na2O4S
Na2SO3
Na2SO3
Na2SO3
Na2SO3
ASNaSSO4
ASSO4
AA / pH 4-5 other (specify) Months E

eurofins

Environment Testing America

Ver: 06/08/2021

**Eurofins Xenco, Carlsbad** 

## **Chain of Custody Record**

Kramer Jessica	Sampler Lab PM		Chain of Custody Record
	Carrier Tracking No(s)		
890-488 13	COC No:		10 CON C. 1010
		America	Environment Testing

1089 N Canal St Carlsbad NM 88220	0	Shain c	Chain of Custody Record	ody R	900	ď													9 8 8 8 8 8 8	s eurofins	Environment Testing America
Phone 575-988-3199 Fax. 575-988-3199						l			ļ			1							1		
Client Information (Sub Contract Lab)	Sampler			Lab PM Kramer	er Jes	Jessica						Carr	Carrier Tracking No(s).	cking	No(s)				800	COC No: 890-488 13	
	Phone			E-Mail: jessic	E-Mail <sup>.</sup> jessica.kramer@eurofinset.com	ner@	eurofi	nset	ğ			State	State of Origin.	gin gin	1				Page	Page: Page 13 of 14	
Company Eurofins Xenco					Accreditations Required (See note) NELAP - Louisiana NELAP	ations	Requir	na (Se	e note	- Texas	as	ľ	1	ŀ			-		990- # doL	Job# 890-1502-1	
Address 1211 W Florida Ave	Due Date Requested 11/4/2021	ă							Analy	ysis	Re	Requested	ž	1	- 1			_	밁	Preservation Codes	les
City: Midland	TAT Requested (days)	ıys)						$\dashv$	$\dashv$	$\dashv$	ㅓ	7		$\neg$				lides and		HCL NaOH	M Hexane N None
State, Zip TX 79701					<u>Espainidas</u> Propositios eterninas	TPH							*					teriminational	шОС	Zn Acetate Nitric Acid NaHSO4	O AsNaO2 P Na2O4S Q Na2SO3
Phone: 432-704-5440(Tel)	PO #:					) Full		e 		************								enterentando.		MeOH Amchlor	
Email	WO#				3 NA 110 5000	o (MOE		hlorid					<u> </u>							Ascorbic Acid Ice DI Water	I TSP Dodecahydrate U Acetone V MCAA
Project Name Kalser SWD	Project #: 88000039				with the grandings of	_S_Pre		EACH					-	***************************************				ainer	$\Gamma$ X	EDTA EDA	
Sile	SSOW#:				200000000000000000000000000000000000000	015NM			· v			***************************************		***************************************				of con	Other	ē,	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Perform MS/N	8016MOD_NM/6	8021B/6036FP_	300_ORGFM_28	Total_BTEX_GC 				······································					Total Number		Special In	Special Instructions/Note
	$\left\{ \right\}$	$\bigvee$	— w ∣	on Code:	X													X			
SW-18 (15) (890-1502-109)	10/26/21	Mountain		Solid		×	×	×	×	1	<b> </b>							-Alley			
SW-19 (15) (890-1502-110)	10/26/21	Mountain		Solid		×	×	×	<u>×</u>										Value of the Great		
SW-20 (15) (890-1502-111)	10/26/21	Mountain		Solid		×	×	×	×	$\stackrel{\sim}{+}$		$\neg$		$\neg$							
SW-21 (15) (890-1502-112)	10/26/21	Mountain		Solid	$\dashv$	×	×	×	×	$\stackrel{\frown}{+}$	$\dashv$		$\neg$					4			
SVV-22 (15) (890-1502-113)	10/26/21	Mountain		Solid	_	×	×	×	×	$\stackrel{\sim}{+}$	_							-		***************************************	
SW-23 (15) (890-1502-114)	10/26/21	Mountain		Solid		×	×	×	×	$\stackrel{\sim}{+}$	1		$\top$					*		- Control of the Cont	
SW-24 (15) (890-1502-115)	10/26/21	Mountain		Solid		×	×	×	×									-			
SW-25 (15) (890-1502-116)	10/26/21	Mountain		Solid		×	×	×	×					$\neg$				-			
SW-26 (15) (890-1502-117)	10/26/21	Mountain		Solid		×	×	×	×		$\neg \uparrow$							-28	in manager to the		
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	aces the ownership sing analyzed the sa signed Chain of Cus	of method anal amples must be stody attesting t	lyte & accredita shipped back to said complica	tion compliance o the Eurofins ) ance to Eurofins	kenco L Xenco	LC lab	contrac	t labor or oth	atories er instr	. This	sampl will b	e ship e prov	ment i	s forw Any cl	arded nange	unde s to a	r chai ccred	n-of-c	custo 1 stat	dy If the laborat	tory does not currently rught to Eurofins Xenco LLC
Possible Hazard Identification Unconfirmed					Sa	_nple	Disp	sal (	Sample Disposal (A fee	e maj	□be	sse	ssed	if Si	Journ	es a	∐g	ain	ed /	may be assessed if samples are retained longer than 1	( month)
Deliverable Requested 1 II III IV Other (specify)	Primary Deliverable Rank	able Rank 2			Spe	cial	al Instructions/QC	tions	Special Instructions/QC Requirements	equi	reme	ents			1	l			ā	a convey of	топпъ
Empty Kit Relinquished by:		Date			Time:				.				Meth	Method of Shipment:	Shipr	ent:	1	l			
Relinquished by	Date/Time			Company		Received	ved b		B	B	$ \mathcal{E} $	2	2	d	Date	Date/Time		- 1	1		Company
Relinquished by	Date/Time		0	Company		Received	ved by	4	1		ļ			1	Date	Date/Time			-		Company
Relinquished by:	Date/Time		0	Company		Received	ed by				1			Ì	Date	Date/Time		- [			Company
Custody Seals Intact. Custody Seal No  A Yes A No						Coole	r Temp	eratun	Cooler Temperature(s) °C a		nd Other Remarks	emark	s l	İ				1			

Ver: 06/08/2021

Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199

**Eurofins Xenco, Carlsbad** 

1089 N Canal St.

### **Chain of Custody Record**

	9	eurofins :
America	Environment Testing	

	Sampler			Lab PM	- ]		1	1	1		င္မ	Carrier Tracking No(s)	cking	No(s)	-			COC No:
Client Information (Sub Contract Lab)	Dhono			Kram	Kramer Jessica	sica					+						00	890-488 14
Shipping/Receiving	T IO			Jessic	∟-мая Jessica kramer@eurofinset.com	er@eu	rofins	et.cor	3		Ne Sta	State of Origin.  New Mexico	Xico Sin				ים דו	Page: Page 14 of 14
Eurofins Xenco					Accreditations Required (See note)  NELAP - Louisiana NELAP - Texas	tions Re - Loui:	quired a	NEL N	₽ ;- 1	exas							თ ⊆	Job#: 890-1502-1
Address 1211 W Florida Ave	Due Date Requested 11/4/2021	ă						<u>A</u> r		alvsis Requested	egue	stec	_				ᆛ	Preservation Codes
City: Midland	TAT Requested (days):	ys):					$\dashv$			_			$\neg$					HCL NaOH
State, Zip. TX 79701	<b>J</b>				enampe i Propri enados til Protito	ТРН										<del>,</del>		D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3
Phone: 432-704-5440(Tel)	PO#				orge spors vers <del>ather</del> es	) Full	e										· O T	MeOH R Amchior S
Email	WO#:				lo)	p (MOI	Chlorid					<del></del>				, , , , , , , , , , , , , , , , , , ,	de Carlling	ASCOIDIC ACID Ice DI Water
Project Name. Kaiser SWD	Project #. 88000039				s or N											Pi au	Sell was	K EDTA W pH 4-5 L EDA Z other (specify)
Site	SSOW#				D (Ye												Carry Sec	
			Sample	Matrix	MS/MSI			x_gcv	Calc								nber of	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Type (C=comp,		ield Fil Perform	015MOE	00_ORG	otal_BT	015MOE			***************************************					otal Nu	
	$\left\langle \cdot \right\rangle$	$\bigvee$	0		X	-		1	ε		-	1					Χľ	opecial first actions/Note
SW-27 (15) (890-1502-118)	10/26/21	Mountain		Solid		×	×	×	×	_							-	
SW-28 (15) (890-1502-119)	10/26/21	Mountain		Solid		×	×	×	×	$\dashv$	$\dashv$	1	1					
SW-29 (15) (890-1502-120)	10/26/21	Mountain		Solid		×	×	×	×	_		$\dashv$	$\top$				-	
SW-30 (RS) (6) (890-1502-121)	10/28/21	Mountain		Solid		×	×	×	×		$\dashv$	$\dashv$	1					
SW-31 (RS) (4) (890-1502-122)	10/28/21	Mountain		Solid		×	×	×	×			$\dashv$						A STATE OF THE PARTY OF THE PAR
SW-32 (RS) (6) (890-1502-123)	10/28/21	Mountain		Solid		×	×	×	×	$\dashv$	_	$\dashv$					<b>4</b>	
SW-33 (RS) (8) (890-1502-124)	10/28/21	Mountain		Solid		×	×	×	×								, 1865.	The second section of the second section is a second section of the second section of the second section is a second section of the second section is a second section of the second section of the second section is a second section of the second section of the second section is a second section of the second section of the second section is a second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the section o
											$\dashv \dashv$	$\dashv \dashv$						
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	places the ownership being analyzed the sa signed Chain of Cus	of method ana imples must be stody attesting t	yte & accreditati shipped back to o said complicar	on compliance the Eurofins ) nce to Eurofine	upon ou (enco LL(	It subcor C labora LC	tract la	borato other in	ries. Ti nstructio	nis sam ons will	ple shi be pro	oment vided	is forw Any ch	arded	under to ac	chain- credita	of-cus	istody If the laboratory does not currently status should be brought to Eurofins Xenco
Possible Hazard Identification Unconfirmed					Sam □	Sample Disposal ( A	te Disposal (A Return To Clien	al (A	fee f	□ay be	asse Disr	<b>assessed if san</b> Disposal By Lah	lif sa	b mp	San	□ rei	ine	may be assessed if samples are retained longer than 1 month)  Disposal By 1 ah Archive For Months
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank. 2	ble Rank. 2			Spec	Special Instructions/Q	tructio	ons/Q	C Requirements	uiren	ents			ľ	-			
Empty Kit Relinquished by:		Date			Time		7	,			۱	Meg	Method of Shipment:	Shipm	ent:		1	
Relinquished by	Date/Time		Co	Company	7	Nece No.	(A)	Z		3	0	T		Date	Date/Time.	١	- 1	Company
Relinquished by	Date/Time		S	Company	7	Received by	by		-			7	$\Lambda$	Pare	Date/Time	ı	ı	Company
Relinquished by:	Date/Time		Co	Company	77.4	Received by:	by:							Date	Date/Time		- 1	Company
Custody Seals Intact. Custody Seal No						Cooler Temperature(s	empera	ture(s)	°C and	and Other Remarks	Remar	Ē		Ī	l	1		
					L			1			-	l			-	-	۱	Ver. 06/08/2021

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-1502-1

SDG Number: 212C-MD-02230

Login Number: 1502 List Source: Eurofins Xenco, Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Eurofins Xenco, Carlsbad

Released to Imaging: 9/1/2023 2:28:53 PM

1

2

6

8

10

10

13

14

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-1502-1

SDG Number: 212C-MD-02230

Login Number: 1502 List Source: Eurofins Xenco, Midland List Number: 2 List Creation: 11/01/21 08:46 AM

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6/2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

### **Environment Testing America**

### **ANALYTICAL REPORT**

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2290-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

MEAMER

Authorized for release by: 5/16/2022 4:19:28 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS .....

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 9/1/2023 2:28:53 PM

•

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

3

4

6

0

9

11

14

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2290-1 SDG: Lea County NM

### **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	23
QC Sample Results	25
QC Association Summary	32
Lab Chronicle	38
Certification Summary	45
Method Summary	46
Sample Summary	47
Chain of Custody	48
Receint Checklists	54

2

3

4

6

8

10

12

13

14

### **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

### **Qualifiers**

### **GC VOA**

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

### GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

### **HPLC/IC**

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)

	,
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

	=
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated

ND	Not Detected at the reporting limit (or MDL or EDL if shown)
שוו	Not belected at the reporting limit (or MDL or LDL if Showing

NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

PRES	Presumptive
QC	Quality Control

KEK	Relative Error Ratio	(Radiocnemistry)

RL	Reporting Limit or Requested Limit (Radiochemistry)
----	---

RPD Relative Percent Difference, a m	neasure of the relative difference between two points

TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2290-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2290-1

### Receipt

The samples were received on 5/6/2022 3:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 11.8°C

### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-25199/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-25199 and analytical batch 880-25231 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-25221 and analytical batch 880-25235 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

6

2

3

4

**O** 

7

10

12

13

14

Lab Sample ID: 890-2290-1

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-92

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 14:33	
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 14:33	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 14:33	
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/14/22 12:33	05/15/22 14:33	
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 14:33	
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/14/22 12:33	05/15/22 14:33	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	98		70 - 130			05/14/22 12:33	05/15/22 14:33	
1,4-Difluorobenzene (Surr)	103		70 - 130			05/14/22 12:33	05/15/22 14:33	
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401	mg/Kg			05/16/22 16:56	
Analyte Total TPH	Result 522	Qualifier		Unit mg/Kg	D	Prepared	Analyzed 05/11/22 10:27	Dil Fa
IOIAI IPH -	522		30.0	mg/Kg			03/11/22 10.27	
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 13:54	
Diesel Range Organics (Over C10-C28)	346		50.0	mg/Kg		05/10/22 08:18	05/10/22 13:54	
Oll Range Organics (Over C28-C36)	176		50.0	mg/Kg		05/10/22 08:18	05/10/22 13:54	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	119		70 - 130			05/10/22 08:18	05/10/22 13:54	
o-Terphenyl (Surr)	108		70 - 130			05/10/22 08:18	05/10/22 13:54	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble						
Analyte	Result	Qualifier		Unit mg/Kg	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-93 Lab Sample ID: 890-2290-2

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 15:01	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 15:01	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 15:01	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/14/22 12:33	05/15/22 15:01	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 15:01	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/14/22 12:33	05/15/22 15:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			05/14/22 12:33	05/15/22 15:01	1

**Eurofins Carlsbad** 

2

3

7

10

12

1 A

Matrix: Solid

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-93 Lab Sample ID: 890-2290-2

Date Collected: 05/06/22 00:00 Matrix: Solid
Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8021B - Volatile Org	anic Compounds	(GC) (Conti	nued)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130			05/14/22 12:33	05/15/22 15:01	1
- Method: Total BTEX - Total B	BTEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/16/22 16:56	1
- Method: 8015 NM - Diesel Ra	ange Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Total TPH	145	49.9	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Range	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9 U	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:05	1
Diesel Range Organics (Over C10-C28)	62.5	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:05	1

C28-C36)					
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	122	70 - 130	05/10/22 08:18	05/10/22 16:05	1
o-Terphenvl (Surr)	113	70 - 130	05/10/22 08:18	05/10/22 16:05	1

49.9

mg/Kg

05/10/22 08:18

05/10/22 16:05

82.6

Method: 300.0 - Anions, Ion Chron	Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	976	24.9	mg/Kg			05/12/22 07:44	5			

Client Sample ID: BH-94

Date Collected: 05/06/22 00:00

Lab Sample ID: 890-2290-3

Matrix: Solid

Date Received: 05/06/22 15:23

**Oll Range Organics (Over** 

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			05/14/22 12:33	05/15/22 15:28	1
1,4-Difluorobenzene (Surr)	102		70 - 130			05/14/22 12:33	05/15/22 15:28	1
- Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Ran	ige Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	412		50.0	mg/Kg			05/11/22 10:27	

Eurofins Carlsbad

3

7

9

10

12

14

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2290-1

Lab Sample ID: 890-2290-3

SDG: Lea County NM

Client Sample ID: BH-94

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
Diesel Range Organics (Over C10-C28)	247		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
OII Range Organics (Over C28-C36)	165		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)			70 - 130			05/10/22 08:18	05/10/22 14:16	1
o-Terphenyl (Surr)	100		70 - 130			05/10/22 08:18	05/10/22 14:16	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1770		24.9	mg/Kg			05/12/22 07:52	5

Lab Sample ID: 890-2290-4 **Client Sample ID: BH-95** Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 15:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 15:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 15:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/14/22 12:33	05/15/22 15:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 15:56	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/14/22 12:33	05/15/22 15:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			05/14/22 12:33	05/15/22 15:56	1
1,4-Difluorobenzene (Surr)	102		70 - 130			05/14/22 12:33	05/15/22 15:56	1
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/16/22 16:56	1
- Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	244		50.0	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Ra	nge Organics (Di	RO) (GC)						
	•	RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	•	Qualifier	<b>RL</b>	Unit mg/Kg	<u>D</u>	Prepared 05/10/22 08:18	Analyzed 05/10/22 14:37	Dil Fac
Method: 8015B NM - Diesel Ra Analyte C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier			<u>D</u>			Dil Fac
Analyte C6-C10 Diesel Range Organics (Over	Result   <50.0	Qualifier	50.0	mg/Kg	<u>D</u>	05/10/22 08:18	05/10/22 14:37	1
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	Result <50.0 113	Qualifier U	50.0 50.0	mg/Kg mg/Kg	<u>D</u>	05/10/22 08:18 05/10/22 08:18	05/10/22 14:37 05/10/22 14:37	1
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0   113	Qualifier U	50.0 50.0 50.0	mg/Kg mg/Kg	<u> </u>	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18	05/10/22 14:37 05/10/22 14:37 05/10/22 14:37	1 1

Job ID: 890-2290-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-95** Lab Sample ID: 890-2290-4

Date Collected: 05/06/22 00:00 Matrix: Solid Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	3780	49.5	mg/Kg			05/12/22 08:00	10		

**Client Sample ID: BH-96** Lab Sample ID: 890-2290-5

Date Collected: 05/06/22 00:00

Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 16:23	
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 16:23	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	107		70 - 130			05/14/22 12:33	05/15/22 16:23	
1,4-Difluorobenzene (Surr)	102		70 - 130			05/14/22 12:33	05/15/22 16:23	
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/16/22 16:56	
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)						
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	166		49.9	mg/Kg			05/11/22 10:27	
Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 15:21	
Diesel Range Organics (Over C10-C28)	55.3		49.9	mg/Kg		05/10/22 08:18	05/10/22 15:21	•
Oll Range Organics (Over C28-C36)	111		49.9	mg/Kg		05/10/22 08:18	05/10/22 15:21	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	107		70 - 130			05/10/22 08:18	05/10/22 15:21	
o-Terphenyl (Surr)	95		70 - 130			05/10/22 08:18	05/10/22 15:21	
Method: 300.0 - Anions, Ion C	hromatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1350		25.2	mg/Kg			05/12/22 08:08	5

Lab Sample ID: 890-2290-6

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-97

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/14/22 12:33	05/15/22 16:50	
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/14/22 12:33	05/15/22 16:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130			05/14/22 12:33	05/15/22 16:50	
1,4-Difluorobenzene (Surr)	101		70 - 130			05/14/22 12:33	05/15/22 16:50	
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/16/22 16:56	
Analyte Total TPH	Result	Qualifier	<b>RL</b> 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/11/22 10:27	Dil Fa
IOTALIPH -	238		49.9	mg/kg			05/11/22 10.27	
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 14:59	
Diesel Range Organics (Over C10-C28)	97.6		49.9	mg/Kg		05/10/22 08:18	05/10/22 14:59	
Oll Range Organics (Over C28-C36)	140		49.9	mg/Kg		05/10/22 08:18	05/10/22 14:59	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	108		70 - 130			05/10/22 08:18	05/10/22 14:59	
o-Terphenyl (Surr)	99		70 - 130			05/10/22 08:18	05/10/22 14:59	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble						
Analyte	Result	Qualifier	49.8	——— Unit mg/Kg	D	Prepared	Analyzed	Dil Fa

**Client Sample ID: BH-98** Lab Sample ID: 890-2290-7

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 17:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 17:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 17:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 17:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 17:16	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 17:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			05/14/22 12:33	05/15/22 17:16	1

**Eurofins Carlsbad** 

Matrix: Solid

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-98 Lab Sample ID: 890-2290-7

Date Collected: 05/06/22 00:00 Matrix: Solid
Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
---	--------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100	70 - 130	05/14/22 12:33	05/15/22 17:16	1

Method: Total	BTEX - Total	I BTEX Calculation	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/16/22 16:56	1

Method: 8015 NM - Diesel Rang	ge Organics (DRO) (GC	)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	102	50.0	mg/Kg			05/11/22 10:27	1

Method: 8015B	NM - Diesel	Range Or	ranice	(DRO)	(GC)	ľ
Methou. ou 136	MINI - DIESEI	Kange Or	gariics	(DKO)	(GC)	ı.

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 15:43	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 15:43	1
C10-C28)								
Oll Range Organics (Over	102		50.0	mg/Kg		05/10/22 08:18	05/10/22 15:43	1

C28-C36)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)		70 - 130	05/10/22 08:18	05/10/22 15:43	1
o-Terphenvl (Surr)	108	70 - 130	05/10/22 08:18	05/10/22 15:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2090		25.0	mg/Kg			05/12/22 13:33	5

Client Sample ID: BH-99 Lab Sample ID: 890-2290-8

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8021B - '	Volatila	Organic (	Compounds	(CC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			05/14/22 12:33	05/15/22 17:42	1
1,4-Difluorobenzene (Surr)	103		70 - 130			05/14/22 12:33	05/15/22 17:42	1

ı						
ı	Mothod	Total	DTEV	Total	DTEV	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402	ma/Ka			05/16/22 16:56	1

Method. 0013 MM - Dieser Kange Organics (DRO) (GC)	Method: 8015 NM - Die	esel Range C	Organics (	DRO)	(GC)
--	-----------------------	--------------	------------	------	------

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	73.6	50.0	mg/Kg			05/11/22 10:27	1

**Eurofins Carlsbad** 

2

3

4

6

9

11

13

....

**Matrix: Solid** 

Lab Sample ID: 890-2290-8

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-99

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
Oll Range Organics (Over C28-C36)	73.6		50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130			05/10/22 08:18	05/10/22 16:26	1
o-Terphenyl (Surr)	96		70 - 130			05/10/22 08:18	05/10/22 16:26	1
- Method: 300.0 - Anions, Ion C	hromatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2860		24.9	mg/Kg			05/12/22 13:41	5

Lab Sample ID: 890-2290-9 **Client Sample ID: BH-100** Matrix: Solid

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 18:09	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 18:09	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 18:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		05/14/22 12:33	05/15/22 18:09	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 18:09	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		05/14/22 12:33	05/15/22 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			05/14/22 12:33	05/15/22 18:09	1
1,4-Difluorobenzene (Surr)	99		70 - 130			05/14/22 12:33	05/15/22 18:09	1
Method: Total BTEX - Total B	ΓEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			05/16/22 16:56	1
- Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.8		49.9	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
00 0 10						05/10/22 08:18	05/10/22 16:49	1
	<49.9	U	49.9	mg/Kg		00/10/22 00:10	03/10/22 10.49	'
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		00/10/22 00:10		'
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <b>56.8</b>	U	49.9 49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over								
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	56.8		49.9			05/10/22 08:18	05/10/22 16:49	1

Lab Sample ID: 890-2290-9

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-100

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 300.0 - Anions, Ion Chrom	atography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5050	49.7	mg/Kg			05/12/22 13:49	10

Client Sample ID: BH-101 Lab Sample ID: 890-2290-10 **Matrix: Solid** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 18:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 18:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 18:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/14/22 18:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 18:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/14/22 18:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			05/14/22 12:37	05/14/22 18:28	1
1,4-Difluorobenzene (Surr)	101		70 - 130			05/14/22 12:37	05/14/22 18:28	1

Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Range O	rganics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 10:27	1

Unit

Prepared

Analyzed

Result Qualifier

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U F1 F2	49.9	mg/Kg		05/10/22 08:18	05/10/22 12:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 12:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 12:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130			05/10/22 08:18	05/10/22 12:49	1

o-Terphenyl (Surr)	103	70 - 130			05/10/22 08:18	05/10/22 12:49	1
Method: 300.0 - Anions, Ion Chrom	natography - Solubl	e					
Analyte	Result Qualifie	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2460	24.8	mg/Kg			05/12/22 13:57	5

**Client Sample ID: BH-102** Lab Sample ID: 890-2290-11 **Matrix: Solid** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8021B - Volatile Organic	Compounds (	GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	1

**Eurofins Carlsbad** 

Dil Fac

5/16/2022

Lab Sample ID: 890-2290-11

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-102** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/14/22 18:55	
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/14/22 18:55	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	103		70 - 130			05/14/22 12:37	05/14/22 18:55	
1,4-Difluorobenzene (Surr)	103		70 - 130			05/14/22 12:37	05/14/22 18:55	
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/16/22 16:56	
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 10:27	
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:32	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:32	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:32	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	124		70 - 130			05/10/22 08:18	05/10/22 17:32	
1-Chloroctane (Surr)						05/10/22 08:18	05/10/22 17:32	
, ,	118		70 - 130			03/10/22 00.10	03/10/22 17.32	
o-Terphenyl (Surr) : Method: 300.0 - Anions, Ion Chr		Soluble	70 - 130			03/10/22 00.10	03/10/22 17.32	
o-Terphenyl (Surr)	omatography -	Soluble Qualifier	70 <sub>-</sub> 130 <b>RL</b>	Unit	D	Prepared	Analyzed	Dil Fa

**Client Sample ID: BH-103** 

Date Collected: 05/06/22 00:00

Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 19:21	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 19:21	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 19:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/14/22 19:21	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 19:21	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/14/22 19:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			05/14/22 12:37	05/14/22 19:21	1
1,4-Difluorobenzene (Surr)	104		70 - 130			05/14/22 12:37	05/14/22 19:21	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2290-12

Matrix: Solid

Lab Sample ID: 890-2290-12

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-103** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:54	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:54	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130			05/10/22 08:18	05/10/22 17:54	1
o-Terphenyl (Surr)	97		70 - 130			05/10/22 08:18	05/10/22 17:54	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	• • •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7750		49.9	mg/Kg			05/12/22 14:30	10

Client Sample ID: BH-104

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 19:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 19:48	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 19:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/14/22 19:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/14/22 19:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/14/22 19:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			05/14/22 12:37	05/14/22 19:48	1
1,4-Difluorobenzene (Surr)	103		70 - 130			05/14/22 12:37	05/14/22 19:48	1
-								
•	EX Calculation							
Method: Total BTEX - Total BT		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX			RL	<mark>Unit</mark> mg/Kg	<u>D</u>		Analyzed 05/16/22 16:56	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX	<0.00398	U			<u>D</u>			Dil Fac
Method: Total BTEX - Total BT Analyte	Result <0.00398	U			<u>D</u>			Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran	Result <0.00398	O) (GC) Qualifier	0.00398	mg/Kg		Prepared	05/16/22 16:56	1
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH	Result <0.00398  age Organics (DR Result <50.0	U O) (GC) Qualifier U	0.00398	mg/Kg		Prepared	05/16/22 16:56  Analyzed	1
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte	result <0.00398  result <50.0  ange Organics (DR)  Result <50.0	U O) (GC) Qualifier U	0.00398	mg/Kg		Prepared	05/16/22 16:56  Analyzed	1

**Eurofins Carlsbad** 

Matrix: Solid

Lab Sample ID: 890-2290-13

Lab Sample ID: 890-2290-13

Job ID: 890-2290-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-104 Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC) (C	Continued)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 18:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 18:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	116		70 - 130			05/10/22 08:18	05/10/22 18:15	1
o-Terphenyl (Surr)	113		70 - 130			05/10/22 08:18	05/10/22 18:15	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3010		24.8	mg/Kg			05/12/22 14:38	5

**Client Sample ID: BH-105** Lab Sample ID: 890-2290-14 Matrix: Solid

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 20:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:15	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 20:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			05/14/22 12:37	05/14/22 20:15	1
1,4-Difluorobenzene (Surr)	92		70 - 130			05/14/22 12:37	05/14/22 20:15	1
Method: Total BTEX - Total BTI	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/16/22 16:56	1
- -			0.00399	mg/Kg			05/16/22 16:56	1
ି Method: 8015 NM - Diesel Rang	ge Organics (DR	O) (GC)				Prepared		
- -	ge Organics (DR		0.00399 RL 49.9	mg/Kg  Unit  mg/Kg	<u>D</u>	Prepared	05/16/22 16:56  Analyzed  05/11/22 10:27	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH	ge Organics (DR Result 176	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Ra	ge Organics (DR Result 176 nge Organics (D	O) (GC) Qualifier	RL	Unit	<u>D</u>		Analyzed 05/11/22 10:27	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH	ge Organics (DR Result 176 nge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	<b>RL</b> 49.9	Unit mg/Kg		Prepared  Prepared  05/10/22 08:18	Analyzed	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Rai Analyte C6-C10	ge Organics (DR Result 176 nge Organics (D Result	O) (GC) Qualifier  RO) (GC) Qualifier	RL 49.9	Unit mg/Kg		Prepared	Analyzed 05/11/22 10:27 Analyzed	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over	ge Organics (DR Result 176  nge Organics (D Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier	RL 49.9	Unit mg/Kg  Unit mg/Kg		Prepared 05/10/22 08:18	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:02	Dil Fac  Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR Result 176  nge Organics (D Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier	RL 49.9	Unit mg/Kg  Unit mg/Kg		Prepared 05/10/22 08:18	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:02	Dil Fac  Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH Method: 8015B NM - Diesel Rai Analyte	ge Organics (DR Result 176  nge Organics (D Result <49.9 54.4	O) (GC) Qualifier  RO) (GC) Qualifier	RL 49.9 RL 49.9 49.9	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:02 05/10/22 20:02	Dil Fac  Dil Fac  1  1
Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR Result 176  nge Organics (D Result <49.9 54.4	O) (GC) Qualifier  RO) (GC) Qualifier U	RL 49.9 RL 49.9 49.9	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:02 05/10/22 20:02	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	ge Organics (DR Result 176  nge Organics (D Result <49.9 54.4 122	O) (GC) Qualifier  RO) (GC) Qualifier U	RL 49.9  RL 49.9  49.9  49.9	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:02 05/10/22 20:02 05/10/22 20:02	Dil Fac  Dil Fac  1  1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2290-1

Lab Sample ID: 890-2290-14

SDG: Lea County NM

**Client Sample ID: BH-105** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Matrix: Solid

ı	Method: 300.0 - Anions, Ion Chron	natography -	Soluble						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	954		5.01	mg/Kg			05/12/22 15:03	1

**Client Sample ID: BH-106** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

<0.800 U

Lab Sample ID: 890-2290-15

Analyzed

05/16/22 16:56

Dil Fac

**Matrix: Solid** 

Sample Depth: 5

Total BTEX

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Toluene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Ethylbenzene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
m-Xylene & p-Xylene	<0.800	U	0.800	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
o-Xylene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Xylenes, Total	<0.800	U	0.800	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			05/14/22 12:37	05/14/22 22:04	200
1,4-Difluorobenzene (Surr)	94		70 - 130			05/14/22 12:37	05/14/22 22:04	200

Method: 8015 NM - Dies	el Range Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9690	249	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Die	sel Range Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

0.800

Unit

mg/Kg

Prepared

<b>,</b>		- <del></del>				
C6-C10	412	249	mg/Kg	05/10/22 08:18	05/10/22 18:37	5
Diesel Range Organics (Over C10-C28)	7610	249	mg/Kg	05/10/22 08:18	05/10/22 18:37	5
Oll Range Organics (Over C28-C36)	1670	249	mg/Kg	05/10/22 08:18	05/10/22 18:37	5
Surrogate	%Recovery Qualifier	l imits		Prenared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	110		70 - 130	05/10/22 08:18	05/10/22 18:37	5
o-Terphenyl (Surr)	105		70 - 130	05/10/22 08:18	05/10/22 18:37	5

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	736		24.9	mg/Kg			05/12/22 16:27	5

Lab Sample ID: 890-2290-16

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-107

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/14/22 12:37	05/14/22 20:42	
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/14/22 12:37	05/14/22 20:42	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	90		70 - 130			05/14/22 12:37	05/14/22 20:42	
1,4-Difluorobenzene (Surr)	98		70 - 130			05/14/22 12:37	05/14/22 20:42	
Method: Total BTEX - Total BTI	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401	mg/Kg			05/16/22 16:56	
Analyte Total TPH	Result	Qualifier	<b>RL</b> 50.0		<u>D</u>	Prepared	Analyzed 05/11/22 10:27	Dil F
		DO) (OO)		0 0				
Method: 8015B NM - Diesel Ra Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
C6-C10	<50.0		50.0	<del>                                 </del>		05/10/22 08:18	05/10/22 19:41	Dille
Diesel Range Organics (Over	169	O	50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	
C10-C28)	103		00.0	mg/ng		00/10/22 00:10	00/10/22 10:11	
Oll Range Organics (Over	169		50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	
C28-C36)								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
1-Chlorooctane (Surr)	113		70 - 130			05/10/22 08:18	05/10/22 19:41	
o-Terphenyl (Surr)	99		70 - 130			05/10/22 08:18	05/10/22 19:41	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
			24.9	mg/Kg			05/12/22 16:35	

Client Sample ID: BH-108
Date Collected: 05/06/22 00:00
Date Received: 05/06/22 15:23

Date Received: 05/06/22 15:23 Sample Depth: 5 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2290-17

Matrix: Solid

Method: 8021B - Volatile Orga	nic Compounds (	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Toluene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Ethylbenzene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
m-Xylene & p-Xylene	<0.795	U	0.795	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
o-Xylene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Xylenes, Total	<0.795	U	0.795	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			05/14/22 12:37	05/14/22 22:31	200

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-108** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Sample Depth: 5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2290-17

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130			05/14/22 12:37	05/14/22 22:31	200
Method: Total BTEX - Total BTE	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.795	U	0.795	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Rang	je Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8980		250	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Rar	nge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<250	U	250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
Diesel Range Organics (Over C10-C28)	7670		250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
Oll Range Organics (Over	1310		250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
C28-C36)								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	100		70 - 130			05/10/22 08:18	05/10/22 18:58	5
o-Terphenyl (Surr)	98		70 - 130			05/10/22 08:18	05/10/22 18:58	5
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		25.1	mg/Kg			05/12/22 16:44	5

Client Sample ID: BH-109 Lab Sample ID: 890-2290-18 **Matrix: Solid** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			05/14/22 12:37	05/14/22 21:09	1
1,4-Difluorobenzene (Surr)	105		70 - 130			05/14/22 12:37	05/14/22 21:09	1
- Method: Total BTEX - Total B1	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/16/22 16:56	1
- Method: 8015 NM - Diesel Rar	ge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			49.9				05/11/22 10:27	

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-109

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:24	1
Oll Range Organics (Over C28-C36)	86.4		49.9	mg/Kg		05/10/22 08:18	05/10/22 20:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)			70 - 130			05/10/22 08:18	05/10/22 20:24	1
o-Terphenyl (Surr)	109		70 - 130			05/10/22 08:18	05/10/22 20:24	1
- Method: 300.0 - Anions, Ion C	hromatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	946		25.0	mg/Kg			05/12/22 15:14	5

**Client Sample ID: BH-110** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

REMOVED FROM
ANALYSIS TABLE

Lab Sample ID: 890-2290-19

Lab Sample ID: 890-2290-18

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D

Prepared Analyzed Dil Fac Benzene <0.402 U 0.402 05/14/22 12:37 05/14/22 22:58 200 mg/Kg Toluene <0.402 U 0.402 05/14/22 12:37 05/14/22 22:58 200 mg/Kg Ethylbenzene mg/Kg 05/14/22 22:58 <0.402 U 0.402 05/14/22 12:37 200 m-Xylene & p-Xylene <0.805 U 0.805 mg/Kg 05/14/22 12:37 05/14/22 22:58 200 <0.402 U 0.402 05/14/22 12:37 05/14/22 22:58 200 o-Xylene mg/Kg Xylenes, Total <0.805 U 0.805 mg/Kg 05/14/22 12:37 05/14/22 22:58 200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	05/14/22 12:3	7 05/14/22 22:58	200
1,4-Difluorobenzene (Surr)	96		70 - 130	05/14/22 12:3	7 05/14/22 22:58	200

**Method: Total BTEX - Total BTEX Calculation** 

Analyte Result Qualifier Unit Prepared Analyzed Dil Fac Total BTEX <0.805 U 0.805 05/16/22 16:56 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac **Total TPH** 50.0 mg/Kg 05/11/22 10:27

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

motification of the process training	organico (Di	(00)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/11/22 07:03	1
Diesel Range Organics (Over	1400		50.0	mg/Kg		05/10/22 08:18	05/11/22 07:03	1
C10-C28)								
Oll Range Organics (Over	263		50.0	mg/Kg		05/10/22 08:18	05/11/22 07:03	1
C28-C36)								

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	111		70 - 130	05/10/22 08:18	05/11/22 07:03	1
o-Terphenyl (Surr)	106		70 - 130	05/10/22 08:18	05/11/22 07:03	1

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-110** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 **REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-2290-19

Matrix: Solid

Sample Depth: 5

Me	thod: 300.0 - Anions, Ion Chromat	ography -	Soluble						
Ana	alyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chl	oride	577		25.2	mg/Kg			05/12/22 16:52	5

**Client Sample ID: BH-111** Lab Sample ID: 890-2290-20 Matrix: Solid

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Method: 8021B - Volatile Orga	anic Compounds (	GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/14/22 12:37	05/14/22 21:36	
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/14/22 12:37	05/14/22 21:36	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		70 - 130			05/14/22 12:37	05/14/22 21:36	
1,4-Difluorobenzene (Surr)	100		70 - 130			05/14/22 12:37	05/14/22 21:36	
Method: Total BTEX - Total B	TEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00404	U	0.00404	mg/Kg			05/16/22 16:56	
Analyte Total TPH	Result 64.3	Qualifier	<b>RL</b> 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/11/22 10:27	Dil Fa
Total IPH	64.3		49.9	mg/kg			05/11/22 10:27	
Method: 8015B NM - Diesel R								
Analyte		Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:45	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:45	
OII Range Organics (Over C28-C36)	64.3		49.9	mg/Kg		05/10/22 08:18	05/10/22 20:45	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	103		70 - 130			05/10/22 08:18	05/10/22 20:45	
	94		70 - 130			05/10/22 08:18	05/10/22 20:45	
o-Terphenyl (Surr)								
o-Terphenyl (Surr) : Method: 300.0 - Anions, Ion C	Chromatography -	Soluble						
,	•	Soluble Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

Lab Sample ID: 890-2290-21

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-112** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			05/14/22 12:37	05/15/22 00:44	1
1,4-Difluorobenzene (Surr)	92		70 - 130			05/14/22 12:37	05/15/22 00:44	1
Method: Total BTEX - Total BTE)	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	362		50.0	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	362	*1	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:05	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:05	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	116		70 - 130			05/09/22 16:33	05/10/22 19:05	1
o-Terphenyl (Surr)	123		70 - 130			05/09/22 16:33	05/10/22 19:05	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	374		5.00	mg/Kg			05/12/22 13:00	1

**Client Sample ID: BH-113** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 01:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 01:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 01:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/15/22 01:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 01:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/15/22 01:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			05/14/22 12:37	05/15/22 01:10	1
1,4-Difluorobenzene (Surr)	102		70 - 130			05/14/22 12:37	05/15/22 01:10	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2290-22

**Matrix: Solid** 

Lab Sample ID: 890-2290-22

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-113

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U *1	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	101		70 - 130			05/09/22 16:33	05/10/22 19:27	1
o-Terphenyl (Surr)	108		70 - 130			05/09/22 16:33	05/10/22 19:27	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	942		4.97	mg/Kg			05/12/22 13:09	1

### **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (
		BFB1	DFBZ1	
∟ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-2290-1	BH-92	98	103	
90-2290-2	BH-93	96	100	
390-2290-3	BH-94	99	102	
90-2290-4	BH-95	99	102	
390-2290-5	BH-96	107	102	
90-2290-6	BH-97	106	101	
90-2290-7	BH-98	103	100	
390-2290-8	BH-99	113	103	
890-2290-9	BH-100	109	99	
390-2290-10	BH-101	105	101	
390-2290-10 MS	BH-101	103	108	
390-2290-10 MSD	BH-101	87	96	
90-2290-11	BH-102	103	103	
90-2290-12	BH-103	108	104	
90-2290-13	BH-104	106	103	
90-2290-14	BH-105	105	92	
90-2290-15	BH-106	90	94	
390-2290-16	BH-107	90	98	
90-2290-17	BH-108	99	98	
390-2290-18	BH-109	110	105	
390-2290-19	BH-110	74	96	
390-2290-20	BH-111	100	100	
390-2290-21	BH-112	87	92	
390-2290-22	BH-113	107	102	
.CS 880-25563/1-A	Lab Control Sample	95	103	
_CS 880-25564/1-A	Lab Control Sample	101	100	
_CSD 880-25563/2-A	Lab Control Sample Dup	99	105	
.CSD 880-25564/2-A	Lab Control Sample Dup	96	107	
MB 880-25563/5-A	Method Blank	77	94	
MB 880-25564/5-A	Method Blank	77	92	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

		1001	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14554-A-1-C MS	Matrix Spike	109	108
880-14554-A-1-D MSD	Matrix Spike Duplicate	94	94
890-2290-1	BH-92	119	108
890-2290-2	BH-93	122	113
890-2290-3	BH-94	114	100
890-2290-4	BH-95	104	93
890-2290-5	BH-96	107	95
890-2290-6	BH-97	108	99
890-2290-7	BH-98	117	108

### **Surrogate Summary**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2290-1

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2290-8	BH-99	107	96	
890-2290-9	BH-100	106	96	
890-2290-10	BH-101	105	103	
890-2290-10 MS	BH-101	107	92	
890-2290-10 MSD	BH-101	121	105	
890-2290-11	BH-102	124	118	
890-2290-12	BH-103	105	97	
890-2290-13	BH-104	116	113	
890-2290-14	BH-105	108	96	
890-2290-15	BH-106	110	105	
890-2290-16	BH-107	113	99	
890-2290-17	BH-108	100	98	
890-2290-18	BH-109	117	109	
890-2290-19	BH-110	111	106	
890-2290-20	BH-111	103	94	
390-2290-21	BH-112	116	123	
390-2290-22	BH-113	101	108	
_CS 880-25199/2-A	Lab Control Sample	123	124	
LCS 880-25221/2-A	Lab Control Sample	104	93	
LCSD 880-25199/3-A	Lab Control Sample Dup	129	132 S1+	
_CSD 880-25221/3-A	Lab Control Sample Dup	124	109	
MB 880-25199/1-A	Method Blank	99	103	
MB 880-25221/1-A	Method Blank	110	117	

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25563/5-A

**Matrix: Solid** Analysis Batch: 25561 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25563

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 07:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 07:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 07:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 07:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 07:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 07:45	1

MB MB

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77	70 - 130	05/14/22 12:33	05/15/22 07:45	1
1,4-Difluorobenzene (Surr)	94	70 - 130	05/14/22 12:33	05/15/22 07:45	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-25563/1-A

Matrix: Solid

Analysis Batch: 25561

Prep Type: Total/NA

Prep Batch: 25563

	<b>Spike</b>	LCS	LUS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1040		mg/Kg		104	70 - 130	
Toluene	0.100	0.09693		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.09485		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1880		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09337		mg/Kg		93	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: LCSD 880-25563/2-A

Matrix: Solid

Analysis Batch: 25561

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 25563

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1174		mg/Kg		117	70 - 130	12	35	
Toluene	0.100	0.1064		mg/Kg		106	70 - 130	9	35	
Ethylbenzene	0.100	0.1024		mg/Kg		102	70 - 130	8	35	
m-Xylene & p-Xylene	0.200	0.2038		mg/Kg		102	70 - 130	8	35	
o-Xylene	0.100	0.1007		mg/Kg		101	70 - 130	8	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1 4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: MB 880-25564/5-A

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25564

	11.10	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
Toluene	< 0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-25564/5-A

**Matrix: Solid** 

Analysis Batch: 25561

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 25564

	III.D	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:37	05/14/22 18:01	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	05/14/22 12:37 0	5/14/22 18:01	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/14/22 12:37 0	5/14/22 18:01	1

Lab Sample ID: LCS 880-25564/1-A

**Matrix: Solid** 

Analysis Batch: 25561

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 25564

	Spike	LCS LCS			%Rec	
Analyte	Added	Result Qualif	ier Unit	D %Rec	Limits	
Benzene	0.100	0.1104	mg/Kg	110	70 - 130	
Toluene	0.100	0.1137	mg/Kg	114	70 - 130	
Ethylbenzene	0.100	0.1151	mg/Kg	115	70 - 130	
m-Xylene & p-Xylene	0.200	0.2290	mg/Kg	115	70 - 130	
o-Xylene	0.100	0.1106	mg/Kg	111	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-25564/2-A

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25564

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1232	mg/Kg		123	70 - 130	11	35
Toluene	0.100	0.1126	mg/Kg		113	70 - 130	1	35
Ethylbenzene	0.100	0.1066	mg/Kg		107	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2139	mg/Kg		107	70 - 130	7	35
o-Xylene	0.100	0.1122	mg/Kg		112	70 - 130	1	35

LCSD LCSD

Surrogate	%Recovery Qualifi	er Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1,4-Difluorobenzene (Surr)	107	70 - 130

Lab Sample ID: 890-2290-10 MS

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: BH-101

Prep Type: Total/NA

Prep Batch: 25564

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.1011		mg/Kg		100	70 - 130	
Toluene	< 0.00199	U	0.101	0.09136		mg/Kg		91	70 - 130	
Ethylbenzene	< 0.00199	U	0.101	0.08965		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1797		mg/Kg		89	70 - 130	

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2290-1 SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2290-10 MS **Matrix: Solid** 

Analysis Batch: 25561

Client Sample ID: BH-101 Prep Type: Total/NA Prep Batch: 25564

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Unit %Rec Limits D <0.00199 U 0.101 0.08784 87 70 - 130 o-Xylene mg/Kg

MS MS %Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 103 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 108

Lab Sample ID: 890-2290-10 MSD Client Sample ID: BH-101

**Matrix: Solid** 

Analyte

**Analysis Batch: 25561** Prep Batch: 25564 MSD MSD Sample Sample Spike Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits RPD Limit D Benzene <0.00199 U 0.100 0.08471 mg/Kg 85 70 - 130 18 35 Toluene < 0.00199 U 0.100 0.08214 mg/Kg 82 70 - 130 11 35 35

Ethylbenzene <0.00199 U 0.100 0.08185 mg/Kg 82 70 - 130 9 m-Xylene & p-Xylene <0.00398 U 0.200 0.1660 mg/Kg 83 70 - 130 8 35 <0.00199 0.100 0.07935 79 70 - 130 35 o-Xylene U mg/Kg 10 MSD MSD

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 87 70 - 130 1,4-Difluorobenzene (Surr) 96 70 - 130

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-25199/1-A

Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25231 Prep Batch: 25199

MB MB Result Qualifier RL Unit D Prepared Dil Fac Analyte Analyzed C6-C10 <50.0 50.0 U mg/Kg 05/09/22 16:33 05/10/22 11:21 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 05/09/22 16:33 05/10/22 11:21 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 05/09/22 16:33 05/10/22 11:21

MB MB Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 05/10/22 11:21 1-Chlorooctane (Surr) 70 - 130 05/09/22 16:33 99 o-Terphenyl (Surr) 103 70 - 130 05/09/22 16:33 05/10/22 11:21

Lab Sample ID: LCS 880-25199/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 25231

Prep Batch: 25199 Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 1000 858.3 mg/Kg 86 70 - 130 1000 1226 123 70 - 130 Diesel Range Organics (Over mg/Kg

C10-C28)

LCS LCS %Recovery Surrogate Qualifier Limits 1-Chlorooctane (Surr) 70 - 130 123

**Eurofins Carlsbad** 

Prep Type: Total/NA

Prep Type: Total/NA

Job ID: 890-2290-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-25199/2-A

**Matrix: Solid** 

Analysis Batch: 25231

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 25199

LCS LCS

Surrogate %Recovery Qualifier Limits o-Terphenyl (Surr) 124 70 - 130

Lab Sample ID: LCSD 880-25199/3-A

Lab Sample ID: 880-14554-A-1-C MS

**Matrix: Solid** 

Analysis Batch: 25231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25199

%Rec RPD

LCSD LCSD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit C6-C10 1000 1077 mg/Kg 108 70 - 130 23 20 1000 1304 mg/Kg 130 70 - 130 6 20 Diesel Range Organics (Over

C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 129 70 - 130 1-Chlorooctane (Surr) 70 - 130 o-Terphenyl (Surr) 132 S1+

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25199

Analysis Batch: 25231 Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit C6-C10 <50.0 U \*1 1000 1064 mg/Kg 106 70 - 130 <50.0 U 1000 1112 109 70 - 130 Diesel Range Organics (Over mg/Kg

C10-C28)

**Matrix: Solid** 

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	109		70 - 130
o-Terphenyl (Surr)	108		70 - 130

Lab Sample ID: 880-14554-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 25231** 

Prep Type: Total/NA

Prep Batch: 25199

**RPD** 

Sample Sample Spike MSD MSD %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit C6-C10 <50.0 U \*1 998 899.1 90 70 - 130 17 20 mg/Kg <50.0 U 998 969.3 95 70 - 130 Diesel Range Organics (Over mg/Kg 14 20

C10-C28)

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane (Surr)	94	70 - 130
o-Terphenyl (Surr)	94	70 - 130

Lab Sample ID: MB 880-25221/1-A

**Matrix: Solid** 

**Analysis Batch: 25235** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25221

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 11:44	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 11:44	1
C10-C28)								

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2290-1 SDG: Lea County NM

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-25221/1-A **Matrix: Solid** 

Analysis Batch: 25235

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 25221

Dil Fac

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 11:44	1

1000

мв мв

MB MB

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	110		70 - 130
o-Terphenyl (Surr)	117		70 - 130

05/10/22 08:18 05/10/22 11:44 05/10/22 08:18 05/10/22 11:44

Analyzed

Prepared

**Client Sample ID: Lab Control Sample** 

70 - 130

**Matrix: Solid** 

**Analysis Batch: 25235** 

Lab Sample ID: LCS 880-25221/2-A

						Prep Batch: 252	21
Spike	LCS	LCS				%Rec	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
 1000	1043		mg/Kg		104	70 - 130	

mg/Kg

993.9

Diesel Range Organics (Over C10-C28)

Analyte C6-C10

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130
o-Terphenyl (Surr)	93		70 - 130

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-25221/3-A **Matrix: Solid** 

**Analysis Batch: 25235** 

iciit	outlible ib. Eub outlitor outlible bup
	Prep Type: Total/NA
	Prep Batch: 25221

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier RPD Limit Unit %Rec Limits C6-C10 1000 1171 mg/Kg 117 70 - 130 12 20 1000 Diesel Range Organics (Over 1177 mg/Kg 118 70 - 130 17 20 C10-C28)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	124		70 - 130
o-Terphenyl (Surr)	109		70 - 130

Lab Sample ID: 890-2290-10 MS Client Sample ID: BH-101 Matrix: Solid Prep Type: Total/NA

**Analysis Batch: 25235** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C10	<49.9	U F1 F2	1000	1218		mg/Kg		119	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	983.9		mg/Kg		98	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	107		70 - 130
o-Terphenyl (Surr)	92		70 - 130

**Eurofins Carlsbad** 

Prep Batch: 25221

Job ID: 890-2290-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

....

Lab Sample ID: 890-2290-10 MSD Client Sample ID: BH-101 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25235 Prep Batch: 25221

Sample Sample Spike MSD MSD Result Qualifier RPD Limit Analyte babbA Result Qualifier Unit %Rec Limits C6-C10 <49.9 U F1 F2 998 1540 F1 F2 mg/Kg 151 70 - 130 23 20 Diesel Range Organics (Over <49.9 U 998 1141 mg/Kg 114 70 - 130 15 20

C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	121		70 - 130
o-Terphenyl (Surr)	105		70 - 130

### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25289/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25351

мв мв Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 5.00 Chloride <5.00 U mg/Kg 05/12/22 06:55

Lab Sample ID: LCS 880-25289/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 25351

Spike LCS LCS %Rec Result Qualifier babbA Analyte %Rec Limits Unit Chloride 250 270.0 mg/Kg 108 90 - 110

Lab Sample ID: LCSD 880-25289/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 25351** 

	Spike	LCSD	LCSD			%Rec		RPD
Analyte	Added	Result	Qualifier U	Jnit [	0 %Rec	Limits	RPD	Limit
Chloride	250	269.9	n	ng/Kg	108	90 - 110	0	20

Lab Sample ID: 890-2290-1 MS Client Sample ID: BH-92 **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25351

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	4070	F1	2530	6956	F1	ma/Ka		114	90 - 110	

Lab Sample ID: 890-2290-1 MSD Client Sample ID: BH-92 **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 25351											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	4070	F1	2530	6972	F1	mg/Kg		115	90 - 110	0	20

**Eurofins Carlsbad** 

5/16/2022

Job ID: 890-2290-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2290-11 MS Client Sample ID: BH-102 **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25351

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2550		1260	3909		mg/Kg		107	90 - 110	

Client Sample ID: BH-102 Lab Sample ID: 890-2290-11 MSD **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25351

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 2550 1260 3911 mg/Kg 107 90 - 110

Lab Sample ID: MB 880-25414/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25429

мв мв Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 05/12/22 11:56 mg/Kg

Lab Sample ID: LCS 880-25414/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 25429** 

		Spike	LCS	LCS				%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride		250	245.3		mg/Kg	_	98	90 - 110	

Lab Sample ID: LCSD 880-25414/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25429

	Opike	LOOD	LOGD				/orkec		KFD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	245.1		mg/Kg		98	90 - 110	0	20	

Snika

ICSD ICSD

Lab Sample ID: 880-14738-A-1-B MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 25429** 

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	208		248	438 3		ma/Ka		93	90 110	

Lab Sample ID: 880-14738-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 25429** 

7 many old Batolin 20 120												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	208		248	435.7		mg/Kg		92	90 - 110	1	20	

**Eurofins Carlsbad** 

PPN

% Pac

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

# **GC VOA**

### Analysis Batch: 25561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Total/NA	Solid	8021B	25563
890-2290-2	BH-93	Total/NA	Solid	8021B	25563
890-2290-3	BH-94	Total/NA	Solid	8021B	25563
890-2290-4	BH-95	Total/NA	Solid	8021B	25563
890-2290-5	BH-96	Total/NA	Solid	8021B	25563
890-2290-6	BH-97	Total/NA	Solid	8021B	25563
890-2290-7	BH-98	Total/NA	Solid	8021B	25563
890-2290-8	BH-99	Total/NA	Solid	8021B	25563
890-2290-9	BH-100	Total/NA	Solid	8021B	25563
890-2290-10	BH-101	Total/NA	Solid	8021B	25564
890-2290-11	BH-102	Total/NA	Solid	8021B	25564
890-2290-12	BH-103	Total/NA	Solid	8021B	25564
890-2290-13	BH-104	Total/NA	Solid	8021B	25564
890-2290-14	BH-105	Total/NA	Solid	8021B	25564
890-2290-15	BH-106	Total/NA	Solid	8021B	25564
890-2290-16	BH-107	Total/NA	Solid	8021B	25564
890-2290-17	BH-108	Total/NA	Solid	8021B	25564
890-2290-18	BH-109	Total/NA	Solid	8021B	25564
890-2290-19	BH-110	Total/NA	Solid	8021B	25564
890-2290-20	BH-111	Total/NA	Solid	8021B	25564
890-2290-21	BH-112	Total/NA	Solid	8021B	25564
890-2290-22	BH-113	Total/NA	Solid	8021B	25564
MB 880-25563/5-A	Method Blank	Total/NA	Solid	8021B	25563
MB 880-25564/5-A	Method Blank	Total/NA	Solid	8021B	25564
LCS 880-25563/1-A	Lab Control Sample	Total/NA	Solid	8021B	25563
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	8021B	25564
LCSD 880-25563/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25563
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25564
890-2290-10 MS	BH-101	Total/NA	Solid	8021B	25564
890-2290-10 MSD	BH-101	Total/NA	Solid	8021B	25564

#### Prep Batch: 25563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Total/NA	Solid	5035	
890-2290-2	BH-93	Total/NA	Solid	5035	
890-2290-3	BH-94	Total/NA	Solid	5035	
890-2290-4	BH-95	Total/NA	Solid	5035	
890-2290-5	BH-96	Total/NA	Solid	5035	
890-2290-6	BH-97	Total/NA	Solid	5035	
890-2290-7	BH-98	Total/NA	Solid	5035	
890-2290-8	BH-99	Total/NA	Solid	5035	
890-2290-9	BH-100	Total/NA	Solid	5035	
MB 880-25563/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25563/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25563/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

### Prep Batch: 25564

<b>Lab Sample ID</b> 890-2290-10	Client Sample ID BH-101	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
890-2290-11	BH-102	Total/NA	Solid	5035	
890-2290-12	BH-103	Total/NA	Solid	5035	

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **GC VOA (Continued)**

# Prep Batch: 25564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2290-13	BH-104	Total/NA	Solid	5035	
890-2290-14	BH-105	Total/NA	Solid	5035	
890-2290-15	BH-106	Total/NA	Solid	5035	
890-2290-16	BH-107	Total/NA	Solid	5035	
890-2290-17	BH-108	Total/NA	Solid	5035	
890-2290-18	BH-109	Total/NA	Solid	5035	
890-2290-19	BH-110	Total/NA	Solid	5035	
890-2290-20	BH-111	Total/NA	Solid	5035	
890-2290-21	BH-112	Total/NA	Solid	5035	
890-2290-22	BH-113	Total/NA	Solid	5035	
MB 880-25564/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2290-10 MS	BH-101	Total/NA	Solid	5035	
890-2290-10 MSD	BH-101	Total/NA	Solid	5035	

#### **Analysis Batch: 25658**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2290-1	BH-92	Total/NA	Solid	Total BTEX	-
890-2290-2	BH-93	Total/NA	Solid	Total BTEX	
890-2290-3	BH-94	Total/NA	Solid	Total BTEX	
890-2290-4	BH-95	Total/NA	Solid	Total BTEX	
890-2290-5	BH-96	Total/NA	Solid	Total BTEX	
890-2290-6	BH-97	Total/NA	Solid	Total BTEX	
890-2290-7	BH-98	Total/NA	Solid	Total BTEX	
890-2290-8	BH-99	Total/NA	Solid	Total BTEX	
890-2290-9	BH-100	Total/NA	Solid	Total BTEX	
890-2290-10	BH-101	Total/NA	Solid	Total BTEX	
890-2290-11	BH-102	Total/NA	Solid	Total BTEX	
890-2290-12	BH-103	Total/NA	Solid	Total BTEX	
890-2290-13	BH-104	Total/NA	Solid	Total BTEX	
890-2290-14	BH-105	Total/NA	Solid	Total BTEX	
890-2290-15	BH-106	Total/NA	Solid	Total BTEX	
890-2290-16	BH-107	Total/NA	Solid	Total BTEX	
890-2290-17	BH-108	Total/NA	Solid	Total BTEX	
890-2290-18	BH-109	Total/NA	Solid	Total BTEX	
890-2290-19	BH-110	Total/NA	Solid	Total BTEX	
890-2290-20	BH-111	Total/NA	Solid	Total BTEX	
890-2290-21	BH-112	Total/NA	Solid	Total BTEX	
890-2290-22	BH-113	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

### Prep Batch: 25199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-21	BH-112	Total/NA	Solid	8015NM Prep	
890-2290-22	BH-113	Total/NA	Solid	8015NM Prep	
MB 880-25199/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25199/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14554-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

**Eurofins Carlsbad** 

5/16/2022

1

\_

Л

6

8

10

12

13

14

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

# GC Semi VOA (Continued)

# Prep Batch: 25199 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14554-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Prep Batch: 25221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Total/NA	Solid	8015NM Prep	
890-2290-2	BH-93	Total/NA	Solid	8015NM Prep	
890-2290-3	BH-94	Total/NA	Solid	8015NM Prep	
890-2290-4	BH-95	Total/NA	Solid	8015NM Prep	
890-2290-5	BH-96	Total/NA	Solid	8015NM Prep	
890-2290-6	BH-97	Total/NA	Solid	8015NM Prep	
890-2290-7	BH-98	Total/NA	Solid	8015NM Prep	
890-2290-8	BH-99	Total/NA	Solid	8015NM Prep	
890-2290-9	BH-100	Total/NA	Solid	8015NM Prep	
890-2290-10	BH-101	Total/NA	Solid	8015NM Prep	
890-2290-11	BH-102	Total/NA	Solid	8015NM Prep	
890-2290-12	BH-103	Total/NA	Solid	8015NM Prep	
890-2290-13	BH-104	Total/NA	Solid	8015NM Prep	
890-2290-14	BH-105	Total/NA	Solid	8015NM Prep	
890-2290-15	BH-106	Total/NA	Solid	8015NM Prep	
890-2290-16	BH-107	Total/NA	Solid	8015NM Prep	
890-2290-17	BH-108	Total/NA	Solid	8015NM Prep	
890-2290-18	BH-109	Total/NA	Solid	8015NM Prep	
890-2290-19	BH-110	Total/NA	Solid	8015NM Prep	
890-2290-20	BH-111	Total/NA	Solid	8015NM Prep	
MB 880-25221/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25221/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25221/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2290-10 MS	BH-101	Total/NA	Solid	8015NM Prep	
890-2290-10 MSD	BH-101	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 25231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-21	BH-112	Total/NA	Solid	8015B NM	25199
890-2290-22	BH-113	Total/NA	Solid	8015B NM	25199
MB 880-25199/1-A	Method Blank	Total/NA	Solid	8015B NM	25199
LCS 880-25199/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25199
LCSD 880-25199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25199
880-14554-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25199
880-14554-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25199

### Analysis Batch: 25235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Total/NA	Solid	8015B NM	25221
890-2290-2	BH-93	Total/NA	Solid	8015B NM	25221
890-2290-3	BH-94	Total/NA	Solid	8015B NM	25221
890-2290-4	BH-95	Total/NA	Solid	8015B NM	25221
890-2290-5	BH-96	Total/NA	Solid	8015B NM	25221
890-2290-6	BH-97	Total/NA	Solid	8015B NM	25221
890-2290-7	BH-98	Total/NA	Solid	8015B NM	25221
890-2290-8	BH-99	Total/NA	Solid	8015B NM	25221
890-2290-9	BH-100	Total/NA	Solid	8015B NM	25221

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

# GC Semi VOA (Continued)

# **Analysis Batch: 25235 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-10	BH-101	Total/NA	Solid	8015B NM	25221
890-2290-11	BH-102	Total/NA	Solid	8015B NM	25221
890-2290-12	BH-103	Total/NA	Solid	8015B NM	25221
890-2290-13	BH-104	Total/NA	Solid	8015B NM	25221
890-2290-14	BH-105	Total/NA	Solid	8015B NM	25221
890-2290-15	BH-106	Total/NA	Solid	8015B NM	25221
890-2290-16	BH-107	Total/NA	Solid	8015B NM	25221
890-2290-17	BH-108	Total/NA	Solid	8015B NM	25221
890-2290-18	BH-109	Total/NA	Solid	8015B NM	25221
890-2290-19	BH-110	Total/NA	Solid	8015B NM	25221
890-2290-20	BH-111	Total/NA	Solid	8015B NM	25221
MB 880-25221/1-A	Method Blank	Total/NA	Solid	8015B NM	25221
LCS 880-25221/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25221
LCSD 880-25221/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25221
890-2290-10 MS	BH-101	Total/NA	Solid	8015B NM	25221
890-2290-10 MSD	BH-101	Total/NA	Solid	8015B NM	25221

### Analysis Batch: 25343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2290-1	BH-92	Total/NA	Solid	8015 NM	
890-2290-2	BH-93	Total/NA	Solid	8015 NM	
890-2290-3	BH-94	Total/NA	Solid	8015 NM	
890-2290-4	BH-95	Total/NA	Solid	8015 NM	
890-2290-5	BH-96	Total/NA	Solid	8015 NM	
890-2290-6	BH-97	Total/NA	Solid	8015 NM	
890-2290-7	BH-98	Total/NA	Solid	8015 NM	
890-2290-8	BH-99	Total/NA	Solid	8015 NM	
890-2290-9	BH-100	Total/NA	Solid	8015 NM	
890-2290-10	BH-101	Total/NA	Solid	8015 NM	
890-2290-11	BH-102	Total/NA	Solid	8015 NM	
890-2290-12	BH-103	Total/NA	Solid	8015 NM	
890-2290-13	BH-104	Total/NA	Solid	8015 NM	
890-2290-14	BH-105	Total/NA	Solid	8015 NM	
890-2290-15	BH-106	Total/NA	Solid	8015 NM	
890-2290-16	BH-107	Total/NA	Solid	8015 NM	
890-2290-17	BH-108	Total/NA	Solid	8015 NM	
890-2290-18	BH-109	Total/NA	Solid	8015 NM	
890-2290-19	BH-110	Total/NA	Solid	8015 NM	
890-2290-20	BH-111	Total/NA	Solid	8015 NM	
890-2290-21	BH-112	Total/NA	Solid	8015 NM	
890-2290-22	BH-113	Total/NA	Solid	8015 NM	

# HPLC/IC

### Leach Batch: 25289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Soluble	Solid	DI Leach	
890-2290-2	BH-93	Soluble	Solid	DI Leach	
890-2290-3	BH-94	Soluble	Solid	DI Leach	
890-2290-4	BH-95	Soluble	Solid	DI Leach	
890-2290-5	BH-96	Soluble	Solid	DI Leach	

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

# **HPLC/IC** (Continued)

# Leach Batch: 25289 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-6	BH-97	Soluble	Solid	DI Leach	_
890-2290-7	BH-98	Soluble	Solid	DI Leach	
890-2290-8	BH-99	Soluble	Solid	DI Leach	
890-2290-9	BH-100	Soluble	Solid	DI Leach	
890-2290-10	BH-101	Soluble	Solid	DI Leach	
890-2290-11	BH-102	Soluble	Solid	DI Leach	
890-2290-12	BH-103	Soluble	Solid	DI Leach	
890-2290-13	BH-104	Soluble	Solid	DI Leach	
890-2290-14	BH-105	Soluble	Solid	DI Leach	
890-2290-15	BH-106	Soluble	Solid	DI Leach	
890-2290-16	BH-107	Soluble	Solid	DI Leach	
890-2290-17	BH-108	Soluble	Solid	DI Leach	
890-2290-18	BH-109	Soluble	Solid	DI Leach	
890-2290-19	BH-110	Soluble	Solid	DI Leach	
890-2290-20	BH-111	Soluble	Solid	DI Leach	
MB 880-25289/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25289/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25289/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2290-1 MS	BH-92	Soluble	Solid	DI Leach	
890-2290-1 MSD	BH-92	Soluble	Solid	DI Leach	
890-2290-11 MS	BH-102	Soluble	Solid	DI Leach	
890-2290-11 MSD	BH-102	Soluble	Solid	DI Leach	

### Analysis Batch: 25351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Soluble	Solid	300.0	25289
890-2290-2	BH-93	Soluble	Solid	300.0	25289
890-2290-3	BH-94	Soluble	Solid	300.0	25289
890-2290-4	BH-95	Soluble	Solid	300.0	25289
890-2290-5	BH-96	Soluble	Solid	300.0	25289
890-2290-6	BH-97	Soluble	Solid	300.0	25289
890-2290-7	BH-98	Soluble	Solid	300.0	25289
890-2290-8	BH-99	Soluble	Solid	300.0	25289
890-2290-9	BH-100	Soluble	Solid	300.0	25289
890-2290-10	BH-101	Soluble	Solid	300.0	25289
890-2290-11	BH-102	Soluble	Solid	300.0	25289
890-2290-12	BH-103	Soluble	Solid	300.0	25289
890-2290-13	BH-104	Soluble	Solid	300.0	25289
890-2290-14	BH-105	Soluble	Solid	300.0	25289
890-2290-15	BH-106	Soluble	Solid	300.0	25289
890-2290-16	BH-107	Soluble	Solid	300.0	25289
890-2290-17	BH-108	Soluble	Solid	300.0	25289
890-2290-18	BH-109	Soluble	Solid	300.0	25289
890-2290-19	BH-110	Soluble	Solid	300.0	25289
890-2290-20	BH-111	Soluble	Solid	300.0	25289
MB 880-25289/1-A	Method Blank	Soluble	Solid	300.0	25289
LCS 880-25289/2-A	Lab Control Sample	Soluble	Solid	300.0	25289
LCSD 880-25289/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25289
890-2290-1 MS	BH-92	Soluble	Solid	300.0	25289
890-2290-1 MSD	BH-92	Soluble	Solid	300.0	25289
890-2290-11 MS	BH-102	Soluble	Solid	300.0	25289

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **HPLC/IC** (Continued)

# **Analysis Batch: 25351 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-11 MSD	BH-102	Soluble	Solid	300.0	25289

#### Leach Batch: 25414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-21	BH-112	Soluble	Solid	DI Leach	
890-2290-22	BH-113	Soluble	Solid	DI Leach	
MB 880-25414/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25414/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25414/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14738-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-14738-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 25429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-21	BH-112	Soluble	Solid	300.0	25414
890-2290-22	BH-113	Soluble	Solid	300.0	25414
MB 880-25414/1-A	Method Blank	Soluble	Solid	300.0	25414
LCS 880-25414/2-A	Lab Control Sample	Soluble	Solid	300.0	25414
LCSD 880-25414/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25414
880-14738-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	25414
880-14738-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25414

**Eurofins Carlsbad** 

-

3

Λ

5

9

1 0

12

13

14

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-92** Lab Sample ID: 890-2290-1 Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 14:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 13:54	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		10			25351	05/12/22 07:19	CH	XEN MID

**Client Sample ID: BH-93** Lab Sample ID: 890-2290-2

Date Collected: 05/06/22 00:00 Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 15:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 16:05	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 07:44	CH	XEN MID

**Client Sample ID: BH-94** Lab Sample ID: 890-2290-3 Date Collected: 05/06/22 00:00

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 15:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 14:16	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 07:52	CH	XEN MID

**Client Sample ID: BH-95** Lab Sample ID: 890-2290-4 Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 15:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID

**Eurofins Carlsbad** 

Page 38 of 55

**Matrix: Solid** 

Job ID: 890-2290-1 SDG: Lea County NM

Client Sample ID: BH-95

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-2290-4

Matrix: Solid

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 14:37	SM	XEN MID
Soluble	Leach	DI Leach			5.05 a	50 mL	25289	05/10/22 17:06	SC	XEN MID

10

Lab Sample ID: 890-2290-5

05/12/22 08:00 CH

25351

Matrix: Solid

XEN MID

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Client Sample ID: BH-96

Analysis

300.0

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 16:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 15:21	SM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 08:08	CH	XEN MID

Client Sample ID: BH-97 Lab Sample ID: 890-2290-6

Date Collected: 05/06/22 00:00 Matrix: Solid
Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 16:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 14:59	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		10			25351	05/12/22 13:24	CH	XEN MID

Client Sample ID: BH-98 Lab Sample ID: 890-2290-7

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 17:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	25221 25235	05/10/22 08:18 05/10/22 15:43	DM SM	XEN MID XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

3

<u>+</u>

6

0

1 0

. . 12

14

Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-98** Lab Sample ID: 890-2290-7

Date Collected: 05/06/22 00:00 Matrix: Solid Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 13:33	CH	XEN MID

**Client Sample ID: BH-99** Lab Sample ID: 890-2290-8

Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 17:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 16:26	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 13:41	CH	XEN MID

Client Sample ID: BH-100 Lab Sample ID: 890-2290-9

Date Collected: 05/06/22 00:00 **Matrix: Solid** Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 18:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 16:49	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		10			25351	05/12/22 13:49	CH	XEN MID

**Client Sample ID: BH-101** Lab Sample ID: 890-2290-10 Date Collected: 05/06/22 00:00

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 18:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 12:49	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 13:57	CH	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Job ID: 890-2290-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-102 Lab Sample ID: 890-2290-11

Date Collected: 05/06/22 00:00 **Matrix: Solid** Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 18:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 17:32	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 14:05	CH	XEN MID

Lab Sample ID: 890-2290-12 Client Sample ID: BH-103 Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

Date Received: 05/06/22 15:23

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 25564 Total/NA 4.96 g 05/14/22 12:37 MR XEN MID 5 mL Total/NA 8021B 25561 05/14/22 19:21 XEN MID Analysis 1 MR Total/NA Total BTEX 25658 05/16/22 16:56 XEN MID Analysis 1 SM Total/NA Analysis 8015 NM 25343 05/11/22 10:27 SM XEN MID Total/NA 25221 XEN MID Prep 8015NM Prep 10.00 g 05/10/22 08:18 DM 10 mL Total/NA Analysis 8015B NM 25235 05/10/22 17:54 SM XEN MID Soluble SC XEN MID Leach DI Leach 5.01 g 50 mL 25289 05/10/22 17:06 Soluble Analysis 300.0 10 25351 05/12/22 14:30 CH XEN MID

Client Sample ID: BH-104 Lab Sample ID: 890-2290-13 Date Collected: 05/06/22 00:00 **Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 19:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 18:15	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 14:38	CH	XEN MID

Lab Sample ID: 890-2290-14 **Client Sample ID: BH-105** Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 20:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-2290-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-105

Lab Sample ID: 890-2290-14 Date Collected: 05/06/22 00:00 Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 20:02	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		1			25351	05/12/22 15:03	CH	XEN MID

Client Sample ID: BH-106 Lab Sample ID: 890-2290-15

Date Collected: 05/06/22 00:00 **Matrix: Solid** Date Received: 05/06/22 15:23

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab Total/NA 5035 25564 Prep 5.00 g 5 mL 05/14/22 12:37 MR XEN MID Total/NA Analysis 8021B 200 25561 05/14/22 22:04 MR XEN MID Total/NA Total BTEX 25658 XEN MID Analysis 1 05/16/22 16:56 SM Total/NA Analysis 8015 NM 25343 05/11/22 10:27 SM XEN MID 1 XEN MID Total/NA Prep 8015NM Prep 10.04 g 10 mL 25221 05/10/22 08:18 DM Total/NA Analysis 8015B NM 5 25235 05/10/22 18:37 SM XEN MID Soluble Leach DI Leach 5.02 g 50 mL 25289 05/10/22 17:06 SC XEN MID Soluble Analysis 300.0 5 25351 05/12/22 16:27 CH XEN MID

Client Sample ID: BH-107 Lab Sample ID: 890-2290-16

Date Collected: 05/06/22 00:00 **Matrix: Solid** Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 20:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 19:41	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 16:35	CH	XEN MID

Client Sample ID: BH-108 Lab Sample ID: 890-2290-17

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		200			25561	05/14/22 22:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		5			25235	05/10/22 18:58	SM	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-108

Date Received: 05/06/22 15:23

Lab Sample ID: 890-2290-17 Date Collected: 05/06/22 00:00

**Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Soluble DI Leach 25289 Leach 4.98 g 50 mL 05/10/22 17:06 SC XEN MID 300.0 05/12/22 16:44 Soluble Analysis 5 25351 CH XEN MID

Client Sample ID: BH-109 Lab Sample ID: 890-2290-18

**Matrix: Solid** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 21:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 20:24	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 15:14	CH	XEN MID

Client Sample ID: BH-110 Lab Sample ID: 890-2290-19

Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		200			25561	05/14/22 22:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/11/22 07:03	SM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 16:52	CH	XEN MID

Client Sample ID: BH-111 Lab Sample ID: 890-2290-20

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 21:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 20:45	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 15:24	CH	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-112** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Lab Sample ID: 890-2290-21

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 00:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 19:05	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		1			25429	05/12/22 13:00	CH	XEN MID

**Client Sample ID: BH-113** Lab Sample ID: 890-2290-22 Date Collected: 05/06/22 00:00 Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 01:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 19:27	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		1			25429	05/12/22 13:09	CH	XEN MID

#### **Laboratory References:**

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, but	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytee for w
the agency does not of	• •	it the laboratory is not certain	ed by the governing additionty. This list the	ay include analytes for w
0 ,	• •	Matrix	Analyte	ay include analytes for w
the agency does not of	fer certification.	•	, , ,	ay include analytes for w

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2290-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

3

4

\_\_\_\_

7

9

10

40

13

14

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2290-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2290-1	BH-92	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-2	BH-93	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-3	BH-94	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-4	BH-95	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-5	BH-96	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-6	BH-97	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-7	BH-98	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-8	BH-99	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-9	BH-100	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-10	BH-101	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-11	BH-102	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-12	BH-103	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-13	BH-104	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-14	BH-105	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-15	BH-106	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-16	BH-107	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-17	BH-108	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-18	BH-109	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-19	BH-110	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-20	BH-111	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-21	BH-112	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-22	BH-113	Solid	05/06/22 00:00	05/06/22 15:23	5

ORIGINAL COPY

1

3

4

6

8

10

12

1

		a)		1			- 1						ONLY )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Date: Time:	Date: Time:		BH-101 (5')	BH-100 (5')	ВН-99 (5')	BH-98 (5')	вн-97 (5')	ВН-96 (5')	BH-95 (5')	BH-94 (5')	ВН-93 (5')	ВН-92 (5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	те Tetra Tech, Inc.
Received by:	Received by:	Coc News	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	DATE	YEAR: 2020	SAMPLING		Sampler signature:		Project #:		Site Manager:	
Date: Time:	Date: Time:		Date: Time:		×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 882-4559 Fax (432) 882-3846
Circle) HAND DELIVERED FEDEX UPS Tracking#	Sample Temperature RUSH: Same Day 24 hr 48 hr 72 hr	STANDARD	X X X REMARKS:	×	×	×	×	×	×	×	×	×	PAH 8 Total M TCLP N TCLP S RCI GC/MS GC/MS PCB'S NORM PLM (A Chlorid	RED (** 8021B 8021B X1005 V1005 Petals / Metals Volatile 8082 Semi V 8082	Y/N) BTI G (Ext to GRO Ag As Is Solve to GRO Ag As Is Vol. if 608 Os)	- DRO - Ba Cd Cd Ba Cd Cd Ss / 624 B270C/6	ORO - r Pb Se r Pb S	e Hg	list)	890-2290 Chain of Custody		

ORIGINAL COPY

1

3

4

5

8

10

12

1

	Relinquished by:		Relinquished by:	1 1-11	Relinquished by											( LABUSE )	LAB#		Comments:	December 5		Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4	Analysis Reques
	Date: Time:		Date: Time:	5/6/12 1503	Time:	BH-111 (5')	BH-110 (5')	BH-109 (5')	BH-108 (5')	BH-107 (5')	BH-106 (5')	BH-105 (5')	BH-104 (5')	BH-103 (5')	BH-102 (5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions		Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
	Received by:		Received by:	((14)	Received by:	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	DATE	YEAR: 2020	SAMPLING			Sampler Signature:		Project #:		Site Manager:		
	Date: Time:		/ Date: Time:	CP-3). G. AN	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE		Ezequiel Moreno			212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946	
(Circle) HAND DELIVERED FEDEX UPS	Special Repor	Rush Charges Authorized	Sample Temperature	ONLY	LAB USE   REMARKS:	×	×			×	×	×	×	×	×	TPH 8 PAH 8 Total II TCLP TCLP TCLP GC/MS GC/MS	RED ( 8021I TX100: 8015M 8270C Metals Volatil Semi ' S Vol. S Sem 8082	Y/N) 3 BT 5 (Ext t 6 GRO Ag As 6 Ag As 6 Ag As 7 Ses 7 Volatile 8260B 6 Vol.	- DRO - Ba Cd C Ba Cd C	ORO r Pb S cr Pb S	e Hg	)))		:	ANALYSIS REQUEST  (Circle or Specify Method		
Tracking #:	Special Report Limits or TRRP Report	s Authorized	e Day 24 nr 46 nr 72 nr	24 F. 48 F. 73	ARD	×	×	×	×	×	×	×	×	×	×	+	Asbes de de ral Wa	Sulfate	emistry (	(see a	ttache	ed lis	st)		uest ethod No.)		rage z or s

	Relinquished by:		Relinquished by:	Relinquished by:									( LAB USE )	LAB #		Comments:	Receiving Laboratory:	nvoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
	Date: Time:		Date: Time:	Mars 5/6/22 1524			SW-37 (0-5')	SW-36 (0-5')	SW-35 (0-5')	SW-34 (0-5')	BH-113 (5')	BH-112 (5')		SAMPLE IDENTIFICATION			y: Eurofins Xenco	Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
-	Received by:		Received by:	Received by:			5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
				S AND			×	×	×	×	×	×	WATE SOIL	R	MATRIX		Ezequ		212C-I		Clair Gonzales	901W W Midian Tel (4 Fax (
	Date: Time:		Date: Time:	Date: Time:			×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE None		PRESERVATIVE METHOD		Ezequiel Moreno		212C-MD-02230		zales	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
							×	×	×	×	×	×	# CON	RED (	Y/N)	EX 826						
(Circle) H		le.	ample Te	OF		#	Î	^  ×		×	×	^  ×	TPH T	X1005	(Ext to			MRO)		_		1
HAND DELIVERED			Sample Temperature	LAB USE					E			E	PAH 8 Total M	270C etals	Ag As	Ba Cd C	r Pb Se	Hg		<u> </u>	(Circle	
IVERED			<u>Ф</u>					Ł	L				TCLP \	/olatile	es	Ba Cd (	Cr Pb S	e Hg		_	AN.	
FEDEX	Spe	∐ <sub>Rus</sub>	∐ <sub>Ru</sub>	REMARKS:	H		_		F	$\perp$		F	RCI								ANALYSIS REQUES	
X UPS	cial Rep	Rush Charges Authorized	RUSH: Same Day	S: STANDARD			$\perp$	ŧ	+	+	L	L	_	Semi	. Vol.	/ 624 8270C/6	25		_	_ (	IS RE	
	ort Lim	jes Auti	me Day	DARD				‡	1	-	$^{\dagger}$	F	PCB's NORM								QUES	
Tracking #:	its or T	horized	y 24 hr		井	+	×	×	×	×	×	×	PLM (A Chlorid	e	os) Sulfate	TDS				_	ALYSIS REQUEST  Specify Method No.	
	Special Report Limits or TRRP Report		48		岸		#	‡	+	‡	‡	+	_	al Wa	ter Che	emistry		tached	list)		0	
	eport		hr 72			+1	+	#	#	+	‡	+	Allion/	Jauor	, Jaidi							
			각		廿		$\pm$	$\pm$	1	$^{\dagger}$	1									<u>_</u>		
Ш				_								$\perp$	Hold									

**Eurofins Carlsbad** 

1089 N Canal St

# **Chain of Custody Record**

eurofins |

Environment Testing America

BH-95 (890-2290-4) BH-94 (890-2290-3) BH-93 (890-2290-2) Project Name<sup>.</sup> Kaiser SWD BH-97 (890-2290-6) BH-92 (890-2290-1) Sample Identification - Client ID (Lab ID) BH-100 (890-2290-9) BH-99 (890-2290-8) BH-98 (890-2290-7) BH-96 (890-2290-5) 432-704-5440(Tel) Midland lote Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the aboratory does not currently maintain accreditation in the State of Origin listed above for analysis/hests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to careditation status should be brought to Eurofins Environment Testing South Central LLC, attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC. ΓX, 79701 tate, Zip: Shipping/Receiving Carlsbad, NM 88220 Phone: 575-988-3199 Fax. 575-988-3199 ossible Hazard Identification 211 W Florida Ave eliverable Requested | | | | | | | | | | | | Other (specify) mpty Kit Relinquished by lient Information (Sub Contract Lab) linquished by linquished by linquished by: urofins Environment Testing South Centr Ž 3 Custody Seal No かららる Primary Deliverable Rank PO# Due Date Requested 5/12/2022 Date/Time Date/Time 88001057 TAT Requested (days): roject# Sample Date 5/6/22 5/6/22 5/6/22 5/6/22 5/6/22 5/6/22 5/6/22 5/6/22 5/6/22 Date Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Sample (C=comp, G=grab) Sample Preservation Code: Type Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid E-Mail Lab PM Kramer Jessica Jessica Kramer@et.eurofinsus com Field Filtered Sample (Yes or No) lime: NELAP - Texas Accreditations Required (See note) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Perform MS/MSD (Yes or No) Special Instructions/QC Requirements 8015MOD\_NM/8015NM\_S\_Prep Full TPH Received by: × × × × × × × × Cooler Temperature(s) °C and Other Remarks × × × 8016MOD Calc × × × × Analysis Requested State of Origin: New Mexico Carrier Tracking No(s) Date/Time - N **Total Number of containers** a del 7 19<del>10</del> A HCL
B. NAOH
C. TA Acetale
D. Nitric Acid
E. NaHSO4
F. MeOH
G. Amchlor
H. Ascorbic Acid J - DI Water K EDTA L EDA COC No 890-747 1 Preservation 890-2290-1 Page 1 of 3 Special Instructions/Note M Hexane
N None
O AsNaO2
P-Na2O4S
Q Na2SO3
R Na2SO3
S H2SO4
T TSP Dodecahydrate
U Acetone
V MCAA
W A-11-7 R Na2S2O3
S H2SO4
T TSP Dodecahyd
U Acetone
V MCAA
W-pH 4-5
Z other (specify) Company Ver: 06/08/2021 Months

1089 N Canal St Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199 **Eurofins Carlsbad Chain of Custody Record** eurofins Environment Testing

	Odilibiei				•								
Client Information (Sub Contract Lab)				Kran	Kramer Jessica	Д.		2			89	890-747 2	
Shipping/Receiving	č			Jessi	Jessica Kramer@et eurofinsus	@et eurofii	sus com	Z og	New Mexico		TO TO	Page 2 of 3	
Company Eurofins Environment Testing South Centr					Accreditations Requ NELAP - Texas	Accreditations Required (See note) NELAP - Texas	ee note)				-068 # qor	Job# 890-2290-1	
Address 1211 W Florida Ave	Due Date Requested 5/12/2022	ď					Analysis	s Requested	sted		P	Preservation Codes	les
City: Midland	TAT Requested (days):	ıys):									) B >	HCL NaOH	M Hexane N None
State Zip: TX 79701					Construence (Construence (Const						m o c	Nitric Acid	P Na2O4S Q Na2SO3
Phone 432-704-5440(Tel)	PO #:				iganggani kandanas						, : ω π	MeOH Amchlor	R Na2S2O3 S H2SO4
Email	WO#				o) //						dedestrone book	ASCORDIC ACID	U Acetone V MCAA
Project Name Kaiser SWD	Project #:				or N						iners	EDTA EDA	W pH 4-5 Z other (specify)
Site	SSOW#				(Ye						43000	Other:	
					MSD	•					et the Albania		
			Sample	Matrix (www.ater	iltered m MS/N D_NM/	D_Calc					lumber		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	(C=comp, G=grab)	O=waste/oll, BT=Tissue, A=Air)	Perfo	8016N					Total	Special in	Special Instructions/Note:
	X	$\mathbb{X}$	36500 /4	Preservation Code:	$\times$						X		
BH-101 (890-2290-10)	5/6/22	Mountain		Solid	×	×					- <b>18</b> 6		
BH-102 (890-2290-11)	5/6/22	Mountain		Solid	×	×							
BH-103 (890-2290-12)	5/6/22	Mountain		Solid	×	×					<i>#</i>		
BH-104 (890-2290-13)	5/6/22	Mountain		Solid	×	×					<u> </u>	***************************************	The state of the s
BH-105 (890-2290-14)	5/6/22	Mountain		Solid	×	×					98 )		
BH-106 (890-2290-15)	5/6/22	Mountain		Solid	×	×					- A		
BH-107 (890-2290-16)	5/6/22	Mountain		Solid	×	×					**		
BH-108 (890-2290-17)	5/6/22	Mountain		Solid	×	×					-		The second secon
BH-109 (890-2290-18)	5/6/22	Mountain		Solid	×	×					اعد		
Note. Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance u laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signe	nt Testing South Centr bove for analysis/tests entral LLC attention in	al LLC places /matrix being a nmediately If a	the ownership inalyzed, the sa all requested ac	of method ana imples must be creditations are	lyte & accredi shipped back current to da	tation complia to the Eurofii	nce upon out is Environmer signed Chain	subcontract nt Testing So	pon out subcontract laboratories vironment Testing South Central I d Chain of Custody attesting to sa	This sample LLC laborator	shipment is f y or other ins e to Eurofins	orwarded under c fructions will be p. Environment Tes	upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the vironment Testing South Central. LLC laboratory or other instructions will be provided. Any changes to ad Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central. LLC.
Possible Hazard Identification Unconfirmed					Sampl	Sample Disposal ( A f		y be ass ⊟ <sub>Dis</sub>	assessed if san Disposal By Lah	amples are	retained long	fee may be assessed if samples are retained longer than 1 month)  Archive For  Mon	Months
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank.	able Rank. 2	2		Specia	Special Instructions/Q	ıs/QC Requ	C Requirements					
Empty Kit Relinquished by:		Date			Time	1	.		Method of	Method of Shipment:			
Relinquished by Ow Ow S.9.30	Date∕Time			Company			Z			Date/Tippe	0	な	Company
	Date/Time			Company	Récève	elved by:	¢			Date/Time/	1		Company
Relinquished by:	Date/Time <sup>,</sup>			Company	Rec	Received by:				Date/Time:			Company
Custody Seals Intact: Custody Seal No					Coo	Cooler Temperature(s	ဂိ	and Other Remarks.	rks.	ŀ			

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199

# **Chain of Custody Record**

<u>u</u>	
💸 eurofins	
~	
ć	
7	
¥.	
=:	
S	

Client Information (Sub Contract Lab)				Krame	Kramer Jessica	sica a			Саттег	Carner Tracking No(s)	o(s)		COC No:	
	Phone			E-Mail		,			State o	State of Origin			Page:	
Company:				Jess	Ca Niai	ner@e	Accreditations Required (See note):	IS COM	New	New Mexico		L	Page 3 of 3	
Address					NELAP - Texas	- Texa	35						890-2290-1	
1 W Florida Ave	Due Date Requested 5/12/2022	ă					<b>,</b>	Analysis F	Requested	2			Preservation Codes	odes
City Midland	TAT Requested (days):	ıys):				$\dashv$								
State Zip TX 79701													D Nitric Acid E NaHSO4	O AsNaO2 P Na2O4S O Na2SO3
Phone 432-704-5440(Tel)	PO #				1. Expert 19. 10	TPH						internation from		o π
Email	WO#				0-1000000000	Full			<del></del>			, , andrásticite	H Ascorbic Acid	< ⊂ ⊣
Project Name	Project#					Prep						ers	J DI Water K EDTA	V MCAA W pH 4-5
ser SWD	88001057				15077AF-10	_S_						tain		Z other (specify)
Site	SSOW#:				and the same of the same of	15NM						Samuelle.	Other:	
			Sample	Matrix	ered S MS/M:	_NM/80						nberc		
Sample Identification - Client ID (1 at ID)				(w=watel S=solid, O=waste/oil,	OF REAL PROPERTY.	15MOI						tal Nu		
	$\lambda$	X	Preservation Code:	tion Code:	7660° DS	areas d						X T	opecial	pecial instructions/Note
BH-110 (890-2290-19)	5/6/22	Mountain		Solid		×			2			-		
BH-111 (890-2290-20)	5/6/22	Mountain		Solid		×						4		
BH-112 (890-2290-21)	5/6/22	Mountain		Solid		×								
BH-113 (890-2290-22)	5/6/22	Mountain		Solid		×						<b>4</b>		
SW-34 (890-2290-23)	5/6/22	Mountain		Solid		×						4		
SW-35 (890-2290-24)	5/6/22	Mountain		Solid		×						4		
SW-36 (890-2290-25)	5/6/22	Mountain		Solid		×						<b>4</b> , [		
SW-37 (890-2290-26)	5/6/22	Mountain		Solid		×						- 44.7		
Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.	esting South Centra e for analysis/tests/r al LLC attention imu	al LLC places the matrix being and mediately If all	ne ownership or alyzed the sam requested acc	f method analy oples must be reditations are	yte & accr shipped b current to	editation ack to th	compliance e Eurofins E turn the sign	upon out subc nvironment Te ed Chain of Cu	contract labo sting South	ratories T Central LL	nis sample s C laboratory	shipment i or other i	s forwarded unde nstructions will be	r chain-of-custody If the provided Any changes to festing South Central LLC
Possible Hazard Identification Unconfirmed					Sam	ple Di	Sample Disposal (A fee	fee may b	may be assessed if samples are retained longer	ed if san	ples are	retaine	d longer than	than 1 month)
Requested I II III IV Other (specify)	Primary Deliverable Rank.	ble Rank. 2			Spec	ial Ins	Special Instructions/QC R	C Requirements	nents.	ints.		Alchi	Archive For	Months
Empty Kit Relinquished by:		Date			Time	7			3	Method of Shipment:	ipment:			
Relinquished by Cup Cap 5.9.20 [	Date/Time <sup>.</sup>		O	Company		Racelvac	)by	Z	L		Date/Tipper	2	44	Company
	Date/Time		0	Company	70	Received	<b>₹</b>				Date/Time	Ŧ	0	Company
Relinquished by	Date/Time		Q	Company		Received by	by:				Date/Time			Company
Custody Seal No  ∆ Yes ∆ No						Cooler Te	emperature(s	Cooler Temperature(s) °C and Other Remarks.	r Remarks.					

Environment Testing America

Ver 06/08/2021

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2290-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad Login Number: 2290

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2290-1

SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 05/09/22 12:39 PM

List Number: 2 Creator: Teel, Brianna

Login Number: 2290

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

Released to Imaging: 9/1/2023 2:28:53 PM

<6mm (1/4").

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2290-2

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

SKRAMER

Authorized for release by: 5/16/2022 4:19:36 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS .....

Review your project results through

Iotal Access

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 2:28:53 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

1

9

11

4.0

1 /

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2290-2 SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	14
Lab Chronicle	16
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	24

4

6

8

10

12

13

14

# **Definitions/Glossary**

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

#### **Qualifiers**

**GC VOA** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier **Qualifier Description** 

\*1 LCS/LCSD RPD exceeds control limits.

S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

**EDL** Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

**PQL Practical Quantitation Limit** 

**PRES** Presumptive QC **Quality Control** 

**RER** Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2290-2

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2290-2

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2290-2

#### Receipt

The samples were received on 5/6/2022 3:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 11.8°C

#### **GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-25199/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-25199 and analytical batch 880-25231 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

6

2

3

6

1

9

12

13

| | 4

Sample Depth: 0 - 5

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-34 Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2290-23

Matrix: Solid

Method: 8021B - Volatile Orga Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201		0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			05/14/22 12:37	05/15/22 01:36	1

1,4-Difluorobenzene (Surr) 98 70 - 130 05/14/22 12:37 05/15/22 01:36

**Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00402 U 0.00402 mg/Kg 05/16/22 16:56

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 49.9 05/11/22 10:27 **Total TPH** 1520 mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL Unit Dil Fac D Prepared Analyzed C6-C10 1100 49.9 mg/Kg 05/09/22 16:33 05/10/22 20:10 49.9 mg/Kg 05/09/22 16:33 05/10/22 20:10 **Diesel Range Organics (Over** 422 C10-C28) OII Range Organics (Over C28-C36) <49.9 U 49.9 05/09/22 16:33 05/10/22 20:10 mg/Kg

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane (Surr) 108 70 - 130 05/09/22 16:33 05/10/22 20:10 o-Terphenyl (Surr) 106 70 - 130 05/09/22 16:33 05/10/22 20:10

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit D Dil Fac Prepared Analyzed Chloride 1170 24.8 05/12/22 13:19 mg/Kg

Client Sample ID: SW-35 Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 0 - 5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2290-24

Matrix: Solid

Method: 8021B - Volatile Orga	nic Compounds (	(GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			05/14/22 12:37	05/15/22 02:02	1
1,4-Difluorobenzene (Surr)	101		70 - 130			05/14/22 12:37	05/15/22 02:02	1

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-2 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-35** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Sample Depth: 0 - 5

**Method: Total BTEX - Total BTEX Calculation** 

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-2290-24

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/16/22 16:56	•
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	435		49.9	mg/Kg			05/11/22 10:27	
- Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U *1	49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
Diesel Range Organics (Over	435		49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			05/09/22 16:33	05/10/22 20:32	1
o-Terphenyl (Surr)	116		70 - 130			05/09/22 16:33	05/10/22 20:32	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	• • •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1150		24.8	mg/Kg			05/12/22 13:46	5

Sample Depth: 0 - 5

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Client Sample ID: SW-36

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2290-25

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.100	U	0.100	mg/Kg		05/14/22 12:37	05/15/22 03:46	50
Toluene	<0.100	U	0.100	mg/Kg		05/14/22 12:37	05/15/22 03:46	50
Ethylbenzene	<0.100	U	0.100	mg/Kg		05/14/22 12:37	05/15/22 03:46	50
m-Xylene & p-Xylene	<0.201	U	0.201	mg/Kg		05/14/22 12:37	05/15/22 03:46	50
o-Xylene	<0.100	U	0.100	mg/Kg		05/14/22 12:37	05/15/22 03:46	50
Xylenes, Total	<0.201	U	0.201	mg/Kg		05/14/22 12:37	05/15/22 03:46	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			05/14/22 12:37	05/15/22 03:46	50
1,4-Difluorobenzene (Surr)	97		70 - 130			05/14/22 12:37	05/15/22 03:46	50
Method: Total BTEX - Total BT	EX Calculation							
Method: Total BTEX - Total BT Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
		Qualifier	RL 0.201	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 05/16/22 16:56	Dil Fac
Analyte	Result   <0.201	U			<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX	Result <0.201  ge Organics (DR	U			<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total BTEX Method: 8015 NM - Diesel Ran	Result <0.201  ge Organics (DR	U (GC)	0.201	mg/Kg	<u> </u>		05/16/22 16:56	1
Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte	ge Organics (DR Result 4280	U O) (GC) Qualifier	0.201	mg/Kg	<u> </u>		05/16/22 16:56  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH	ge Organics (DR Result 4280 ange Organics (D	U O) (GC) Qualifier	0.201	mg/Kg	<u> </u>		05/16/22 16:56  Analyzed	1

# **Client Sample Results**

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-36

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

REMOVED FROM **ANALYSIS TABLE**  Lab Sample ID: 890-2290-25

Matrix: Solid

Sample Depth: 0 - 5

Chloride

Method: 8015B NM - Diesel Rang	• • •	, , , , ,	Continued)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	4130		50.0	mg/Kg		05/09/22 16:33	05/10/22 19:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	124		70 - 130			05/09/22 16:33	05/10/22 19:48	1
o-Terphenyl (Surr)	126		70 - 130			05/09/22 16:33	05/10/22 19:48	1
— Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						

25.0

05/12/22 13:55 Lab Sample ID: 890-2290-26

**Matrix: Solid** 

Client Sample ID: SW-37 Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Sample Depth: 0 - 5

**REMOVED FROM ANALYSIS TABLE** 

1980

mg/Kg

Method: 8021B - Volatile Organic Compounds (GC) Result Qualifier Analyte RΙ Unit D Prepared Dil Fac Analyzed Benzene <0.0500 U 0.0500 mg/Kg 05/14/22 12:37 05/15/22 04:13 25 Toluene <0.0500 U 0.0500 05/14/22 12:37 05/15/22 04:13 25 mg/Kg Ethylbenzene <0.0500 U 0.0500 mg/Kg 05/14/22 12:37 05/15/22 04:13 25 m-Xylene & p-Xylene <0.100 U 0.100 mg/Kg 05/14/22 12:37 05/15/22 04:13 25 o-Xylene <0.0500 U 0.0500 mg/Kg 05/14/22 12:37 05/15/22 04:13 25 <0.100 U 05/14/22 12:37 05/15/22 04:13 Xylenes, Total 0.100 mg/Kg 25

Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed 4-Bromofluorobenzene (Surr) 102 70 - 130 05/14/22 12:37 05/15/22 04:13 25 1,4-Difluorobenzene (Surr) 102 70 - 130 05/14/22 12:37 05/15/22 04:13 25

**Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Total BTEX <0.100 U 0.100 05/16/22 16:56 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac **Total TPH** 50.0 mg/Kg 05/11/22 10:27

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte Result Qualifier Dil Fac RL Unit D Prepared Analyzed C6-C10 <50.0 U \*1 50.0 05/09/22 16:33 05/10/22 20:53 mg/Kg 05/09/22 16:33 05/10/22 20:53 **Diesel Range Organics (Over** 50.0 mg/Kg 346 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 05/09/22 16:33 05/10/22 20:53

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane (Surr) 108 70 - 130 05/09/22 16:33 05/10/22 20:53 o-Terphenyl (Surr) 108 70 - 130 05/09/22 16:33 05/10/22 20:53

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-2 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-37** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Sample Depth: 0 - 5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2290-26

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte Result Qualifier Dil Fac RL Unit D Prepared Analyzed 25.3 05/12/22 14:05 Chloride 1510 mg/Kg

# **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-2290-2 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2290-23	SW-34	99	98	
390-2290-24	SW-35	103	101	
890-2290-25	SW-36	99	97	
390-2290-26	SW-37	102	102	
390-2290-A-10-E MS	Matrix Spike	103	108	
390-2290-A-10-F MSD	Matrix Spike Duplicate	87	96	
_CS 880-25564/1-A	Lab Control Sample	101	100	
LCSD 880-25564/2-A	Lab Control Sample Dup	96	107	
MB 880-25564/5-A	Method Blank	77	92	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** Prep Type: Total/NA

matrixi oona				. Top Type: Totalitis
				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-14554-A-1-C MS	Matrix Spike	109	108	
880-14554-A-1-D MSD	Matrix Spike Duplicate	94	94	
890-2290-23	SW-34	108	106	
890-2290-24	SW-35	118	116	
890-2290-25	SW-36	124	126	
890-2290-26	SW-37	108	108	
LCS 880-25199/2-A	Lab Control Sample	123	124	
LCSD 880-25199/3-A	Lab Control Sample Dup	129	132 S1+	
MB 880-25199/1-A	Method Blank	99	103	
Surrogate Legend				

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

# QC Sample Results

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25564/5-A

Lab Sample ID: LCS 880-25564/1-A

**Matrix: Solid** Analysis Batch: 25561 Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 25564

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 18:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:37	05/14/22 18:01	1

MB MB

MD MD

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77	70 - 130	05/14/22 12:37	05/14/22 18:01	1
1.4-Difluorobenzene (Surr)	92	70 - 130	05/14/22 12:37	05/14/22 18:01	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 25564

Prep Type: Total/NA

Prep Batch: 25564

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1104 mg/Kg 110 70 - 130 Toluene 0.100 0.1137 mg/Kg 114 70 - 130 0.100 Ethylbenzene 0.1151 mg/Kg 115 70 - 130 70 - 130 0.200 0.2290 m-Xylene & p-Xylene mg/Kg 115 0.100 0.1106 70 - 130 o-Xylene mg/Kg 111

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-25564/2-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 25561

Analysis Batch: 25561

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1232		mg/Kg		123	70 - 130	11	35
Toluene	0.100	0.1126		mg/Kg		113	70 - 130	1	35
Ethylbenzene	0.100	0.1066		mg/Kg		107	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2139		mg/Kg		107	70 - 130	7	35
o-Xylene	0.100	0.1122		mg/Kg		112	70 - 130	1	35

Client Sample ID: Matrix Spike

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1.4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-2290-A-10-E MS

Matrix: Solid										Prep Type:	Total/NA	
Analysis Batch: 25561										Prep Bate	ch: 25564	
	Sample	Sample	Spike	MS	MS				%I	Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Re	ec Lir	nits		

<0.00199 U 0.101 0.1011 100 Benzene mg/Kg 70 - 130 Toluene <0.00199 U 0.101 0.09136 mg/Kg 91 70 - 130

Prep Batch: 25564

Prep Type: Total/NA

Prep Batch: 25199

# QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-2290-2 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2290-A-10-E MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 25561

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.101	0.08965		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1797		mg/Kg		89	70 - 130	
o-Xylene	<0.00199	U	0.101	0.08784		mg/Kg		87	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 103 1,4-Difluorobenzene (Surr) 108 70 - 130

Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 890-2290-A-10-F MSD

**Matrix: Solid** Analysis Batch: 25561

Analysis Batch: 25561									Prep Batch: 25564			
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00199	U	0.100	0.08471		mg/Kg		85	70 - 130	18	35	
Toluene	<0.00199	U	0.100	0.08214		mg/Kg		82	70 - 130	11	35	
Ethylbenzene	<0.00199	U	0.100	0.08185		mg/Kg		82	70 - 130	9	35	
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1660		mg/Kg		83	70 - 130	8	35	
o-Xylene	<0.00199	U	0.100	0.07935		mg/Kg		79	70 - 130	10	35	

MSD MSD Surrogate Qualifier Limits %Recovery 87 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 96 70 - 130

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-25199/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 25231

--- ---

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 11:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 11:21	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 11:21	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	99		70 - 130	05/09/22 16:33	05/10/22 11:21	1
o-Terphenyl (Surr)	103		70 - 130	05/09/22 16:33	05/10/22 11:21	1

Lab Sample ID: LCS 880-25199/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid Analysis Batch: 25231

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C10	1000	858.3		mg/Kg	_	86	70 - 130	 _
Diesel Range Organics (Over	1000	1226		mg/Kg		123	70 - 130	

C10-C28)

**Eurofins Carlsbad** 

Prep Batch: 25199

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

LCS LCS

Lab Sample ID: LCS 880-25199/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 25231

Prep Type: Total/NA

Prep Batch: 25199

Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 123 70 - 130 o-Terphenyl (Surr) 124 70 - 130

Lab Sample ID: LCSD 880-25199/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA

Prep Batch: 25199

Analysis Batch: 25231 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit C6-C10 1000 1077 108 70 - 13023 20 mg/Kg Diesel Range Organics (Over 1000 1304 mg/Kg 130 70 - 130 20 C10-C28)

> LCSD LCSD %Recovery Qualifier Limits 129

1-Chlorooctane (Surr) 70 - 130 o-Terphenyl (Surr) 132 S1+ 70 - 130

Lab Sample ID: 880-14554-A-1-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25231 Prep Batch: 25199

MS MS %Rec Sample Sample Spike

Qualifier Qualifier Added Analyte Result Result Unit D %Rec Limits C6-C10 U \*1 1000 1064 106 70 - 130 <50.0 mg/Kg Diesel Range Organics (Over <50.0 U 1000 1112 mg/Kg 109 70 - 130

C10-C28)

Surrogate

MS MS %Recovery Qualifier Surrogate Limits 1-Chlorooctane (Surr) 109 70 - 130 o-Terphenyl (Surr) 108 70 - 130

Lab Sample ID: 880-14554-A-1-D MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

**Matrix: Solid** 

Prep Batch: 25199 Analysis Batch: 25231 Sample Sample Spike MSD MSD %Rec RPD

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit C6-C10 <50.0 U \*1 90 70 - 130 998 899.1 mg/Kg 17 20 Diesel Range Organics (Over <50.0 U 998 969.3 mg/Kg 95 70 - 130 14 20 C10-C28)

MSD MSD %Recovery Surrogate Qualifier Limits 1-Chlorooctane (Surr) 94 70 - 130 94 o-Terphenyl (Surr) 70 - 130

## QC Sample Results

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25414/1-A

**Matrix: Solid** 

Analysis Batch: 25429

Client Sample ID: Method Blank **Prep Type: Soluble** 

mg/Kg

98

90 - 110

Client Sample ID: Matrix Spike Duplicate

**Prep Type: Soluble** 

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 05/12/22 11:56

Lab Sample ID: LCS 880-25414/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 25429** 

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits

250

мв мв

Lab Sample ID: LCSD 880-25414/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

245.3

Analysis Batch: 25429

Chloride

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 245.1 mg/Kg 90 - 110

Lab Sample ID: 880-14738-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25429

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits 438.3 Chloride 208 248 90 - 110 mg/Kg

Lab Sample ID: 880-14738-A-1-C MSD

**Matrix: Solid** 

Analysis Batch: 25429

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 248 208 435.7 mg/Kg 92 90 - 110 20

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

# **QC Association Summary**

Job ID: 890-2290-2 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## **GC VOA**

## Analysis Batch: 25561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8021B	25564
890-2290-24	SW-35	Total/NA	Solid	8021B	25564
890-2290-25	SW-36	Total/NA	Solid	8021B	25564
890-2290-26	SW-37	Total/NA	Solid	8021B	25564
MB 880-25564/5-A	Method Blank	Total/NA	Solid	8021B	25564
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	8021B	25564
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25564
890-2290-A-10-E MS	Matrix Spike	Total/NA	Solid	8021B	25564
890-2290-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25564

## Prep Batch: 25564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	5035	
890-2290-24	SW-35	Total/NA	Solid	5035	
890-2290-25	SW-36	Total/NA	Solid	5035	
890-2290-26	SW-37	Total/NA	Solid	5035	
MB 880-25564/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2290-A-10-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2290-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 25659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-2290-23	SW-34	Total/NA	Solid	Total BTEX
890-2290-24	SW-35	Total/NA	Solid	Total BTEX
890-2290-25	SW-36	Total/NA	Solid	Total BTEX
890-2290-26	SW-37	Total/NA	Solid	Total BTEX

## **GC Semi VOA**

## Prep Batch: 25199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8015NM Prep	-
890-2290-24	SW-35	Total/NA	Solid	8015NM Prep	
890-2290-25	SW-36	Total/NA	Solid	8015NM Prep	
890-2290-26	SW-37	Total/NA	Solid	8015NM Prep	
MB 880-25199/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25199/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14554-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14554-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 25231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8015B NM	25199
890-2290-24	SW-35	Total/NA	Solid	8015B NM	25199
890-2290-25	SW-36	Total/NA	Solid	8015B NM	25199
890-2290-26	SW-37	Total/NA	Solid	8015B NM	25199
MB 880-25199/1-A	Method Blank	Total/NA	Solid	8015B NM	25199
LCS 880-25199/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25199

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2290-2

Project/Site: Kaiser SWD

SDG: Lea County NM

# GC Semi VOA (Continued)

## **Analysis Batch: 25231 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-25199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25199
880-14554-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25199
880-14554-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25199

## Analysis Batch: 25344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8015 NM
890-2290-24	SW-35	Total/NA	Solid	8015 NM
890-2290-25	SW-36	Total/NA	Solid	8015 NM
890-2290-26	SW-37	Total/NA	Solid	8015 NM

## **HPLC/IC**

## Leach Batch: 25414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Soluble	Solid	DI Leach	
890-2290-24	SW-35	Soluble	Solid	DI Leach	
890-2290-25	SW-36	Soluble	Solid	DI Leach	
890-2290-26	SW-37	Soluble	Solid	DI Leach	
MB 880-25414/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25414/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25414/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14738-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-14738-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## **Analysis Batch: 25429**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Soluble	Solid	300.0	25414
890-2290-24	SW-35	Soluble	Solid	300.0	25414
890-2290-25	SW-36	Soluble	Solid	300.0	25414
890-2290-26	SW-37	Soluble	Solid	300.0	25414
MB 880-25414/1-A	Method Blank	Soluble	Solid	300.0	25414
LCS 880-25414/2-A	Lab Control Sample	Soluble	Solid	300.0	25414
LCSD 880-25414/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25414
880-14738-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	25414
880-14738-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25414

Client: Tetra Tech, Inc.

Job ID: 890-2290-2

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-34 Lab Sample ID: 890-2290-23

Date Collected: 05/06/22 00:00 Matrix: Solid
Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 01:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 20:10	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:19	CH	XEN MID

Client Sample ID: SW-35

Date Collected: 05/06/22 00:00

Lab Sample ID: 890-2290-24

Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 02:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 20:32	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	25414	05/12/22 11:30	СН	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:46	СН	XEN MID

Client Sample ID: SW-36

Date Collected: 05/06/22 00:00

Lab Sample ID: 890-2290-25

Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		50			25561	05/15/22 03:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 19:48	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:55	CH	XEN MID

Client Sample ID: SW-37

Date Collected: 05/06/22 00:00

Lab Sample ID: 890-2290-26

Matrix: Solid

Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		25			25561	05/15/22 04:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID

Eurofins Carlsbad

Page 16 of 25

2

3

7

9

1 4

13

1.

XEN MID
D: 890-2290-26
Matrix: Solid

## Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 890-2290-2

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-37 Lab Sample ID: 890-2290-26

Date Collected: 05/06/22 00:00 Matrix: Solid
Date Received: 05/06/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 20:53	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 14:05	CH	XEN MID

## Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

2

3

4

5

7

a

1 ∩

12

13

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2290-2

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-21-22	06-30-22
The following englytes	and the street and the state of a contract to a			
the agency does not of	• •	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for
,	• •	it the laboratory is not certifi  Matrix	led by the governing authority. I his list ma	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

5

7

10

12

13

## **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2290-2

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

-

9

Δ

**5** 

7

10

11

13

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2290-2

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2290-23	SW-34	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5
890-2290-24	SW-35	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5
890-2290-25	SW-36	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5
890-2290-26	SW-37	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5

1

3

4

6

8

10

1:

TCLP Semi Volatiles	### Tech, Inc.		Relinquished by:		Relinquished by:	The Sa	Relinquished by:											( LAB USE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Project #: 212C-MD-02230   Sampler Signature:   Ezequiel Moreno   Ezemanure:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno	Site Manager:   Clair Gonzales   Site Manager:   Clair Gonzales							BH-101 (5')	BH-100 (5')	BH-99 (5')	BH-98 (5')	BH-97 (5')	BH-96 (5')	BH-95 (5')	BH-94 (5')	ВН-93 (5')	BH-92 (5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solution	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Clair Gonzales   Clai	Clair Gonzales		Received by:		Received by:	45/199/1	Received by:	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022		YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
# CONTAINERS  # CONTAINERS  # CONTAINERS  # FILTERED (Y/N)  FILTERED (Y/N)    FILTER	# CONTAINERS # CONTAINERS  # C																	WATE SOIL HCL HNO <sub>3</sub> ICE		1-		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
TCLP Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Volatiles  TCLP Semi Volatiles	TCLP Metals Ag As Ba Cd Cr Pb Se Hg   TCLP Volatiles   TCLP Semi Volatiles   TCLP Semi Volatiles   TCLP Semi Volatiles   RCl   GC/MS Vol. 8260B / 624   GC/MS Vol. 8270C/625   PCB's 8082 / 608   NORM   PLM (Asbestos)   NORM   PLM (Asbestos)   X X X X X X X X X X X X X X X X X X	(Circ	ue:			3	ne:	×	×	×	×	×	×	×	×	×	×	# CON FILTE BTEX	RED (	ERS (Y/N) B BT	EX 8260	DB					
TCLP Semi Volatiles	TCLP Semi Volatiles	le) HAND DELIVERE	8:1/	Q.9/	nie Temperature	ONLY			×	×	×	×	×	×	×	×	×	TPH 8 PAH 8 Total I	3270C Metals Metals	Ag As	Ba Cd C	r Pb Se	: Hg		890-2290 Ch		
	General Water Chemistry (see attached list)  Anion/Cation Balance	FEDEX UPS	Special Report	Rush Charges /	RUSH: Same	N O N N O N	EMARKS:											TCLP RCI GC/M GC/M PCB's	Semi Vol. S Vol. S Sem 8082	Volatile 8260E ni. Vol.	3 / 624	25			- 9		

3

4

6

ŏ

11

	Relinquished by:		Relinquished by:	1	Relinquished by											( LAB USE )	LAB#		Collinging	Commente:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
	Date: Time:		Date: Time:	New 516/12 1523	Date: Time:	BH-111 (5')	BH-110 (5')	ВН-109 (5')	BH-108 (5')	вн-107 (5')	ВН-106 (5')	BH-105 (5')	BH-104 (5')	ВН-103 (5')	BH-102 (5')		SAMPLE IDENTIFICATION			Eurotins Xenco		Dusty McInturff - Permian Water Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
	Received by:		Received by:	((in	Received by:	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	DATE	YEAR: 2020	SAMPLING		-	Sampler Signature:		Project #:		Site Manager:	
	Ďa		Da	2 4	, D	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL	R	MATRIX					212C-MD-02230		Clair Gonzales	901W Wall I Midland,T Tel (432; Fax (432
	Date: Time:		Date: Time:	(6.9)	Date: Time:	×	×	×	×	×	×	×	×	×	×	HNO <sub>3</sub> ICE None		METHOD			Ezequiel Moreno		D-02230		ales	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 882-4559 Fax (432) 882-3946
																# CON	RED (	Y/N)								
(Circle) H/			Sample Temperature	9	LAB	×	×	×		×	×	×	×	×	×		X100	5 (Ext	EX 826 to C35) - DRO		<del>-</del> 0 -	MRO)		_		
HAND DELIVERED			mperatur	ONLY	LAB USE						F					PAH 8	_		Ba Cd C	Cr Pl	b Se	Hg			(Cir	:
VERED		_	0		RE						E				L	TCLP	Volatil	es	s Ba Cd	Cr F	b Se	e Hg			ANALYSIS REQUEST	
FEDE	Spe	L R S	RUS	<u> </u>	叞					L			L		L	TCLP RCI		1			_	· -			ANALYSIS REQUEST	
FEDEX UPS	cial Re	h Chan	RUSH: Same Day	STANDARD												GC/M	S Sem	i. Vol.	8 / 624 8270C/6	525	_				IS RE	
L.I	port Lir	ges Au	ame Da	DAR		E	L									PCB's NORM					_			_	QUE Meti	
racking #:	nits or	Rush Charges Authorized			,	×	×	×	×	×	×	×	×	×	×	PLM (	de		1					_	l por	
	Special Report Limits or TRRP Report	۵	24 hr 48				F			F			$oxed{\bot}$	F	F	Chlori Gene		Sulfate	e TDS nemistry	_	e att	ached	list)	_,	No.)	
	Report		₹			E		F			E		F	F	F	Anion	/Catio	n Bala	nce		_			_		
			72 hr				-			$\vdash$	+	+	+	+	+											
10 1						$\vdash$	1	+-	+-	+	+	+	+	+	+-	Hold	_	_		-						1

ORIGINAL COPY

Tetra Tech, Inc.	Relinquished by:		Relinquished by:	11-11	Relinquished by:									( LAB USE )	LAB#			Comments:	Nacciving Laboratory.	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Project #:   212C-MD-02230   Sampler Signature:   Ezequiel Moreno   Fic (433) 982-3946   Fa				15	: Time:			SW-37 (0-5')	SW-36 (0-5')	SW-35 (0-5')	SW-34 (0-5')	BH-113 (5')	BH-112 (5')		SAMPLE IDENTIFICATION				Eurofins Xenco	Dusty McIntum - Permian vyater Solutions	Daniel Webs Solutions	Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Clair Gonzales	Received by:		Received by:	()(00	Received by:			5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022		TEAR. 2020	SAMPLING						Project #:		Site Manager:	
# CONTAINERS  # CONTAINERS    FILTERED (Y/N)				6	ate:									WAT SOIL HCL HNO	3	+	1		Ezequiel Moreno			212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland, Toxas 79705 Tel (432) 682-4559 Fax (432) 682-3946
TPH TX1005 (Ext to C35)	me:			9	me:									# CO	NTAII	NERS (Y/N)									
TCLP Volatiles			Sample Temperature	ONLY	LAB USE									TPH TPH PAH Total	TX10 8015 8270 Metal	O5 (Ex M (GF C s Ag A	t to C35 O - DR	5) :O -	ORO Pb S	Зе Н	g			(Circle	
Of Ces Apply Description of Ces Apply Descript	Special Rep	Rush Charg	RUSH: Sai		REMARKS:									TCLP TCLP RCI GC/M	Volat Semi S Vol S Sei	iles Volat . 826 mi. Vo	iles 08 / 624 . 8270	4		_				ANALYSIS REG	
	ort Limits or TRRP Re	es Authorized	24 hr		)ARD			×	×	×	×	×	×	PLM Chlor Chlor Gene	(Asbeide ide ide eral W	stos) Sulfa	te T	_	see a	attac	ched	list)		nethod No.)	

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2290-2 SDG Number: Lea County NM

Login Number: 2290 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2290-2 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 05/09/22 12:39 PM

List Number: 2 Creator: Teel, Brianna

Login Number: 2290

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

<6mm (1/4").

Released to Imaging: 9/1/2023 2:28:53 PM

# **Environment Testing America**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2515-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 7/20/2022 7:58:20 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2515-1 SDG: Lea County NM

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Surrogate Summary	34
QC Sample Results	37
QC Association Summary	48
Lab Chronicle	56
Certification Summary	67
Method Summary	68
Sample Summary	69
Chain of Custody	70
Receipt Checklists	74

2

3

4

6

8

10

12

13

## **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

2

### **Qualifiers**

## GC VOA Qualifier

F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

**Qualifier Description** 

**Qualifier Description** 

\_\_\_

### GC Semi VOA

Qualifier

F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

7

### HPLC/IC Qualifier

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary Abbreviation

Listed under the "D" column to designate that the result is reported on a dry weight basis
 %R Percent Recovery
 CFL Contains Free Liquid
 CFU Colony Forming Unit
 CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

These commonly used abbreviations may or may not be present in this report.

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

12

14

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2515-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2515-1

#### Receipt

The samples were received on 7/8/2022 4:08 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-121 8 (890-2515-14), BH-122 8 (890-2515-15), BH-123 8 (890-2515-16), BH-124 8 (890-2515-17), BH-125 8 (890-2515-18), BH-126 8 (890-2515-19), BH-127 8 (890-2515-20), BH-128 8 (890-2515-21), BH-130 8 (890-2515-23), BH-131 8 (890-2515-24), BH-132 8 (890-2515-25), BH-133 8 (890-2515-26), BH-134 8 (890-2515-27), BH-136 8 (890-2515-29), BH-137 8 (890-2515-30), BH-138 8 (890-2515-31), BH-139 8 (890-2515-32), (CCV 880-29700/33) and (CCV 880-29700/51). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW35 0-6 (890-2515-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-114 10 (890-2515-7), BH-115 10 (890-2515-8), BH-116 10 (890-2515-9) and BH-117 10 (890-2515-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: BH-118 10 (890-2515-11). Elevated reporting limits (RLs) are provided.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-118 10 (890-2515-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29987 and analytical batch 880-30016 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: BH-117 10 (890-2515-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-29557 and analytical batch 880-29499 was outside control limits. Sample non-homogeneity is suspected.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29563 and analytical batch 880-29603 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: BH-131 8 (890-2515-24). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

-0

3

А

5

6

8

13

## **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2515-1 (Continued)

**Laboratory: Eurofins Carlsbad (Continued)** 

5

E

7

ŏ

10

40

13

Lab Sample ID: 890-2515-1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW34 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 12:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 12:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 12:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 09:52	07/15/22 12:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 12:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 09:52	07/15/22 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				07/14/22 09:52	07/15/22 12:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130				07/14/22 09:52	07/15/22 12:56	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range			DI	MDI	Unit	n	Propared	Analyzod	Dil Ea
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result   <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (Di	Qualifier U RO) (GC)	49.9		mg/Kg			07/13/22 09:51	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <49.9  ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u>D</u>	Prepared	07/13/22 09:51  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (Di	Qualifier U RO) (GC)	49.9		mg/Kg			07/13/22 09:51	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U F2	49.9		mg/Kg		Prepared	07/13/22 09:51  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D) Result <49.9	Qualifier U  RO) (GC) Qualifier U F2	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 20:46	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F2 U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 20:46  07/12/22 20:46	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F2 U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 20:46  07/12/22 20:46	Dil Face
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F2 U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 Prepared	07/13/22 09:51  Analyzed  07/12/22 20:46  07/12/22 20:46  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F2 U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24  Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 20:46  07/12/22 20:46  Analyzed  07/12/22 20:46	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F2 U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24  Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 20:46  07/12/22 20:46  Analyzed  07/12/22 20:46	Dil Fac

Client Sample ID: SW35 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:52	07/15/22 13:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:52	07/15/22 13:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:52	07/15/22 13:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:52	07/15/22 13:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:52	07/15/22 13:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:52	07/15/22 13:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130				07/14/22 09:52	07/15/22 13:17	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2515-2

2

3

6

e S

10

12

13

anio Ganobaa

Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

Client Sample ID: SW35 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Lab Sample	ID:	890-2515-2
		Matrix: Solid

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery Qualifie	er Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96	70 - 130	07/14/22 09:52	07/15/22 13:17	

**Method: Total BTEX - Total BTEX Calculation** 

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg	 		07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result Quali	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	ma/Ka			07/13/22 09:51	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifi	er Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92	70 - 130	07/12/22 14:24	07/12/22 21:50	1
o-Terphenyl	106	70 - 130	07/12/22 14:24	07/12/22 21:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualit		MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244	4.98	mg/Kg			07/14/22 04:18	1

Lab Sample ID: 890-2515-3 Client Sample ID: SW36 0-6 **Matrix: Solid** 

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Method: 8021B -	Malatile O		d- (OO)
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				07/14/22 09:52	07/15/22 17:36	1
1,4-Difluorobenzene (Surr)	107		70 - 130				07/14/22 09:52	07/15/22 17:36	1

Method:	Total	RTFY -	Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403		ma/Ka			07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	2)
motification of the property and organics (Erro) (Se	•,

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			07/13/22 09:51	1

Lab Sample ID: 890-2515-3

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW36 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:11	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/12/22 14:24	07/12/22 22:11	1
o-Terphenyl	102		70 - 130				07/12/22 14:24	07/12/22 22:11	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.8		5.05		mg/Kg			07/14/22 04:27	1

Client Sample ID: SW37 0-6 Lab Sample ID: 890-2515-4 Date Collected: 07/06/22 00:00 Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 16:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 16:25	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 16:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 09:52	07/15/22 16:25	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/14/22 09:52	07/15/22 16:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 09:52	07/15/22 16:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				07/14/22 09:52	07/15/22 16:25	1
1,4-Difluorobenzene (Surr)	107		70 - 130				07/14/22 09:52	07/15/22 16:25	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:33	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				07/12/22 14:24	07/12/22 22:33	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1

SDG: Lea County NM

Client Sample ID: SW37 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Lab Sample ID: 890-2515-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	natography - Soluble							
Analyte	Result Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.7	4.99	r	mg/Kg			07/14/22 04:37	1

Client Sample ID: BH-106 6 Lab Sample ID: 890-2515-5 **Matrix: Solid** 

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/22 09:52	07/15/22 18:18	
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/22 09:52	07/15/22 18:18	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	114		70 - 130				07/14/22 09:52	07/15/22 18:18	
1,4-Difluorobenzene (Surr)	113		70 - 130				07/14/22 09:52	07/15/22 18:18	
Total BTEX  Method: 8015 NM - Diesel Range	<0.00396  Organics (DR		0.00396		mg/Kg			07/15/22 08:13	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 22:54	•
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 22:54	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 22:54	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	111		70 - 130				07/12/22 14:24	07/12/22 22:54	

**Eurofins Carlsbad** 

Analyzed 07/14/22 04:46

RL

4.95

MDL Unit

mg/Kg

D

Prepared

Dil Fac

Analyte

Chloride

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

21.0

Lab Sample ID: 890-2515-6

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-108 6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
m-Xylene & p-Xylene	< 0.00397	U	0.00397		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/14/22 09:52	07/15/22 18:38	1
1,4-Difluorobenzene (Surr)	107		70 - 130				07/14/22 09:52	07/15/22 18:38	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			07/15/22 08:13	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<u> </u>	Result < 50.0		RL 50.0	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	
Analyte Total TPH  Method: 8015B NM - Diesel Ran	<50.0	U		MDL		<u>D</u>	Prepared		
Total TPH  Method: 8015B NM - Diesel Ran	<50.0	U				D_	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics	<50.0	RO) (GC) Qualifier	50.0		mg/Kg			07/13/22 09:51	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Ran Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  ge Organics (D	RO) (GC) Qualifier	50.0		mg/Kg		Prepared	07/13/22 09:51  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Ran Analyte  Gasoline Range Organics (GRO)-C6-C10	<50.0  ge Organics (Di  Result  <50.0	U  RO) (GC)  Qualifier  U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 23:16	Dil Fac
Total TPH  Method: 8015B NM - Diesel Ran Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0  ge Organics (Di Result <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 23:16  07/12/22 23:16	Dil Fac
Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 23:16  07/12/22 23:16  07/12/22 23:16	Dil Face 1 1 1 Dil Face
Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 Prepared	07/13/22 09:51  Analyzed  07/12/22 23:16  07/12/22 23:16  07/12/22 23:16  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <80.0 *Recovery 89 103	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24  Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed 07/12/22 23:16  07/12/22 23:16  Analyzed  07/12/22 23:16	Dil Fac
Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <89 103 omatography -	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24  Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed 07/12/22 23:16  07/12/22 23:16  Analyzed  07/12/22 23:16	Dil Fac

Client Sample ID: BH-114 10

Released to Imaging: 9/1/2023 2:28:53 PM

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 19:20	10
Toluene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 19:20	10
Ethylbenzene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 19:20	10
m-Xylene & p-Xylene	<0.0404	U	0.0404		mg/Kg		07/14/22 09:52	07/15/22 19:20	10
o-Xylene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 19:20	10
Xylenes, Total	<0.0404	U	0.0404		mg/Kg		07/14/22 09:52	07/15/22 19:20	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		S1+	70 - 130				07/14/22 09:52	07/15/22 19:20	10

**Eurofins Carlsbad** 

Lab Sample ID: 890-2515-7

Matrix: Solid

Lab Sample ID: 890-2515-7

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-114 10

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 10

Method: 8021B	Volatile Ore	ranic Com	nounds (C	C	(Continued)	
WELLIOU. OUZ ID	- voiatile Org	Janiic Com	poulius (C	3C) (	(Continueu)	

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	126	70 - 130	07/14/22 09:52	07/15/22 19:20	10

Method: To	ntal RTFY.	Total BTEX	Calculation
mictilou. It	Jiai Di La	TOTAL DIEX	Odiculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0404	U	0.0404	mg/Kg			07/15/22 08:13	1

Method: 8015 NM - Diesel Range	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	99.5	50.0	mg/Kg			07/13/22 09:51	1

<u>_</u>								
Method: 8015B NM - Diesel Range	Organics (DI	RO) (GC)						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		07/12/22 14:24	07/13/22 04:16	1
(GRO)-C6-C10								
	Analyte Gasoline Range Organics	AnalyteResultGasoline Range Organics<50.0	Gasoline Range Organics <50.0 U	Analyte         Result         Qualifier         RL           Gasoline Range Organics         <50.0	AnalyteResult Gasoline Range OrganicsQualifierRLMDLUnitU50.0mg/Kg	AnalyteResult Gasoline Range OrganicsResult VQualifier URL UMDL mg/KgUnit mg/KgD mg/Kg	AnalyteResult Gasoline Range OrganicsQualifierRLMDL UUnitDPrepared07/12/22 14:24	AnalyteResultQualifierRLMDLUnitDPreparedAnalyzedGasoline Range Organics<50.0

3 1 3 (1 1 1 1 1 1 )			3 3			
C10-C28) OII Range Organics (Over C28-C36)	<50.0 U	50.0	mg/Kg	07/12/22 14:24	07/13/22 04:16	1
Diesel Range Organics (Over	99.5	50.0	mg/Kg	07/12/22 14:24	07/13/22 04:16	1

Surrogate	%Recovery Quality	fier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95	70 - 130	07/12/22 14:24	07/13/22 04:16	1
o-Terphenyl	105	70 - 130	07/12/22 14:24	07/13/22 04:16	1

Method: 300.0 - Anions, Ion	Chromatography - Soluble
	D 11 0 110

Analyte		alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	266	5.00	mg/Kg			07/14/22 08:09	1

Client Sample ID: BH-115 10

Date Collected: 07/06/22 00:00

Lab Sample ID: 890-2515-8

Matrix: Solid

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 10

Analyte

Method:	8021B -	Volatile	Organic (	Compounds	(GC)

monioui coziz rolumo cigui	(33)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0439		0.0201		mg/Kg		07/14/22 09:52	07/15/22 19:40	10
Toluene	<0.0201	U	0.0201		mg/Kg		07/14/22 09:52	07/15/22 19:40	10
Ethylbenzene	<0.0201	U	0.0201		mg/Kg		07/14/22 09:52	07/15/22 19:40	10
m-Xylene & p-Xylene	<0.0402	U	0.0402		mg/Kg		07/14/22 09:52	07/15/22 19:40	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		07/14/22 09:52	07/15/22 19:40	10
Xylenes, Total	<0.0402	U	0.0402		mg/Kg		07/14/22 09:52	07/15/22 19:40	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	205	S1+	70 - 130				07/14/22 09:52	07/15/22 19:40	10
1,4-Difluorobenzene (Surr)	128		70 - 130				07/14/22 09:52	07/15/22 19:40	10

1,4-Difluorobenzene (Surr)	128	70 - 130	07/14/22 09:52	07/15/22 19:40	10
Method: Total BTEX - Total BTEX	Calculation				

0.0402

RL

MDL Unit

mg/Kg

Result Qualifier

Total BTEX	0.0439

wiethod: 8015 NW - Diesei Range C	rganics (DRI	U) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.1		49.9		mg/Kg			07/13/22 09:51	1

Eurofins Carlsbad

Analyzed

07/15/22 08:13

Prepared

6

2

4

6

0

4.0

15

13

14

Dil Fac

Lab Sample ID: 890-2515-8

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-115 10

Date Collected: 07/06/22 00:00	Matrix: Solid
Date Received: 07/08/22 16:08	
Sample Depth: 10	

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 04:38	1
(GRO)-C6-C10									
Diesel Range Organics (Over	86.1		49.9		mg/Kg		07/12/22 14:24	07/13/22 04:38	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 04:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				07/12/22 14:24	07/13/22 04:38	1
o-Terphenyl	96		70 - 130				07/12/22 14:24	07/13/22 04:38	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.4		5.00		mg/Kg			07/14/22 08:18	

Lab Sample ID: 890-2515-9 Client Sample ID: BH-116 10 Date Collected: 07/06/22 00:00 Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0597		0.0202		mg/Kg		07/14/22 09:52	07/15/22 20:01	10
Toluene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 20:01	10
Ethylbenzene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 20:01	10
m-Xylene & p-Xylene	<0.0403	U	0.0403		mg/Kg		07/14/22 09:52	07/15/22 20:01	10
o-Xylene	<0.0202	U	0.0202		mg/Kg		07/14/22 09:52	07/15/22 20:01	10
Xylenes, Total	<0.0403	U	0.0403		mg/Kg		07/14/22 09:52	07/15/22 20:01	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	180	S1+	70 - 130				07/14/22 09:52	07/15/22 20:01	10
1,4-Difluorobenzene (Surr)	126		70 - 130				07/14/22 09:52	07/15/22 20:01	10
Analyte Total BTEX	0.0597	Qualifier	0.0403	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 07/15/22 08:13	
Total BTEX Method: 8015 NM - Diesel Range	0.0597 Organics (DR	O) (GC)						07/15/22 08:13	,
Total BTEX	0.0597 Organics (DR		0.0403		mg/Kg		Prepared		Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte	0.0597 Organics (DR) Result 196 ge Organics (D	O) (GC) Qualifier	0.0403	MDL	mg/Kg			07/15/22 08:13  Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range	0.0597 Organics (DR) Result 196 ge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	0.0403  RL 49.9	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	07/15/22 08:13  Analyzed  07/13/22 09:51	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics	0.0597 Organics (DR) Result 196 ge Organics (DR) Result	O) (GC) Qualifier  RO) (GC) Qualifier	0.0403  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	07/15/22 08:13  Analyzed  07/13/22 09:51  Analyzed	Dil Fa
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	0.0597 Organics (DR) Result 196 ge Organics (D) Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier  U	0.0403  RL 49.9  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  07/12/22 14:24	07/15/22 08:13  Analyzed 07/13/22 09:51  Analyzed 07/13/22 03:54	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	0.0597 Organics (DR) Result 196 ge Organics (D) Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier U	0.0403  RL 49.9  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  Prepared  07/12/22 14:24  07/12/22 14:24	07/15/22 08:13  Analyzed 07/13/22 09:51  Analyzed 07/13/22 03:54 07/13/22 03:54	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	0.0597 Organics (DR) Result 196 ge Organics (DI) Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier U	0.0403  RL 49.9  RL 49.9  49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  07/12/22 14:24  07/12/22 14:24	07/15/22 08:13  Analyzed 07/13/22 09:51  Analyzed 07/13/22 03:54 07/13/22 03:54	Dil Fac

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1

SDG: Lea County NM

Client Sample ID: BH-116 10

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 10

Lab Sample ID: 890-2515-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	76.8		4.98		mg/Kg			07/14/22 08:28	1	

Lab Sample ID: 890-2515-10 Client Sample ID: BH-117 10 Matrix: Solid

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.0553		0.0199		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
Toluene	<0.0199	U	0.0199		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
Ethylbenzene	<0.0199	U	0.0199		mg/Kg		07/14/22 09:52	07/15/22 20:22	1
m-Xylene & p-Xylene	<0.0398	U	0.0398		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
o-Xylene	<0.0199	U	0.0199		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
Xylenes, Total	<0.0398	U	0.0398		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	186	S1+	70 - 130				07/14/22 09:52	07/15/22 20:22	10
1,4-Difluorobenzene (Surr)	127		70 - 130				07/14/22 09:52	07/15/22 20:22	1
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.0553		0.0398		mg/Kg			07/15/22 08:13	•
Method: 8015 NM - Diesel Ran	• • •		DI.	MDI	11-14	_	Dunnand	Austral	D!! F
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
Total TPH	743		50.0		mg/Kg			07/13/22 09:51	•
Method: 8015B NM - Diesel Ra	• •	, , ,							
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 02:50	
Diesel Range Organics (Over C10-C28)	644		50.0		mg/Kg		07/12/22 14:24	07/13/22 02:50	
Oll Range Organics (Over C28-C36)	98.9		50.0		mg/Kg		07/12/22 14:24	07/13/22 02:50	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	120		70 - 130				07/12/22 14:24	07/13/22 02:50	
o-Terphenyl	133	S1+	70 - 130				07/12/22 14:24	07/13/22 02:50	
Method: 300.0 - Anions, Ion Ch	nromatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
						=			

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-118 10

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Sample Depth: 10

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2515-11

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
Toluene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
Ethylbenzene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
m-Xylene & p-Xylene	<0.202	U	0.202		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
o-Xylene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
Xylenes, Total	<0.202	U	0.202		mg/Kg		07/18/22 15:14	07/19/22 16:21	50

Surrogate	%Recovery Qua	ualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103	70 - 130	07/18/22 15:14	07/19/22 16:21	50
1,4-Difluorobenzene (Surr)	62 S1-	- 70 - 130	07/18/22 15:14	07/19/22 16:21	50

Method: Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.202	U	0.202		mg/Kg			07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4480	249	mg/Kg			07/13/22 09:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<249	U	249		mg/Kg		07/12/22 14:24	07/13/22 03:12	5
(GRO)-C6-C10									
Diesel Range Organics (Over	3970		249		mg/Kg		07/12/22 14:24	07/13/22 03:12	5
C10-C28)									
Oll Range Organics (Over	507		249		mg/Kg		07/12/22 14:24	07/13/22 03:12	5
C28-C36)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 130				07/12/22 14:24	07/13/22 03:12	

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	187		4.95		mg/Kg			07/14/22 08:46	1

70 - 130

Client Sample ID: BH-119 8

o-Terphenyl

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Sample Depth: 8

**REMOVED FROM ANALYSIS TABLE** 

94

Lab Sample ID: 890-2515-12

**Matrix: Solid** 

Method: 8021B - Volatile Organic	Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		07/14/22 09:52	07/15/22 18:59	1

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-119 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2515-12

**Matrix: Solid** 

Sample Depth: 8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	07/14/22 09:52	07/15/22 18:59	1
1,4-Difluorobenzene (Surr)	110		70 - 130	07/14/22 09:52	07/15/22 18:59	1

**Method: Total BTEX - Total BTEX Calculation** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac **Total TPH** 5070 250 mg/Kg 07/13/22 09:51

Method: 8015B NM - Diesel Range Organics (DRO) (GC) MDL Unit Dil Fac Result Qualifier D Analyte RLPrepared Analyzed <250 U 250 07/12/22 14:24 07/13/22 03:33 Gasoline Range Organics mg/Kg (GRO)-C6-C10 **Diesel Range Organics (Over** 4490 250 mg/Kg 07/12/22 14:24 07/13/22 03:33 5 C10-C28) 07/12/22 14:24 07/13/22 03:33 **Oll Range Organics (Over 578** 250 mg/Kg

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 07/12/22 14:24 07/13/22 03:33 1-Chlorooctane 97 07/12/22 14:24 07/13/22 03:33 o-Terphenyl 100 70 - 130 5

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Chloride 3960 25.1 07/14/22 09:14 mg/Kg

Client Sample ID: BH-120 8 Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

C28-C36)

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2515-13

**Matrix: Solid** 

nic Compounds (	GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
<0.00402	U F1 F2	0.00402		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
<0.00402	U F1 F2	0.00402		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
120		70 - 130				07/14/22 09:57	07/15/22 01:35	1
95		70 - 130				07/14/22 09:57	07/15/22 01:35	1
	Result   <0.00201   <0.00201   <0.00201   <0.00201   <0.00402   <0.00201   <0.00402   <0.00402     < .0.00402     < .0.00402     < .0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402   <0.00402	120	Result         Qualifier         RL           <0.00201	Result         Qualifier         RL         MDL           <0.00201	Result         Qualifier         RL         MDL         Unit           <0.00201	Result         Qualifier         RL         MDL         Unit         D           <0.00201	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00201	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           <0.00201

Method: Total BTEX - Total BTEX C	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/15/22 08:13	1

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-120 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Sample Depth: 8 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2515-13

Lab Sample ID: 890-2515-14

**Matrix: Solid** 

Matrix: Solid

Solia

5

6

8

9

11

13

14

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			07/13/22 09:51	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/12/22 14:24	07/12/22 23:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/12/22 14:24	07/12/22 23:37	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/12/22 14:24	07/12/22 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/12/22 14:24	07/12/22 23:37	1
o-Terphenyl	102		70 - 130				07/12/22 14:24	07/12/22 23:37	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1150		25.2		mg/Kg			07/14/22 09:23	5

Client Sample ID: BH-121 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130				07/14/22 09:57	07/15/22 02:01	1
1,4-Difluorobenzene (Surr)	80		70 - 130				07/14/22 09:57	07/15/22 02:01	1
Method: Total BTEX - Total BTEX Analyte Total BTEX		Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/15/22 08:13	
Analyte Total BTEX  Method: 8015 NM - Diesel Range	Result <0.00402  Organics (DR0	U (GC)	0.00402		mg/Kg			07/15/22 08:13	1
Analyte Total BTEX	Result <0.00402  Organics (DR0	O) (GC) Qualifier		MDL	mg/Kg	<u>D</u>	Prepared Prepared		Dil Fac Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte	Result <0.00402  Organics (DR0 Result <49.9  e Organics (DI	O) (GC) Qualifier	0.00402		mg/Kg  Unit mg/Kg			07/15/22 08:13  Analyzed	1 Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range	Result <0.00402  Organics (DR0 Result <49.9  e Organics (DI	O) (GC) Qualifier U RO) (GC) Qualifier	0.00402 RL 49.9	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	07/15/22 08:13  Analyzed  07/13/22 09:51	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <0.00402  Organics (DR0 Result <49.9  e Organics (DI Result	Qualifier U RO) (GC) Qualifier U Qualifier U	0.00402  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	07/15/22 08:13  Analyzed  07/13/22 09:51  Analyzed	Dil Fac

**Matrix: Solid** 

Lab Sample ID: 890-2515-14

Lab Sample ID: 890-2515-15

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-121 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	07/12/22 14:24	07/12/22 23:59	1
o-Terphenyl	118		70 - 130	07/12/22 14:24	07/12/22 23:59	1

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride5280101mg/Kg07/14/22 18:2520

Client Sample ID: BH-122 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 02:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 02:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 02:27	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 02:27	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 02:27	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 02:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				07/14/22 09:57	07/15/22 02:27	
1,4-Difluorobenzene (Surr)	76		70 - 130				07/14/22 09:57	07/15/22 02:27	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/15/22 08:13	1
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	II							
_	00.0	U	50.0		mg/Kg			07/13/22 09:51	1
- -			50.0		mg/Kg			07/13/22 09:51	1
Method: 8015B NM - Diesel Ranç Analyte	ge Organics (D		50.0 <b>RL</b>	MDL		D	Prepared	07/13/22 09:51  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		D_	Prepared 07/12/22 14:24		
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (Di Result <50.0	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u> </u>	07/12/22 14:24	<b>Analyzed</b> 07/13/22 00:20	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (Di Result <50.0	RO) (GC) Qualifier U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 14:24	Analyzed 07/13/22 00:20 07/13/22 00:20	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	ge Organics (D) Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u> </u>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24	Analyzed 07/13/22 00:20 07/13/22 00:20 07/13/22 00:20	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U		MDL	Unit mg/Kg mg/Kg	<u> </u>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 <i>Prepared</i>	Analyzed 07/13/22 00:20 07/13/22 00:20 07/13/22 00:20 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D)  Result  <50.0  <50.0  <50.0  **Recovery**  108  119	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 <b>Prepared</b> 07/12/22 14:24	Analyzed 07/13/22 00:20 07/13/22 00:20 07/13/22 00:20  Analyzed 07/13/22 00:20	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D)  Result  <50.0  <50.0  <50.0   **Recovery  108  119  Domatography -	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 <b>Prepared</b> 07/12/22 14:24	Analyzed 07/13/22 00:20 07/13/22 00:20 07/13/22 00:20  Analyzed 07/13/22 00:20	Dil Fac

**Eurofins Carlsbad** 

2

3

4

6

8

10

13

Lab Sample ID: 890-2515-16

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-123 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130				07/14/22 09:57	07/15/22 02:54	1
1,4-Difluorobenzene (Surr)	80		70 - 130				07/14/22 09:57	07/15/22 02:54	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range			DI	MDI	Unit	<b>D</b>	Droporod	Analyzad	Dil Eo
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result   <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	
Analyte	Result <49.9  ge Organics (Di	Qualifier U RO) (GC)		MDL		<u>D</u>			
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <49.9  ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u>D</u>	Prepared	07/13/22 09:51  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			07/13/22 09:51	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	07/13/22 09:51  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D) Result <49.9	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed  07/13/22 00:41	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 Prepared	07/13/22 09:51  Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24  Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed 07/13/22 00:41  07/13/22 00:41  Analyzed 07/13/22 00:41	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg		Prepared 07/12/22 14:24 07/12/22 14:24 07/12/22 14:24  Prepared 07/12/22 14:24	07/13/22 09:51  Analyzed 07/13/22 00:41  07/13/22 00:41  Analyzed 07/13/22 00:41	Dil Fac

Client Sample ID: BH-124 8 Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8



Lab Sample ID: 890-2515-17

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 03:20	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 03:20	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 03:20	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/14/22 09:57	07/15/22 03:20	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 03:20	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/14/22 09:57	07/15/22 03:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130				07/14/22 09:57	07/15/22 03:20	1

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-124 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Sample Depth: 8

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2515-17

Lab Sample ID: 890-2515-18

Matrix: Solid

Matrix: Solid

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
--	------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	74	70 - 130	07/14/22 09:57	07/15/22 03:20	1

Method: Total	BTEX - Total	BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	P	repared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg				07/15/22 08:13	1

Method: 801	5 NM - Diese	I Range Orga	anics (DRO) (GC)	

	· ga (2.1.0) (0.0)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			07/13/22 09:51	1

Method: 8015B	NM - Diesel	Range Ore	anice l	(DRO)	(GC)
Methou. ou isb	IAIN - DIESEI	Range Org	janics i	(DRU)	(GC)

	, 3 (	, (,							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrog	%Recove	ery Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlo		93 70 - 130	07/12/22 14:24	07/13/22 01:24	1
o-Terp	10	70 - 130	07/12/22 14:24	07/13/22 01:24	1
0-Terp	10	70 - 130	01/12/22 14.24		07/13/22 01.24

Method: 300.0 - Anions,	Ion Chromato	graphy	y - Soluble

Analyte	Result Qualit	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106	4.96		mg/Kg			07/14/22 18:52	1

Client Sample ID: BH-125 8

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B -	. Volatila	Organic (	Compounds	(GC)
Methou, ouz ib :	· voiatile	Oruanic C	JUHUUUHIUS	100

Welliou. 002 ID - Volatile Orga	ilic compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 03:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 03:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 03:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 09:57	07/15/22 03:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 03:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 09:57	07/15/22 03:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130				07/14/22 09:57	07/15/22 03:46	1
1,4-Difluorobenzene (Surr)	74		70 - 130				07/14/22 09:57	07/15/22 03:46	1
<del>-</del>									

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399		ma/Ka			07/15/22 08:13	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			07/13/22 09:51	1

Lab Sample ID: 890-2515-18

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-125 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:46	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				07/12/22 14:24	07/13/22 01:46	1
o-Terphenyl	98		70 - 130				07/12/22 14:24	07/13/22 01:46	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3800		25.0		mg/Kg			07/14/22 19:02	5

Client Sample ID: BH-126 8 Lab Sample ID: 890-2515-19 Date Collected: 07/07/22 00:00 Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 04:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 04:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 04:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 04:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 04:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 04:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130				07/14/22 09:57	07/15/22 04:13	1
1,4-Difluorobenzene (Surr)	76		70 - 130				07/14/22 09:57	07/15/22 04:13	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 02:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 02:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 02:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				07/12/22 14:24	07/13/22 02:07	1
o-Terphenyl	115		70 <sub>-</sub> 130				07/12/22 14:24	07/13/22 02:07	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

Lab Sample ID: 890-2515-19

Client Sample ID: BH-126 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4170		100		mg/Kg			07/14/22 19:11	20

Lab Sample ID: 890-2515-20 Client Sample ID: BH-127 8 Matrix: Solid

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130				07/14/22 09:57	07/15/22 04:39	1
1,4-Difluorobenzene (Surr)	77		70 - 130				07/14/22 09:57	07/15/22 04:39	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/15/22 08:13	1
Analyte Total TPH	<b>Result</b> <49.9	Qualifier U	49.9 —	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	Dil Fac
Method: 8015B NM - Diesel Ran	•								
Analyte		Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 02:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 02:29	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 02:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/12/22 14:24	07/13/22 02:29	1
o-Terphenyl	106		70 - 130				07/12/22 14:24	07/13/22 02:29	1
Mathadi 200 0 Aniana Ian Chu	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chr	omatograpmy -	Oolubic							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2515-21

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-128 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130				07/14/22 09:57	07/15/22 05:05	1
1,4-Difluorobenzene (Surr)	72		70 - 130				07/14/22 09:57	07/15/22 05:05	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/15/22 08:13	1
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	
-			40.0		mg/rtg			01/10/22 00.01	
Method: 8015B NM - Diesel Rang	•					_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	49.9		mg/Kg		07/12/22 15:30	07/13/22 11:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		07/12/22 15:30	07/13/22 11:31	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 11:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/12/22 15:30	07/13/22 11:31	1
o-Terphenyl	107		70 - 130				07/12/22 15:30	07/13/22 11:31	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro	0	Soluble Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-129 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac										
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	<0.00201 <0.00201 <0.00201 <0.00402	U U	0.00201 0.00201 0.00201 0.00402		mg/Kg mg/Kg mg/Kg mg/Kg		07/14/22 09:57 07/14/22 09:57 07/14/22 09:57 07/14/22 09:57	07/15/22 05:32 07/15/22 05:32 07/15/22 05:32 07/15/22 05:32	1 1 1 1										
										o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 05:32	1
										Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 05:32	1
										Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				07/14/22 09:57	07/15/22 05:32	1										

**Eurofins Carlsbad** 

Lab Sample ID: 890-2515-22

2

3

5

7

10

12

13

itins Carlsbac

**Matrix: Solid** 

Lab Sample ID: 890-2515-22

Lab Sample ID: 890-2515-23

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-129 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B -	Volatile Ord	anic Com	nounds (C	GC) (	(Continued)	
Method. 002 1D	Volatile Oit		poullus (C	30) I	(Continueu)	

Surrogate	%Recovery Quality	ifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	74	70 - 130	07/14/22 09:57	07/15/22 05:32	1

Method: Total	BTEX - Total	BTEX Calculation	าท

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	07/15/22 08:13	1

ı		
ı	Method: 8015 NM - Diesel Range Organics (DRO)	(CC)
ı	Method. 0013 NM - Diesel Kange Organics (DRO)	(00)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg		_	07/13/22 09:51	1

Method: 8015B NM - Diese	Range Organics	(DRO) (GC)
--------------------------	----------------	------------

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 12:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 12:36	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 12:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89	70 - 130	07/12/22 15:30	07/13/22 12:36	1
o-Terphenyl	103	70 - 130	07/12/22 15:30	07/13/22 12:36	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Chloride	926		4.95		mg/Kg				07/14/22 07:52	1

Client Sample ID: BH-130 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

		/							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 07:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 07:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 07:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 07:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 07:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 07:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				07/14/22 09:57	07/15/22 07:18	1
1,4-Difluorobenzene (Surr)	80		70 - 130				07/14/22 09:57	07/15/22 07:18	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/15/22 08:13	1

Analyte	•	•	Result	Qualifier	RL	MDL Uni	t D	Prepare		Dil Fac
Total TPH			<49.9	U	49.9	mg/	Kg		07/13/22 09:51	1

Eurofins Carlsbad

2

3

7

10

45

13

otins Carisbac

Lab Sample ID: 890-2515-23

Lab Sample ID: 890-2515-24

Matrix: Solid

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-130 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 12:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 12:58	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				07/12/22 15:30	07/13/22 12:58	1
o-Terphenyl	113		70 - 130				07/12/22 15:30	07/13/22 12:58	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	675		4.99		mg/Kg			07/14/22 08:00	1

Client Sample ID: BH-131 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 07:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 07:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 07:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 07:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 07:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 07:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				07/14/22 09:57	07/15/22 07:45	1
1,4-Difluorobenzene (Surr)	76		70 - 130				07/14/22 09:57	07/15/22 07:45	1
Method: Total BTEX - Total BTE	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T DTE\/	0.00400		0.00400		""			07/45/00 00:40	
Total BTEX	<0.00400	U	0.00400		mg/Kg			07/15/22 08:13	1
• -			0.00400		mg/Kg			07/15/22 08:13	1
Total BTEX 	o Organics (DR		0.00400 <b>RL</b>	MDL	mg/Kg Unit	D	Prepared	07/15/22 08:13  Analyzed	1 Dil Fac
: Method: 8015 NM - Diesel Range	o Organics (DR	O) (GC)		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR) Result 63.5	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR Result 63.5 ge Organics (D	O) (GC) Qualifier	RL		Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte	e Organics (DR Result 63.5 ge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	<b>RL</b> 49.9		Unit mg/Kg			Analyzed 07/13/22 09:51	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	e Organics (DR Result 63.5 ge Organics (DI Result	O) (GC) Qualifier  RO) (GC) Qualifier	RL		Unit mg/Kg		Prepared	Analyzed 07/13/22 09:51 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result 63.5 ge Organics (DI Result	O) (GC) Qualifier  RO) (GC) Qualifier	RL		Unit mg/Kg		Prepared	Analyzed 07/13/22 09:51 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result 63.5 ge Organics (Di Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier U	RL 49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30	Analyzed 07/13/22 09:51  Analyzed 07/13/22 13:20 07/13/22 13:20	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result 63.5 ge Organics (D Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier U	RL 49.9		Unit mg/Kg  Unit mg/Kg		Prepared 07/12/22 15:30	Analyzed 07/13/22 09:51  Analyzed 07/13/22 13:20	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	e Organics (DR Result 63.5 ge Organics (Di Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier U	RL 49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30	Analyzed 07/13/22 09:51  Analyzed 07/13/22 13:20 07/13/22 13:20	Dil Fac  Dil Fac  1  1  1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result 63.5 ge Organics (DR Result <49.9	O) (GC) Qualifier  RO) (GC) Qualifier U	RL 49.9  RL 49.9  49.9  49.9		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30 07/12/22 15:30	Analyzed 07/13/22 09:51  Analyzed 07/13/22 13:20 07/13/22 13:20 07/13/22 13:20	Dil Fac Dil Fac

Job ID: 890-2515-1

SDG: Lea County NM

Client Sample ID: BH-131 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 5.00 07/14/22 08:07 Chloride 85.5 mg/Kg

Client Sample ID: BH-132 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

**Method: Total BTEX - Total BTEX Calculation** 

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

<0.00396 U

Lab Sample ID: 890-2515-25

Analyzed

07/15/22 08:13

Lab Sample ID: 890-2515-24

**Matrix: Solid** 

Matrix: Solid

Sample Depth: 8

Analyte

Total BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		S1+	70 - 130				07/14/22 09:57	07/15/22 08:11	1
1,4-Difluorobenzene (Surr)	74		70 - 130				07/14/22 09:57	07/15/22 08:11	1

<del>-</del> -									
Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1

0.00396

MDL Unit

mg/Kg

Prepared

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 13:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 13:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/12/22 15:30	07/13/22 13:41	1
o-Terphenyl	102		70 <sub>-</sub> 130				07/12/22 15:30	07/13/22 13:41	1

Method: 300.0 - Anions, Ion Chroma	atography - So	oluble						
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	172	4.96		mg/Kg			07/14/22 08:15	1

**Eurofins Carlsbad** 

Dil Fac

Lab Sample ID: 890-2515-26

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-133 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 08:49	
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 08:49	•
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 08:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 08:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 08:49	•
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 08:49	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				07/14/22 09:57	07/15/22 08:49	
1,4-Difluorobenzene (Surr)	81		70 - 130				07/14/22 09:57	07/15/22 08:49	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/15/22 08:13	-
Analyte Total TPH	<50.0	Qualifier U	50.0		mg/Kg	D	Prepared	Analyzed 07/13/22 09:51	Dil Fa
			30.0		mg/Rg			07/13/22 09.31	
Method: 8015B NM - Diesel Rang									
Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:03	,
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	П	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:03	
C10-C28)	100.0	J	00.0		mg/itg		01712/22 10:00	07710/22 14.00	
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:03	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	86		70 - 130				07/12/22 15:30	07/13/22 14:03	
o-Terphenyl	101		70 - 130				07/12/22 15:30	07/13/22 14:03	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
	0 . ,								
Analyte	0 . ,	Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-134 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 09:16	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 09:16	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 09:16	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/14/22 09:57	07/15/22 09:16	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 09:16	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/14/22 09:57	07/15/22 09:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		S1+	70 - 130				07/14/22 09:57	07/15/22 09:16	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2515-27

3

5

7

10

12

13

۲

no Ganobaa

Lab Sample ID: 890-2515-27

Lab Sample ID: 890-2515-28

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-134 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Odinanaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	78	70 - 130	07/14/22 09:57	07/15/22 09:16	1

Method: Total	BTEX - Total	BTEX Calculation	าท

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (0	<b>3C</b> )

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg		_	07/13/22 09:51	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	07/12/22 1	15:30	07/13/22 14:24	1
o-Terphenyl	101		70 - 130	07/12/22 1	15:30	07/13/22 14:24	1

Method: 300.0	) - Anions, Io	n Chromatograp	hy - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300	5.01	mg/Kg			07/14/22 08:47	1

Client Sample ID: BH-135 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

		/							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 09:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 09:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 09:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 09:57	07/15/22 09:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 09:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 09:57	07/15/22 09:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				07/14/22 09:57	07/15/22 09:42	1
1,4-Difluorobenzene (Surr)	74		70 - 130				07/14/22 09:57	07/15/22 09:42	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	ט	Prepared	Analyzed	DII Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/15/22 08:13	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			07/13/22 09:51	1

Eurofins Carlsbad

2

3

4

7

0

10

Lab Sample ID: 890-2515-28

Lab Sample ID: 890-2515-29

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-135 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 14:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 14:45	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 14:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/12/22 15:30	07/13/22 14:45	
o-Terphenyl	103		70 - 130				07/12/22 15:30	07/13/22 14:45	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	722		4.97		mg/Kg			07/14/22 10:01	1

Client Sample ID: BH-136 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 10:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 10:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 10:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 10:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 10:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 10:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	148	S1+	70 - 130				07/14/22 09:57	07/15/22 10:08	1
1,4-Difluorobenzene (Surr)	72		70 - 130				07/14/22 09:57	07/15/22 10:08	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 15:07	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 15:07	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 15:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/12/22 15:30	07/13/22 15:07	1
o-Terphenyl	103		70 - 130				07/12/22 15:30	07/13/22 15:07	1

**Eurofins Carlsbad** 

2

3

\_ \_

8

10

12

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Method: 300.0 - Anions, Ion Chromatography - Soluble

Job ID: 890-2515-1

SDG: Lea County NM

Lab Sample ID: 890-2515-29

Client Sample ID: BH-136 8

Date Collected: 07/07/22 00:00 Da

Sa

ate Received: 07/08/22 16:08	
ample Depth: 8	
	_

Analyte Result Qualifier RL MDL Unit Dil Fac D Prepared Analyzed 07/14/22 10:09 4.98 Chloride 490 mg/Kg Client Sample ID: BH-137 8 Lab Sample ID: 890-2515-30

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

1-Chlorooctane

o-Terphenyl

Analyte

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 10:34	
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 10:34	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	17	S1-	70 - 130				07/14/22 09:57	07/15/22 10:34	
1,4-Difluorobenzene (Surr)	79		70 - 130				07/14/22 09:57	07/15/22 10:34	
Analyte Total BTEX	<0.00402	Qualifier U		MDL	Unit mg/Kg	<u>D</u>	Prepared	<b>Analyzed</b> 07/15/22 08:13	Dil Fa
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	
Method: 8015B NM - Diesel Rang									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	
Oll Dange Organica (Over C20 C26)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	
Oll Range Organics (Over C28-C36)	٠٠٠٠	-			5 5			***************************************	

70 - 130

70 - 130

RL

5.00

MDL Unit

mg/Kg

91

104

167

Result Qualifier

Method: 300.0 - Anions, Ion Chromatography - Soluble

**Eurofins Carlsbad** 

07/12/22 15:30

07/12/22 15:30

Prepared

D

07/13/22 15:28

07/13/22 15:28

Analyzed

07/14/22 10:17

Dil Fac

Lab Sample ID: 890-2515-31

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-138 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 11:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 11:01	•
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 11:01	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/22 09:57	07/15/22 11:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 11:01	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/22 09:57	07/15/22 11:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130				07/14/22 09:57	07/15/22 11:01	1
1,4-Difluorobenzene (Surr)	76		70 - 130				07/14/22 09:57	07/15/22 11:01	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range	•	, , ,	DI	MDI	11	_	Dd	Austral	D!! E
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	, , ,	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result 55.9	Qualifier RO) (GC)	50.0		mg/Kg		· ·	07/13/22 09:51	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result 55.9  ge Organics (DI Result	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg	<u>D</u>	Prepared	07/13/22 09:51  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result 55.9	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg		· ·	07/13/22 09:51	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 55.9  ge Organics (DI Result	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg		Prepared	07/13/22 09:51  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 55.9  ge Organics (Di Result <50.0	Qualifier  RO) (GC) Qualifier  U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 16:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier  RO) (GC) Qualifier U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 16:11  07/13/22 16:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier  RO) (GC) Qualifier U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 16:11  07/13/22 16:11  07/13/22 16:11	Dil Face
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier  RO) (GC) Qualifier U	50.0  RL  50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30 07/12/22 15:30 Prepared	07/13/22 09:51  Analyzed  07/13/22 16:11  07/13/22 16:11  07/13/22 16:11  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  RO) (GC) Qualifier  U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30 07/12/22 15:30  Prepared 07/12/22 15:30	07/13/22 09:51  Analyzed 07/13/22 16:11  07/13/22 16:11  Analyzed 07/13/22 16:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  RO) (GC) Qualifier  U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/12/22 15:30 07/12/22 15:30 07/12/22 15:30  Prepared 07/12/22 15:30	07/13/22 09:51  Analyzed 07/13/22 16:11  07/13/22 16:11  Analyzed 07/13/22 16:11	Dil Fac

Client Sample ID: BH-139 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 11:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 11:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 11:27	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 11:27	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 11:27	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 11:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				07/14/22 09:57	07/15/22 11:27	

**Eurofins Carlsbad** 

**Matrix: Solid** 

Lab Sample ID: 890-2515-32

3

7

9

11

12

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

SDG: Lea County NM

Lab Sample ID: 890-2515-32

Lab Sample ID: 890-2515-33

Matrix: Solid

Client Sample ID: BH-139 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B	- Volatile Organic	Compounds	(GC)	(Continued)
MICHIOU. UUZ ID	- voiatile Organic	Compounds		(Continueu)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	74	70 - 130	07/14/22 09:57	07/15/22 11:27	1

N 0 - 41 1 -	T - 4 - 1	DTEV	T-4-1	DTEV	0-11-41
wetnoa:	iotai	RIFY -	- Iotai	RIFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/15/22 08:13	1

Mathadi COLE NIM Diagal	Danas Ornanias		/CCN
Method: 8015 NM - Diese	Range Organics	IDRUI	(GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			07/13/22 09:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 16:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 16:32	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	07/12/22 15:30	07/13/22 16:32	1
o-Terphenyl	106		70 - 130	07/12/22 15:30	07/13/22 16:32	1

Method: 300.0	) - Anions, Io	n Chromatograp	hy - Soluble

Analyte	Result Qualific		MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1390	25.0	mg/Kg			07/14/22 15:23	5

Client Sample ID: BH-140 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B - '	Volatila	Organic (	Compounds	(CC)

method: 8021B - Volatile Organic Compounds (GC)										
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1		
<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1		
<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1		
<0.00398	U	0.00398		mg/Kg		07/14/22 10:08	07/15/22 23:49	1		
<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1		
<0.00398	U	0.00398		mg/Kg		07/14/22 10:08	07/15/22 23:49	1		
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
107		70 - 130				07/14/22 10:08	07/15/22 23:49	1		
107		70 - 130				07/14/22 10:08	07/15/22 23:49	1		
	Result   <0.00199   <0.00199   <0.00199   <0.00398   <0.00199   <0.00398   <0.00398	Result   Qualifier	Result         Qualifier         RL           <0.00199	Result         Qualifier         RL         MDL           <0.00199	Result         Qualifier         RL         MDL         Unit           <0.00199	Result         Qualifier         RL         MDL         Unit         D           <0.00199	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00199	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           <0.00199		

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/15/22 08:13	1

	Method: 8015 NM - Diesel	Range Organics (DRO	D) (GC)	۱
ı	Michiga. 00 to Min - Diese	i italige Organics (Ditt		,

Analyte	Result (	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 l	U	49.8	mg/Kg			07/13/22 09:51	1

Eurofins Carlsbad

2

3

4

6

8

1 N

12

13

-

Lab Sample ID: 890-2515-33

Lab Sample ID: 890-2515-34

Matrix: Solid

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-140 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		07/12/22 15:30	07/13/22 16:53	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		07/12/22 15:30	07/13/22 16:53	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/12/22 15:30	07/13/22 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				07/12/22 15:30	07/13/22 16:53	1
o-Terphenyl	103		70 - 130				07/12/22 15:30	07/13/22 16:53	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-141 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 10:08	07/16/22 00:10	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 10:08	07/16/22 00:10	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 10:08	07/16/22 00:10	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/22 10:08	07/16/22 00:10	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 10:08	07/16/22 00:10	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/22 10:08	07/16/22 00:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				07/14/22 10:08	07/16/22 00:10	1
1,4-Difluorobenzene (Surr)	104		70 - 130				07/14/22 10:08	07/16/22 00:10	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	61.0		49.9		mg/Kg			07/13/22 09:51	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 17:15	1
Diesel Range Organics (Over C10-C28)	61.0		49.9		mg/Kg		07/12/22 15:30	07/13/22 17:15	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 17:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/12/22 15:30	07/13/22 17:15	1
o-Terphenyl	101		70 - 130				07/12/22 15:30	07/13/22 17:15	1

**Eurofins Carlsbad** 

2

3

4

7

0

10

12

Lab Sample ID: 890-2515-34

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-141 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 300.0 - Anions, Ion Chromatography - Soluble
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac
Chloride 2410 24.8 mg/Kg 07/14/22 15:55 5

1

5

7

8

11

12

## **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

latrix: Solid				Prep Type: Total/NA
				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-17011-A-1-D MS	Matrix Spike	122	79	
880-17011-A-1-E MSD	Matrix Spike Duplicate	124	80	
890-2515-1	SW34 0-6	109	104	
390-2515-2	SW35 0-6	160 S1+	96	
890-2515-3	SW36 0-6	107	107	
890-2515-4	SW37 0-6	103	107	
890-2515-5	BH-106 6	114	113	
390-2515-6	BH-108 6	110	107	
390-2515-7	BH-114 10	174 S1+	126	
390-2515-8	BH-115 10	205 S1+	128	
390-2515-9	BH-116 10	180 S1+	126	
390-2515-10	BH-117 10	186 S1+	127	
390-2515-11	BH-118 10	103	62 S1-	
390-2515-12	BH-119 8	118	110	
890-2515-13	BH-120 8	120	95	
390-2515-13 MS	BH-120 8	132 S1+	78	
890-2515-13 MSD	BH-120 8	112	91	
390-2515-14	BH-121 8	137 S1+	80	
90-2515-15	BH-122 8	135 S1+	76	
90-2515-16	BH-123 8	149 S1+	80	
90-2515-17	BH-124 8	145 S1+	74	
90-2515-18	BH-125 8	147 S1+	74	
90-2515-19	BH-126 8	147 S1+	76	
90-2515-20	BH-127 8	144 S1+	77	
90-2515-21	BH-128 8	147 S1+	72	
390-2515-22	BH-129 8	129	74	
390-2515-23	BH-130 8	135 S1+	80	
90-2515-24	BH-131 8	132 S1+	76	
390-2515-25	BH-132 8	150 S1+	74	
390-2515-26	BH-133 8	142 S1+	81	
390-2515-27	BH-134 8	142 S1+	78	
90-2515-28	BH-135 8	118	74	
90-2515-29	BH-136 8	148 S1+	72	
90-2515-30	BH-137 8	17 S1-	79	
390-2515-31	BH-138 8	139 S1+	76	
890-2515-32	BH-139 8	135 S1+	74	
390-2515-33	BH-140 8	107	107	
90-2515-33 MS	BH-140 8	98	100	
890-2515-33 MSD	BH-140 8	97	98	
390-2515-34	BH-141 8	104	104	
CS 880-29722/1-A	Lab Control Sample	94	102	
CS 880-29723/1-A	Lab Control Sample	129	77	
CS 880-29739/1-A	Lab Control Sample	97	98	
.CS 880-29987/1-A	Lab Control Sample	119	90	
.CSD 880-29722/2-A	Lab Control Sample Dup	98	101	
CSD 880-29723/2-A	Lab Control Sample Dup	138 S1+	78	
CSD 880-29739/2-A	Lab Control Sample Dup	102	96	
_CSD 880-29987/2-A	Lab Control Sample Dup	127	92	
MB 880-29669/5-A	Method Blank	95	77	

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
MB 880-29722/5-A	Method Blank	106	108	
MB 880-29723/5-A	Method Blank	98	74	
MB 880-29739/5-A	Method Blank	102	108	
MB 880-29987/5-A	Method Blank	87	84	
Surrogate Legend				

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

				Percent Surrogate Recovery (Acceptance Limits)
		1001	ОТРН1	recent during at recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2515-1	SW34 0-6	95	109	
390-2515-1 MS	SW34 0-6	80	79	
890-2515-1 MSD	SW34 0-6	81	79	
390-2515-2	SW35 0-6	92	106	
390-2515-3	SW36 0-6	91	102	
390-2515-4	SW37 0-6	98	112	
390-2515-5	BH-106 6	111	125	
390-2515-6	BH-108 6	89	103	
390-2515-7	BH-114 10	95	105	
890-2515-8	BH-115 10	84	96	
390-2515-9	BH-116 10	113	125	
390-2515-10	BH-117 10	120	133 S1+	
390-2515-11	BH-118 10	90	94	
390-2515-12	BH-119 8	97	100	
390-2515-13	BH-120 8	88	102	
390-2515-14	BH-121 8	107	118	
390-2515-15	BH-122 8	108	119	
390-2515-16	BH-123 8	89	103	
390-2515-17	BH-124 8	93	107	
390-2515-18	BH-125 8	86	98	
390-2515-19	BH-126 8	106	115	
390-2515-20	BH-127 8	93	106	
390-2515-21	BH-128 8	93	107	
890-2515-21 MS	BH-128 8	79	92	
890-2515-21 MSD	BH-128 8	80	93	
390-2515-22	BH-129 8	89	103	
390-2515-23	BH-130 8	102	113	
390-2515-24	BH-131 8	86	0.05 S1-	
890-2515-25	BH-132 8	88	102	
390-2515-26	BH-133 8	86	102	
390-2515-27	BH-134 8	86	101	
390-2515-28	BH-135 8	92	103	
390-2515-29	BH-136 8	92	103	
390-2515-29	BH-137 8	91	104	
390-2515-31	BH-138 8	98	111	
390-2515-32	BH-139 8	92	106	

## **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2515-33	BH-140 8	90	103	
890-2515-34	BH-141 8	91	101	
LCS 880-29557/2-A	Lab Control Sample	99	107	
LCS 880-29563/2-A	Lab Control Sample	99	112	
LCSD 880-29557/3-A	Lab Control Sample Dup	101	110	
LCSD 880-29563/3-A	Lab Control Sample Dup	102	113	
MB 880-29557/1-A	Method Blank	94	108	
MB 880-29563/1-A	Method Blank	100	118	
Surrogate Legend				

10

OTPH = o-Terphenyl

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

3

4

6

0

9

1 0

12

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29669/5-A

**Matrix: Solid** 

Analysis Batch: 29700

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29669

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
Toluene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
Ethylbenzene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
m-Xylene & p-Xylene	<0.000800	U	0.000800		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
o-Xylene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
Xylenes, Total	<0.000800	U	0.000800		mg/Kg		07/13/22 13:52	07/14/22 11:30	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	70 - 130	07/13/22 13:52	07/14/22 11:30	1
1,4-Difluorobenzene (Surr)	77	70 - 130	07/13/22 13:52	07/14/22 11:30	1

Lab Sample ID: MB 880-29722/5-A

**Matrix: Solid** 

Analysis Batch: 29790

Client Sample ID: Method Blank

Analyzed

Prepared

Prep Type: Total/NA

Prep Batch: 29722

Dil Fac

Analyte Result Qualifier RL MDL Unit mg/Kg Benzene <0.00200 U 0.00200 Toluene <0.00200 U 0.00200 mg/Kg

MR MR

07/14/22 09:52 07/15/22 11:11 07/14/22 09:52 07/15/22 11:11 Ethylbenzene <0.00200 U 0.00200 mg/Kg 07/14/22 09:52 07/15/22 11:11 <0.00400 U 0.00400 07/14/22 09:52 07/15/22 11:11 m-Xylene & p-Xylene mg/Kg <0.00200 U 0.00200 07/14/22 09:52 07/15/22 11:11 o-Xylene mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 07/14/22 09:52 07/15/22 11:11

MB MB

Surrogate	%Recovery	Qualifier	Limits	Pr	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	07/14	4/22 09:52	07/15/22 11:11	1
1,4-Difluorobenzene (Surr)	108		70 - 130	07/14	4/22 09:52	07/15/22 11:11	1

Lab Sample ID: LCS 880-29722/1-A

**Matrix: Solid** 

**Analysis Batch: 29790** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 29722

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1075		mg/Kg	_	107	70 - 130	
Toluene	0.100	0.09814		mg/Kg		98	70 - 130	
Ethylbenzene	0.100	0.08616		mg/Kg		86	70 - 130	
m-Xylene & p-Xylene	0.200	0.1710		mg/Kg		85	70 - 130	
o-Xylene	0.100	0.09010		mg/Kg		90	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: LCSD 880-29722/2-A

**Matrix: Solid** 

Analysis Batch: 29790

Client Sample ID: Lab	<b>Control Sample Dup</b>
	Dren Trees Total/NA

Prep Type: Total/NA

Prep Batch: 29722

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09685	,	mg/Kg		97	70 - 130	10	35

### QC Sample Results

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-29722/2-A

**Matrix: Solid** 

Analysis Batch: 29790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29722

Spike	LCSD	LCSD				%Rec		RPD	
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
0.100	0.09023		mg/Kg		90	70 - 130	8	35	
0.100	0.08012		mg/Kg		80	70 - 130	7	35	
0.200	0.1601		mg/Kg		80	70 - 130	7	35	
0.100	0.08531		mg/Kg		85	70 - 130	5	35	
	Added 0.100 0.100 0.200	Added         Result           0.100         0.09023           0.100         0.08012           0.200         0.1601	Added         Result         Qualifier           0.100         0.09023           0.100         0.08012           0.200         0.1601	Added         Result         Qualifier         Unit           0.100         0.09023         mg/Kg           0.100         0.08012         mg/Kg           0.200         0.1601         mg/Kg	Added         Result         Qualifier         Unit         D           0.100         0.09023         mg/Kg           0.100         0.08012         mg/Kg           0.200         0.1601         mg/Kg	Added         Result         Qualifier         Unit         D         %Rec           0.100         0.09023         mg/Kg         90           0.100         0.08012         mg/Kg         80           0.200         0.1601         mg/Kg         80	Added         Result         Qualifier         Unit         D         %Rec         Limits           0.100         0.09023         mg/Kg         90         70 - 130           0.100         0.08012         mg/Kg         80         70 - 130           0.200         0.1601         mg/Kg         80         70 - 130	Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           0.100         0.09023         mg/Kg         90         70 - 130         8           0.100         0.08012         mg/Kg         80         70 - 130         7           0.200         0.1601         mg/Kg         80         70 - 130         7	Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD         Limit           0.100         0.09023         mg/Kg         90         70 - 130         8         35           0.100         0.08012         mg/Kg         80         70 - 130         7         35           0.200         0.1601         mg/Kg         80         70 - 130         7         35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	98	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: MB 880-29723/5-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 29700** 

Prep Type: Total/NA

Prep Batch: 29723

мв мв Analyte Result Qualifier MDL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 07/14/22 09:57 07/15/22 01:08 mg/Kg Toluene <0.00200 U 0.00200 07/14/22 09:57 07/15/22 01:08 mg/Kg Ethylbenzene <0.00200 U 0.00200 07/14/22 09:57 07/15/22 01:08 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 07/14/22 09:57 07/15/22 01:08 mg/Kg o-Xylene <0.00200 U 0.00200 mg/Kg 07/14/22 09:57 07/15/22 01:08 <0.00400 U 0.00400 07/14/22 09:57 07/15/22 01:08 Xylenes, Total mg/Kg

MB MB

Surrogate	%Recovery Qualifi	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98	70 - 130	07/14/22 09:57	07/15/22 01:08	1
1.4-Difluorobenzene (Surr)	74	70 - 130	07/14/22 09:57	07/15/22 01:08	1

Lab Sample ID: LCS 880-29723/1-A

**Matrix: Solid** 

Analysis Batch: 29700

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29723

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07927		mg/Kg		79	70 - 130	
Toluene	0.100	0.08725		mg/Kg		87	70 - 130	
Ethylbenzene	0.100	0.09476		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	0.200	0.1923		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1.4-Difluorobenzene (Surr)	77		70 <sub>-</sub> 130

Lab Sample ID: LCSD 880-29723/2-A

**Matrix: Solid** 

**Analysis Batch: 29700** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29723

-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08406		mg/Kg		84	70 - 130	6	35
Toluene	0.100	0.09646		mg/Kg		96	70 - 130	10	35
Ethylbenzene	0.100	0.09969		mg/Kg		100	70 - 130	5	35

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-29723/2-A **Matrix: Solid** 

Analysis Batch: 29700

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29723

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit 0.200 0.2043 102 70 - 130 35 m-Xylene & p-Xylene mg/Kg 6 o-Xylene 0.100 0.1087 mg/Kg 109 70 - 130

LCSD LCSD

%Recovery Qualifier Limits Surrogate S1+ 70 - 130 4-Bromofluorobenzene (Surr) 138 1,4-Difluorobenzene (Surr) 70 - 130 78

Lab Sample ID: 890-2515-13 MS Client Sample ID: BH-120 8

**Matrix: Solid** 

Analysis Batch: 29700

Prep Type: Total/NA

Prep Batch: 29723

%Rec Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Benzene <0.00201 U F1 F2 0.100 0.08436 mg/Kg 84 70 - 130 Toluene <0.00201 UF1F2 0.100 0.08782 mg/Kg 88 70 - 130 0.100 0.08772 88 Ethylbenzene <0.00201 UF1F2 mg/Kg 70 - 130 m-Xylene & p-Xylene <0.00402 UF1F2 0.200 0.1196 F1 mg/Kg 60 70 - 130 0.100 0.09763 o-Xylene <0.00201 UF1F2 mg/Kg 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1.4-Difluorobenzene (Surr)	78		70 - 130

Lab Sample ID: 890-2515-13 MSD

**Matrix: Solid** 

Analysis Batch: 29700

Client Sample ID: BH-120 8

Prep Type: Total/NA

Prep Batch: 29723

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F1 F2	0.0994	0.05294	F1 F2	mg/Kg		53	70 - 130	46	35
Toluene	<0.00201	U F1 F2	0.0994	0.03890	F1 F2	mg/Kg		39	70 - 130	77	35
Ethylbenzene	<0.00201	U F1 F2	0.0994	0.04605	F1 F2	mg/Kg		46	70 - 130	62	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.04969	F1 F2	mg/Kg		25	70 - 130	83	35
o-Xylene	<0.00201	U F1 F2	0.0994	0.05486	F1 F2	mg/Kg		55	70 - 130	56	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	112	70 - 130
1.4-Difluorobenzene (Surr)	91	70 - 130

Lab Sample ID: MB 880-29739/5-A

**Matrix: Solid** 

Analysis Batch: 29790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29739

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 10:08	07/15/22 23:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 10:08	07/15/22 23:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 10:08	07/15/22 23:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 10:08	07/15/22 23:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 10:08	07/15/22 23:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 10:08	07/15/22 23:27	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	MB	МВ				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/14/22 10:08	07/15/22 23:27	1
1,4-Difluorobenzene (Surr)	108		70 - 130	07/14/22 10:08	07/15/22 23:27	1

Lab Sample ID: LCS 880-29739/1-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 29790 Prep Batch: 29739

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09154		mg/Kg		92	70 - 130	
Toluene	0.100	0.08982		mg/Kg		90	70 - 130	
Ethylbenzene	0.100	0.08005		mg/Kg		80	70 - 130	
m-Xylene & p-Xylene	0.200	0.1608		mg/Kg		80	70 - 130	
o-Xylene	0.100	0.08701		mg/Kg		87	70 - 130	

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 97 1,4-Difluorobenzene (Surr) 98 70 - 130

Lab Sample ID: LCSD 880-29739/2-A

**Matrix: Solid** 

**Analysis Batch: 29790** 

**Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

Prep Batch: 29739

LCSD LCSD Spike %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Benzene 0.100 35 0.07913 mg/Kg 79 70 - 130 15 Toluene 0.100 0.08469 85 70 - 130 35 mg/Kg 6 Ethylbenzene 0.100 0.07885 79 70 - 130 35 mg/Kg m-Xylene & p-Xylene 0.200 0.1600 mg/Kg 80 70 - 130 35 o-Xylene 0.100 0.08634 mg/Kg 86 70 - 130 35

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 102 1,4-Difluorobenzene (Surr) 96 70 - 130

Lab Sample ID: 890-2515-33 MS Client Sample ID: BH-140 8

**Matrix: Solid** 

Analysis Batch: 29790

Prep Type: Total/NA Prep Batch: 29739

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.09282		mg/Kg		92	70 - 130	
Toluene	<0.00199	U	0.101	0.08759		mg/Kg		87	70 - 130	
Ethylbenzene	<0.00199	U	0.101	0.07718		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1511		mg/Kg		75	70 - 130	
o-Xylene	<0.00199	U	0.101	0.08237		mg/Kg		82	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

## **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2515-33 MSD

**Matrix: Solid** 

Analysis Batch: 29790

Client Sample ID: BH-140 8 Prep Type: Total/NA

Prep Batch: 29739

2

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.09466		mg/Kg		94	70 - 130	2	35
Toluene	<0.00199	U	0.100	0.08989		mg/Kg		90	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.100	0.07866		mg/Kg		79	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1542		mg/Kg		77	70 - 130	2	35

0.08371

mg/Kg

0.100

MSD MSD

<0.00199 U

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1 4-Difluorobenzene (Surr)	98	70 130

Lab Sample ID: MB 880-29987/5-A

**Matrix: Solid** 

o-Xylene

Analysis Batch: 30016

MB MB

Client Sample ID: Method Blank Prep Type: Total/NA

70 - 130

Prep Batch: 29987

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000400	U	0.000400		mg/Kg		07/18/22 15:14	07/19/22 11:53	1
Toluene	<0.000400	U	0.000400		mg/Kg		07/18/22 15:14	07/19/22 11:53	1
Ethylbenzene	<0.000400	U	0.000400		mg/Kg		07/18/22 15:14	07/19/22 11:53	1
m-Xylene & p-Xylene	<0.000800	U	0.000800		mg/Kg		07/18/22 15:14	07/19/22 11:53	1
o-Xylene	<0.000400	U	0.000400		mg/Kg		07/18/22 15:14	07/19/22 11:53	1
Xylenes, Total	<0.00800	U	0.000800		mg/Kg		07/18/22 15:14	07/19/22 11:53	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	07/18/22 15:14	07/19/22 11:53	1
1,4-Difluorobenzene (Surr)	84		70 - 130	07/18/22 15:14	07/19/22 11:53	1

Lab Sample ID: LCS 880-29987/1-A

Matrix: Solid

Analysis Batch: 30016

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 29987

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1014		mg/Kg		101	70 - 130	
Toluene	0.100	0.1022		mg/Kg		102	70 - 130	
Ethylbenzene	0.100	0.1103		mg/Kg		110	70 - 130	
m-Xylene & p-Xylene	0.200	0.2162		mg/Kg		108	70 - 130	
o-Xylene	0.100	0.1134		mg/Kg		113	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1.4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-29987/2-A

Matrix: Solid

Analysis Batch: 30016

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 29987

	s	pike	LCSD	LCSD				%Rec		RPD
Analyte	Ad	ded	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene		.100	0.1075		mg/Kg		108	70 - 130	6	35
Toluene	C	.100	0.1084		mg/Kg		108	70 - 130	6	35

### QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-29987/2-A

**Matrix: Solid** 

Analysis Batch: 30016

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 29987

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ethylbenzene	0.100	0.1173		mg/Kg		117	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2293		mg/Kg		115	70 - 130	6	35
o-Xylene	0.100	0.1192		mg/Kg		119	70 - 130	5	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 29987

Lab Sample ID: 880-17011-A-1-D MS **Matrix: Solid** 

**Analysis Batch: 30016** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.0998	0.05315	F1	mg/Kg		53	70 - 130	
Toluene	<0.00200	U F1	0.0998	0.05812	F1	mg/Kg		58	70 - 130	
Ethylbenzene	<0.00200	U F1	0.0998	0.06366	F1	mg/Kg		64	70 - 130	
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1212	F1	mg/Kg		61	70 - 130	
o-Xylene	<0.00200	U F1	0.0998	0.06845	F1	mg/Kg		69	70 - 130	

MS MS

Surrogate	%Recovery Qual	ifier Limits
4-Bromofluorobenzene (Surr)	122	70 - 130
1,4-Difluorobenzene (Surr)	79	70 - 130

Lab Sample ID: 880-17011-A-1-E MSD

**Matrix: Solid** 

Analysis Batch: 30016

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Prep Batch: 29987

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.100	0.03929	F1	mg/Kg		39	70 - 130	30	35
Toluene	<0.00200	U F1	0.100	0.04309	F1	mg/Kg		43	70 - 130	30	35
Ethylbenzene	<0.00200	U F1	0.100	0.04664	F1	mg/Kg		47	70 - 130	31	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.08957	F1	mg/Kg		45	70 - 130	30	35
o-Xylene	<0.00200	U F1	0.100	0.05185	F1	mg/Kg		52	70 - 130	28	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	124	70 - 130
1,4-Difluorobenzene (Surr)	80	70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-29557/1-A

Analysis Batch: 29499

**Matrix: Solid** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29557

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 19:42	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 19:42	1
C10-C28)									

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-2515-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-29557/1-A **Matrix: Solid** 

Analysis Batch: 29499

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 29557

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 19:42	1

мв мв Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 94 70 - 130 07/12/22 14:24 07/12/22 19:42 70 - 130 07/12/22 14:24 07/12/22 19:42 o-Terphenyl 108

Lab Sample ID: LCS 880-29557/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid Analysis Batch: 29499** 

Prep Type: Total/NA Prep Batch: 29557 Spike LCS LCS

Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 841.3 mg/Kg 84 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 860.2 mg/Kg 86 70 - 130 C10-C28)

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 99 o-Terphenyl 107 70 - 130

Lab Sample ID: LCSD 880-29557/3-A

**Matrix: Solid** 

Analysis Batch: 29499

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 29557

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	831.8		mg/Kg		83	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	872.7		mg/Kg		87	70 - 130	1	20
C10-C28)									

LCSD LCSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 101 70 - 130 o-Terphenyl 110 70 - 130

Lab Sample ID: 890-2515-1 MS Client Sample ID: SW34 0-6

**Matrix: Solid** 

Analysis Batch: 29499

Prep Type: Total/NA

Prep Batch: 29557

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U F2	996	1008		mg/Kg		98	70 - 130	 
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	996	849.4		mg/Kg		85	70 - 130	
C10-C28)										

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	79		70 - 130

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2515-1 MSD

**Matrix: Solid** 

Analysis Batch: 29499

Client Sample ID: SW34 0-6 Prep Type: Total/NA

Prep Batch: 29557

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	998	742.9	F2	mg/Kg		72	70 - 130	30	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	860.6		mg/Kg		86	70 - 130	1	20

MSD MSD

Surrogate	%Recovery Qu	alifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: MB 880-29563/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 29603** 

мв мв

Prep Type: Total/NA Prep Batch: 29563

Result Qualifier MDL Unit Prepared Analyte RL Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 07/12/22 15:30 07/13/22 10:27 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 07/12/22 15:30 07/13/22 10:27 Oll Range Organics (Over C28-C36) 50.0 <50.0 U mg/Kg 07/12/22 15:30 07/13/22 10:27

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100	70 - 130	07/12/22 15:30	07/13/22 10:27	1
o-Terphenyl	118	70 - 130	07/12/22 15:30	07/13/22 10:27	1

Lab Sample ID: LCS 880-29563/2-A

Matrix: Solid

Analysis Batch: 29603

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29563

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	877.2	-	mg/Kg		88	70 - 130	 
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	913.4		mg/Kg		91	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	99	70 - 130
o-Terphenyl	112	70 - 130

Lab Sample ID: LCSD 880-29563/3-A

**Matrix: Solid** 

Analysis Batch: 29603

Prep Type: Total/NA

Prep Batch: 29563

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	889.2		mg/Kg		89	70 - 130	1	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	975.7		mg/Kg		98	70 - 130	7	20	
C10-C28)										

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-29563/3-A

**Matrix: Solid** 

Analysis Batch: 29603

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29563

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 102 70 - 130 o-Terphenyl 113 70 - 130

Lab Sample ID: 890-2515-21 MS Client Sample ID: BH-128 8

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 29603 Prep Batch: 29563

%Rec Limits

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec <49.9 U F1 <49.8 UF1 996 0 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 UF1 996 <49.8 UF1 0 mg/Kg 70 - 130C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-2515-21 MSD

**Matrix: Solid** 

**Analysis Batch: 29603** 

Client Sample ID: BH-128 8 Prep Type: Total/NA

Prep Batch: 29563

Sample Sample Spike MSD MSD Analyte Result Qualifier hahhA Result Qualifier Unit %Rec Limits RPD Limit D Gasoline Range Organics <49.9 U F1 998 <49.9 UF1 mg/Kg 0 70 - 130 NC 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 UF1 998 <49.9 U F1 mg/Kg 0 70 - 130 NC 20 C10-C28)

MSD MSD %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 80 70 - 130 o-Terphenyl 93

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29402/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 29640** 

**Prep Type: Soluble** 

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/14/22 03:23	1

Lab Sample ID: LCS 880-29402/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29640

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	258.0		mg/Kg		103	90 - 110	

## QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-29402/3-A	Client Sample ID: Lab Control Sample Dup
Matrix: Solid	Prep Type: Soluble

Analysis Batch: 29640

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	258.0		mg/Kg		103	90 - 110	0	20	

Lab Sample ID: 890-2515-1 MS Client Sample ID: SW34 0-6 **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29640

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	20.4		251	271.0	-	mg/Kg		100	90 - 110

Lab Sample ID: 890-2515-1 MSD Client Sample ID: SW34 0-6

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29640

MSD MSD %Rec RPD Sample Sample Spike Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 20.4 251 90 - 110 271.1 mg/Kg

Lab Sample ID: 890-2515-11 MS Client Sample ID: BH-118 10 **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29640

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	187		248	437.9		mg/Kg		101	90 - 110	

Lab Sample ID: 890-2515-11 MSD Client Sample ID: BH-118 10 **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29640

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	187		248	438.6		ma/Ka		101	90 - 110		20

Lab Sample ID: MB 880-29401/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29646

MR MR

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/14/22 07:05	1

Lab Sample ID: LCS 880-29401/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29646

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	257.7	,	mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-29401/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29646

Released to Imaging: 9/1/2023 2:28:53 PM

•	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	266.9		mg/Kg		107	90 - 110	4	20

Client Sample ID: BH-128 8

Client Sample ID: BH-128 8

Client Sample ID: BH-138 8

Client Sample ID: BH-138 8

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

### **QC Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2515-21 MS

Matrix: Solid

Analysis Batch: 29646

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	582		252	824.4		mg/Kg		96	90 - 110	

Lab Sample ID: 890-2515-21 MSD

Matrix: Solid

Analysis Batch: 29646

		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
l	Chloride	582		252	828.8		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-2515-31 MS

Matrix: Solid

**Analysis Batch: 29646** 

7 many old Batolin 200 id										
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	512		250	772.9		mg/Kg	_	105	90 - 110	

Lab Sample ID: 890-2515-31 MSD

Matrix: Solid

Analysis Batch: 29646

Alialysis Datcii. 23040											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	512		250	779.8		mg/Kg		107	90 - 110	1	20

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

### **GC VOA**

Prep Batch: 29669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29669/5-A	Method Blank	Total/NA	Solid	5035	

#### **Analysis Batch: 29700**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-13	BH-120 8	Total/NA	Solid	8021B	29723
890-2515-14	BH-121 8	Total/NA	Solid	8021B	29723
890-2515-15	BH-122 8	Total/NA	Solid	8021B	29723
890-2515-16	BH-123 8	Total/NA	Solid	8021B	29723
890-2515-17	BH-124 8	Total/NA	Solid	8021B	29723
890-2515-18	BH-125 8	Total/NA	Solid	8021B	29723
890-2515-19	BH-126 8	Total/NA	Solid	8021B	29723
890-2515-20	BH-127 8	Total/NA	Solid	8021B	29723
890-2515-21	BH-128 8	Total/NA	Solid	8021B	29723
890-2515-22	BH-129 8	Total/NA	Solid	8021B	29723
890-2515-23	BH-130 8	Total/NA	Solid	8021B	29723
890-2515-24	BH-131 8	Total/NA	Solid	8021B	29723
890-2515-25	BH-132 8	Total/NA	Solid	8021B	29723
890-2515-26	BH-133 8	Total/NA	Solid	8021B	29723
890-2515-27	BH-134 8	Total/NA	Solid	8021B	29723
890-2515-28	BH-135 8	Total/NA	Solid	8021B	29723
890-2515-29	BH-136 8	Total/NA	Solid	8021B	29723
890-2515-30	BH-137 8	Total/NA	Solid	8021B	29723
890-2515-31	BH-138 8	Total/NA	Solid	8021B	29723
890-2515-32	BH-139 8	Total/NA	Solid	8021B	29723
MB 880-29669/5-A	Method Blank	Total/NA	Solid	8021B	29669
MB 880-29723/5-A	Method Blank	Total/NA	Solid	8021B	29723
LCS 880-29723/1-A	Lab Control Sample	Total/NA	Solid	8021B	29723
LCSD 880-29723/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29723
890-2515-13 MS	BH-120 8	Total/NA	Solid	8021B	29723
890-2515-13 MSD	BH-120 8	Total/NA	Solid	8021B	29723

#### Prep Batch: 29722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Total/NA	Solid	5035	
890-2515-2	SW35 0-6	Total/NA	Solid	5035	
890-2515-3	SW36 0-6	Total/NA	Solid	5035	
890-2515-4	SW37 0-6	Total/NA	Solid	5035	
890-2515-5	BH-106 6	Total/NA	Solid	5035	
890-2515-6	BH-108 6	Total/NA	Solid	5035	
890-2515-7	BH-114 10	Total/NA	Solid	5035	
890-2515-8	BH-115 10	Total/NA	Solid	5035	
890-2515-9	BH-116 10	Total/NA	Solid	5035	
890-2515-10	BH-117 10	Total/NA	Solid	5035	
890-2515-12	BH-119 8	Total/NA	Solid	5035	
MB 880-29722/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29722/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29722/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

### Prep Batch: 29723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-13	BH-120 8	Total/NA	Solid	5035	

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

**GC VOA (Continued)** 

### Prep Batch: 29723 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-14	BH-121 8	Total/NA	Solid	5035	
890-2515-15	BH-122 8	Total/NA	Solid	5035	
890-2515-16	BH-123 8	Total/NA	Solid	5035	
890-2515-17	BH-124 8	Total/NA	Solid	5035	
890-2515-18	BH-125 8	Total/NA	Solid	5035	
890-2515-19	BH-126 8	Total/NA	Solid	5035	
890-2515-20	BH-127 8	Total/NA	Solid	5035	
890-2515-21	BH-128 8	Total/NA	Solid	5035	
890-2515-22	BH-129 8	Total/NA	Solid	5035	
890-2515-23	BH-130 8	Total/NA	Solid	5035	
890-2515-24	BH-131 8	Total/NA	Solid	5035	
890-2515-25	BH-132 8	Total/NA	Solid	5035	
890-2515-26	BH-133 8	Total/NA	Solid	5035	
890-2515-27	BH-134 8	Total/NA	Solid	5035	
890-2515-28	BH-135 8	Total/NA	Solid	5035	
890-2515-29	BH-136 8	Total/NA	Solid	5035	
890-2515-30	BH-137 8	Total/NA	Solid	5035	
890-2515-31	BH-138 8	Total/NA	Solid	5035	
890-2515-32	BH-139 8	Total/NA	Solid	5035	
MB 880-29723/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29723/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29723/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2515-13 MS	BH-120 8	Total/NA	Solid	5035	
890-2515-13 MSD	BH-120 8	Total/NA	Solid	5035	

### Prep Batch: 29739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-33	BH-140 8	Total/NA	Solid	5035	
890-2515-34	BH-141 8	Total/NA	Solid	5035	
MB 880-29739/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29739/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29739/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2515-33 MS	BH-140 8	Total/NA	Solid	5035	
890-2515-33 MSD	BH-140 8	Total/NA	Solid	5035	

#### Analysis Batch: 29790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Total/NA	Solid	8021B	29722
890-2515-2	SW35 0-6	Total/NA	Solid	8021B	29722
890-2515-3	SW36 0-6	Total/NA	Solid	8021B	29722
890-2515-4	SW37 0-6	Total/NA	Solid	8021B	29722
890-2515-5	BH-106 6	Total/NA	Solid	8021B	29722
890-2515-6	BH-108 6	Total/NA	Solid	8021B	29722
890-2515-7	BH-114 10	Total/NA	Solid	8021B	29722
890-2515-8	BH-115 10	Total/NA	Solid	8021B	29722
890-2515-9	BH-116 10	Total/NA	Solid	8021B	29722
890-2515-10	BH-117 10	Total/NA	Solid	8021B	29722
890-2515-12	BH-119 8	Total/NA	Solid	8021B	29722
890-2515-33	BH-140 8	Total/NA	Solid	8021B	29739
890-2515-34	BH-141 8	Total/NA	Solid	8021B	29739
MB 880-29722/5-A	Method Blank	Total/NA	Solid	8021B	29722

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2515-1

SDG: Lea County NM

## **GC VOA (Continued)**

### **Analysis Batch: 29790 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29739/5-A	Method Blank	Total/NA	Solid	8021B	29739
LCS 880-29722/1-A	Lab Control Sample	Total/NA	Solid	8021B	29722
LCS 880-29739/1-A	Lab Control Sample	Total/NA	Solid	8021B	29739
LCSD 880-29722/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29722
LCSD 880-29739/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29739
890-2515-33 MS	BH-140 8	Total/NA	Solid	8021B	29739
890-2515-33 MSD	BH-140 8	Total/NA	Solid	8021B	29739

#### Analysis Batch: 29793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Total/NA	Solid	Total BTEX	
890-2515-2	SW35 0-6	Total/NA	Solid	Total BTEX	
890-2515-3	SW36 0-6	Total/NA	Solid	Total BTEX	
890-2515-4	SW37 0-6	Total/NA	Solid	Total BTEX	
890-2515-5	BH-106 6	Total/NA	Solid	Total BTEX	
890-2515-6	BH-108 6	Total/NA	Solid	Total BTEX	
890-2515-7	BH-114 10	Total/NA	Solid	Total BTEX	
890-2515-8	BH-115 10	Total/NA	Solid	Total BTEX	
890-2515-9	BH-116 10	Total/NA	Solid	Total BTEX	
890-2515-10	BH-117 10	Total/NA	Solid	Total BTEX	
890-2515-11	BH-118 10	Total/NA	Solid	Total BTEX	
890-2515-12	BH-119 8	Total/NA	Solid	Total BTEX	
890-2515-13	BH-120 8	Total/NA	Solid	Total BTEX	
890-2515-14	BH-121 8	Total/NA	Solid	Total BTEX	
890-2515-15	BH-122 8	Total/NA	Solid	Total BTEX	
890-2515-16	BH-123 8	Total/NA	Solid	Total BTEX	
890-2515-17	BH-124 8	Total/NA	Solid	Total BTEX	
890-2515-18	BH-125 8	Total/NA	Solid	Total BTEX	
890-2515-19	BH-126 8	Total/NA	Solid	Total BTEX	
890-2515-20	BH-127 8	Total/NA	Solid	Total BTEX	
890-2515-21	BH-128 8	Total/NA	Solid	Total BTEX	
890-2515-22	BH-129 8	Total/NA	Solid	Total BTEX	
890-2515-23	BH-130 8	Total/NA	Solid	Total BTEX	
890-2515-24	BH-131 8	Total/NA	Solid	Total BTEX	
890-2515-25	BH-132 8	Total/NA	Solid	Total BTEX	
890-2515-26	BH-133 8	Total/NA	Solid	Total BTEX	
890-2515-27	BH-134 8	Total/NA	Solid	Total BTEX	
890-2515-28	BH-135 8	Total/NA	Solid	Total BTEX	
890-2515-29	BH-136 8	Total/NA	Solid	Total BTEX	
890-2515-30	BH-137 8	Total/NA	Solid	Total BTEX	
890-2515-31	BH-138 8	Total/NA	Solid	Total BTEX	
890-2515-32	BH-139 8	Total/NA	Solid	Total BTEX	
890-2515-33	BH-140 8	Total/NA	Solid	Total BTEX	
890-2515-34	BH-141 8	Total/NA	Solid	Total BTEX	

#### Prep Batch: 29987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-11	BH-118 10	Total/NA	Solid	5035	
MB 880-29987/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29987/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29987/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

**Eurofins Carlsbad** 

2

3

4

6

8

10

13

14

7/20/2022

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

## **GC VOA (Continued)**

### Prep Batch: 29987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17011-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-17011-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### **Analysis Batch: 30016**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-11	BH-118 10	Total/NA	Solid	8021B	29987
MB 880-29987/5-A	Method Blank	Total/NA	Solid	8021B	29987
LCS 880-29987/1-A	Lab Control Sample	Total/NA	Solid	8021B	29987
LCSD 880-29987/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29987
880-17011-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	29987
880-17011-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29987

#### **GC Semi VOA**

#### Analysis Batch: 29499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Total/NA	Solid	8015B NM	29557
890-2515-2	SW35 0-6	Total/NA	Solid	8015B NM	29557
890-2515-3	SW36 0-6	Total/NA	Solid	8015B NM	29557
890-2515-4	SW37 0-6	Total/NA	Solid	8015B NM	29557
890-2515-5	BH-106 6	Total/NA	Solid	8015B NM	29557
890-2515-6	BH-108 6	Total/NA	Solid	8015B NM	29557
890-2515-7	BH-114 10	Total/NA	Solid	8015B NM	29557
890-2515-8	BH-115 10	Total/NA	Solid	8015B NM	29557
890-2515-9	BH-116 10	Total/NA	Solid	8015B NM	29557
890-2515-10	BH-117 10	Total/NA	Solid	8015B NM	29557
890-2515-11	BH-118 10	Total/NA	Solid	8015B NM	29557
890-2515-12	BH-119 8	Total/NA	Solid	8015B NM	29557
890-2515-13	BH-120 8	Total/NA	Solid	8015B NM	29557
890-2515-14	BH-121 8	Total/NA	Solid	8015B NM	29557
890-2515-15	BH-122 8	Total/NA	Solid	8015B NM	29557
890-2515-16	BH-123 8	Total/NA	Solid	8015B NM	29557
890-2515-17	BH-124 8	Total/NA	Solid	8015B NM	29557
890-2515-18	BH-125 8	Total/NA	Solid	8015B NM	29557
890-2515-19	BH-126 8	Total/NA	Solid	8015B NM	29557
890-2515-20	BH-127 8	Total/NA	Solid	8015B NM	29557
MB 880-29557/1-A	Method Blank	Total/NA	Solid	8015B NM	29557
LCS 880-29557/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29557
LCSD 880-29557/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29557
890-2515-1 MS	SW34 0-6	Total/NA	Solid	8015B NM	29557
890-2515-1 MSD	SW34 0-6	Total/NA	Solid	8015B NM	29557

#### Prep Batch: 29557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Total/NA	Solid	8015NM Prep	
890-2515-2	SW35 0-6	Total/NA	Solid	8015NM Prep	
890-2515-3	SW36 0-6	Total/NA	Solid	8015NM Prep	
890-2515-4	SW37 0-6	Total/NA	Solid	8015NM Prep	
890-2515-5	BH-106 6	Total/NA	Solid	8015NM Prep	
890-2515-6	BH-108 6	Total/NA	Solid	8015NM Prep	
890-2515-7	BH-114 10	Total/NA	Solid	8015NM Prep	

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## GC Semi VOA (Continued)

### Prep Batch: 29557 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-8	BH-115 10	Total/NA	Solid	8015NM Prep	
890-2515-9	BH-116 10	Total/NA	Solid	8015NM Prep	
890-2515-10	BH-117 10	Total/NA	Solid	8015NM Prep	
890-2515-11	BH-118 10	Total/NA	Solid	8015NM Prep	
890-2515-12	BH-119 8	Total/NA	Solid	8015NM Prep	
890-2515-13	BH-120 8	Total/NA	Solid	8015NM Prep	
890-2515-14	BH-121 8	Total/NA	Solid	8015NM Prep	
890-2515-15	BH-122 8	Total/NA	Solid	8015NM Prep	
890-2515-16	BH-123 8	Total/NA	Solid	8015NM Prep	
890-2515-17	BH-124 8	Total/NA	Solid	8015NM Prep	
890-2515-18	BH-125 8	Total/NA	Solid	8015NM Prep	
890-2515-19	BH-126 8	Total/NA	Solid	8015NM Prep	
890-2515-20	BH-127 8	Total/NA	Solid	8015NM Prep	
MB 880-29557/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29557/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29557/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2515-1 MS	SW34 0-6	Total/NA	Solid	8015NM Prep	
890-2515-1 MSD	SW34 0-6	Total/NA	Solid	8015NM Prep	

#### Prep Batch: 29563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-21	BH-128 8	Total/NA	Solid	8015NM Prep	
890-2515-22	BH-129 8	Total/NA	Solid	8015NM Prep	
890-2515-23	BH-130 8	Total/NA	Solid	8015NM Prep	
890-2515-24	BH-131 8	Total/NA	Solid	8015NM Prep	
890-2515-25	BH-132 8	Total/NA	Solid	8015NM Prep	
890-2515-26	BH-133 8	Total/NA	Solid	8015NM Prep	
890-2515-27	BH-134 8	Total/NA	Solid	8015NM Prep	
890-2515-28	BH-135 8	Total/NA	Solid	8015NM Prep	
890-2515-29	BH-136 8	Total/NA	Solid	8015NM Prep	
890-2515-30	BH-137 8	Total/NA	Solid	8015NM Prep	
890-2515-31	BH-138 8	Total/NA	Solid	8015NM Prep	
890-2515-32	BH-139 8	Total/NA	Solid	8015NM Prep	
890-2515-33	BH-140 8	Total/NA	Solid	8015NM Prep	
890-2515-34	BH-141 8	Total/NA	Solid	8015NM Prep	
MB 880-29563/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29563/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29563/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2515-21 MS	BH-128 8	Total/NA	Solid	8015NM Prep	
890-2515-21 MSD	BH-128 8	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 29603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-21	BH-128 8	Total/NA	Solid	8015B NM	29563
890-2515-22	BH-129 8	Total/NA	Solid	8015B NM	29563
890-2515-23	BH-130 8	Total/NA	Solid	8015B NM	29563
890-2515-24	BH-131 8	Total/NA	Solid	8015B NM	29563
890-2515-25	BH-132 8	Total/NA	Solid	8015B NM	29563
890-2515-26	BH-133 8	Total/NA	Solid	8015B NM	29563
890-2515-27	BH-134 8	Total/NA	Solid	8015B NM	29563
890-2515-28	BH-135 8	Total/NA	Solid	8015B NM	29563

**Eurofins Carlsbad** 

2

3

4

6

8

10

40

13

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## GC Semi VOA (Continued)

### **Analysis Batch: 29603 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-29	BH-136 8	Total/NA	Solid	8015B NM	29563
890-2515-30	BH-137 8	Total/NA	Solid	8015B NM	29563
890-2515-31	BH-138 8	Total/NA	Solid	8015B NM	29563
890-2515-32	BH-139 8	Total/NA	Solid	8015B NM	29563
890-2515-33	BH-140 8	Total/NA	Solid	8015B NM	29563
890-2515-34	BH-141 8	Total/NA	Solid	8015B NM	29563
MB 880-29563/1-A	Method Blank	Total/NA	Solid	8015B NM	29563
LCS 880-29563/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29563
LCSD 880-29563/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29563
890-2515-21 MS	BH-128 8	Total/NA	Solid	8015B NM	29563
890-2515-21 MSD	BH-128 8	Total/NA	Solid	8015B NM	29563

#### Analysis Batch: 29634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2515-1	SW34 0-6	Total/NA	Solid	8015 NM	
890-2515-2	SW35 0-6	Total/NA	Solid	8015 NM	
890-2515-3	SW36 0-6	Total/NA	Solid	8015 NM	
890-2515-4	SW37 0-6	Total/NA	Solid	8015 NM	
890-2515-5	BH-106 6	Total/NA	Solid	8015 NM	
890-2515-6	BH-108 6	Total/NA	Solid	8015 NM	
890-2515-7	BH-114 10	Total/NA	Solid	8015 NM	
890-2515-8	BH-115 10	Total/NA	Solid	8015 NM	
890-2515-9	BH-116 10	Total/NA	Solid	8015 NM	
890-2515-10	BH-117 10	Total/NA	Solid	8015 NM	
890-2515-11	BH-118 10	Total/NA	Solid	8015 NM	
890-2515-12	BH-119 8	Total/NA	Solid	8015 NM	
890-2515-13	BH-120 8	Total/NA	Solid	8015 NM	
890-2515-14	BH-121 8	Total/NA	Solid	8015 NM	
890-2515-15	BH-122 8	Total/NA	Solid	8015 NM	
890-2515-16	BH-123 8	Total/NA	Solid	8015 NM	
890-2515-17	BH-124 8	Total/NA	Solid	8015 NM	
890-2515-18	BH-125 8	Total/NA	Solid	8015 NM	
890-2515-19	BH-126 8	Total/NA	Solid	8015 NM	
890-2515-20	BH-127 8	Total/NA	Solid	8015 NM	
890-2515-21	BH-128 8	Total/NA	Solid	8015 NM	
890-2515-22	BH-129 8	Total/NA	Solid	8015 NM	
890-2515-23	BH-130 8	Total/NA	Solid	8015 NM	
890-2515-24	BH-131 8	Total/NA	Solid	8015 NM	
890-2515-25	BH-132 8	Total/NA	Solid	8015 NM	
890-2515-26	BH-133 8	Total/NA	Solid	8015 NM	
890-2515-27	BH-134 8	Total/NA	Solid	8015 NM	
890-2515-28	BH-135 8	Total/NA	Solid	8015 NM	
890-2515-29	BH-136 8	Total/NA	Solid	8015 NM	
890-2515-30	BH-137 8	Total/NA	Solid	8015 NM	
890-2515-31	BH-138 8	Total/NA	Solid	8015 NM	
890-2515-32	BH-139 8	Total/NA	Solid	8015 NM	
890-2515-33	BH-140 8	Total/NA	Solid	8015 NM	
890-2515-34	BH-141 8	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

5

3

J

**5** 

8

9

TU

12

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

### HPLC/IC

#### Leach Batch: 29401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2515-21	BH-128 8	Soluble	Solid	DI Leach	_
890-2515-22	BH-129 8	Soluble	Solid	DI Leach	
890-2515-23	BH-130 8	Soluble	Solid	DI Leach	
890-2515-24	BH-131 8	Soluble	Solid	DI Leach	
890-2515-25	BH-132 8	Soluble	Solid	DI Leach	
890-2515-26	BH-133 8	Soluble	Solid	DI Leach	
890-2515-27	BH-134 8	Soluble	Solid	DI Leach	
890-2515-28	BH-135 8	Soluble	Solid	DI Leach	
890-2515-29	BH-136 8	Soluble	Solid	DI Leach	
890-2515-30	BH-137 8	Soluble	Solid	DI Leach	
890-2515-31	BH-138 8	Soluble	Solid	DI Leach	
890-2515-32	BH-139 8	Soluble	Solid	DI Leach	
890-2515-33	BH-140 8	Soluble	Solid	DI Leach	
890-2515-34	BH-141 8	Soluble	Solid	DI Leach	
MB 880-29401/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29401/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29401/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2515-21 MS	BH-128 8	Soluble	Solid	DI Leach	
890-2515-21 MSD	BH-128 8	Soluble	Solid	DI Leach	
890-2515-31 MS	BH-138 8	Soluble	Solid	DI Leach	
890-2515-31 MSD	BH-138 8	Soluble	Solid	DI Leach	

#### Leach Batch: 29402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2515-1	SW34 0-6	Soluble	Solid	DI Leach	
890-2515-2	SW35 0-6	Soluble	Solid	DI Leach	
890-2515-3	SW36 0-6	Soluble	Solid	DI Leach	
890-2515-4	SW37 0-6	Soluble	Solid	DI Leach	
890-2515-5	BH-106 6	Soluble	Solid	DI Leach	
890-2515-6	BH-108 6	Soluble	Solid	DI Leach	
890-2515-7	BH-114 10	Soluble	Solid	DI Leach	
890-2515-8	BH-115 10	Soluble	Solid	DI Leach	
890-2515-9	BH-116 10	Soluble	Solid	DI Leach	
390-2515-10	BH-117 10	Soluble	Solid	DI Leach	
890-2515-11	BH-118 10	Soluble	Solid	DI Leach	
390-2515-12	BH-119 8	Soluble	Solid	DI Leach	
390-2515-13	BH-120 8	Soluble	Solid	DI Leach	
890-2515-14	BH-121 8	Soluble	Solid	DI Leach	
390-2515-15	BH-122 8	Soluble	Solid	DI Leach	
390-2515-16	BH-123 8	Soluble	Solid	DI Leach	
390-2515-17	BH-124 8	Soluble	Solid	DI Leach	
390-2515-18	BH-125 8	Soluble	Solid	DI Leach	
390-2515-19	BH-126 8	Soluble	Solid	DI Leach	
390-2515-20	BH-127 8	Soluble	Solid	DI Leach	
MB 880-29402/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29402/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29402/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2515-1 MS	SW34 0-6	Soluble	Solid	DI Leach	
390-2515-1 MSD	SW34 0-6	Soluble	Solid	DI Leach	
390-2515-11 MS	BH-118 10	Soluble	Solid	DI Leach	
890-2515-11 MSD	BH-118 10	Soluble	Solid	DI Leach	

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

### HPLC/IC

#### Analysis Batch: 29640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Soluble	Solid	300.0	29402
890-2515-2	SW35 0-6	Soluble	Solid	300.0	29402
890-2515-3	SW36 0-6	Soluble	Solid	300.0	29402
890-2515-4	SW37 0-6	Soluble	Solid	300.0	29402
890-2515-5	BH-106 6	Soluble	Solid	300.0	29402
890-2515-6	BH-108 6	Soluble	Solid	300.0	29402
890-2515-7	BH-114 10	Soluble	Solid	300.0	29402
890-2515-8	BH-115 10	Soluble	Solid	300.0	29402
890-2515-9	BH-116 10	Soluble	Solid	300.0	29402
890-2515-10	BH-117 10	Soluble	Solid	300.0	29402
890-2515-11	BH-118 10	Soluble	Solid	300.0	29402
890-2515-12	BH-119 8	Soluble	Solid	300.0	29402
890-2515-13	BH-120 8	Soluble	Solid	300.0	29402
890-2515-14	BH-121 8	Soluble	Solid	300.0	29402
890-2515-15	BH-122 8	Soluble	Solid	300.0	29402
890-2515-16	BH-123 8	Soluble	Solid	300.0	29402
890-2515-17	BH-124 8	Soluble	Solid	300.0	29402
890-2515-18	BH-125 8	Soluble	Solid	300.0	29402
890-2515-19	BH-126 8	Soluble	Solid	300.0	29402
890-2515-20	BH-127 8	Soluble	Solid	300.0	29402
MB 880-29402/1-A	Method Blank	Soluble	Solid	300.0	29402
LCS 880-29402/2-A	Lab Control Sample	Soluble	Solid	300.0	29402
LCSD 880-29402/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29402
890-2515-1 MS	SW34 0-6	Soluble	Solid	300.0	29402
890-2515-1 MSD	SW34 0-6	Soluble	Solid	300.0	29402
890-2515-11 MS	BH-118 10	Soluble	Solid	300.0	29402
890-2515-11 MSD	BH-118 10	Soluble	Solid	300.0	29402

#### Analysis Batch: 29646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-21	BH-128 8	Soluble	Solid	300.0	29401
890-2515-22	BH-129 8	Soluble	Solid	300.0	29401
890-2515-23	BH-130 8	Soluble	Solid	300.0	29401
890-2515-24	BH-131 8	Soluble	Solid	300.0	29401
890-2515-25	BH-132 8	Soluble	Solid	300.0	29401
890-2515-26	BH-133 8	Soluble	Solid	300.0	29401
890-2515-27	BH-134 8	Soluble	Solid	300.0	29401
890-2515-28	BH-135 8	Soluble	Solid	300.0	29401
890-2515-29	BH-136 8	Soluble	Solid	300.0	29401
890-2515-30	BH-137 8	Soluble	Solid	300.0	29401
890-2515-31	BH-138 8	Soluble	Solid	300.0	29401
890-2515-32	BH-139 8	Soluble	Solid	300.0	29401
890-2515-33	BH-140 8	Soluble	Solid	300.0	29401
890-2515-34	BH-141 8	Soluble	Solid	300.0	29401
MB 880-29401/1-A	Method Blank	Soluble	Solid	300.0	29401
LCS 880-29401/2-A	Lab Control Sample	Soluble	Solid	300.0	29401
LCSD 880-29401/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29401
890-2515-21 MS	BH-128 8	Soluble	Solid	300.0	29401
890-2515-21 MSD	BH-128 8	Soluble	Solid	300.0	29401
890-2515-31 MS	BH-138 8	Soluble	Solid	300.0	29401
890-2515-31 MSD	BH-138 8	Soluble	Solid	300.0	29401

XEN MID

XEN MID

XEN MID

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW34 0-6 Lab Sample ID: 890-2515-1 Date Collected: 07/06/22 00:00

**Matrix: Solid** 

Date Received: 07/08/22 16:08 Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 5.03 g 5 mL 29722 07/14/22 09:52 EL XEN MID 8021B Total/NA Analysis 1 5 mL 5 mL 29790 07/15/22 12:56 MR XEN MID Total/NA Analysis Total BTEX 29793 07/15/22 08:13 ΑJ XEN MID XEN MID Total/NA 8015 NM 29634 Analysis 1 07/13/22 09:51 SM Total/NA 8015NM Prep 10 mL 29557 07/12/22 14:24 XEN MID Prep 10.03 g DM

Client Sample ID: SW35 0-6 Lab Sample ID: 890-2515-2

Date Collected: 07/06/22 00:00 **Matrix: Solid** 

4.99 g

29499

29402

29640

50 mL

07/12/22 20:46

07/11/22 09:13

07/14/22 03:51

SM

KS

CH

Date Received: 07/08/22 16:08

Analysis

Analysis

Leach

8015B NM

DI Leach

300.0

Total/NA

Soluble

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/15/22 13:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 21:50	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 04:18	CH	XEN MID

Lab Sample ID: 890-2515-3 Client Sample ID: SW36 0-6 Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/15/22 17:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 22:11	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 04:27	CH	XEN MID

Client Sample ID: SW37 0-6 Lab Sample ID: 890-2515-4

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/15/22 16:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID

**Eurofins Carlsbad** 

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW37 0-6

Date Received: 07/08/22 16:08

Lab Sample ID: 890-2515-4 Date Collected: 07/06/22 00:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 22:33	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 04:37	CH	XEN MID

Client Sample ID: BH-106 6 Lab Sample ID: 890-2515-5

Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/15/22 18:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 22:54	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 04:46	CH	XEN MID

Client Sample ID: BH-108 6 Lab Sample ID: 890-2515-6

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/15/22 18:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 23:16	SM	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 08:00	CH	XEN MID

Client Sample ID: BH-114 10 Lab Sample ID: 890-2515-7

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	29790	07/15/22 19:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	29557 29499	07/12/22 14:24 07/13/22 04:16	DM SM	XEN MID XEN MID

**Eurofins Carlsbad** 

Page 57 of 75

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-114 10

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Lab Sample ID: 890-2515-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 08:09	CH	XEN MID

Client Sample ID: BH-115 10 Lab Sample ID: 890-2515-8

Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	29790	07/15/22 19:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 04:38	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29402	07/11/22 09:13	KS	XEN MIC
Soluble	Analysis	300.0		1			29640	07/14/22 08:18	CH	XEN MID

Client Sample ID: BH-116 10 Lab Sample ID: 890-2515-9

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	29790	07/15/22 20:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 03:54	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 08:28	CH	XEN MID

Client Sample ID: BH-117 10 Lab Sample ID: 890-2515-10

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29722	07/14/22 09:52	EL	XEN MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	29790	07/15/22 20:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 02:50	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 08:37	CH	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-118 10

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Lab Sample ID: 890-2515-11

**Matrix: Solid** 

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29987	07/18/22 15:14	MR	XEN MI
Total/NA	Analysis	8021B		50			30016	07/19/22 16:21	MR	XEN MI
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MI
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MI
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29557	07/12/22 14:24	DM	XEN MI
Total/NA	Analysis	8015B NM		5			29499	07/13/22 03:12	SM	XEN MI
Soluble	Leach	DI Leach			5.05 g	50 mL	29402	07/11/22 09:13	KS	XEN MI
Soluble	Analysis	300.0		1			29640	07/14/22 08:46	CH	XEN MI

Client Sample ID: BH-119 8 Lab Sample ID: 890-2515-12 Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 29722 Total/NA 5.00 g 5 mL 07/14/22 09:52 EL XEN MID Total/NA 8021B 5 mL 07/15/22 18:59 XEN MID Analysis 1 5 mL 29790 MR Total/NA Total BTEX 29793 07/15/22 08:13 XEN MID Analysis 1 A.I Total/NA Analysis 8015 NM 29634 07/13/22 09:51 SM XEN MID Total/NA 29557 XEN MID Prep 8015NM Prep 10.01 g 07/12/22 14:24 DM 10 mL Total/NA Analysis 8015B NM 5 29499 07/13/22 03:33 SM XEN MID 07/11/22 09:13 Soluble XEN MID Leach DI Leach 4.99 g 50 mL 29402 KS Soluble Analysis 300.0 5 29640 07/14/22 09:14 CH XEN MID

Lab Sample ID: 890-2515-13 Client Sample ID: BH-120 8 Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 01:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 23:37	SM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		5			29640	07/14/22 09:23	СН	XEN MID

Client Sample ID: BH-121 8 Lab Sample ID: 890-2515-14 Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 02:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID

**Eurofins Carlsbad** 

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-121 8

Lab Sample ID: 890-2515-14 Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

**Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8015 NM Analysis 29634 07/13/22 09:51 SM XEN MID Total/NA Prep 8015NM Prep 10.03 g 10 mL 29557 07/12/22 14:24 DM XEN MID Total/NA Analysis 8015B NM 29499 07/12/22 23:59 SM XEN MID 1 Soluble 29402 07/11/22 09:13 KS XEN MID Leach DI Leach 4.97 g 50 mL 300.0 29640 07/14/22 18:25 Soluble Analysis 20 CH XEN MID

Client Sample ID: BH-122 8 Lab Sample ID: 890-2515-15

Date Collected: 07/06/22 00:00 **Matrix: Solid** Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 02:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 00:20	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		5			29640	07/14/22 18:34	CH	XEN MID

Client Sample ID: BH-123 8 Lab Sample ID: 890-2515-16 Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 02:54	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 00:41	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 18:43	CH	XEN MID

Client Sample ID: BH-124 8 Lab Sample ID: 890-2515-17

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 03:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	29557 29499	07/12/22 14:24 07/13/22 01:24	DM SM	XEN MID XEN MID

**Eurofins Carlsbad** 

Client Sample ID: BH-124 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Lab Sample ID: 890-2515-17

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 18:52	CH	XEN MID

Client Sample ID: BH-125 8 Lab Sample ID: 890-2515-18

Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 03:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 01:46	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		5			29640	07/14/22 19:02	CH	XEN MID

Client Sample ID: BH-126 8 Lab Sample ID: 890-2515-19

Date Collected: 07/07/22 00:00 **Matrix: Solid** Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 04:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 02:07	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		20			29640	07/14/22 19:11	CH	XEN MID

Client Sample ID: BH-127 8 Lab Sample ID: 890-2515-20

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 04:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 02:29	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		5			29640	07/14/22 19:20	CH	XEN MID

**Eurofins Carlsbad** 

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-128 8

Lab Sample ID: 890-2515-21 Date Collected: 07/07/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 05:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 11:31	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 07:28	CH	XEN MID

Client Sample ID: BH-129 8 Lab Sample ID: 890-2515-22

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 29723 Total/NA 4.98 g 07/14/22 09:57 EL XEN MID 5 mL Total/NA 8021B 29700 07/15/22 05:32 XEN MID Analysis 1 MR Total/NA Total BTEX 29793 07/15/22 08:13 XEN MID Analysis 1 A.I Total/NA Analysis 8015 NM 29634 07/13/22 09:51 SM XEN MID Total/NA 29563 XEN MID Prep 8015NM Prep 10.01 g 07/12/22 15:30 DM 10 mL Total/NA Analysis 8015B NM 29603 07/13/22 12:36 AJ XEN MID

Client Sample ID: BH-130 8 Lab Sample ID: 890-2515-23 Date Collected: 07/07/22 00:00 **Matrix: Solid** 

5.05 g

50 mL

29401

29646

Date Received: 07/08/22 16:08

Leach

Analysis

DI Leach

300.0

Soluble

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 07:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 12:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 08:00	CH	XEN MID

Lab Sample ID: 890-2515-24 Client Sample ID: BH-131 8 Date Collected: 07/07/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 07:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

XEN MID

XEN MID

07/11/22 09:10

07/14/22 07:52

KS

CH

Released to Imaging: 9/1/2023 2:28:53 PM

Client Sample ID: BH-131 8

Lab Sample ID: 890-2515-24 Date Collected: 07/07/22 00:00 Matrix: Solid

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 13:20	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 08:07	CH	XEN MID

Client Sample ID: BH-132 8 Lab Sample ID: 890-2515-25 **Matrix: Solid** 

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 08:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 13:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 08:15	CH	XEN MID

Lab Sample ID: 890-2515-26 Client Sample ID: BH-133 8 Date Collected: 07/06/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 08:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 14:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 08:39	CH	XEN MID

Client Sample ID: BH-134 8 Lab Sample ID: 890-2515-27

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 09:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	29563 29603	07/12/22 15:30 07/13/22 14:24	DM AJ	XEN MID XEN MID

**Eurofins Carlsbad** 

Client Sample ID: BH-134 8

Date Received: 07/08/22 16:08

Lab Sample ID: 890-2515-27 Date Collected: 07/07/22 00:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 08:47	CH	XEN MID

Client Sample ID: BH-135 8 Lab Sample ID: 890-2515-28

Date Collected: 07/07/22 00:00 **Matrix: Solid** Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 09:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 14:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 10:01	CH	XEN MID

Client Sample ID: BH-136 8 Lab Sample ID: 890-2515-29

Date Collected: 07/07/22 00:00 **Matrix: Solid** 

Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 10:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 15:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 10:09	CH	XEN MID

Client Sample ID: BH-137 8 Lab Sample ID: 890-2515-30

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 10:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 15:28	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 10:17	CH	XEN MID

**Eurofins Carlsbad** 

Client Sample ID: BH-138 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08 Lab Sample ID: 890-2515-31

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 11:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 16:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 10:25	CH	XEN MID

Client Sample ID: BH-139 8 Lab Sample ID: 890-2515-32

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 11:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 16:32	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		5			29646	07/14/22 15:23	CH	XEN MID

Client Sample ID: BH-140 8

Date Collected: 07/06/22 00:00

Date

te Collectea:	07/06/22 00:0	10								Matrix: Solid
te Received:	07/08/22 16:0	8								
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
on Tuno	Type	Mothod	Dun	Footor	Amount	Amount	Number	or Analyzed	Analyst	Lab

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29739	07/14/22 10:08	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/15/22 23:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 16:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 15:31	CH	XEN MID

Client Sample ID: BH-141 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

	Detak	Datah		Dil	Initial	Final	Datah	Duamawad		
Duan Tuna	Batch	Batch	Dun	Dil	Initial	Final	Batch	Prepared	Amalust	Lab
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	29739	07/14/22 10:08	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29790	07/16/22 00:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID

**Eurofins Carlsbad** 

Lab Sample ID: 890-2515-33

Lab Sample ID: 890-2515-34

Matrix: Solid

### **Lab Chronicle**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-141 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08 Lab Sample ID: 890-2515-34

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29563	07/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29603	07/13/22 17:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		5			29646	07/14/22 15:55	CH	XEN MID

#### Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

2

3

4

5

7

9

10

12

13

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	P	rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-22-24	06-30-23
The following analytes the agency does not of	• •	ut the laboratory is not certific	ed by the governing authority. This list ma	ay include analytes for
0 ,	or corumounorr.			
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method 8015 NM		Matrix Solid	Analyte Total TPH	

XEN MID

ASTM

### **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2515-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method **Method Description** Protocol Laboratory 8021B Volatile Organic Compounds (GC) SW846 XEN MID **Total BTEX Calculation** Total BTEX TAL SOP XEN MID 8015 NM Diesel Range Organics (DRO) (GC) SW846 XEN MID 8015B NM Diesel Range Organics (DRO) (GC) SW846 XEN MID 300.0 Anions, Ion Chromatography MCAWW XEN MID 5035 SW846 XEN MID Closed System Purge and Trap 8015NM Prep Microextraction SW846 XEN MID

#### **Protocol References:**

DI Leach

ASTM = ASTM International

Released to Imaging: 9/1/2023 2:28:53 PM

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

#### **Laboratory References:**

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

-

3

4

7

9

10

12

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2515-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2515-1	SW34 0-6	Solid	07/06/22 00:00	07/08/22 16:08	0 - 6
890-2515-2	SW35 0-6	Solid	07/06/22 00:00	07/08/22 16:08	0 - 6
890-2515-3	SW36 0-6	Solid	07/06/22 00:00	07/08/22 16:08	0 - 6
890-2515-4	SW37 0-6	Solid	07/06/22 00:00	07/08/22 16:08	0 - 6
890-2515-5	BH-106 6	Solid	07/06/22 00:00	07/08/22 16:08	6
890-2515-6	BH-108 6	Solid	07/06/22 00:00	07/08/22 16:08	6
890-2515-7	BH-114 10	Solid	07/06/22 00:00	07/08/22 16:08	10
890-2515-8	BH-115 10	Solid	07/06/22 00:00	07/08/22 16:08	10
890-2515-9	BH-116 10	Solid	07/06/22 00:00	07/08/22 16:08	10
890-2515-10	BH-117 10	Solid	07/06/22 00:00	07/08/22 16:08	10
890-2515-11	BH-118 10	Solid	07/06/22 00:00	07/08/22 16:08	10
890-2515-12	BH-119 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-13	BH-120 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-14	BH-121 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-15	BH-122 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-16	BH-123 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-17	BH-124 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-18	BH-125 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-19	BH-126 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-20	BH-127 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-21	BH-128 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-22	BH-129 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-23	BH-130 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-24	BH-131 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-25	BH-132 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-26	BH-133 8	Solid	07/06/22 00:00	07/08/22 16:08	8
890-2515-27	BH-134 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-28	BH-135 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-29	BH-136 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-30	BH-137 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-31	BH-138 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-32	BH-139 8	Solid	07/07/22 00:00	07/08/22 16:08	8
890-2515-33	BH-140 8	Solid	07/06/22 00:00	07/08/22 16:08	8

Solid

07/07/22 00:00

07/08/22 16:08 8

\_

3

4

6

8

9

10

12

13

1 4

890-2515-34

BH-141 8

Relinquished by	,	Red to All Parkets	Personal Mary											CA VA	LAB #		Commence	Application flexages	מו אנוולוו ווס	(county state)	reject Marea	Carrie Marrie	[a]
Ą		16	*	BH-117 (107)	BH-116 (10)	ВН-115 (10)	BH-114 (10")	BH 103 (6)	BH-106 (6)	SW-37 (0-6)	S\$\$-36 (0-6)	SW 35 (0.6)	SW-34 (0-6)		SAMPL			Eurofins Xenco		Lea County, NM	Kaiser SWD	Perman Wa	
Cale: Time		LOOI 22/8//	ale In												SAMPLE IDENTIFICATION			ico	Permian Water Solutions - Dusty Mointurff	NA		Permian Water Solutions	Tetra Tech, Inc.
Receved by		2	الأعادة الماحية فاب	76/2022	7 6/2022	7/6/2022	7/6/2022	76/2022	76/2022	760002	76/2022	7 6:2022	7 6/2022	DATE	tion by by	SAMPLING		Sangar square		Project #		Site Manager	
		100	1.									aerd.		IIVE		LING		arma arma			Clar Gon/		890-2515
		-	7	×	×	×	×	×	×	×	×	×	×	WATE SOIL	R	MATRIX		Peyto		212G-	ales a le	Clair Gonzales	
Date Time		Date Q		×	×	×	×	×	×	×	×	×	×	HCL HNO- ICE None		PRESERVATIVE		Peyton Oliver		212C-ND-02230	Clar Conzales d'Intralech com	nzales	Chain of Custody
		2001	5											# CONT		RS							
(	ง			×	×	×	×	×	×	×	×	×	×	FILTER BIEX II	P <sub>c</sub> ,	HIF	A BASO	H			<u> </u>	A	
00	5		LAB USE ONLY	×	×	×	×	×	×	×	×	×	×		15641		DRO	5R0 -	MRO)			ANALYSIS REQUEST	
	Š													tc.PM	ela s /	Ng As	la Co Cr Ha Cd C				_	REQUE	
		R	REMARKS											TCLF S								EST	
er al Ri	Rush Charges Auf chized	RUSH	STAN										F	GC/MS			624 27(CF)	6				Spec	
port Lin	yes AL	Sare Day	STANDARD	E										PCHS I NORM	OHO 4	F y 18						Ž S	
J. 10 %.	C(284	y 24 hr		×	×	×	×	×	×	×	×	×	×	PLN A Chorin			Vr.					thod	
Special Raport Limits or TRRP Region		48 % 72												Chlorid General An antic	l s'vale		mistry (	see at	a. hed	list;		No	
		2		F								-											
														Hold									

Tetra Tech, Inc.	Tetra Tech, Inc.    Permian Water Solutions   Dusty McIntuit	Tetra Tech, Inc.	Perman Water Solutions	Perman Water Solutions	Relinquished by	Helingustrad tv	tell	Religioustred by												LAB#		Comments:	Receiving Laboratory	Predict to	(caunty state)	Froject Name	Coent Name	႕	1
Solutions  Solutions  Dusty McInitali  Solutions - Dusty McInitali  Solutions - Dusty McInitali  Sampler Signature  Poyton C  Sampler Signature  Poyton C  Sampler Signature  Poyton C  Sampler Signature  Poyton C  Sampler Signature  Poyton C  Towns The Care Towns C  Towns C	Solutions  Solutions  Class Generales Statisticales  Class Generales Statisticales  Class Generales Statisticales  2º2C-MD-02230  Sentification  Sentificati	Solutions  Star Manager  Clair Controlled  Clair Controlled  Clair Controlled  Clair Controlled  Clair Controlled  Controlled  Project is  2:2C-MD-02230  Controlled  Project is  2:2C-MD-02230  Controlled  Project is  2:2C-MD-02230  Controlled  Project is  Project is  Controlled  Controlled  Project is  Controlled  Controlled  Project is  Controlled  Project is  Controlled  Controlled  Project is  Controlled  Pr	Solutions  Class Convenience  Class Convenience  Class Convenience  Class Convenience  Class Convenience  Propert is  2 12 C-MD-02230  Class Convenience  Propert is  2 12 C-MD-02230  Class Convenience  Propert is  2 12 C-MD-02230  Class Convenience  Propert is  Class Convenience  Propert is  Class Convenience  Propert is  Class Convenience  Propert is  Class Convenience  Propert is  Class Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Propert is  Convenience  Convenience  Propert is  Convenience  Convenience  Propert is  Convenience  Convenience  Convenience  Propert is  Convenience	Solutions  Solutions  Class Contralles  Class Contralles  Class Contralles  Charles  Physical Contralles  Charles  Physical Contralles  Contralles  AMALYSIS REQUEST  (Circle or Specify Method  Circle or Specify Method  Contralles  AMALYSIS REQUEST  (Circle or Specify Method  Circle or Specify Method  Circle or Specify Method  AMALYSIS REQUEST  Contralles  AMALYSIS REQUEST  (Circle or Specify Method  Circle  r.v.	DV.	761		814-127 (8)	BH-126 (8)	BH-125 (8)	BH-124 (8)	ВH 123 (8)	BH-122 (B)	BH-121 (8)	BH-120 (8)	HH-119 (8)	Вн-118 (10)		SAMPL					ž		Perman Wa			
Ste Manager Clair Conzales Tietral  Clair Conzales Tietral  Project 8  Sampler Signature Peyton C  Sampler Signature Peyton C  SAMPLING MATRIX  FRANCE STATE  AT 15,2022  FRANCE STATE	Site Manager: Clair Gonzales Distriction  Clair Gonzales District Com  Propert 8  212C-MD-02230  Propert 9  SAMPLING MATRIX PRISERVATOR  SAMPLING MATRIX PRISERVATOR  SAMPLING MATRIX PRISERVATOR  SET TO 2022  TO	Site Name of the Sampler Signature  Project 8  Sampler Signature  Peyton Oliver	Site Manager:  Class Gonzales Spinitures  Project 6  212C-MD-02236  Project 6  212C-MD-02236  Project 6  212C-MD-02236  ANALYSIS REQUEST  Class Gonzales Spinitures  Project 6  212C-MD-02236  ANALYSIS REQUEST  (Circle of Circle	Ster Name of Springer			7/8/22 1609													E IDENTIFICATION			nco	Solutions -	NM		iter Salutions	ra Tech, Inc.	Took Inc
Clair Gonzales Elicinal 212C-MD 212C-MD 212C-MD Date of the control of the contro	Clair Gonzales  Clair Gonzales  Peyton Oliver	Class Conzales Distrated to 22 C. MD-02230  Peyton Oliver  Peyton	Clay Conzales Clay Conzeles  Clay Conzeles Conzeles  Clay Conzeles Clay Conzeles  Peyton Oliver	Call Contains The Contains A NALYSIS REQUEST  Peyton Oliver  Peyto	Received by	40 50465-03-	Char	Accepted by	772022	77-2022	76/2022	76/2022	7 6/2022	76202	76/2022	10.2.22	76/2022	7002132		NE AND SECTION	SAMPLING		Sampler Signature		Project 8	Clan	Site Manager		
Transition of the later of the	X X X X X X X X X X X ICE STORM None None State of the Containers  # Containers  Filtered (Y/N)	ANALYSIS REQUESTIONS  A CONTAINERS  FILTERED (Y/N)  ANALYSIS REQUESTION  ANALYSIS REQUESTION  ANALYSIS REQUESTION  Find Metals Ag As Ba Cd Cr Ph Se Hg  TOLP Metals Ag As Ba Cd Cr Ph Se Hg  TOLP Metals Ag As Ba Cd Cr Ph Se Hg	ANALYSIS REQUEST  TO P Metals Ag As Ba Cd Cr Ph Se Hg  TCLP Water Series Violaties  TCLP Series Violaties  TCLP Series Violaties	ANALYSIS REQUEST  ANALYSIS REQUEST  ANALYSIS REQUEST  ANALYSIS REQUEST  ANALYSIS REQUEST  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  CITCLE OF SERVICE  ANALYSIS REQUEST  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF SERVICE  ANALYSIS REQUEST  CITCLE OF	D	0	SA C	ᅬ	×	×	×	×	×	×	×	×	×	×	WATE SOIL	R			Peyton		2°2C-N		Clair Gonz	Indiana (	Man In
	FILTERED (YAY)	ANALYSIS REQUESTION FOR DESCRIPTION FOR SERVICE TO SERV	ANALYSIS REQUES  TOLP Metals Ag As Ba Cd Cr Ph Se Hg  TCLP Vetalles  TCLP Seria Vetalles  TCLP Seria Vetalles	ANALYSIS REQUEST    Circle   Continue   Circle   Continue   Circle					×	×	×	×	×	×	×	×	×	×	HNO ICE		PRESERVATOR METHOD		Oliver		D-02230	lech com	zies		21,70

Tetra Tech, Inc.    Posterior Water Schillors   Controller   Controlle
Stephenger Clar Contailes Departure Peyton Oliver Clar Contailes Com Sender Squature Peyton Oliver Pegton Oliver Pegton Oliver Peyton Oliver Pegton Oliver P
ANALYSIS REQUEST  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg  TOLE Medias Ag As Ba Cd Cr Pt Se Hg
FILTERED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  ANALYSIS REQUEST  FILTRED (VINI)  FILTRED (VINI)  FILTRED (VINI)  FILTRED (

	Relinquished by		Ralingia stadity	Astronomical States										LAST STATE	LAB#		Comments	Receiving Lebaretary	invalida to	county states	Project Rame	C. ent Name	ति
	Ψ,		× / ·	1/1						BT-141 (6)	BH-140 (8)	BH 139 (8)	BH-138 (8)		SAMPLE			Furofins Xenco	Permian Water Solutions -	Lea County, NM	Kaiser SWD	Perman Water Solutions	Tetr
	Cate Time		778	7/8/27 1609											SAMPLE IDENTIFICATION			0	r Salutions - Dusty Meinturff	ly1		r Solutions	Tetra Tech, Inc.
	Received by		Received by	Marce for the Marce of the						200002	7 6:2.22	1772022	77.2222	UATE	ALVE PT IA	SAMPLING		Sampler Signature		Project #		Site Manager	
	D	<b>C</b>	0					#		×	×	×	×	WATE SOIL HCL	R	MATRIX		Peyton Oliver		2.2C-W	Clar Gonzales otetralech com	Clar Gonzales	Television services
	Dale The		Date I me	Date lite						×	×	×	×	HNO ICE None		WETHER THE		Oliver		212C-MD-02230	lech com	Hes	
o			57	_						×	×	×	×	# DON FILTE BIEX		(/N)	-2. P./ ii						
			0,000	2	F			1		×	×	×	×		X1015	-	030) DRO	ORO -	MRO			ANALYSIS REQUEST	
THE HAND DE			arteradua, act	USE ONLY				#						PAH I	2700		la Ge O					SIS	
ve RH-I			à						+	+				TC.P	Vieta is	N3 Ns	Ba Cd C					REQUES	
			П	REMARKS.					-	+	-	+	-	-	volate Semi Vi							UES1	
x4094	Spec	HS	RUSH	LJ G						1		T		RO								or <b>5</b>	
Sedf	Special Report Fire or TRRP Report	Rush Charges Authorized		STANDARD	-	$\vdash$	H		+	+		+	-		Sem		ONE Y	15				000	
Tra	port I	gers A	Sarre Dey	DAR	F					F		F	F	PER'S	ML 65 1	++ 1H						₹	
Fra sing #	4	E		õ	E					$\pm$				-	hatesi.	29)							
	O. TR	2	24 N		F			$\dashv$		×	×	×	×	Chlon		in take	TDS					<u> </u>	
	R		48 71						$\pm$	+	1			Gene	al Wal	er One	emistry		lacred	list)		No.)	
П	00%				H	-		+	-	+	+	+	+	Anion	Chlier	Bulan	ice						
			A.I							1	1	1											
					_	-	_		_	-	1	-	-							<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>			
Ш					L					1	1	_		Hold									

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2515-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2515 List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2515-1

SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 07/12/22 11:11 AM

Creator: Rodriguez, Leticia

Login Number: 2515

List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Released to Imaging: 9/1/2023 2:28:53 PM

<6mm (1/4").

Released to Imaging: 9/1/2023 2:28:53 PM

**Environment Testing America** 

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2553-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Brittany Long

RAMER

Authorized for release by: 7/20/2022 11:48:05 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2553-1 SDG: Lea County NM

# **Table of Contents**

1
2
3
4
5
21
23
29
34
41
42
43
44
46

4

6

8

10

11

13

### **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Qualifiers** 

**GC VOA** 

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Elisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Carlsbad** 

2

3

Л

5

O

Я

9

. .

12

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2553-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2553-1

#### Receipt

The samples were received on 7/12/2022 4:57 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 36.2°C

#### **GC VOA**

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-29774 and analytical batch 880-29893 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-29947 and analytical batch 880-30015 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-29754 and analytical batch 880-29864 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

6

4

\_\_\_\_\_

9

12

IR

| 1 4

Lab Sample ID: 890-2553-1

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-142 5'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:27	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/22 16:53	07/18/22 12:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:27	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/22 16:53	07/18/22 12:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				07/14/22 16:53	07/18/22 12:27	1
1,4-Difluorobenzene (Surr)	107		70 - 130				07/14/22 16:53	07/18/22 12:27	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/19/22 09:14	1
Analyte	Dogult	Qualifier							
raidiyto	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<u> </u>	<50.0			MDL	mg/Kg	D	Prepared	Analyzed 07/18/22 09:27	
Total TPH	<50.0	U		MDL		<u>D</u>	Prepared		
Total TPH	<50.0	U				<u>D</u> 	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0	RO) (GC) Qualifier	50.0		mg/Kg			07/18/22 09:27	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 ge Organics (D Result	RO) (GC) Qualifier	50.0		mg/Kg		Prepared	07/18/22 09:27  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	<50.0 ge Organics (D Result <50.0	U  RO) (GC)  Qualifier  U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 11:12	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0 ge Organics (D) Result <50.0 <50.0	U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 11:12  07/15/22 11:12	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 11:12  07/15/22 11:12	Dil Face 1 1 1 Dil Face
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 Prepared	07/18/22 09:27  Analyzed  07/15/22 11:12  07/15/22 11:12  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery 81 88	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42  Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed 07/15/22 11:12  07/15/22 11:12  Analyzed  07/15/22 11:12	Dil Face 1 Dil Face 1
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <81 88 comatography -	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42  Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed 07/15/22 11:12  07/15/22 11:12  Analyzed  07/15/22 11:12	Dil Fac  1  Dil Fac  1  1  Dil Fac  1  Dil Fac

Client Sample ID: BH-143 5'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 12:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				07/14/22 16:53	07/18/22 12:48	1

**Eurofins Carlsbad** 

Matrix: Solid

Lab Sample ID: 890-2553-2

Lab Sample ID: 890-2553-2

Lab Sample ID: 890-2553-3

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-143 5'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 5'

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
motification to a gaine compa	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	07/14/22 16:53	07/18/22 12:48	1

Mathad:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	ma/Ka			07/19/22 09:14	1

ı			
ı	Mothod: 8015 NM -	Diesel Range Organio	e (DRO) (GC)

Analyte	Result Quali	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			07/18/22 09:27	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 12:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 12:16	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 12:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99	70 - 130	07/15/22 08:42	07/15/22 12:16	1
o-Terphenyl	104	70 - 130	07/15/22 08:42	07/15/22 12:16	1

Method: 300.0 - Anions,	Ion Chromato	graphy	y - Soluble

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	984	4.98		mg/Kg			07/16/22 21:42	1

Client Sample ID: BH-144 5'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 5'

Method: 8021B -	Malatile O		
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				07/14/22 16:53	07/18/22 13:09	1
1,4-Difluorobenzene (Surr)	96		70 - 130				07/14/22 16:53	07/18/22 13:09	1

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	 D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402		ma/Ka			07/19/22 09:14	1

Method. 0013 MM - Dieser Kange Organics (DRO) (GC)	Method: 8015 NM - Die	esel Range C	Organics (	DRO)	(GC)
--	-----------------------	--------------	------------	------	------

Analyte		Result	Qualifier	RL	MDL	Unit	ļ	D	Prepared	Analyzed	Dil Fac
Total TPH		226		50.0		mg/Kg				07/18/22 09:27	1

Lab Sample ID: 890-2553-3

Lab Sample ID: 890-2553-4

Matrix: Solid

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-144 5'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
Diesel Range Organics (Over C10-C28)	226		50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				07/15/22 08:42	07/15/22 14:02	1
o-Terphenyl	86		70 - 130				07/15/22 08:42	07/15/22 14:02	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			4.99		mg/Kg			07/16/22 21:52	

Client Sample ID: BH-145 5'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
o-Xylene	< 0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				07/14/22 16:53	07/18/22 13:30	1
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 13:30	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/19/22 09:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/18/22 09:27	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:37	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				07/15/22 08:42	07/15/22 12:37	1
	82		70 - 130				07/15/22 08:42	07/15/22 12:37	1

**Eurofins Carlsbad** 

2

3

7

12

Job ID: 890-2553-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Date Received: 07/12/22 16:57

Lab Sample ID: 890-2553-4

Client Sample ID: BH-145 5'

Date Collected: 07/12/22 00:00

Lab

Matrix: Solid

Sample Depth: 5'

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	903		5.00		mg/Kg			07/16/22 22:01	1

Client Sample ID: BH-146 5'

Lab Sample ID: 890-2553-5

Date Collected: 07/12/22 00:00 Matrix: Solid

Date Received: 07/12/22 00:00 Watrix: Solid

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 13:51	
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 13:51	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	112		70 - 130				07/14/22 16:53	07/18/22 13:51	
1,4-Difluorobenzene (Surr)	111		70 - 130				07/14/22 16:53	07/18/22 13:51	
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399		0.00399		mg/Kg			07/19/22 09:14	
Method: 8015 NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			07/18/22 09:27	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:58	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:58	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:58	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
	77		70 - 130				07/15/22 08:42	07/15/22 12:58	
1-Chlorooctane			70 400				07/15/22 08:42	07/15/22 12:58	
1-Chlorooctane o-Terphenyl	82		70 - 130						
1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro		Soluble	70 - 130						
o-Terphenyl	omatography -	Soluble Qualifier	70 - 130 RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2553-6

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-147 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	
Toluene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 14:11	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 14:11	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130				07/14/22 16:53	07/18/22 14:11	
1,4-Difluorobenzene (Surr)	110		70 - 130				07/14/22 16:53	07/18/22 14:11	
Method: Total BTEX - Total BTE	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/19/22 09:14	
Analyte	Result	O) (GC) Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	
Method: 8015 NM - Diesel Rang Analyte Total TPH	Result 537	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/18/22 09:27	
Analyte Fotal TPH Method: 8015B NM - Diesel Rar	Result 537	Qualifier  RO) (GC)	50.0		mg/Kg	<u> </u>		07/18/22 09:27	
Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte	Result 537 nge Organics (Di Result	Qualifier  RO) (GC)  Qualifier	50.0	MDL	mg/Kg Unit	<u>D</u>	Prepared	07/18/22 09:27  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics	Result 537	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg	<u> </u>		07/18/22 09:27	Dil Fa
Analyte  Fotal TPH  Method: 8015B NM - Diesel Ran Analyte  Gasoline Range Organics  GRO)-C6-C10  Diesel Range Organics (Over	Result 537 nge Organics (Di Result	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg Unit	<u> </u>	Prepared	07/18/22 09:27  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	nge Organics (Digension Result	Qualifier  RO) (GC)  Qualifier	50.0 RL 50.0		mg/Kg  Unit mg/Kg	<u> </u>	Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 15:52	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	Result	Qualifier  RO) (GC)  Qualifier	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 15:52  07/15/22 15:52	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier  RO) (GC) Qualifier  U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 15:52  07/15/22 15:52	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  RO) (GC) Qualifier  U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 Prepared	07/18/22 09:27  Analyzed  07/15/22 15:52  07/15/22 15:52  Analyzed	Dil Fa
Analyte	Result	Qualifier  RO) (GC) Qualifier  U	50.0  RL  50.0  50.0  50.0  Limits  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42  Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 15:52  07/15/22 15:52  Analyzed  07/15/22 15:52	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  RO) (GC) Qualifier  U	50.0  RL  50.0  50.0  50.0  Limits  70 - 130		mg/Kg  Unit mg/Kg mg/Kg mg/Kg	<u> </u>	Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42  Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 15:52  07/15/22 15:52  Analyzed  07/15/22 15:52	Dil Fa

Client Sample ID: BH-148 6'

Date Collected: 07/12/22 00:00

Lab Sample ID: 890-2553-7

Matrix: Solid

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Released to Imaging: 9/1/2023 2:28:53 PM

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 14:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 14:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 14:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 14:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 14:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 14:32	1

**Eurofins Carlsbad** 

2

J

5

7

9

11

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2553-1

Lab Sample ID: 890-2553-7

SDG: Lea County NM

Client Sample ID: BH-148 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	07/14/22 16:53	07/18/22 14:32	1
1,4-Difluorobenzene (Surr)	96		70 - 130	07/14/22 16:53	07/18/22 14:32	1

**Method: Total BTEX - Total BTEX Calculation** 

Analyte	Result	Qualifier	RL	MDL	Unit	P	repared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg	 		07/19/22 09:14	1

Method: 8015 NM - Diesel Range (	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	190	49.9	mg/Kg			07/18/22 09:27	1

Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 14:24	1
Diesel Range Organics (Over C10-C28)	138		49.9		mg/Kg		07/15/22 08:42	07/15/22 14:24	1
Oll Range Organics (Over C28-C36)	52.3		49.9		mg/Kg		07/15/22 08:42	07/15/22 14:24	1
Surrogata	% Bassyany	Qualifier	Limita				Branarad	Analyzad	Dil Ess

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	07/15/22 08:42	07/15/22 14:24	1
o-Terphenyl	101		70 - 130	07/15/22 08:42	07/15/22 14:24	1

Method: 300.0 - Anions, Ion Chron	natography - S	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.69		4.97		mg/Kg			07/16/22 22:47	1

Client Sample ID: BH-149 6'

Released to Imaging: 9/1/2023 2:28:53 PM

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 6'

Total BTEX

nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
enzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
oluene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
thylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
n-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
ylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
urrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
-Bromofluorobenzene (Surr)			70 - 130				07/14/22 16:53	07/18/22 14:53	1
,4-Difluorobenzene (Surr)	110		70 - 130				07/14/22 16:53	07/18/22 14:53	1

**Eurofins Carlsbad** 

07/19/22 09:14

0.00404

<0.00404 U

mg/Kg

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2553-1

SDG: Lea County NM

Client Sample ID: BH-149 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Lab Sample ID: 890-2553-8

Lab Sample ID: 890-2553-9

**Matrix: Solid** 

Matrix: Solid

Method: 8015 NM - Diesel Range (	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	64.6		49.9		mg/Kg			07/18/22 09:27	1
Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 17:38	1
Diesel Range Organics (Over C10-C28)	64.6		49.9		mg/Kg		07/15/22 08:42	07/15/22 17:38	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				07/15/22 08:42	07/15/22 17:38	1
o-Terphenyl	91		70 - 130				07/15/22 08:42	07/15/22 17:38	1
- Method: 300.0 - Anions, Ion Chroi	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.07		4.98		mg/Kg			07/16/22 22:56	1

Client Sample ID: BH-150 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				07/14/22 16:53	07/18/22 15:14	1
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 15:14	1
Method: Total BTEX - Total BTEX Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/19/22 09:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	83.6		50.0		mg/Kg			07/18/22 09:27	1
-	ne Organics (D	RO) (GC)							
Method: 8015B NM - Diesel Rang				MDI	Unit	D	Prepared	Analyzed	Dil Fac
	, ,	Qualifier	RL	MDL	Oilit				
Analyte Gasoline Range Organics	, ,		RL	MDL	mg/Kg		07/15/22 08:42	07/15/22 17:17	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result			MDL			07/15/22 08:42 07/15/22 08:42	07/15/22 17:17 07/15/22 17:17	1

**Matrix: Solid** 

Lab Sample ID: 890-2553-9

Lab Sample ID: 890-2553-10

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-150 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	96		70 - 130	07/15/22 08:42	07/15/22 17:17	1
l	o-Terphenyl	102		70 - 130	07/15/22 08:42	07/15/22 17:17	1

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride10.94.96mg/Kg07/16/22 23:051

Client Sample ID: BH-151 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 15:35	
Toluene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 15:35	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 15:35	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 15:35	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 15:35	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 15:35	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	111		70 - 130				07/14/22 16:53	07/18/22 15:35	
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 15:35	
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/19/22 09:14	
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Total TPH	126		50.0		mg/Kg			07/18/22 09:27	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 16:56	
Diesel Range Organics (Over C10-C28)	126		50.0		mg/Kg		07/15/22 08:42	07/15/22 16:56	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 16:56	
							Prepared	Analyzed	Dil Fa
Surrogate	%Recovery	Qualifier	Limits				rrepared	Analyzea	
Surrogate 1-Chlorooctane		Qualifier	70 - 130				07/15/22 08:42	07/15/22 16:56	
		Qualifier							
1-Chlorooctane	93		70 - 130				07/15/22 08:42	07/15/22 16:56	
1-Chlorooctane o-Terphenyl	93 99 omatography -		70 - 130	MDL	Unit	D	07/15/22 08:42	07/15/22 16:56	Dil Fa

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

2

3

5

7

9

12

Lab Sample ID: 890-2553-11

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-152 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/18/22 13:40	07/19/22 17:37	1
1,4-Difluorobenzene (Surr)	99		70 - 130				07/18/22 13:40	07/19/22 17:37	1
- Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/19/22 09:14	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.9		50.0		mg/Kg			07/18/22 09:27	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 18:42	1
Diesel Range Organics (Over C10-C28)	74.9		50.0		mg/Kg		07/15/22 08:42	07/15/22 18:42	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<b>74.9</b> <50.0	U	50.0 50.0		mg/Kg		07/15/22 08:42 07/15/22 08:42	07/15/22 18:42 07/15/22 18:42	1
C10-C28)									1
C10-C28) OII Range Organics (Over C28-C36)	<50.0		50.0				07/15/22 08:42	07/15/22 18:42	1 Dil Fac
C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.0		50.0 <i>Limits</i>				07/15/22 08:42  Prepared	07/15/22 18:42  Analyzed	1 <b>Dil Fac</b>
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 **Recovery 78 83	Qualifier	50.0  Limits  70 - 130				07/15/22 08:42  Prepared  07/15/22 08:42	07/15/22 18:42  Analyzed  07/15/22 18:42	1 Dil Fac
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0  **Recovery 78 83  omatography -	Qualifier	50.0  Limits  70 - 130	MDL		D	07/15/22 08:42  Prepared  07/15/22 08:42	07/15/22 18:42  Analyzed  07/15/22 18:42	

Client Sample ID: BH-153 6'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/18/22 13:40	07/19/22 17:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:57	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/18/22 13:40	07/19/22 17:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				07/18/22 13:40	07/19/22 17:57	1

**Eurofins Carlsbad** 

**Matrix: Solid** 

Lab Sample ID: 890-2553-12

Lab Sample ID: 890-2553-12

07/15/22 08:42 07/15/22 15:06

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-153 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
motification to a gaine compa	Julius (33)	( Continuou,

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93	70 - 130	07/18/22 13:40	07/19/22 17:57	1

Method: Total	<b>BTFX</b> - Total	<b>BTEX Calculation</b>
mothiod: rotal		DIE/ Guidalation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg		_	07/19/22 09:14	1

1					
Moth	nod: 8015 NM	Diocal Bana	o Organica	IDDOVIC	105
INIELI	IOU. OU 15 INIVI	- Diesei Kaliy	e Organics	ין נטאטן	3C)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117	49.9	mg/Kg			07/18/22 09:27	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 15:06	1
(GRO)-C6-C10									
Diesel Range Organics (Over	117		49.9		mg/Kg		07/15/22 08:42	07/15/22 15:06	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/15/22 08:42	07/15/22 15:06	1

1-Chlorooctane	81	70 - 130
o-Terphenyl	84	70 - 130

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	22.7		4 98		ma/Ka			07/16/22 23:51	1

Chloride	22.7	4.98	mg/Kg	07/16/22 23:51	1
Client Sample ID: BH-154 6'				Lab Sample ID: 890-25	53-13

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

#### Method: 8021B - Volatile Organic Compounds (GC)

Wethou. 002 ID - Volatile Orga	inic compounds (	(00)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:18	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 18:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:18	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				07/18/22 13:40	07/19/22 18:18	1
1,4-Difluorobenzene (Surr)	95		70 - 130				07/18/22 13:40	07/19/22 18:18	1

Method: T	otal RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	IJ	0.00399		ma/Ka			07/19/22 09:14	1

	Method: 8015 NM -	- Diesel Range	<b>Organics</b>	(DRO)	(GC)
--	-------------------	----------------	-----------------	-------	------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1330	50.0	mg/Kg			07/18/22 09:27	1

**Eurofins Carlsbad** 

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-154 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57 Sample Depth: 6'

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2553-13

Lab Sample ID: 890-2553-14

**Matrix: Solid** 

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	1
Diesel Range Organics (Over C10-C28)	1070		50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	1
Oll Range Organics (Over C28-C36)	261		50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/15/22 08:42	07/15/22 13:41	1
o-Terphenyl	82		70 - 130				07/15/22 08:42	07/15/22 13:41	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	77.4		4.98		mg/Kg			07/17/22 00:01	

Client Sample ID: BH-155 6'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 18:38	1
Toluene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 18:38	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 18:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 18:38	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 18:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				07/18/22 13:40	07/19/22 18:38	1
1,4-Difluorobenzene (Surr)	99		70 - 130				07/18/22 13:40	07/19/22 18:38	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/19/22 09:14	1
Method: 8015 NM - Diesel Range	•								
	•	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	•		RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/18/22 09:27	Dil Fac
Analyte	Result 111	Qualifier		MDL		<u>D</u>	Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result 111 ge Organics (Di	Qualifier				<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result 111 ge Organics (Di	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg		<u> </u>	07/18/22 09:27	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 111 ge Organics (DI Result	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg		Prepared	07/18/22 09:27  Analyzed	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result 111 ge Organics (DI Result	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg		Prepared	07/18/22 09:27  Analyzed	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 111  ge Organics (Di Result <50.0	Qualifier  RO) (GC) Qualifier U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 14:45  07/15/22 14:45	Dil Fac
Analyte Total TPH	Result 111 ge Organics (Di Result <50.0	Qualifier  RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 14:45	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   111	Qualifier  RO) (GC) Qualifier U	50.0  RL 50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 Prepared	07/18/22 09:27  Analyzed  07/15/22 14:45  07/15/22 14:45  Analyzed	1 Dil Fac 1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   111	Qualifier  RO) (GC) Qualifier U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed 07/15/22 14:45 07/15/22 14:45	1 Dil Fac 1 1

Lab Sample ID: 890-2553-14

Job ID: 890-2553-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-155 6' Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 6'

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	20.8		5.05		mg/Kg			07/17/22 00:29	1	

Lab Sample ID: 890-2553-15 Client Sample ID: BH-156 6' Matrix: Solid

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 18:58	
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 18:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				07/18/22 13:40	07/19/22 18:58	1
1,4-Difluorobenzene (Surr)	89		70 - 130				07/18/22 13:40	07/19/22 18:58	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/19/22 09:14	1
Method: 8015 NM - Diesel Range	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	94.0		50.0		mg/Kg			07/18/22 09:27	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 17:59	1
Diesel Range Organics (Over C10-C28)	94.0		50.0		mg/Kg		07/15/22 08:42	07/15/22 17:59	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/15/22 08:42	07/15/22 17:59	1
o-Terphenyl	93		70 - 130				07/15/22 08:42	07/15/22 17:59	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2553-16

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-157 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Method: 8021B - Volatile Organic	c Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	
Toluene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/18/22 13:40	07/19/22 19:19	1
1,4-Difluorobenzene (Surr)	95		70 - 130				07/18/22 13:40	07/19/22 19:19	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/19/22 09:14	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/18/22 09:27	1
- Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 19:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 19:03	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 19:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				07/15/22 08:42	07/15/22 19:03	1
o-Terphenyl	89		70 - 130				07/15/22 08:42	07/15/22 19:03	1
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.4		5.00		mg/Kg			07/17/22 00:47	1

Client Sample ID: BH-158 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2553-17

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/18/22 13:40	07/19/22 20:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/18/22 13:40	07/19/22 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				07/18/22 13:40	07/19/22 20:41	1

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-158 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57 **REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2553-17

Matrix: Solid

Sample Depth: 6'

Surrogate	%Recovery 0	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130	07/18/22 13:40	07/19/22 20:41	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			07/19/22 09:14	1

Mothod: 8015 NM - Diosal Panga	Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	P	repared	Analyzed	Dil Fac	
Total TPH	9550		250		mg/Kg				07/18/22 09:27	1	

		_			
Method: 8015B	NM - Diesel	Range Org	ranics (	'DROL	GC
motriou. ou rob	THE DIGGOL	itunge or	garnoo (	D. (O)	( <b>–</b>

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
Diesel Range Organics (Over C10-C28)	7890		250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
Oll Range Organics (Over C28-C36)	1660		250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5

Surrogate	%Recovery Qualifier	Limits	Prepared	l Analyzed	Dil Fac
1-Chlorooctane	77	70 - 130	07/15/22 08	:42 07/15/22 13:19	5
o-Terphenyl	88	70 - 130	07/15/22 08	:42 07/15/22 13:19	5

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117	4.99	ma/Ka			07/17/22 00:56	1

Client Sample ID: SW-50 0-6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

REMOVED FROM **ANALYSIS TABLE** 

Lab Sample ID: 890-2553-18

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/18/22 13:40	07/19/22 19:39	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/18/22 13:40	07/19/22 19:39	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/18/22 13:40	07/19/22 19:39	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/18/22 13:40	07/19/22 19:39	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/18/22 13:40	07/19/22 19:39	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/18/22 13:40	07/19/22 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				07/18/22 13:40	07/19/22 19:39	1
1,4-Difluorobenzene (Surr)	96		70 - 130				07/18/22 13:40	07/19/22 19:39	1

Method: Tota	I RTFY .	. Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/19/22 09:14	1

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-50 0-6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57 Sample Depth: 0' - 6'

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2553-18

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	152		49.9		mg/Kg			07/18/22 09:27	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 18:21	1
Diesel Range Organics (Over C10-C28)	152		49.9		mg/Kg		07/15/22 08:42	07/15/22 18:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 18:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130				07/15/22 08:42	07/15/22 18:21	1
o-Terphenyl	78		70 - 130				07/15/22 08:42	07/15/22 18:21	1

RL

4.95

MDL Unit

mg/Kg

Client Sample ID: SW-51 0-6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

Analyte

Chloride

<b>REMOVED</b>	FROM
<b>ANALYSIS</b>	<b>TABLE</b>

Result Qualifier

9.67

Lab Sample ID: 890-2553-19

Analyzed

07/17/22 01:06

Prepared

**Matrix: Solid** 

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				07/18/22 13:40	07/19/22 20:00	1
1,4-Difluorobenzene (Surr)	104		70 - 130				07/18/22 13:40	07/19/22 20:00	1
Analyte		Qualifier U		MDL	Unit mg/Kg	<u>D</u>	Prepared	<b>Analyzed</b> 07/19/22 09:14	
<b>Analyte</b> Total BTEX	Result < 0.00399	U		MDL		<u>D</u>	Prepared		
Analyte Total BTEX  Method: 8015 NM - Diesel Range	Result <0.00399  Organics (DR	U			mg/Kg	<u>D</u>	Prepared Prepared		Dil Fac
Method: Total BTEX - Total BTEX Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH	Result <0.00399  Organics (DR	O) (GC)	0.00399		mg/Kg	_ =	<u> </u>	07/19/22 09:14	1
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH	Result <0.00399  Organics (DRO Result 202	O) (GC) Qualifier	0.00399		mg/Kg	_ =	<u> </u>	07/19/22 09:14  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range	Result <0.00399  Organics (DRO Result 202  ge Organics (DI	O) (GC) Qualifier	0.00399		mg/Kg  Unit mg/Kg	_ =	<u> </u>	07/19/22 09:14  Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Result <0.00399  Organics (DRO Result 202  ge Organics (DI	O) (GC) Qualifier  RO) (GC) Qualifier	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg		Prepared	07/19/22 09:14  Analyzed  07/18/22 09:27	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte	Pesult 202  Georganics (DR)  Result 202  Georganics (DI)  Result Result	O) (GC) Qualifier  RO) (GC) Qualifier	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg  Unit		Prepared Prepared	07/19/22 09:14  Analyzed  07/18/22 09:27  Analyzed	1

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-51 0-6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2553-19

Matrix: Solid

Sample Depth: 0' - 6'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	07/15/22 08:43	07/15/22 19:24	1
o-Terphenyl	92		70 - 130	07/15/22 08:43	07/15/22 19:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride 143 4.95 mg/Kg 07/17/22 01:15

Client Sample ID: SW-52 0-6' Lab Sample ID: 890-2553-20 Date Collected: 07/12/22 00:00 **Matrix: Solid** 

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

Chloride

Released to Imaging: 9/1/2023 2:28:53 PM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:20	
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:20	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:20	•
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:20	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				07/18/22 13:40	07/19/22 20:20	
1,4-Difluorobenzene (Surr)	97		70 - 130				07/18/22 13:40	07/19/22 20:20	•
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/19/22 09:14	
: Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Range Analyte	Result	O) (GC) Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed 07/18/22 09:27	
Analyte Total TPH	Result 81.4	Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Ranç	Result 81.4 ge Organics (D	Qualifier  RO) (GC)	49.8		mg/Kg			07/18/22 09:27	
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result 81.4 ge Organics (D Result	Qualifier  RO) (GC)  Qualifier	49.8		mg/Kg	<u>D</u>	Prepared	07/18/22 09:27 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 81.4 ge Organics (D	Qualifier  RO) (GC)  Qualifier	49.8		mg/Kg			07/18/22 09:27	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 81.4 ge Organics (D Result	Qualifier  RO) (GC)  Qualifier	49.8		mg/Kg		Prepared	07/18/22 09:27 Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 81.4  ge Organics (D Result <a href="#">&lt;49.8</a>	Qualifier  RO) (GC)  Qualifier  U	49.8  RL 49.8		mg/Kg  Unit mg/Kg		Prepared 07/15/22 08:43	07/18/22 09:27  Analyzed  07/15/22 16:13	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 81.4  ge Organics (D Result <49.8  81.4	Qualifier  RO) (GC) Qualifier U	49.8  RL 49.8  49.8		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:43 07/15/22 08:43	07/18/22 09:27  Analyzed  07/15/22 16:13  07/15/22 16:13	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier  RO) (GC) Qualifier U	49.8 RL 49.8 49.8 49.8		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:43 07/15/22 08:43	07/18/22 09:27  Analyzed 07/15/22 16:13 07/15/22 16:13	Dil Fac
Analyte	Result	Qualifier  RO) (GC) Qualifier U	49.8 RL 49.8 49.8 49.8 Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:43 07/15/22 08:43 07/15/22 08:43 Prepared	07/18/22 09:27  Analyzed  07/15/22 16:13  07/15/22 16:13  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  RO) (GC) Qualifier  U	49.8 49.8 49.8 49.8 49.8  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 07/15/22 08:43 07/15/22 08:43 07/15/22 08:43  Prepared 07/15/22 08:43	07/18/22 09:27  Analyzed  07/15/22 16:13  07/15/22 16:13  Analyzed  07/15/22 16:13	Dil Fac

**Eurofins Carlsbad** 

07/17/22 01:24

4.97

mg/Kg

## **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				 Surrogate Rec
		BFB1	DFBZ1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	 
880-17008-A-21-C MS	Matrix Spike	107	95	
380-17008-A-21-D MSD	Matrix Spike Duplicate	117	92	
890-2553-1	BH-142 5'	109	107	
890-2553-1 MS	BH-142 5'	97	85	
890-2553-1 MSD	BH-142 5'	118	90	
390-2553-2	BH-143 5'	130	98	
390-2553-3	BH-144 5'	113	96	
890-2553-4	BH-145 5'	110	108	
890-2553-5	BH-146 5'	112	111	
890-2553-6	BH-147 6'	106	110	
890-2553-7	BH-148 6'	112	96	
890-2553-8	BH-149 6'	111	110	
890-2553-9	BH-150 6'	105	108	
890-2553-10	BH-151 6'	111	108	
890-2553-11	BH-152 6'	110	99	
390-2553-12	BH-153 6'	108	93	
390-2553-13	BH-154 6'	96	95	
390-2553-14	BH-155 6'	106	99	
890-2553-15	BH-156 6'	109	89	
890-2553-16	BH-157 6'	118	95	
890-2553-17	BH-158 6'	105	91	
890-2553-18	SW-50 0-6'	103	96	
890-2553-19	SW-51 0-6'	116	104	
890-2553-20	SW-52 0-6'	111	97	
LCS 880-29774/1-A	Lab Control Sample	114	88	
LCS 880-29947/1-A	Lab Control Sample	108	96	
LCSD 880-29774/2-A	Lab Control Sample Dup	97	99	
LCSD 880-29947/2-A	Lab Control Sample Dup	109	94	
MB 880-29774/5-A	Method Blank	97	110	
MB 880-29947/5-A	Method Blank	97	97	
		٥.	٠.	

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surro
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2553-1	BH-142 5'	81	88	
890-2553-1 MS	BH-142 5'	82	79	
890-2553-1 MSD	BH-142 5'	87	84	
890-2553-2	BH-143 5'	99	104	
890-2553-3	BH-144 5'	84	86	
890-2553-4	BH-145 5'	78	82	
890-2553-5	BH-146 5'	77	82	
890-2553-6	BH-147 6'	85	88	
890-2553-7	BH-148 6'	99	101	

## **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2553-8	BH-149 6'	86	91	
890-2553-9	BH-150 6'	96	102	
890-2553-10	BH-151 6'	93	99	
890-2553-11	BH-152 6'	78	83	
890-2553-12	BH-153 6'	81	84	
890-2553-13	BH-154 6'	81	82	
890-2553-14	BH-155 6'	78	80	
890-2553-15	BH-156 6'	88	93	
890-2553-16	BH-157 6'	83	89	
890-2553-17	BH-158 6'	77	88	
890-2553-18	SW-50 0-6'	74	78	
890-2553-19	SW-51 0-6'	90	92	
890-2553-20	SW-52 0-6'	92	97	
LCS 880-29795/2-A	Lab Control Sample	118	124	
LCSD 880-29795/3-A	Lab Control Sample Dup	127	128	
MB 880-29795/1-A	Method Blank	92	103	

TCO = 1-Chlorooctane

OTPH = o-Terphenyl

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29774/5-A

**Matrix: Solid** 

Analysis Batch: 29893

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29774

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 16:53	07/18/22 12:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 12:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 16:53	07/18/22 12:05	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	07/14/22 16:53	07/18/22 12:05	1
1,4-Difluorobenzene (Surr)	110		70 - 130	07/14/22 16:53	07/18/22 12:05	1

Lab Sample ID: LCS 880-29774/1-A

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29774

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09196	-	mg/Kg		92	70 - 130	
Toluene	0.100	0.1153		mg/Kg		115	70 - 130	
Ethylbenzene	0.100	0.1149		mg/Kg		115	70 - 130	
m-Xylene & p-Xylene	0.200	0.2397		mg/Kg		120	70 - 130	
o-Xylene	0.100	0.1241		mg/Kg		124	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-29774/2-A

Matrix: Solid

Analysis Batch: 29893

Prep Type: Total/NA Prep Batch: 29774

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1022		mg/Kg		102	70 - 130	11	35
Toluene	0.100	0.09957		mg/Kg		100	70 - 130	15	35
Ethylbenzene	0.100	0.08943		mg/Kg		89	70 - 130	25	35
m-Xylene & p-Xylene	0.200	0.1801		mg/Kg		90	70 - 130	28	35
o-Xylene	0.100	0.09438		mg/Kg		94	70 - 130	27	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 890-2553-1 MS

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: BH-142 5'

Prep Type: Total/NA

Prep Batch: 29774

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.100	0.08275		mg/Kg		83	70 - 130	
Toluene	< 0.00200	U	0.100	0.09095		mg/Kg		91	70 - 130	

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2553-1 MS

**Matrix: Solid** 

Analysis Batch: 29893

Client Sample ID: BH-142 5'

**Prep Type: Total/NA** 

Prep Batch: 29774

	Sample	Sample	<b>Spike</b>	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00200	U	0.100	0.07967		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1588		mg/Kg		79	70 - 130
o-Xylene	<0.00200	U	0.100	0.08167		mg/Kg		82	70 - 130

MS MS

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Client Sample ID: BH-142 5'

Prep Type: Total/NA

Prep Batch: 29774

Lab Sample ID: 890-2553-1 MSD **Matrix: Solid** 

Analysis Batch: 29893

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0994	0.06644	F1	mg/Kg		67	70 - 130	22	35
Toluene	<0.00200	U	0.0994	0.07947		mg/Kg		80	70 - 130	13	35
Ethylbenzene	<0.00200	U	0.0994	0.07332		mg/Kg		74	70 - 130	8	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1541		mg/Kg		78	70 - 130	3	35
o-Xylene	<0.00200	U	0.0994	0.08160		mg/Kg		82	70 - 130	0	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-29947/5-A

**Matrix: Solid** 

**Analysis Batch: 30015** 

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 29947

MB MB

Analyte	Result	Qualifier	RL	MDL Un	it	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg	/Kg		07/18/22 13:40	07/19/22 11:47	1
Toluene	<0.00200	U	0.00200	mg	/Kg		07/18/22 13:40	07/19/22 11:47	1
Ethylbenzene	<0.00200	U	0.00200	mg	/Kg		07/18/22 13:40	07/19/22 11:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg	/Kg		07/18/22 13:40	07/19/22 11:47	1
o-Xylene	<0.00200	U	0.00200	mg	/Kg		07/18/22 13:40	07/19/22 11:47	1
Xylenes, Total	<0.00400	U	0.00400	mg	/Kg		07/18/22 13:40	07/19/22 11:47	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	07/18/22 13:40	07/19/22 11:47	1
1,4-Difluorobenzene (Surr)	97		70 - 130	07/18/22 13:40	07/19/22 11:47	1

Lab Sample ID: LCS 880-29947/1-A

Matrix: Solid

Analysis Batch: 30015

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29947

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.08396		mg/Kg		84	70 - 130
Toluene	0.100	0.08292		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.08272		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1743		mg/Kg		87	70 - 130

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-29947/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 30015 Prep Batch: 29947

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
o-Xylene	0.100	0.09506		mg/Kg		95	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-29947/2-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 30015 Prep Batch: 29947

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08247		mg/Kg		82	70 - 130	2	35
Toluene	0.100	0.08858		mg/Kg		89	70 - 130	7	35
Ethylbenzene	0.100	0.08883		mg/Kg		89	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1891		mg/Kg		95	70 - 130	8	35
o-Xylene	0.100	0.1032		mg/Kg		103	70 - 130	8	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1.4-Difluorobenzene (Surr)	94		70 - 130

95

Lab Sample ID: 880-17008-A-21-C MS Client Sample ID: Matrix Spike Matrix: Solid Prep Type: Total/NA

Prep Batch: 29947 **Analysis Batch: 30015** 

Sample	Sample	Spike	MS	MS				%Rec	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
<0.00201	U F2 F1	0.100	0.01945	F1	mg/Kg		19	70 - 130	
<0.00201	U F2 F1	0.100	0.01816	F1	mg/Kg		18	70 - 130	
<0.00201	U F2 F1	0.100	0.01493	F1	mg/Kg		14	70 - 130	
<0.00402	U F2 F1	0.200	0.03295	F1	mg/Kg		15	70 - 130	
0.00273	F2 F1	0.100	0.01888	F1	mg/Kg		16	70 - 130	
	Result <0.00201 <0.00201 <0.00201 <0.00201 <0.00402	<0.00201 U F2 F1	Result         Qualifier         Added           <0.00201	Result         Qualifier         Added         Result           <0.00201	Result         Qualifier         Added         Result         Qualifier           <0.00201	Result         Qualifier         Added         Result         Qualifier         Unit           <0.00201	Result         Qualifier         Added         Result         Qualifier         Unit         D           <0.00201	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec           <0.00201	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits           <0.00201

m-xylone a p-xylone	10.00402	01211	0.200	0.00230 11	mg/rtg	10	70 - 100
o-Xylene	0.00273	F2 F1	0.100	0.01888 F1	mg/Kg	16	70 - 130
	MS	MS					
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	107		70 - 130				

70 - 130

Lab Sample ID: 880-17008-A-21-D MSD **Client Sample ID: Matrix Spike Duplicate** 

**Matrix: Solid** Analysis Batch: 30015 Prep Batch: 29947

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F2 F1	0.0998	0.03835	F2 F1	mg/Kg		38	70 - 130	65	35
Toluene	<0.00201	U F2 F1	0.0998	0.05746	F2 F1	mg/Kg		58	70 - 130	104	35
Ethylbenzene	<0.00201	U F2 F1	0.0998	0.04190	F2 F1	mg/Kg		41	70 - 130	95	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.05289	F2 F1	mg/Kg		25	70 - 130	46	35
o-Xylene	0.00273	F2 F1	0.0998	0.02937	F2 F1	mg/Kg		27	70 - 130	43	35

**Eurofins Carlsbad** 

Prep Type: Total/NA

1,4-Difluorobenzene (Surr)

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2553-1 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-17008-A-21-D MSD

**Matrix: Solid** 

Analysis Batch: 30015

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Prep Batch: 29947

MSD MSD

Surrogate	%Recovery Q	uaiitier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-29795/1-A

Matrix: Solid

**Analysis Batch: 29788** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29795

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 10:08	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 10:08	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 10:08	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	07/15/22 08:42	07/15/22 10:08	1
o-Terphenyl	103		70 - 130	07/15/22 08:42	07/15/22 10:08	1

Lab Sample ID: LCS 880-29795/2-A

**Matrix: Solid** 

**Analysis Batch: 29788** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29795

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	867.0		mg/Kg		87	70 - 130	 
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	990.9		mg/Kg		99	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	118	70 - 130
o-Terphenyl	124	70 - 130

Lab Sample ID: LCSD 880-29795/3-A

**Matrix: Solid** Analysis Batch: 29788

<b>Client Sample</b>	ID: Lab	Control	Sample	Dup
----------------------	---------	---------	--------	-----

Prep Type: Total/NA

Prep Batch: 29795

LCSD LCSD Spike %Rec RPD Added Result Qualifier Unit %Rec Limits Limit Gasoline Range Organics 1000 1009 101 70 - 130 15 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1041 mg/Kg 104 70 - 130 5 20

C10-C28)

LCSD LCSD

Surrogate	%Recovery Quali	ifier Limits
1-Chlorooctane	127	70 - 130
o-Terphenyl	128	70 - 130

Job ID: 890-2553-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2553-1 MS

**Matrix: Solid** 

Analysis Batch: 29788

Client Sample	ID: I	BH-142	<b>5</b> '
Prep 1	Tvpe	: Total/I	A

Prep Batch: 29795

Prep Batch: 29795

**Prep Type: Soluble** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	884.9		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	756.2		mg/Kg		72	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 890-2553-1 MSD Client Sample ID: BH-142 5' Prep Type: Total/NA

Matrix: Solid

**Analysis Batch: 29788** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	939.7		mg/Kg		92	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	809.8		mg/Kg		77	70 - 130	7	20

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 87 70 - 130 o-Terphenyl 84 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29754/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 29864

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/22 20:47	1

Lab Sample ID: LCS 880-29754/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29864

	Spike	LUS	LUS				70Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	256.2		mg/Kg		102	90 - 110	

Lab Sample ID: LCSD 880-29754/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29864

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	254.8		mg/Kg		102	90 - 110	1	20	

## **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Prep Type: Soluble** 

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2553-1 MS **Matrix: Solid** 

Analysis Batch: 29864

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	167	F1	248	444.9	F1	mg/Kg		112	90 - 110	

Client Sample ID: BH-142 5'

Client Sample ID: BH-142 5'

**Prep Type: Soluble** 

Analysis Batch: 29864

Lab Sample ID: 890-2553-1 MSD

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	167	F1	248	444.7	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: 890-2553-11 MS Client Sample ID: BH-152 6'

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29864

**Matrix: Solid** 

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	16.0		251	292.7		mg/Kg		110	90 - 110	

Lab Sample ID: 890-2553-11 MSD Client Sample ID: BH-152 6' **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29864

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	16.0		251	292.7		mg/Kg		110	90 - 110	0	20

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

GC VOA

Prep Batch: 29774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-1	BH-142 5'	Total/NA	Solid	5035	
890-2553-2	BH-143 5'	Total/NA	Solid	5035	
890-2553-3	BH-144 5'	Total/NA	Solid	5035	
890-2553-4	BH-145 5'	Total/NA	Solid	5035	
890-2553-5	BH-146 5'	Total/NA	Solid	5035	
890-2553-6	BH-147 6'	Total/NA	Solid	5035	
890-2553-7	BH-148 6'	Total/NA	Solid	5035	
890-2553-8	BH-149 6'	Total/NA	Solid	5035	
890-2553-9	BH-150 6'	Total/NA	Solid	5035	
890-2553-10	BH-151 6'	Total/NA	Solid	5035	
MB 880-29774/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29774/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29774/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2553-1 MS	BH-142 5'	Total/NA	Solid	5035	
890-2553-1 MSD	BH-142 5'	Total/NA	Solid	5035	

**Analysis Batch: 29893** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-1	BH-142 5'	Total/NA	Solid	8021B	29774
890-2553-2	BH-143 5'	Total/NA	Solid	8021B	29774
890-2553-3	BH-144 5'	Total/NA	Solid	8021B	29774
890-2553-4	BH-145 5'	Total/NA	Solid	8021B	29774
890-2553-5	BH-146 5'	Total/NA	Solid	8021B	29774
890-2553-6	BH-147 6'	Total/NA	Solid	8021B	29774
890-2553-7	BH-148 6'	Total/NA	Solid	8021B	29774
890-2553-8	BH-149 6'	Total/NA	Solid	8021B	29774
890-2553-9	BH-150 6'	Total/NA	Solid	8021B	29774
890-2553-10	BH-151 6'	Total/NA	Solid	8021B	29774
MB 880-29774/5-A	Method Blank	Total/NA	Solid	8021B	29774
LCS 880-29774/1-A	Lab Control Sample	Total/NA	Solid	8021B	29774
LCSD 880-29774/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29774
890-2553-1 MS	BH-142 5'	Total/NA	Solid	8021B	29774
890-2553-1 MSD	BH-142 5'	Total/NA	Solid	8021B	29774

Prep Batch: 29947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-11	BH-152 6'	Total/NA	Solid	5035	
890-2553-12	BH-153 6'	Total/NA	Solid	5035	
890-2553-13	BH-154 6'	Total/NA	Solid	5035	
890-2553-14	BH-155 6'	Total/NA	Solid	5035	
890-2553-15	BH-156 6'	Total/NA	Solid	5035	
890-2553-16	BH-157 6'	Total/NA	Solid	5035	
890-2553-17	BH-158 6'	Total/NA	Solid	5035	
890-2553-18	SW-50 0-6'	Total/NA	Solid	5035	
890-2553-19	SW-51 0-6'	Total/NA	Solid	5035	
890-2553-20	SW-52 0-6'	Total/NA	Solid	5035	
MB 880-29947/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29947/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29947/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17008-A-21-C MS	Matrix Spike	Total/NA	Solid	5035	
880-17008-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2553-1

SDG: Lea County NM

### **GC VOA**

#### Analysis Batch: 30015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-11	BH-152 6'	Total/NA	Solid	8021B	29947
890-2553-12	BH-153 6'	Total/NA	Solid	8021B	29947
890-2553-13	BH-154 6'	Total/NA	Solid	8021B	29947
890-2553-14	BH-155 6'	Total/NA	Solid	8021B	29947
890-2553-15	BH-156 6'	Total/NA	Solid	8021B	29947
890-2553-16	BH-157 6'	Total/NA	Solid	8021B	29947
890-2553-17	BH-158 6'	Total/NA	Solid	8021B	29947
890-2553-18	SW-50 0-6'	Total/NA	Solid	8021B	29947
890-2553-19	SW-51 0-6'	Total/NA	Solid	8021B	29947
890-2553-20	SW-52 0-6'	Total/NA	Solid	8021B	29947
MB 880-29947/5-A	Method Blank	Total/NA	Solid	8021B	29947
LCS 880-29947/1-A	Lab Control Sample	Total/NA	Solid	8021B	29947
LCSD 880-29947/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29947
880-17008-A-21-C MS	Matrix Spike	Total/NA	Solid	8021B	29947
880-17008-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29947

#### Analysis Batch: 30030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2553-1	BH-142 5'	Total/NA	Solid	Total BTEX	
890-2553-2	BH-143 5'	Total/NA	Solid	Total BTEX	
890-2553-3	BH-144 5'	Total/NA	Solid	Total BTEX	
890-2553-4	BH-145 5'	Total/NA	Solid	Total BTEX	
890-2553-5	BH-146 5'	Total/NA	Solid	Total BTEX	
890-2553-6	BH-147 6'	Total/NA	Solid	Total BTEX	
890-2553-7	BH-148 6'	Total/NA	Solid	Total BTEX	
890-2553-8	BH-149 6'	Total/NA	Solid	Total BTEX	
890-2553-9	BH-150 6'	Total/NA	Solid	Total BTEX	
890-2553-10	BH-151 6'	Total/NA	Solid	Total BTEX	
890-2553-11	BH-152 6'	Total/NA	Solid	Total BTEX	
890-2553-12	BH-153 6'	Total/NA	Solid	Total BTEX	
890-2553-13	BH-154 6'	Total/NA	Solid	Total BTEX	
890-2553-14	BH-155 6'	Total/NA	Solid	Total BTEX	
890-2553-15	BH-156 6'	Total/NA	Solid	Total BTEX	
890-2553-16	BH-157 6'	Total/NA	Solid	Total BTEX	
890-2553-17	BH-158 6'	Total/NA	Solid	Total BTEX	
890-2553-18	SW-50 0-6'	Total/NA	Solid	Total BTEX	
890-2553-19	SW-51 0-6'	Total/NA	Solid	Total BTEX	
890-2553-20	SW-52 0-6'	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

#### Analysis Batch: 29788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-1	BH-142 5'	Total/NA	Solid	8015B NM	29795
890-2553-2	BH-143 5'	Total/NA	Solid	8015B NM	29795
890-2553-3	BH-144 5'	Total/NA	Solid	8015B NM	29795
890-2553-4	BH-145 5'	Total/NA	Solid	8015B NM	29795
890-2553-5	BH-146 5'	Total/NA	Solid	8015B NM	29795
890-2553-6	BH-147 6'	Total/NA	Solid	8015B NM	29795
890-2553-7	BH-148 6'	Total/NA	Solid	8015B NM	29795
890-2553-8	BH-149 6'	Total/NA	Solid	8015B NM	29795

**Eurofins Carlsbad** 

2

3

4

0

10

12

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## GC Semi VOA (Continued)

### **Analysis Batch: 29788 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-9	BH-150 6'	Total/NA	Solid	8015B NM	29795
890-2553-10	BH-151 6'	Total/NA	Solid	8015B NM	29795
890-2553-11	BH-152 6'	Total/NA	Solid	8015B NM	29795
890-2553-12	BH-153 6'	Total/NA	Solid	8015B NM	29795
890-2553-13	BH-154 6'	Total/NA	Solid	8015B NM	29795
890-2553-14	BH-155 6'	Total/NA	Solid	8015B NM	29795
890-2553-15	BH-156 6'	Total/NA	Solid	8015B NM	29795
890-2553-16	BH-157 6'	Total/NA	Solid	8015B NM	29795
890-2553-17	BH-158 6'	Total/NA	Solid	8015B NM	29795
890-2553-18	SW-50 0-6'	Total/NA	Solid	8015B NM	29795
890-2553-19	SW-51 0-6'	Total/NA	Solid	8015B NM	29795
890-2553-20	SW-52 0-6'	Total/NA	Solid	8015B NM	29795
MB 880-29795/1-A	Method Blank	Total/NA	Solid	8015B NM	29795
LCS 880-29795/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29795
LCSD 880-29795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29795
890-2553-1 MS	BH-142 5'	Total/NA	Solid	8015B NM	29795
890-2553-1 MSD	BH-142 5'	Total/NA	Solid	8015B NM	29795

#### Prep Batch: 29795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
890-2553-1	BH-142 5'	Total/NA	Solid	8015NM Prep	
890-2553-2	BH-143 5'	Total/NA	Solid	8015NM Prep	
890-2553-3	BH-144 5'	Total/NA	Solid	8015NM Prep	
890-2553-4	BH-145 5'	Total/NA	Solid	8015NM Prep	
890-2553-5	BH-146 5'	Total/NA	Solid	8015NM Prep	
890-2553-6	BH-147 6'	Total/NA	Solid	8015NM Prep	
890-2553-7	BH-148 6'	Total/NA	Solid	8015NM Prep	
890-2553-8	BH-149 6'	Total/NA	Solid	8015NM Prep	
890-2553-9	BH-150 6'	Total/NA	Solid	8015NM Prep	
890-2553-10	BH-151 6'	Total/NA	Solid	8015NM Prep	
890-2553-11	BH-152 6'	Total/NA	Solid	8015NM Prep	
890-2553-12	BH-153 6'	Total/NA	Solid	8015NM Prep	
890-2553-13	BH-154 6'	Total/NA	Solid	8015NM Prep	
890-2553-14	BH-155 6'	Total/NA	Solid	8015NM Prep	
890-2553-15	BH-156 6'	Total/NA	Solid	8015NM Prep	
890-2553-16	BH-157 6'	Total/NA	Solid	8015NM Prep	
890-2553-17	BH-158 6'	Total/NA	Solid	8015NM Prep	
890-2553-18	SW-50 0-6'	Total/NA	Solid	8015NM Prep	
890-2553-19	SW-51 0-6'	Total/NA	Solid	8015NM Prep	
890-2553-20	SW-52 0-6'	Total/NA	Solid	8015NM Prep	
MB 880-29795/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29795/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2553-1 MS	BH-142 5'	Total/NA	Solid	8015NM Prep	
890-2553-1 MSD	BH-142 5'	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 29911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-1	BH-142 5'	Total/NA	Solid	8015 NM	
890-2553-2	BH-143 5'	Total/NA	Solid	8015 NM	
890-2553-3	BH-144 5'	Total/NA	Solid	8015 NM	

**Eurofins Carlsbad** 

2

3

1

6

8

10

13

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## GC Semi VOA (Continued)

### **Analysis Batch: 29911 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-4	BH-145 5'	Total/NA	Solid	8015 NM	
890-2553-5	BH-146 5'	Total/NA	Solid	8015 NM	
890-2553-6	BH-147 6'	Total/NA	Solid	8015 NM	
890-2553-7	BH-148 6'	Total/NA	Solid	8015 NM	
890-2553-8	BH-149 6'	Total/NA	Solid	8015 NM	
890-2553-9	BH-150 6'	Total/NA	Solid	8015 NM	
890-2553-10	BH-151 6'	Total/NA	Solid	8015 NM	
890-2553-11	BH-152 6'	Total/NA	Solid	8015 NM	
890-2553-12	BH-153 6'	Total/NA	Solid	8015 NM	
890-2553-13	BH-154 6'	Total/NA	Solid	8015 NM	
890-2553-14	BH-155 6'	Total/NA	Solid	8015 NM	
890-2553-15	BH-156 6'	Total/NA	Solid	8015 NM	
890-2553-16	BH-157 6'	Total/NA	Solid	8015 NM	
890-2553-17	BH-158 6'	Total/NA	Solid	8015 NM	
890-2553-18	SW-50 0-6'	Total/NA	Solid	8015 NM	
890-2553-19	SW-51 0-6'	Total/NA	Solid	8015 NM	
890-2553-20	SW-52 0-6'	Total/NA	Solid	8015 NM	

#### **HPLC/IC**

#### Leach Batch: 29754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2553-1	BH-142 5'	Soluble	Solid	DI Leach	_
890-2553-2	BH-143 5'	Soluble	Solid	DI Leach	
890-2553-3	BH-144 5'	Soluble	Solid	DI Leach	
890-2553-4	BH-145 5'	Soluble	Solid	DI Leach	
890-2553-5	BH-146 5'	Soluble	Solid	DI Leach	
890-2553-6	BH-147 6'	Soluble	Solid	DI Leach	
890-2553-7	BH-148 6'	Soluble	Solid	DI Leach	
890-2553-8	BH-149 6'	Soluble	Solid	DI Leach	
890-2553-9	BH-150 6'	Soluble	Solid	DI Leach	
890-2553-10	BH-151 6'	Soluble	Solid	DI Leach	
890-2553-11	BH-152 6'	Soluble	Solid	DI Leach	
390-2553-12	BH-153 6'	Soluble	Solid	DI Leach	
390-2553-13	BH-154 6'	Soluble	Solid	DI Leach	
390-2553-14	BH-155 6'	Soluble	Solid	DI Leach	
390-2553-15	BH-156 6'	Soluble	Solid	DI Leach	
390-2553-16	BH-157 6'	Soluble	Solid	DI Leach	
390-2553-17	BH-158 6'	Soluble	Solid	DI Leach	
390-2553-18	SW-50 0-6'	Soluble	Solid	DI Leach	
390-2553-19	SW-51 0-6'	Soluble	Solid	DI Leach	
390-2553-20	SW-52 0-6'	Soluble	Solid	DI Leach	
MB 880-29754/1-A	Method Blank	Soluble	Solid	DI Leach	
_CS 880-29754/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
_CSD 880-29754/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
390-2553-1 MS	BH-142 5'	Soluble	Solid	DI Leach	
390-2553-1 MSD	BH-142 5'	Soluble	Solid	DI Leach	
390-2553-11 MS	BH-152 6'	Soluble	Solid	DI Leach	
890-2553-11 MSD	BH-152 6'	Soluble	Solid	DI Leach	

**Eurofins Carlsbad** 

3

4

6

8

10

11

4.0

. .

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### HPLC/IC

Analysis Batch: 29864

890-2553-11 MSD

BH-152 6'

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-1	BH-142 5'	Soluble	Solid	300.0	29754
890-2553-2	BH-143 5'	Soluble	Solid	300.0	29754
890-2553-3	BH-144 5'	Soluble	Solid	300.0	29754
890-2553-4	BH-145 5'	Soluble	Solid	300.0	29754
890-2553-5	BH-146 5'	Soluble	Solid	300.0	29754
890-2553-6	BH-147 6'	Soluble	Solid	300.0	29754
890-2553-7	BH-148 6'	Soluble	Solid	300.0	29754
890-2553-8	BH-149 6'	Soluble	Solid	300.0	29754
890-2553-9	BH-150 6'	Soluble	Solid	300.0	29754
890-2553-10	BH-151 6'	Soluble	Solid	300.0	29754
890-2553-11	BH-152 6'	Soluble	Solid	300.0	29754
890-2553-12	BH-153 6'	Soluble	Solid	300.0	29754
890-2553-13	BH-154 6'	Soluble	Solid	300.0	29754
890-2553-14	BH-155 6'	Soluble	Solid	300.0	29754
890-2553-15	BH-156 6'	Soluble	Solid	300.0	29754
890-2553-16	BH-157 6'	Soluble	Solid	300.0	29754
890-2553-17	BH-158 6'	Soluble	Solid	300.0	29754
890-2553-18	SW-50 0-6'	Soluble	Solid	300.0	29754
890-2553-19	SW-51 0-6'	Soluble	Solid	300.0	29754
890-2553-20	SW-52 0-6'	Soluble	Solid	300.0	29754
MB 880-29754/1-A	Method Blank	Soluble	Solid	300.0	29754
LCS 880-29754/2-A	Lab Control Sample	Soluble	Solid	300.0	29754
LCSD 880-29754/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29754
890-2553-1 MS	BH-142 5'	Soluble	Solid	300.0	29754
890-2553-1 MSD	BH-142 5'	Soluble	Solid	300.0	29754
890-2553-11 MS	BH-152 6'	Soluble	Solid	300.0	29754

Soluble

Solid

300.0

**Eurofins Carlsbad** 

Job ID: 890-2553-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-142 5'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Lab Sample ID: 890-2553-1

**Matrix: Solid** 

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 12:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 11:12	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 21:15	CH	XEN MID

Client Sample ID: BH-143 5' Lab Sample ID: 890-2553-2

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 29774 Total/NA 5.01 g 5 mL 07/14/22 16:53 MR XEN MID 8021B Total/NA 5 mL 29893 07/18/22 12:48 XEN MID Analysis 1 5 mL MR Total/NA Total BTEX 30030 07/19/22 09:14 XEN MID Analysis 1 SM Total/NA Analysis 8015 NM 29911 07/18/22 09:27 SM XEN MID Total/NA 29795 07/15/22 08:42 XEN MID Prep 8015NM Prep 10.02 g 10 mL DM Total/NA Analysis 8015B NM 29788 07/15/22 12:16 SM XEN MID Soluble 29754 07/14/22 12:47 SMC XEN MID Leach DI Leach 5.02 g 50 mL Soluble Analysis 300.0 29864 07/16/22 21:42 СН XEN MID

Lab Sample ID: 890-2553-3 Client Sample ID: BH-144 5'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 13:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 14:02	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 21:52	CH	XEN MID

Client Sample ID: BH-145 5' Lab Sample ID: 890-2553-4 Date Collected: 07/12/22 00:00 Matrix: Solid

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 13:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID

**Eurofins Carlsbad** 

Page 34 of 47

#### **Lab Chronicle**

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-145 5'

Lab Sample ID: 890-2553-4 Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 12:37	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:01	CH	XEN MID

Client Sample ID: BH-146 5' Lab Sample ID: 890-2553-5

Date Collected: 07/12/22 00:00 **Matrix: Solid** 

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 13:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 12:58	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:10	CH	XEN MID

Client Sample ID: BH-147 6' Lab Sample ID: 890-2553-6

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 14:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 15:52	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:38	CH	XEN MID

Client Sample ID: BH-148 6' Lab Sample ID: 890-2553-7

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 14:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	29795 29788	07/15/22 08:42 07/15/22 14:24	DM SM	XEN MID XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client Sample ID: BH-148 6'

Lab Sample ID: 890-2553-7 Date Collected: 07/12/22 00:00 Matrix: Solid Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:47	CH	XEN MID

Client Sample ID: BH-149 6' Lab Sample ID: 890-2553-8

Date Collected: 07/12/22 00:00 **Matrix: Solid** 

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 14:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 17:38	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:56	CH	XEN MID

Client Sample ID: BH-150 6' Lab Sample ID: 890-2553-9

Date Collected: 07/12/22 00:00 **Matrix: Solid** 

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 15:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 17:17	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 23:05	CH	XEN MID

Client Sample ID: BH-151 6' Lab Sample ID: 890-2553-10

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 15:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 16:56	SM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 23:15	CH	XEN MID

**Eurofins Carlsbad** 

Client Sample ID: BH-152 6'

Lab Sample ID: 890-2553-11 Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 17:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 18:42	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 23:24	CH	XEN MID

Client Sample ID: BH-153 6' Lab Sample ID: 890-2553-12

Date Collected: 07/12/22 00:00 Matrix: Solid

Date Received: 07/12/22 16:57

Released to Imaging: 9/1/2023 2:28:53 PM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 17:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 15:06	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 23:51	CH	XEN MID

Client Sample ID: BH-154 6' Lab Sample ID: 890-2553-13

Date Collected: 07/12/22 00:00 **Matrix: Solid** Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 18:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 13:41	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 00:01	CH	XEN MID

Client Sample ID: BH-155 6' Lab Sample ID: 890-2553-14

Date Collected: 07/12/22 00:00 **Matrix: Solid** Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 18:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID

Client Sample ID: BH-155 6'

Lab Sample ID: 890-2553-14 Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 14:45	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 00:29	CH	XEN MID

Client Sample ID: BH-156 6' Lab Sample ID: 890-2553-15

Date Collected: 07/12/22 00:00 **Matrix: Solid** 

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 18:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 17:59	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 00:38	CH	XEN MID

Client Sample ID: BH-157 6' Lab Sample ID: 890-2553-16

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 19:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 19:03	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 00:47	CH	XEN MID

Client Sample ID: BH-158 6' Lab Sample ID: 890-2553-17

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 20:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		5			29788	07/15/22 13:19	SM	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client Sample ID: BH-158 6'

Lab Sample ID: 890-2553-17 Date Collected: 07/12/22 00:00 Matrix: Solid

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 00:56	CH	XEN MID

Client Sample ID: SW-50 0-6' Lab Sample ID: 890-2553-18

Date Collected: 07/12/22 00:00 **Matrix: Solid** 

Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 19:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 18:21	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 01:06	CH	XEN MID

Client Sample ID: SW-51 0-6' Lab Sample ID: 890-2553-19

Date Collected: 07/12/22 00:00 **Matrix: Solid** Date Received: 07/12/22 16:57

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 20:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 19:24	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 01:15	CH	XEN MID

Client Sample ID: SW-52 0-6' Lab Sample ID: 890-2553-20

Date Received: 07/12/22 16:57

Date Collected: 07/12/22 00:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 20:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	29795	07/15/22 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 16:13	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 01:24	CH	XEN MID

**Eurofins Carlsbad** 

### **Lab Chronicle**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2553-1 SDG: Lea County NM

#### Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

## **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

#### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification .  Prep Method	Matrix	Analyte	ay morado anarytoo tor v
9 ,		•	, , ,	

4

C

4.0

11

13

## **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

3

4

6

1

q

10

4.0

13

## **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

890-2553-20

SW-52 0-6'

Job ID: 890-2553-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2553-1	BH-142 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-2	BH-143 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-3	BH-144 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-4	BH-145 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-5	BH-146 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-6	BH-147 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-7	BH-148 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-8	BH-149 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-9	BH-150 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-10	BH-151 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-11	BH-152 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-12	BH-153 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-13	BH-154 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-14	BH-155 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-15	BH-156 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-16	BH-157 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-17	BH-158 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-18	SW-50 0-6'	Solid	07/12/22 00:00	07/12/22 16:57	0' - 6'
890-2553-19	SW-51 0-6'	Solid	07/12/22 00:00	07/12/22 16:57	0' - 6'

Solid

07/12/22 00:00

07/12/22 16:57 0' - 6'

2

4

5

7

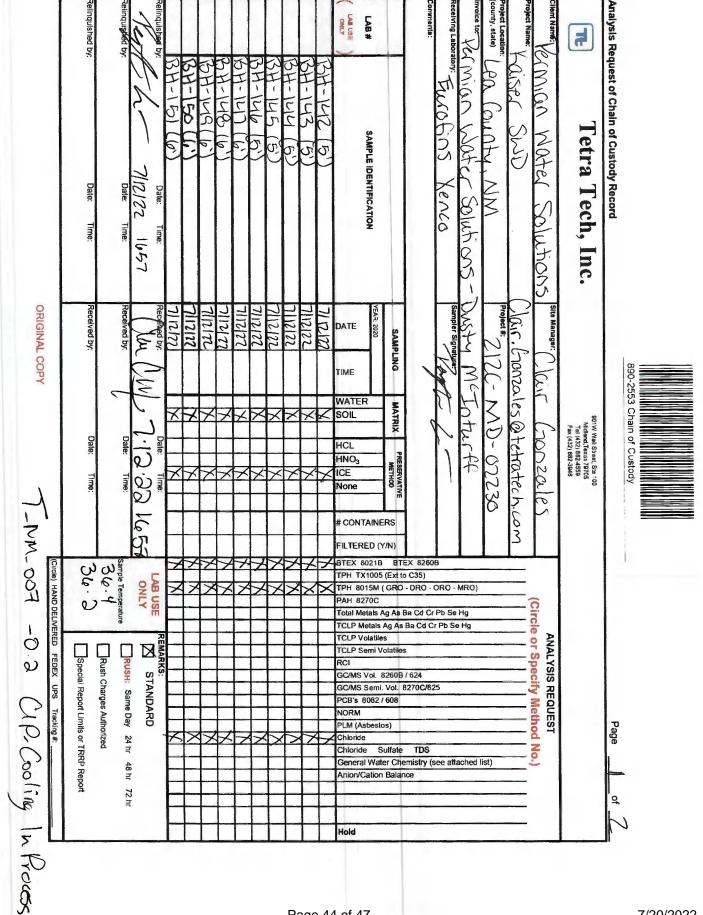
ŏ

10

12

13

ᆏ



LAB#

3

4

6

8

10

12

1 /

Tetra Tech, Inc.    Tetra Tech, Inc.
Received by:  Date: Time:  Sin Manager:  WATER SOIL  MATERIX PRESERVATIVE  ##CONTAINERS  FILTERED (YN)  Date: Time:  ##CONTAINERS  FILTERED (YN)  AREA (PD See Hg  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Volatiles  TCLP Semi-Volatiles   On Wall Street S
FILTERED (Y/N)  Sample Temperature  Sample Temperature  Sample Temperature  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  STANDARYS:  FILTERED (Y/N)  STANDARYS:  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  STANDARYS:  FILTERED (Y/N)  STANDARYS:  TOLP Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Volatiles  TCLP Semi Volatiles  FILTERED (Y/N)  ANALYSIS REQUEST  TOLP Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Semi Volatiles  FILTERED (Y/N)  ANALYSIS REQUEST  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  FILTERED (Y/N)  STANDARYS:  FILTERED (Y/N)  FILTERED (

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2553-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad Login Number: 2553

List Number: 1 Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <a href="mailto:smm">&lt;6 mm</a> (1/4").	N/A	

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2553-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 07/14/22 10:49 AM

Creator: Rodriguez, Leticia

Login Number: 2553

List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Euronnis Carisbau

Released to Imaging: 9/1/2023 2:28:53 PM

9

А

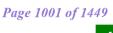
10

**12** 

13

14

<6mm (1/4").



**Environment Testing America** 

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2689-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

Revision: 1

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMPR

Authorized for release by: 8/11/2022 8:29:02 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

eurofins

Received by OCD: 8/28/2023 2:17:46 PM

.....LINKS **Review your project** results through EOL

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Laboratory Job ID: 890-2689-1 SDG: Lea County NM

**Table of Contents** 

1
2
3
4
5
17
19
26
30
35
36
37
38
40

10

12

## **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-2689-1

Project/Site: Kaiser SWD

SDG: Lea County NM

2

**Qualifiers** 

GC VOA

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

 S1+
 Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Indicates the analyte was analyzed for but not detected.

Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

U

Qualifier Qualifier Description

- 8

Indicates the analyte was analyzed for but not detected.

6

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

#### Case Narrative

Client: Tetra Tech, Inc.

Job ID: 890-2689-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2689-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2689-1

#### **REVISION**

The report being provided is a revision of the original report sent on 8/8/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID edit.

Report revision history

#### Receipt

The samples were received on 7/29/2022 2:06 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 15.2°C

#### **GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31669 and analytical batch 880-31654 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-159 (8') (890-2689-6) and BH-160 (8') (890-2689-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-31669 and analytical batch 880-31654 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

6

8

11

13

Client Sample ID: BH-118 (13')

Date Collected: 07/26/22 12:00
Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/05/22 11:19	08/06/22 01:44	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/05/22 11:19	08/06/22 01:44	1
Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			08/08/22 14:27	1
Method: 8015 NM - Diesel I	Range Organic	s (DRO) (0	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	247		49.9		mg/Kg			08/04/22 09:51	1
Method: 8015B NM - Diese	l Range Organi	ics (DRO)	(GC)						

Method: 8015B NM - Diesel R	ange Organ	ICS (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 22:32	1
Diesel Range Organics (Over C10-C28)	247		49.9		mg/Kg		08/03/22 09:25	08/03/22 22:32	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 22:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				08/03/22 09:25	08/03/22 22:32	1
o-Terphenyl	94		70 - 130				08/03/22 09:25	08/03/22 22:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	263	5.03	mg/Kg			08/06/22 06:13	1	

Client Sample ID: BH-119 (10')

Date Collected: 07/26/22 12:00

Lab Sample ID: 890-2689-2

Matrix: Solid

Date Received: 07/29/22 14:06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/22 11:19	08/06/22 00:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/22 11:19	08/06/22 00:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				08/05/22 11:19	08/06/22 00:22	1
1,4-Difluorobenzene (Surr)	92		70 - 130				08/05/22 11:19	08/06/22 00:22	1

**Eurofins Carlsbad** 

3

5

0

Ŏ

10

12

Client Sample ID: BH-119 (10')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-2

Matrix: Solid

wethou.	TOTAL DIEY -	IULAI DIEA	Calcula	lion
Analyte			Result	Qualif

**MDL** Unit ifier RL D Prepared Analyzed Dil Fac Total BTEX 0.00399 08/08/22 14:27 <0.00399 U mg/Kg

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D Prepared Total TPH <49.9 U 49.9 mg/Kg 08/04/22 09:51

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualitier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		08/03/22 09:25	08/03/22 20:23	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		08/03/22 09:25	08/03/22 20:23	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/03/22 09:25	08/03/22 20:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4 Oblassa atassa			70 400			00/02/00 00:05	00/02/00 00:02	

1-Chlorooctane 70 - 130 99 o-Terphenyl 113 70 - 130 08/03/22 09:25 08/03/22 20:23

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	382	25.1	mg/Kg			08/06/22 06:41	5

Client Sample ID: BH-158 (8')

Lab Sample ID: 890-2689-3 Date Collected: 07/26/22 12:00 Matrix: Solid

Date Received: 07/29/22 14:06

Method: 8021B	- Volatile Organic Compounds (GC)
A a Id.a	D 14 O 115

Analyte	Result	Qualifier	RL	MDL	Unit	ט	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 00:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 00:42	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 00:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 00:42	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 00:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 00:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Anaiyzea	DII Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	08/05/22 11:19	08/06/22 00:42	1
1,4-Difluorobenzene (Surr)	93		70 - 130	08/05/22 11:19	08/06/22 00:42	1

## **Method: Total BTEX - Total BTEX Calculation**

Analyte Result Qualifier **MDL** Unit RL D **Prepared** Analyzed Total BTEX <0.00398 U 0.00398 08/08/22 14:27 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte Result Qualifier **MDL** Unit RL Prepared Analyzed Dil Fac Total TPH <50.0 U 50.0 08/04/22 09:51 mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

		() (	,					
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		08/03/22 09:25	08/03/22 23:57	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		08/03/22 09:25	08/03/22 23:57	1
C10-C28)								

Released to Imaging: 9/1/2023 2:28:53 PM

**Eurofins Carlsbad** 

Dil Fac

Client Sample ID: BH-158 (8')

Lab Sample ID: 890-2689-3

Job ID: 890-2689-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Date Collected: 07/26/22 12:00 **Matrix: Solid** Date Received: 07/29/22 14:06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 23:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				08/03/22 09:25	08/03/22 23:57	1
o-Terphenyl	88		70 - 130				08/03/22 09:25	08/03/22 23:57	1

Method: 300.0 - Anions, Ion Ci	iromatograpny -	Soluble					
Analyte	Result Qualif	fier RL	MDL Uni	t D	Prepared	Analyzed	Dil Fac
Chloride	99.8	5.00	mg/	/Kg		08/06/22 06:50	1

Lab Sample ID: 890-2689-4 Client Sample ID: SW-50 (0-6') Date Collected: 07/26/22 12:00 **Matrix: Solid** Date Received: 07/29/22 14:06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 01:03	
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 01:03	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	117		70 - 130				08/05/22 11:19	08/06/22 01:03	
1,4-Difluorobenzene (Surr)	89		70 - 130				08/05/22 11:19	08/06/22 01:03	
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Total BTEX	< 0.00402	U	0.00402		mg/Kg				
					mg/rtg			08/08/22 14:27	
Method: 8015 NM - Diesel Ra	nge Organic	s (DRO) (0	SC)		mg/rtg			08/08/22 14:27	
		s (DRO) (O	SC)	MDL	Unit	D	Prepared	08/08/22 14:27  Analyzed	Dil Fa
Method: 8015 NM - Diesel Ra Analyte Total TPH		Qualifier	•	MDL		<u>D</u>	Prepared		Dil Fa
<b>Analyte</b> Total TPH	<b>Result</b> <49.8	Qualifier U	RL 49.8	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel R	Result <49.8	Qualifier U	RL 49.8		Unit	<u>D</u>	Prepared Prepared	Analyzed	
Analyte Total TPH  Method: 8015B NM - Diesel R Analyte Gasoline Range Organics	Result <49.8	Qualifier U ics (DRO) Qualifier	RL 49.8		Unit mg/Kg	_ =	· ·	Analyzed 08/04/22 09:51	
Analyte	Result <49.8 Range Organ Result	Qualifier U ics (DRO) Qualifier U	RL 49.8 (GC)		Unit mg/Kg Unit	_ =	Prepared	Analyzed 08/04/22 09:51  Analyzed 08/04/22 00:58	Dil Fa

-Chlorooctane	58 1
-Terphenyl	58 1
Method: 300.0 - Anions	Dil Fac
Method: 300.0 - Anions	

Client Sample ID: SW-51 (0-6')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-5 **Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 01:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 01:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				08/05/22 11:19	08/06/22 01:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130				08/05/22 11:19	08/06/22 01:23	1
Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/08/22 14:27	

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total TPH <50.0 U 08/04/22 09:51 50.0 mg/Kg

Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/04/22 01:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/04/22 01:18	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/04/22 01:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				08/03/22 09:25	08/04/22 01:18	1
o-Terphenyl	91		70 - 130				08/03/22 09:25	08/04/22 01:18	1

Method: 300.0 - Anions, Ion Ch	hromatography	/ - Soluble						
Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	201	4.97		mg/Kg			08/06/22 07:09	1

Client Sample ID: BH-159 (8') Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

**REMOVED FROM ANALYSIS TABLE**  **Lab Sample ID: 890-2689-6** 

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 02:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 02:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 02:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/05/22 11:19	08/06/22 02:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 02:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/05/22 11:19	08/06/22 02:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130				08/05/22 11:19	08/06/22 02:46	1
1,4-Difluorobenzene (Surr)	91		70 - 130				08/05/22 11:19	08/06/22 02:46	1

### **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-159 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-2689-6

**Matrix: Solid** 

<b>Method: Total BTEX - Total B</b>	TEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			08/08/22 14:27	1
- Method: 8015 NM - Diesel Ra	inge Organic	s (DRO) (G	iC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
					mg/Kg			08/04/22 09:51	
Total TPH	58.9		50.0		mg/Kg			00/04/22 09.51	'
Total TPH  Method: 8015B NM - Diesel F Analyte	Range Organi	ics (DRO) ( Qualifier		MDL		D	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel F Analyte Gasoline Range Organics	Range Organi	Qualifier	(GC)	MDL		<u>D</u>	Prepared 08/03/22 09:25		Dil Fac
Method: 8015B NM - Diesel F Analyte	Range Organi Result	Qualifier U	(GC)	MDL	Unit	<u>D</u>		Analyzed	Dil Fac

%Recovery Qualifier Limits Dil Fac Prepared Analyzed Surrogate 70 - 130 08/03/22 09:25 08/03/22 22:53 1-Chlorooctane 87 91 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac Chloride 581 25.3 mg/Kg 08/06/22 07:36

Client Sample ID: BH-160 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06 Lab Sample ID: 890-2689-7 **Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 03:06	1
Toluene	< 0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 03:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 03:06	•
m-Xylene & p-Xylene	< 0.00399	U	0.00399		mg/Kg		08/05/22 11:19	08/06/22 03:06	
o-Xylene	< 0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 03:06	•
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/22 11:19	08/06/22 03:06	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				08/05/22 11:19	08/06/22 03:06	
1,4-Difluorobenzene (Surr)	89		70 - 130				08/05/22 11:19	08/06/22 03:06	•
Method: Total BTEX - Total	BTEX Calcula	tion							
Method: Total BTEX - Total Analyte		tion Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
		Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 14:27	Dil Fac
Analyte Total BTEX	<0.00399	<b>Qualifier</b> U	0.00399	MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel I	Result <0.00399	<b>Qualifier</b> U	0.00399	MDL MDL		<u>D</u>	Prepared Prepared		Dil Fac
Analyte	Result <0.00399	Qualifier U	0.00399 GC)		mg/Kg	_ =	<u> </u>	08/08/22 14:27	1
Analyte Total BTEX  Method: 8015 NM - Diesel I Analyte Total TPH	Result <0.00399  Range Organic Result 217	Qualifier U  s (DRO) (O Qualifier	0.00399  GC)  RL  50.0		mg/Kg	_ =	<u> </u>	08/08/22 14:27  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel I Analyte	Result <0.00399  Range Organic Result 217  I Range Organ	Qualifier U  s (DRO) (O Qualifier	0.00399  GC)  RL  50.0		mg/Kg	_ =	<u> </u>	08/08/22 14:27  Analyzed	1

**Eurofins Carlsbad** 

(GRO)-C6-C10

Client Sample ID: BH-160 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06 Lab Sample ID: 890-2689-7

08/06/22 07:46

Matrix: Solid

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	133		50.0		mg/Kg		08/03/22 09:25	08/03/22 21:49	1
Oll Range Organics (Over C28-C36)	83.6		50.0		mg/Kg		08/03/22 09:25	08/03/22 21:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/03/22 09:25	08/03/22 21:49	1
o-Terphenyl	91		70 - 130				08/03/22 09:25	08/03/22 21:49	1
Method: 300.0 - Anions, Ion	Chromatogra	phy - Solu	ıble						

25.2 Client Sample ID: BH-161 (8') Lab Sample ID: 890-2689-8

mg/Kg

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

**Chloride** 

563

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Toluene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				08/05/22 11:19	08/06/22 03:27	1
1,4-Difluorobenzene (Surr)	77		70 - 130				08/05/22 11:19	08/06/22 03:27	1

Method: Total BTEX - Total BT	<b>EX Calcula</b>	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/08/22 14:27	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	218		49.9		mg/Kg			08/04/22 09:51	1
- Method: 8015B NM - Diesel F	Range Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 22:11	1
Diesel Range Organics (Over C10-C28)	147		49.9		mg/Kg		08/03/22 09:25	08/03/22 22:11	1
Oll Range Organics (Over C28-C36)	71.4		49.9		mg/Kg		08/03/22 09:25	08/03/22 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/03/22 09:25	08/03/22 22:11	1
o-Terphenyl	92		70 - 130				08/03/22 09:25	08/03/22 22:11	1

Job ID: 890-2689-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-161 (8') Lab Sample ID: 890-2689-8

Date Collected: 07/26/22 12:00 Matrix: Solid Date Received: 07/29/22 14:06

Method: 300.0 - Anions, Ion Ch	romatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	515		25.0		mg/Kg			08/06/22 07:55	5

Client Sample ID: BH-162 (8') Lab Sample ID: 890-2689-9 REMOVED FROM Date Collected: 07/26/22 12:00 **Matrix: Solid** 

**ANALYSIS TABLE** Date Received: 07/29/22 14:06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:05	1
Toluene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:05	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 02:05	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 02:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				08/05/22 11:19	08/06/22 02:05	1
1,4-Difluorobenzene (Surr)	87		70 - 130				08/05/22 11:19	08/06/22 02:05	1
Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/08/22 14:27	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)										
	Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<49.9	U	49.9		mg/Kg			08/04/22 09:51	1

Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 00:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 00:18	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 00:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				08/03/22 09:25	08/04/22 00:18	1
o Torphonyl	0.4		70 120				08/02/22 00:25	09/04/22 00:19	1

o-Terphenyl	94		70 - 130				08/03/22 09:25	08/04/22 00:18	1
Method: 300.0 - Anions, Ion Chr	•			MDI	1124	_	Barranad	Anabasad	D'! E
Analyte	Result	Qualifier	RL	MDL	Unit	ט	Prepared	Analyzed	Dil Fac
Chloride	106		24.9	_	mg/Kg			08/06/22 08:04	5

Client Sample ID: BH-163 (8') Lab Sample ID: 890-2689-10 Date Collected: 07/26/22 12:00 **Matrix: Solid** 

Date Received: 07/29/22 14:06

Method: 8021B - Volatile Organi	c Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:25	1

Client Sample ID: BH-163 (8') Lab Sample ID: 890-2689-10

Date Collected: 07/26/22 12:00 **Matrix: Solid** Date Received: 07/29/22 14:06

o-Xylene         < 0.00199	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Surrogate         %Recovery 4-Bromofluorobenzene (Surr)         Qualifier 1/4-Diffuorobenzene (Surr)         Limits 2/70 - 130         Prepared 0/8/05/22 11:19         Analyze 0/8/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/05/22 11:19         08/06/22 0/08/06/22 0/08/05/22 0/08/0	m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 02:25	1
Surrogate         %Recovery 4-Bromofluorobenzene (Surr)         Qualifier 122         Limits 70 - 130         Prepared 08/05/22 11:19         Analyze 08/05/22 11:19         08/05/22 11:19         08/05/22 01:29         08/08/22 01:29         08/0	o-Xylene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 02:25	1
### ### ##############################	Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 02:25	1
1,4-Difluorobenzene (Surr)   82   70 - 130   08/05/22 11:19   08/06/22 02	Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BTEX Calculation           Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyze           Total BTEX         <0.00398	4-Bromofluorobenzene (Surr)			70 - 130				08/05/22 11:19	08/06/22 02:25	1
Method: 8015 NM - Diesel Range Organics (DRO) (GC)   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyze   O8/04/22 0	1,4-Difluorobenzene (Surr)	82		70 - 130				08/05/22 11:19	08/06/22 02:25	1
Name	Method: Total BTEX - Tota	BTEX Calcula	tion							
Method: 8015 NM - Diesel Range Organics (DRO) (GC)           Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyze           Total TPH         <50.0				RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyze           Total TPH         <50.0	Total BTEX	<0.00398	U	0.00398		mg/Kg			08/08/22 14:27	1
Analyte         Result Total TPH         Qualifier         RL Stone         MDL Unit mg/Kg         D mg/Kg         Prepared Manalyze         Analyze           Method: 8015B NM - Diesel Range Organics (DRO) (GC)         Result Gasoline Range Organics         Qualifier         RL MDL Unit MDL Unit MDL Unit MG/MG         D Prepared Manalyze         Analyze           Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)         <50.0 U 50.0 mg/Kg	Method: 8015 NM - Diesel	Range Organic	s (DRO) (0	C)						
Method: 8015B NM - Diesel Range Organics (DRO) (GC)           Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyze           Gasoline Range Organics         <50.0			- () (-							
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyze           Gasoline Range Organics         <50.0	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyze           Gasoline Range Organics         <50.0					MDL		<u>D</u>	Prepared	Analyzed 08/04/22 09:51	Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 08/03/22 09:25 08/03/22 2 C10-C28)	Total TPH	<50.0	U	50.0	MDL		<u>D</u>	Prepared		Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 08/03/22 09:25 08/03/22 2 C10-C28)	Total TPH  Method: 8015B NM - Diese	<50.0	ics (DRO)	50.0 (GC)		mg/Kg	_ =			Dil Fac
C10-C28)	Total TPH  Method: 8015B NM - Diese Analyte	<50.0 I Range Organ Result	ics (DRO) Qualifier	50.0 (GC)		mg/Kg Unit	_ =	Prepared	08/04/22 09:51	1
,	Total TPH  Method: 8015B NM - Diese Analyte Gasoline Range Organics	<50.0 I Range Organ Result	ics (DRO) Qualifier	50.0 (GC)		mg/Kg Unit	_ =	Prepared	08/04/22 09:51  Analyzed	1
OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 08/03/22 09:25 08/03/22 2	Total TPH  Method: 8015B NM - Diese Analyte  Gasoline Range Organics (GRO)-C6-C10	<50.0  I Range Organ Result <50.0	ics (DRO) Qualifier	50.0 (GC) RL 50.0		mg/Kg  Unit mg/Kg	_ =	Prepared 08/03/22 09:25	08/04/22 09:51  Analyzed 08/03/22 23:37	1
	Total TPH  Method: 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  I Range Organ Result <50.0	ics (DRO) Qualifier	50.0 (GC) RL 50.0		mg/Kg  Unit mg/Kg	_ =	Prepared 08/03/22 09:25	08/04/22 09:51  Analyzed 08/03/22 23:37	Dil Fac
Surrogate %Recovery Qualifier Limits Prepared Analyze	Total TPH  Method: 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0  I Range Organ  Result  <50.0  <50.0	ics (DRO) Qualifier U	50.0 (GC) RL 50.0 50.0		mg/Kg  Unit mg/Kg mg/Kg	_ =	Prepared 08/03/22 09:25 08/03/22 09:25	08/04/22 09:51  Analyzed 08/03/22 23:37 08/03/22 23:37	Dil Fac

Method: 300.0 - Anions, Ion Ch	romatogra	phy - Soluk	ole						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		5.02		mg/Kg			08/06/22 08:13	1

70 - 130

70 - 130

Client Sample ID: BH-164 (8') Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

1-Chlorooctane

o-Terphenyl

**REMOVED FROM ANALYSIS TABLE** 

97

104

Lab Sample ID: 890-2689-11

08/03/22 09:25 08/03/22 23:37

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 07:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 07:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				08/05/22 11:19	08/06/22 07:34	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/05/22 11:19	08/06/22 07:34	1
- Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		ma/Ka			08/08/22 14:27	1

Client Sample ID: BH-164 (8')

Lab Sample ID: 890-2689-11

Date Collected: 07/26/22 12:00 **Matrix: Solid** Date Received: 07/29/22 14:06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3450		250		mg/Kg			08/04/22 09:51	1
Method: 8015B NM - Diesel I	Range Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		08/03/22 09:25	08/03/22 21:27	5
Diesel Range Organics (Over C10-C28)	2820		250		mg/Kg		08/03/22 09:25	08/03/22 21:27	5
Oll Range Organics (Over C28-C36)	625		250		mg/Kg		08/03/22 09:25	08/03/22 21:27	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/03/22 09:25	08/03/22 21:27	5
o-Terphenyl	105		70 - 130				08/03/22 09:25	08/03/22 21:27	5

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RLMDL Unit Analyzed Dil Fac D Prepared Chloride 1340 24.9 mg/Kg 08/06/22 08:22

Client Sample ID: BH-165 (13')

Lab Sample ID: 890-2689-12 Date Collected: 07/26/22 12:00 **Matrix: Solid** 

Method: 8021B - Volatile Orga	anic Compoi	unds (GC)							
Analyte	-	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	•
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 07:54	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				08/05/22 11:19	08/06/22 07:54	
1,4-Difluorobenzene (Surr)	91		70 - 130				08/05/22 11:19	08/06/22 07:54	
Method: Total BTEX - Total B	TEX Calcula	tion							
		tion Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total B Analyte Total BTEX		Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 14:27	Dil Fac
Analyte Total BTEX	<0.00402	Qualifier U	0.00402	MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX Method: 8015 NM - Diesel Ra	Result <0.00402	Qualifier U	0.00402			<u>D</u>	Prepared Prepared		1
Analyte	Result <0.00402	Qualifier U	0.00402		mg/Kg			08/08/22 14:27	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte	Result <0.00402  nge Organic Result 64.6	Qualifier U  S (DRO) (O Qualifier	0.00402  GC)  RL  49.9		mg/Kg			08/08/22 14:27  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte Total TPH  Method: 8015B NM - Diesel R	Result <0.00402  nge Organic Result 64.6  Range Organic	Qualifier U  S (DRO) (O Qualifier	0.00402  GC)  RL  49.9		mg/Kg  Unit mg/Kg			08/08/22 14:27  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte Total TPH  Method: 8015B NM - Diesel R Analyte Gasoline Range Organics	Result <0.00402  nge Organic Result 64.6  Range Organic	Qualifier U  S (DRO) (Gradualifier  C (DRO) Qualifier  Qualifier	0.00402  GC)  RL  49.9	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	08/08/22 14:27  Analyzed 08/04/22 09:51	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte Total TPH	Result <0.00402  nge Organic Result 64.6  Range Organi Result	Qualifier U  S (DRO) (Gradualifier  C (DRO) Qualifier  Qualifier	0.00402  GC)  RL  49.9  (GC)  RL	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared  Prepared  08/03/22 09:25	08/08/22 14:27  Analyzed  08/04/22 09:51  Analyzed	Dil Fac

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-165 (13') Lab Sample ID: 890-2689-12

Date Collected: 07/26/22 12:00 Matrix: Solid Date Received: 07/29/22 14:06

%Recovery Qualifier Limits Prepared Surrogate Analyzed Dil Fac 1-Chlorooctane 93 70 - 130 08/03/22 09:25 08/03/22 23:15 o-Terphenyl 98 70 - 130 08/03/22 09:25 08/03/22 23:15

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Chloride 613 24.9 mg/Kg 08/06/22 08:50 5

Lab Sample ID: 890-2689-13 Client Sample ID: SW-43 (0-4') **REMOVED FROM** Date Collected: 07/26/22 12:00 ANALYSIS TABLE

Date Received: 07/29/22 14:06

Method: 8021B - Volatile Organic Compounds (GC) Result Qualifier Analyte RL MDL Unit Prepared Analyzed Dil Fac Benzene <0.00202 U 0.00202 08/07/22 12:02 08/08/22 00:42 mg/Kg Toluene <0.00202 U 0.00202 08/07/22 12:02 08/08/22 00:42 mg/Kg Ethylbenzene 08/07/22 12:02 08/08/22 00:42 <0.00202 U 0.00202 mg/Kg 1 m-Xylene & p-Xylene <0.00403 U 0.00403 mg/Kg 08/07/22 12:02 08/08/22 00:42 <0.00202 UF1 0.00202 08/07/22 12:02 08/08/22 00:42 o-Xylene mg/Kg 08/07/22 12:02 08/08/22 00:42 Xylenes, Total <0.00403 UF1 0.00403 mg/Kg %Recovery Qualifier Dil Fac Surrogate Limits Prepared Analyzed 4-Bromofluorobenzene (Surr) 110 70 - 130 08/07/22 12:02 08/08/22 00:42 1,4-Difluorobenzene (Surr) 88 70 - 130 08/07/22 12:02 08/08/22 00:42

**Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00403 U 0.00403 mg/Kg 08/08/22 14:27

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <49.9 U 49.9 08/04/22 09:51 mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier **MDL** Unit Analyte RL D Dil Fac Prepared Analyzed <49.9 U Gasoline Range Organics 49.9 08/03/22 09:25 08/04/22 01:38 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 49.9 mg/Kg 08/03/22 09:25 08/04/22 01:38

Oll Range Organics (Over C28-C36) <49.9 U 49.9 08/03/22 09:25 08/04/22 01:38 mg/Kg Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 88 70 - 130 08/03/22 09:25 08/04/22 01:38

70 - 130

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac Chloride 86.9 5.00 mg/Kg 08/06/22 08:59

**Eurofins Carlsbad** 

08/03/22 09:25 08/04/22 01:38

C10-C28)

o-Terphenyl

Client Sample ID: SW-39 (0-13')

Date Collected: 07/29/22 12:00 Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-14

**Matrix: Solid** 

Method: 8021B - Volatile Orga Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201		0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
Toluene		U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
	<0.00201	_	0.00201		0 0		08/07/22 12:02	08/08/22 01:03	1
Ethylbenzene					mg/Kg				
m-Xylene & p-Xylene	<0.00402		0.00402		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				08/07/22 12:02	08/08/22 01:03	1
1,4-Difluorobenzene (Surr)	93		70 - 130				08/07/22 12:02	08/08/22 01:03	1
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BTA Analyte Total BTEX  Method: 8015 NM - Diesel Rai	Result <0.00402	<b>Qualifier</b> U	0.00402	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 14:27	Dil Fac
Analyte	Result <0.00402	<b>Qualifier</b> U	0.00402	MDL MDL		<u>D</u>	Prepared Prepared		Dil Fac  Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rai Analyte	Result <0.00402	Qualifier U s (DRO) (G	0.00402		mg/Kg	=		08/08/22 14:27	1
Analyte Total BTEX  Method: 8015 NM - Diesel Rai Analyte Total TPH	Result   <0.00402	Qualifier U  S (DRO) (O Qualifier U	0.00402 GC) RL 49.9		mg/Kg Unit	=		08/08/22 14:27  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Rai Analyte Total TPH  Method: 8015B NM - Diesel R	Result <0.00402  nge Organic Result <49.9  ange Organi	Qualifier U  S (DRO) (O Qualifier U	0.00402 GC) RL 49.9		mg/Kg  Unit mg/Kg	=		08/08/22 14:27  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Rai Analyte Total TPH  Method: 8015B NM - Diesel R Analyte Gasoline Range Organics	Result <0.00402  nge Organic Result <49.9  ange Organi	Qualifier U  S (DRO) (Gradualifier U  ics (DRO) Qualifier Qualifier	0.00402  GC)  RL  49.9	MDL	mg/Kg  Unit mg/Kg	<u></u> <u></u>	Prepared	08/08/22 14:27  Analyzed 08/04/22 09:51	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rai	Result <0.00402  nge Organic Result <49.9  ange Organi Result	Qualifier U  S (DRO) (Gradualifier U  ics (DRO) Qualifier U  Qualifier U	0.00402  GC)  RL  49.9  (GC)  RL	MDL	mg/Kg  Unit mg/Kg  Unit	<u></u> <u></u>	Prepared Prepared	08/08/22 14:27  Analyzed  08/04/22 09:51  Analyzed	Dil Fac

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL

%Recovery Qualifier

87

92

MDL Unit Prepared Analyzed 5.04 Chloride 111 mg/Kg 08/06/22 20:26

Limits

70 - 130

70 - 130

Client Sample ID: SW-40 (0-13')

Date Collected: 07/29/22 12:00 Date Received: 07/29/22 14:06

Surrogate

o-Terphenyl

1-Chlorooctane

Lab Sample	ID:	890-2689-15
		Matrix: Calid

08/03/22 09:25 08/04/22 01:58

Analyzed

Prepared

Matrix: Solid

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/07/22 12:02	08/08/22 01:23	1
Toluene	< 0.00199	U	0.00199		mg/Kg		08/07/22 12:02	08/08/22 01:23	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/07/22 12:02	08/08/22 01:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/07/22 12:02	08/08/22 01:23	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/07/22 12:02	08/08/22 01:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/07/22 12:02	08/08/22 01:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				08/07/22 12:02	08/08/22 01:23	1
1,4-Difluorobenzene (Surr)	77		70 - 130				08/07/22 12:02	08/08/22 01:23	1

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-40 (0-13')

Date Collected: 07/29/22 12:00

Lab Sample ID: 890-2689-15

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/08/22 14:27	1
Method: 8015 NM - Diesel Rar	nge Organic	s (DRO) (0	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/04/22 09:51	1
Method: 8015B NM - Diesel Ra	ange Organi	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				08/03/22 09:25	08/04/22 02:18	1
o-Terphenyl	90		70 - 130				08/03/22 09:25	08/04/22 02:18	1
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solι	ıble						
Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.3		5.03		mg/Kg			08/06/22 20:35	1

### **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid Prep Type: Total/NA** 

				Surrogate Recovery (Acceptance I
		BFB1	DFBZ1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-2689-1	BH-118 (13')	94	96	
90-2689-2	BH-119 (10')	114	92	
90-2689-2 MS	BH-119 (10')	124	98	
90-2689-2 MSD	BH-119 (10')	112	93	
90-2689-3	BH-158 (8')	110	93	
90-2689-4	SW-50 (0-6')	117	89	
0-2689-5	SW-51 (0-6')	111	91	
0-2689-6	BH-159 (8')	131 S1+	91	
0-2689-7	BH-160 (8')	135 S1+	89	
0-2689-8	BH-161 (8')	106	77	
0-2689-9	BH-162 (8')	108	87	
0-2689-10	BH-163 (8')	122	82	
0-2689-11	BH-164 (8')	124	99	
0-2689-12	BH-165 (13')	115	91	
)-2689-13	SW-43 (0-4')	110	88	
)-2689-13 MS	SW-43 (0-4')	114	95	
)-2689-13 MSD	SW-43 (0-4')	120	94	
-2689-14	SW-39 (0-13')	120	93	
2689-15	SW-40 (0-13')	108	77	
S 880-31573/1-A	Lab Control Sample	106	90	
S 880-31669/1-A	Lab Control Sample	100	99	
SD 880-31573/2-A	Lab Control Sample Dup	112	94	
SD 880-31669/2-A	Lab Control Sample Dup	101	101	
3 880-31335/5-A	Method Blank	99	89	
880-31573/5-A	Method Blank	101	91	
8 880-31602/5-A	Method Blank	95	80	
J 000-3 1002/J-A	Method Blank	130	111	

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrog	ate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2689-1	BH-118 (13')	92	94	
890-2689-2	BH-119 (10')	99	113	
890-2689-2 MS	BH-119 (10')	96	92	
890-2689-2 MSD	BH-119 (10')	88	84	
890-2689-3	BH-158 (8')	83	88	
890-2689-4	SW-50 (0-6')	90	96	
890-2689-5	SW-51 (0-6')	84	91	
890-2689-6	BH-159 (8')	87	91	
890-2689-7	BH-160 (8')	88	91	
890-2689-8	BH-161 (8')	88	92	
890-2689-9	BH-162 (8')	87	94	
890-2689-10	BH-163 (8')	97	104	

### **Surrogate Summary**

Job ID: 890-2689-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA** 

			Percen	t Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2689-11	BH-164 (8')	99	105	
890-2689-12	BH-165 (13')	93	98	
890-2689-13	SW-43 (0-4')	88	94	
890-2689-14	SW-39 (0-13')	87	92	
890-2689-15	SW-40 (0-13')	84	90	
LCS 880-31397/2-A	Lab Control Sample	109	107	
LCSD 880-31397/3-A	Lab Control Sample Dup	111	110	
MB 880-31397/1-A	Method Blank	96	109	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

### Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31335/5-A

**Matrix: Solid** 

**Analysis Batch: 31540** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 31335

1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/02/22 14:31	08/05/22 11:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/02/22 14:31	08/05/22 11:25	•
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/22 14:31	08/05/22 11:25	•
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/22 14:31	08/05/22 11:25	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/22 14:31	08/05/22 11:25	•
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		08/02/22 14:31	08/05/22 11:25	•

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	08/02/22 14:31	08/05/22 11:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/02/22 14:31	08/05/22 11:25	1

Lab Sample ID: MB 880-31573/5-A

Matrix: Solid

**Analysis Batch: 31540** 

**Client Sample ID: Method Blank Prep Type: Total/NA** 

Prep Batch: 31573

	MB N	MB				•	
Analyte	Result C	Qualifier R	RL MDL Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	J 0.0020	mg/Kg	<u></u>	08/05/22 11:19	08/06/22 00:00	1
Toluene	<0.00200 L	J 0.0020	00 mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Ethylbenzene	<0.00200 L	J 0.0020	00 mg/Kg		08/05/22 11:19	08/06/22 00:00	1
m-Xylene & p-Xylene	<0.00400 U	J 0.0040	00 mg/Kg		08/05/22 11:19	08/06/22 00:00	1
o-Xylene	<0.00200 L	J 0.0020	00 mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Xylenes, Total	<0.00400 U	J 0.0040	00 mg/Kg		08/05/22 11:19	08/06/22 00:00	1

MB MB

Surrogate	%Recovery Quality	fier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101	70 - 130	08/05/22 11:19	08/06/22 00:00	1
1,4-Difluorobenzene (Surr)	91	70 - 130	08/05/22 11:19	08/06/22 00:00	1

Lab Sample ID: LCS 880-31573/1-A

**Matrix: Solid** 

**Analysis Batch: 31540** 

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Lab Control Sample Dup** 

**Prep Type: Total/NA** Prep Batch: 31573

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09897		mg/Kg		99	70 - 130	
Toluene	0.100	0.1022		mg/Kg		102	70 - 130	
Ethylbenzene	0.100	0.1050		mg/Kg		105	70 - 130	
m-Xylene & p-Xylene	0.200	0.2137		mg/Kg		107	70 - 130	
o-Xylene	0.100	0.1208		mg/Kg		121	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	106	70 - 130
1.4-Difluorobenzene (Surr)	90	70 - 130

Lab Sample ID: LCSD 880-31573/2-A

Matrix: Solid						al/NA			
Analysis Batch: 31540							Prep E	Batch: 3	31573
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09262		mg/Kg		93	70 - 130	7	35

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-31573/2-A

**Matrix: Solid** 

**Analysis Batch: 31540** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 31573

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Toluene 0.100 0.09534 mg/Kg 95 70 - 130 7 0.100 Ethylbenzene 0.1047 mg/Kg 105 70 - 130 0 m-Xylene & p-Xylene 0.200 0.2146 mg/Kg 107 70 - 130 n 0.100 2 35 o-Xylene 0.1189 mg/Kg 119 70 - 130

Limit 35 35 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-2689-2 MS Client Sample ID: BH-119 (10')

**Matrix: Solid** 

**Analysis Batch: 31540** 

Prep Type: Total/NA Prep Batch: 31573

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.101	0.09178		mg/Kg		91	70 - 130	
Toluene	<0.00200	U	0.101	0.1004		mg/Kg		100	70 - 130	
Ethylbenzene	<0.00200	U	0.101	0.1071		mg/Kg		107	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.201	0.2218		mg/Kg		110	70 - 130	
o-Xylene	<0.00200	U	0.101	0.1258		mg/Kg		125	70 - 130	

MS MS

Surrogate	%Recovery Qualitier	Limits
4-Bromofluorobenzene (Surr)	124	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: 890-2689-2 MSD Client Sample ID: BH-119 (10')

**Matrix: Solid** 

**Analysis Batch: 31540** 

Prep Type: Total/NA Prep Batch: 31573

Spike MSD MSD %Rec **RPD** Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit Benzene <0.00200 U 0.0998 0.08524 mg/Kg 85 70 - 130 35 Toluene <0.00200 U 0.0998 0.08780 mg/Kg 88 70 - 130 13 35 Ethylbenzene <0.00200 U 0.0998 0.08996 mg/Kg 90 70 - 130 17 35 m-Xylene & p-Xylene 0.200 90 70 - 130 22 35 <0.00399 U 0.1787 mg/Kg o-Xylene <0.00200 U 0.0998 0.1036 104 70 - 130 35 mq/Kq

MSD MSD

MD MD

Surrogate	%Recovery Qu	alifier Limits
4-Bromofluorobenzene (Surr)	112	70 - 130
1,4-Difluorobenzene (Surr)	93	70 - 130

Lab Sample ID: MB 880-31602/5-A

**Matrix: Solid** 

Analysis Batch: 31654

**Client Sample ID: Method Blank** Prep Type: Total/NA

Prep Batch: 31602

	IVID	IVID						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/05/22 13:42	08/07/22 13:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/05/22 13:42	08/07/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/05/22 13:42	08/07/22 13:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/05/22 13:42	08/07/22 13:44	1

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-31602/5-A **Matrix: Solid** 

**Analysis Batch: 31654** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/22 13:42	08/07/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/22 13:42	08/07/22 13:44	1

	MB M	1B			
Surrogate	%Recovery Q	ualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	70 - 130	08/05/22 13:42	08/07/22 13:44	1
1,4-Difluorobenzene (Surr)	80	70 - 130	08/05/22 13:42	08/07/22 13:44	1

Lab Sample ID: MB 880-31669/5-A

**Matrix: Solid** 

**Analysis Batch: 31654** 

Prep Type: Total/NA

Prep Batch: 31669

**Client Sample ID: Method Blank** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 31602

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/07/22 12:02	08/08/22 00:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/07/22 12:02	08/08/22 00:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/07/22 12:02	08/08/22 00:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/07/22 12:02	08/08/22 00:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/07/22 12:02	08/08/22 00:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/07/22 12:02	08/08/22 00:21	1

MB MB %Recovery Qualifier Prepared Surrogate Limits Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 130 70 - 130 08/07/22 12:02 08/08/22 00:21 1,4-Difluorobenzene (Surr) 70 - 130 08/07/22 12:02 08/08/22 00:21 111

Lab Sample ID: LCS 880-31669/1-A

**Matrix: Solid** 

**Analysis Batch: 31654** 

**Client Sample ID: Lab Control Sample Prep Type: Total/NA** Prep Batch: 31669

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1009		mg/Kg		101	70 - 130	
Toluene	0.100	0.09893		mg/Kg		99	70 - 130	
Ethylbenzene	0.100	0.09835		mg/Kg		98	70 - 130	
m-Xylene & p-Xylene	0.200	0.1984		mg/Kg		99	70 - 130	
o-Xylene	0.100	0.1126		mg/Kg		113	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1 4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-31669/2-A				Client Sa	mple	ID: Lat	Control	Sample	<b>Dup</b>
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 31654							Prep E	Batch:	31669
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1023		mg/Kg		102	70 - 130	1	35

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1023	mg/Kg		102	70 - 130	1	35
Toluene	0.100	0.1004	mg/Kg		100	70 - 130	2	35
Ethylbenzene	0.100	0.1014	mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2043	mg/Kg		102	70 - 130	3	35
o-Xylene	0.100	0.1134	mg/Kg		113	70 - 130	1	35

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Client Sample ID: SW-43 (0-4') Lab Sample ID: 890-2689-13 MS Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 31654									Prep E	Batch: 31669
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.100	0.1058		mg/Kg		105	70 - 130	
Toluene	<0.00202	U	0.100	0.1129		mg/Kg		112	70 - 130	
Ethylbenzene	<0.00202	U	0.100	0.1179		mg/Kg		117	70 - 130	
m-Xylene & p-Xylene	< 0.00403	U	0.201	0.2446		mg/Kg		122	70 - 130	
o-Xylene	<0.00202	U F1	0.100	0.1369	F1	mg/Kg		136	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 114 70 - 130 1,4-Difluorobenzene (Surr) 70 - 130 95

Lab Sample ID: 890-2689-13 MSD

Matrix: Solid

**Analysis Batch: 31654** 

Client Sample ID: SW-43 (0-4')

**Prep Type: Total/NA** 

Prep Batch: 31669

_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.100	0.1039		mg/Kg	_	104	70 - 130	2	35
Toluene	<0.00202	U	0.100	0.1120		mg/Kg		112	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.100	0.1218		mg/Kg		122	70 - 130	3	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2532		mg/Kg		126	70 - 130	3	35
o-Xylene	<0.00202	U F1	0.100	0.1413	F1	mg/Kg		141	70 - 130	3	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-31397/1-A

**Matrix: Solid** 

**Analysis Batch: 31371** 

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31397

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 19:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 19:19	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 19:19	1

MB	MR

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	08/03/22 09:25 08/03/22 19:19	1
o-Terphenyl	109		70 - 130	08/03/22 09:25 08/03/22 19:19	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2689-1 SDG: Lea County NM

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-31397/2-A

**Matrix: Solid** 

**Analysis Batch: 31371** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 31397

Prep Batch: 31397

Spike LCS LCS Added Result Qualifier D %Rec Limits Analyte Unit Gasoline Range Organics 1000 1052 mg/Kg 105 70 - 130 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1023 102 70 - 130 mg/Kg

C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	107		70 - 130

**Client Sample ID: Lab Control Sample Dup** 

Lab Sample ID: LCSD 880-31397/3-A **Matrix: Solid Prep Type: Total/NA** 

**Analysis Batch: 31371** 

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1144		mg/Kg		114	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	1065		mg/Kg		106	70 - 130	4	20

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	111	70 - 130
o-Terphenyl	110	70 - 130

Lab Sample ID: 890-2689-2 MS Client Sample ID: BH-119 (10')

Matrix: Solid				Prep Type: Total/NA
Analysis Batch: 31371				Prep Batch: 31397
	Sample Sample	Spike	MS MS	%Rec

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U 999 1062 70 - 130 Gasoline Range Organics 104 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 844.1 mg/Kg 84 70 - 130 C10-C28)

	MS MS	
Surrogate	%Recovery Qualifie	r Limits
1-Chlorooctane	96	70 - 130
o-Terphenyl	92	70 - 130

Lab Sample ID: 890-2689-2 MSD

**Matrix: Solid** 

Analysis Batch: 31371									Prep E	satch: 3	31397
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	906.5		mg/Kg		88	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	780.0		mg/Kg		78	70 - 130	8	20
	MSD	MSD									

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 88

**Eurofins Carlsbad** 

Client Sample ID: BH-119 (10')

Prep Type: Total/NA

Prep Batch: 31397

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: BH-118 (13')

Client Sample ID: BH-118 (13')

Client Sample ID: BH-164 (8')

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2689-2 MSD Client Sample ID: BH-119 (10') Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 31371** 

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 84 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31360/1-A Matrix: Solid

**Analysis Batch: 31623** 

MB MB

Result Qualifier Analyte RL MDL Unit Prepared Analyzed Dil Fac Chloride <5.00 5.00 08/06/22 05:46 U mg/Kg

Lab Sample ID: LCS 880-31360/2-A

**Matrix: Solid** 

**Analysis Batch: 31623** 

Spike LCS LCS %Rec Added Result Qualifier Limits Analyte Unit D %Rec 250 Chloride 236.9 mg/Kg 95 90 - 110

Lab Sample ID: LCSD 880-31360/3-A

**Matrix: Solid** 

**Analysis Batch: 31623** 

LCSD LCSD Spike %Rec **RPD** Added Analyte Result Qualifier Unit D %Rec Limits **RPD** Limit Chloride 250 237.0 95 90 - 110 20 mg/Kg

Lab Sample ID: 890-2689-1 MS

**Matrix: Solid** 

**Analysis Batch: 31623** 

MS MS Sample Sample Spike %Rec **Analyte** Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 263 252 507.4 97 90 - 110 mg/Kg

Lab Sample ID: 890-2689-1 MSD

**Matrix: Solid** 

**Analysis Batch: 31623** 

MSD MSD **RPD** Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 263 252 505.2 90 - 110 mg/Kg

Lab Sample ID: 890-2689-11 MS

**Matrix: Solid** 

**Analysis Batch: 31623** 

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 1240 Chloride 1340 2642 105 90 - 110 mg/Kg

## **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2689-11 MSD Client Sample ID: BH-164 (8') **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 31623** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1340		1240	2664		mg/Kg		107	90 - 110	1	20

Job ID: 890-2689-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

### **GC VOA**

Pre	n B	atc	h:	31	3:	35
	P <b>-</b>	uto	•••	•	•	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31335/5-A	Method Blank	Total/NA	Solid	5035	

#### **Analysis Batch: 31540**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	8021B	31573
890-2689-2	BH-119 (10')	Total/NA	Solid	8021B	31573
890-2689-3	BH-158 (8')	Total/NA	Solid	8021B	31573
890-2689-4	SW-50 (0-6')	Total/NA	Solid	8021B	31573
890-2689-5	SW-51 (0-6')	Total/NA	Solid	8021B	31573
890-2689-6	BH-159 (8')	Total/NA	Solid	8021B	31573
890-2689-7	BH-160 (8')	Total/NA	Solid	8021B	31573
890-2689-8	BH-161 (8')	Total/NA	Solid	8021B	31573
890-2689-9	BH-162 (8')	Total/NA	Solid	8021B	31573
890-2689-10	BH-163 (8')	Total/NA	Solid	8021B	31573
890-2689-11	BH-164 (8')	Total/NA	Solid	8021B	31573
890-2689-12	BH-165 (13')	Total/NA	Solid	8021B	31573
MB 880-31335/5-A	Method Blank	Total/NA	Solid	8021B	31335
MB 880-31573/5-A	Method Blank	Total/NA	Solid	8021B	31573
LCS 880-31573/1-A	Lab Control Sample	Total/NA	Solid	8021B	31573
LCSD 880-31573/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31573
890-2689-2 MS	BH-119 (10')	Total/NA	Solid	8021B	31573
890-2689-2 MSD	BH-119 (10')	Total/NA	Solid	8021B	31573

#### Prep Batch: 31573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	5035	_
890-2689-2	BH-119 (10')	Total/NA	Solid	5035	
890-2689-3	BH-158 (8')	Total/NA	Solid	5035	
890-2689-4	SW-50 (0-6')	Total/NA	Solid	5035	
890-2689-5	SW-51 (0-6')	Total/NA	Solid	5035	
890-2689-6	BH-159 (8')	Total/NA	Solid	5035	
890-2689-7	BH-160 (8')	Total/NA	Solid	5035	
890-2689-8	BH-161 (8')	Total/NA	Solid	5035	
890-2689-9	BH-162 (8')	Total/NA	Solid	5035	
890-2689-10	BH-163 (8')	Total/NA	Solid	5035	
890-2689-11	BH-164 (8')	Total/NA	Solid	5035	
890-2689-12	BH-165 (13')	Total/NA	Solid	5035	
MB 880-31573/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31573/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31573/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2689-2 MS	BH-119 (10')	Total/NA	Solid	5035	
890-2689-2 MSD	BH-119 (10')	Total/NA	Solid	5035	

#### Prep Batch: 31602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31602/5-A	Method Blank	Total/NA	Solid	5035	

#### **Analysis Batch: 31654**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-13	SW-43 (0-4')	Total/NA	Solid	8021B	31669
890-2689-14	SW-39 (0-13')	Total/NA	Solid	8021B	31669

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2689-1

SDG: Lea County NM

### **GC VOA (Continued)**

#### **Analysis Batch: 31654 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-15	SW-40 (0-13')	Total/NA	Solid	8021B	31669
MB 880-31602/5-A	Method Blank	Total/NA	Solid	8021B	31602
MB 880-31669/5-A	Method Blank	Total/NA	Solid	8021B	31669
LCS 880-31669/1-A	Lab Control Sample	Total/NA	Solid	8021B	31669
LCSD 880-31669/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31669
890-2689-13 MS	SW-43 (0-4')	Total/NA	Solid	8021B	31669
890-2689-13 MSD	SW-43 (0-4')	Total/NA	Solid	8021B	31669

#### Prep Batch: 31669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-13	SW-43 (0-4')	Total/NA	Solid	5035	
890-2689-14	SW-39 (0-13')	Total/NA	Solid	5035	
890-2689-15	SW-40 (0-13')	Total/NA	Solid	5035	
MB 880-31669/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31669/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31669/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2689-13 MS	SW-43 (0-4')	Total/NA	Solid	5035	
890-2689-13 MSD	SW-43 (0-4')	Total/NA	Solid	5035	

#### **Analysis Batch: 31779**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	Total BTEX	
890-2689-2	BH-119 (10')	Total/NA	Solid	Total BTEX	
890-2689-3	BH-158 (8')	Total/NA	Solid	Total BTEX	
890-2689-4	SW-50 (0-6')	Total/NA	Solid	Total BTEX	
890-2689-5	SW-51 (0-6')	Total/NA	Solid	Total BTEX	
890-2689-6	BH-159 (8')	Total/NA	Solid	Total BTEX	
890-2689-7	BH-160 (8')	Total/NA	Solid	Total BTEX	
890-2689-8	BH-161 (8')	Total/NA	Solid	Total BTEX	
890-2689-9	BH-162 (8')	Total/NA	Solid	Total BTEX	
890-2689-10	BH-163 (8')	Total/NA	Solid	Total BTEX	
890-2689-11	BH-164 (8')	Total/NA	Solid	Total BTEX	
890-2689-12	BH-165 (13')	Total/NA	Solid	Total BTEX	
890-2689-13	SW-43 (0-4')	Total/NA	Solid	Total BTEX	
890-2689-14	SW-39 (0-13')	Total/NA	Solid	Total BTEX	
890-2689-15	SW-40 (0-13')	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

#### **Analysis Batch: 31371**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	8015B NM	31397
890-2689-2	BH-119 (10')	Total/NA	Solid	8015B NM	31397
890-2689-3	BH-158 (8')	Total/NA	Solid	8015B NM	31397
890-2689-4	SW-50 (0-6')	Total/NA	Solid	8015B NM	31397
890-2689-5	SW-51 (0-6')	Total/NA	Solid	8015B NM	31397
890-2689-6	BH-159 (8')	Total/NA	Solid	8015B NM	31397
890-2689-7	BH-160 (8')	Total/NA	Solid	8015B NM	31397
890-2689-8	BH-161 (8')	Total/NA	Solid	8015B NM	31397
890-2689-9	BH-162 (8')	Total/NA	Solid	8015B NM	31397
890-2689-10	BH-163 (8')	Total/NA	Solid	8015B NM	31397

**Eurofins Carlsbad** 

2

3

4

6

8

3

13

14

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

### GC Semi VOA (Continued)

#### **Analysis Batch: 31371 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-11	BH-164 (8')	Total/NA	Solid	8015B NM	31397
890-2689-12	BH-165 (13')	Total/NA	Solid	8015B NM	31397
890-2689-13	SW-43 (0-4')	Total/NA	Solid	8015B NM	31397
890-2689-14	SW-39 (0-13')	Total/NA	Solid	8015B NM	31397
890-2689-15	SW-40 (0-13')	Total/NA	Solid	8015B NM	31397
MB 880-31397/1-A	Method Blank	Total/NA	Solid	8015B NM	31397
LCS 880-31397/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31397
LCSD 880-31397/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31397
890-2689-2 MS	BH-119 (10')	Total/NA	Solid	8015B NM	31397
890-2689-2 MSD	BH-119 (10')	Total/NA	Solid	8015B NM	31397

#### Prep Batch: 31397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	8015NM Prep	
890-2689-2	BH-119 (10')	Total/NA	Solid	8015NM Prep	
890-2689-3	BH-158 (8')	Total/NA	Solid	8015NM Prep	
890-2689-4	SW-50 (0-6')	Total/NA	Solid	8015NM Prep	
890-2689-5	SW-51 (0-6')	Total/NA	Solid	8015NM Prep	
890-2689-6	BH-159 (8')	Total/NA	Solid	8015NM Prep	
890-2689-7	BH-160 (8')	Total/NA	Solid	8015NM Prep	
890-2689-8	BH-161 (8')	Total/NA	Solid	8015NM Prep	
890-2689-9	BH-162 (8')	Total/NA	Solid	8015NM Prep	
890-2689-10	BH-163 (8')	Total/NA	Solid	8015NM Prep	
890-2689-11	BH-164 (8')	Total/NA	Solid	8015NM Prep	
890-2689-12	BH-165 (13')	Total/NA	Solid	8015NM Prep	
890-2689-13	SW-43 (0-4')	Total/NA	Solid	8015NM Prep	
890-2689-14	SW-39 (0-13')	Total/NA	Solid	8015NM Prep	
890-2689-15	SW-40 (0-13')	Total/NA	Solid	8015NM Prep	
MB 880-31397/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31397/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31397/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2689-2 MS	BH-119 (10')	Total/NA	Solid	8015NM Prep	
890-2689-2 MSD	BH-119 (10')	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 31489**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	8015 NM	
890-2689-2	BH-119 (10')	Total/NA	Solid	8015 NM	
390-2689-3	BH-158 (8')	Total/NA	Solid	8015 NM	
390-2689-4	SW-50 (0-6')	Total/NA	Solid	8015 NM	
390-2689-5	SW-51 (0-6')	Total/NA	Solid	8015 NM	
390-2689-6	BH-159 (8')	Total/NA	Solid	8015 NM	
390-2689-7	BH-160 (8')	Total/NA	Solid	8015 NM	
390-2689-8	BH-161 (8')	Total/NA	Solid	8015 NM	
390-2689-9	BH-162 (8')	Total/NA	Solid	8015 NM	
390-2689-10	BH-163 (8')	Total/NA	Solid	8015 NM	
390-2689-11	BH-164 (8')	Total/NA	Solid	8015 NM	
390-2689-12	BH-165 (13')	Total/NA	Solid	8015 NM	
390-2689-13	SW-43 (0-4')	Total/NA	Solid	8015 NM	
390-2689-14	SW-39 (0-13')	Total/NA	Solid	8015 NM	
390-2689-15	SW-40 (0-13')	Total/NA	Solid	8015 NM	

Client: Tetra Tech, Inc.

Job ID: 890-2689-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### HPLC/IC

#### Leach Batch: 31360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Soluble	Solid	DI Leach	
890-2689-2	BH-119 (10')	Soluble	Solid	DI Leach	
890-2689-3	BH-158 (8')	Soluble	Solid	DI Leach	
890-2689-4	SW-50 (0-6')	Soluble	Solid	DI Leach	
890-2689-5	SW-51 (0-6')	Soluble	Solid	DI Leach	
890-2689-6	BH-159 (8')	Soluble	Solid	DI Leach	
890-2689-7	BH-160 (8')	Soluble	Solid	DI Leach	
890-2689-8	BH-161 (8')	Soluble	Solid	DI Leach	
890-2689-9	BH-162 (8')	Soluble	Solid	DI Leach	
890-2689-10	BH-163 (8')	Soluble	Solid	DI Leach	
890-2689-11	BH-164 (8')	Soluble	Solid	DI Leach	
890-2689-12	BH-165 (13')	Soluble	Solid	DI Leach	
890-2689-13	SW-43 (0-4')	Soluble	Solid	DI Leach	
890-2689-14	SW-39 (0-13')	Soluble	Solid	DI Leach	
890-2689-15	SW-40 (0-13')	Soluble	Solid	DI Leach	
MB 880-31360/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31360/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31360/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2689-1 MS	BH-118 (13')	Soluble	Solid	DI Leach	
890-2689-1 MSD	BH-118 (13')	Soluble	Solid	DI Leach	
890-2689-11 MS	BH-164 (8')	Soluble	Solid	DI Leach	
890-2689-11 MSD	BH-164 (8')	Soluble	Solid	DI Leach	

#### **Analysis Batch: 31623**

Released to Imaging: 9/1/2023 2:28:53 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Soluble	Solid	300.0	31360
890-2689-2	BH-119 (10')	Soluble	Solid	300.0	31360
890-2689-3	BH-158 (8')	Soluble	Solid	300.0	31360
890-2689-4	SW-50 (0-6')	Soluble	Solid	300.0	31360
890-2689-5	SW-51 (0-6')	Soluble	Solid	300.0	31360
890-2689-6	BH-159 (8')	Soluble	Solid	300.0	31360
890-2689-7	BH-160 (8')	Soluble	Solid	300.0	31360
890-2689-8	BH-161 (8')	Soluble	Solid	300.0	31360
890-2689-9	BH-162 (8')	Soluble	Solid	300.0	31360
890-2689-10	BH-163 (8')	Soluble	Solid	300.0	31360
890-2689-11	BH-164 (8')	Soluble	Solid	300.0	31360
890-2689-12	BH-165 (13')	Soluble	Solid	300.0	31360
890-2689-13	SW-43 (0-4')	Soluble	Solid	300.0	31360
890-2689-14	SW-39 (0-13')	Soluble	Solid	300.0	31360
890-2689-15	SW-40 (0-13')	Soluble	Solid	300.0	31360
MB 880-31360/1-A	Method Blank	Soluble	Solid	300.0	31360
LCS 880-31360/2-A	Lab Control Sample	Soluble	Solid	300.0	31360
LCSD 880-31360/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31360
890-2689-1 MS	BH-118 (13')	Soluble	Solid	300.0	31360
890-2689-1 MSD	BH-118 (13')	Soluble	Solid	300.0	31360
890-2689-11 MS	BH-164 (8')	Soluble	Solid	300.0	31360
890-2689-11 MSD	BH-164 (8')	Soluble	Solid	300.0	31360

**Eurofins Carlsbad** 

1

\_

5

5

0

9

11

1 4

. .

Job ID: 890-2689-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2689-1

Lab Sample ID: 890-2689-2

Matrix: Solid

**Matrix: Solid** 

Client Sample ID: BH-118 (13') Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 01:44	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	31397 31371	08/03/22 09:25 08/03/22 22:32		EETSC M
Soluble Soluble	Leach Analysis	DI Leach 300.0		1	4.97 g	50 mL	31360 31623	08/02/22 19:05 08/06/22 06:13		EETSC M

Client Sample ID: BH-119 (10')

Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 00:22	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 20:23	AJ	EETSC M
Soluble	Leach	DI Leach			4.99 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 06:41	AJ	EETSC M

Client Sample ID: BH-158 (8')	Lab Sample ID: 890-2689-3
Date Collected: 07/26/22 12:00	Matrix: Solid
Date Received: 07/29/22 14:06	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 00:42	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 23:57	AJ	EETSC M
Soluble	Leach	DI Leach			5 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 06:50	AJ	EETSC M

Client Sample ID: SW-50 (0-6')

Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 01:03	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M

**Eurofins Carlsbad** 

Lab Sample ID: 890-2689-4

Matrix: Solid

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2689-1
SDG: Lea County NM

Client Sample ID: SW-50 (0-6')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06 Lab Sample ID: 890-2689-4

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC MIC
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 00:58	AJ	EETSC M
Soluble	Leach	DI Leach			5.03 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 07:00	AJ	EETSC M

Client Sample ID: SW-51 (0-6')

Date Collected: 07/26/22 12:00

Lab Sample ID: 890-2689-5

Matrix: Solid

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 01:23	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA Total/NA	Prep	8015NM Prep 8015B NM		4	10.00 g	10 mL	31397 31371	08/03/22 09:25 08/04/22 01:18		EETSC M
	Analysis			ı						
Soluble Soluble	Leach Analysis	DI Leach 300.0		1	5.03 g	50 mL	31360 31623	08/02/22 19:05 08/06/22 07:09		EETSC M EETSC M

Client Sample ID: BH-159 (8')

Date Collected: 07/26/22 12:00

Lab Sample ID: 890-2689-6

Matrix: Solid

Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 02:46	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 22:53	AJ	EETSC M
Soluble	Leach	DI Leach			4.95 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 07:36	AJ	EETSC M

Client Sample ID: BH-160 (8')

Date Collected: 07/26/22 12:00

Lab Sample ID: 890-2689-7

Matrix: Solid

Date Received: 07/29/22 14:06

Released to Imaging: 9/1/2023 2:28:53 PM

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	31573	08/05/22 11:19	MR	EETSC MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 03:06	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.00 g	10 mL	31397 31371	08/03/22 09:25 08/03/22 21:49		EETSC M

**Eurofins Carlsbad** 

2

1

5

**b** 

8

10

12

14

Lab Sample ID: 890-2689-7 Client Sample ID: BH-160 (8') Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	31360	08/02/22 19:05	SMC	EETSC MIC
Soluble	Analysis	300.0		5			31623	08/06/22 07:46	AJ	EETSC M

Lab Sample ID: 890-2689-8 Client Sample ID: BH-161 (8')

Date Collected: 07/26/22 12:00 Matrix: Solid Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 03:27	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 22:11	AJ	EETSC M
Soluble	Leach	DI Leach			5 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 07:55	AJ	EETSC M

Lab Sample ID: 890-2689-9 Client Sample ID: BH-162 (8') **Matrix: Solid** 

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 02:05	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 00:18	AJ	EETSC M
Soluble	Leach	DI Leach			5.02 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 08:04	AJ	EETSC M

Client Sample ID: BH-163 (8') Lab Sample ID: 890-2689-10 Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	31573	08/05/22 11:19	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 02:25	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 23:37	AJ	EETSC M
Soluble	Leach	DI Leach			4.98 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 08:13	AJ	EETSC M

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client Sample ID: BH-164 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-11

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31573	08/05/22 11:19	MR	EETSC MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 07:34	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		5			31371	08/03/22 21:27	AJ	EETSC M
Soluble	Leach	DI Leach			5.03 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 08:22	AJ	EETSC M

Client Sample ID: BH-165 (13')

Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-12

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	31573	08/05/22 11:19	MR	EETSC MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 07:54	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	31397 31371	08/03/22 09:25 08/03/22 23:15	=	EETSC M EETSC M
Soluble Soluble	Leach Analysis	DI Leach 300.0		5	5.02 g	50 mL	31360 31623	08/02/22 19:05 08/06/22 08:50		EETSC M EETSC M

Client Sample ID: SW-43 (0-4')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-13

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035	_		4.96 g	5 mL	31669	08/07/22 12:02	EL	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31654	08/08/22 00:42	EL	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 01:38	AJ	EETSC M
Soluble	Leach	DI Leach			5 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 08:59	AJ	EETSC M

Client Sample ID: SW-39 (0-13')

Date Collected: 07/29/22 12:00 Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-14

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	31669	08/07/22 12:02	EL	EETSC MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	31654	08/08/22 01:03	EL	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2689-1

SDG: Lea County NM

Client Sample ID: SW-39 (0-13')

Date Collected: 07/29/22 12:00 Date Received: 07/29/22 14:06 Lab Sample ID: 890-2689-14

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC MIC
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 01:58	AJ	EETSC M
Soluble	Leach	DI Leach			4.96 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 20:26	AJ	EETSC M

Client Sample ID: SW-40 (0-13')

Lab Sample ID: 890-2689-15

Date Collected: 07/29/22 12:00 Date Received: 07/29/22 14:06

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	31669	08/07/22 12:02	EL	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31654	08/08/22 01:23	EL	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 02:18	AJ	EETSC M
Soluble	Leach	DI Leach			4.97 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 20:35	AJ	EETSC M

**Laboratory References:** 

EETSC MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

1

3

4

5

۰ R

9

11

13

14

## **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2689-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analyte the agency does not		ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
and agency does not	oner certification.			
Analysis Method	Prep Method	Matrix	Analyte	
0 ,		Matrix Solid	Analyte Total TPH	

3

4

5

7

9

10

12

4 /

## **Method Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2689-1 SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EETSC MID
Total BTEX	Total BTEX Calculation	TAL SOP	EETSC MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EETSC MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EETSC MID
300.0	Anions, Ion Chromatography	MCAWW	EETSC MID
5035	Closed System Purge and Trap	SW846	EETSC MID
8015NM Prep	Microextraction	SW846	EETSC MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EETSC MID

5

6

8

9

10

12

13

14

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### **Laboratory References:**

EETSC MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

SW-43 (0-4')

SW-39 (0-13')

SW-40 (0-13')

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

890-2689-13

890-2689-14

890-2689-15

Job ID: 890-2689-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2689-1	BH-118 (13')	Solid		07/29/22 14:06
890-2689-2	BH-119 (10')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-3	BH-158 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-4	SW-50 (0-6')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-5	SW-51 (0-6')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-6	BH-159 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-7	BH-160 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-8	BH-161 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-9	BH-162 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-10	BH-163 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-11	BH-164 (8')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-12	BH-165 (13')	Solid	07/26/22 12:00	07/29/22 14:06

07/26/22 12:00 07/29/22 14:06

07/29/22 12:00 07/29/22 14:06

07/29/22 12:00 07/29/22 14:06

Solid

Solid

Solid

K

4

\_

8

40

4 4

12

13

12

		Relinquished by:		Rélinquished by:	Reindulgued by							60	-			( LABUSE )	LAB#		Comments:		Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:		ạ		Analysis Req	
		Date: Time:		Date: Time:	7/20/27	BH-163 (8')	BH-162 (8')	BH-161 (8')	BH-160 (8')	вн-159 (8')	SW-51 (0-6')	SW-50 (0-6')	ВН-158 (8')	ВН-119 (10')	BH-118 (13')		SAMPLE IDENTIFICATION			Eurofins Xenco		Permian Water Solutions - Dusty	Lea County, NM	Kaiser SWD	Permian Water Solutions		ietra iecn, i		Analysis Request of Chain of Custody Record	
ORIGINAL COPY		Received by:		Received by:	1405 Amend	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022	7/26/2022	DATE	YEAR: 2020	SAMPLING			Sampler Signature:	Dusty McInturff	Project #:		Site Manager		inc.			
*		Date: Ime:			a Stat 7/29/20	×			×	×	×	×	×	×		WATEI SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE			Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Tel (432) 682-4559	Midland, Texas 79705	890-2689 Chain of Custod	
1 nm-00	(Circle) HANI	.5.	18.	Sample Temperature	140 LAB USE ONLY	<u>^                                    </u>		工	×	×						# CONT FILTER BTEX 8 TPH TX TPH 80	RED (18021B) (1005	Y/N) BT			D - N	MRO)			ANALYSIS				stody	
٦	HAND DELIVERED FEDEX UPS Tracking #	Special Report Limits or TRRP Report	Rush Charges Authorized	perature RUSH: Same Day 24 hr 48 hr 72	X STANDARD	BEMARKS:	× ×		×	×	×	×	×	×	×	TCLP M TCLP S RCI GC/MS GC/MS PCB's 8 NORM PLM (As	etals / letals solutile emi V Vol. 1 Semi. Semi. ssbeste e	Ag As ses de la constant de la const	es / 624 8270C/6	225	Se	Hg	list)		SIS REQUEST (Circle or Specify Method No.)				Page	
				7			Ŧ	+						F	F	Hold													of	

	Relinquished by:		Relinquished by:	de	Relipquished by:								( LABUSE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:		月	The state of the s
	r: Date: Time:		Date: Time:	1041 62/52/2 - 7 4	C Date: Time:			SW-40 (0-13')	SW-39 (0-13')	SW-43 (0-4')	ВН-165 (8')	BH-164 (8')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions		Tetra Tech, Inc.	The state of the s
	Received by:			Annau	Received by:			7/29/2022	7/29/2022	7/26/2022	7/26/2022	7/26/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #		U RANGE AND AND AND AND AND AND AND AND AND AND			
	Date: Time:		/Date: Time:	Ja Stat 7/29/	Date: Time:			×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Midland, Texas 79705 Tel (432) 662-4559	OUT OF THE ALC MALOR
(C)	1	_	San	1401 cc				×	×	×	×	×	# CON FILTER BTEX	RED (	ERS Y/N)	X 8260	В				<b>&gt;</b>			
(Circle) HAND DELIVERED	5	5.4	Sample Temperature	Control				×	×	×	×	×	PAH 8 Total M TCLP N	015M o 270C etals / fetals folatile	(GROAg As EAg As	- DRO - Ba Cd Cr Ba Cd C	Pb Se	Hg			ANALYSIS REQUEST			
le) HAND DELIVERED FEDEX UPS Tracking #	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH: Same Day		REMARKS:								RCI GC/MS GC/MS PCB's NORM PLM (A	Vol. Semi.	8260B / Vol. 8 / 608		5				r Specify Me			
*	s or TRRP Report	prized	24 hr 48 hr 72 hr					×	×	×	×	×	Chlorid Chlorid Genera	e le S al Wat	Sulfate	emistry (	see at	tached	list)		thod No.)			
													Hold											

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2689-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2689 List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2689-1

SDG Number: Lea County NM

List Source: Eurofins Midland
List Number: 2
List Creation: 08/02/22 10:44 AM

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

2

4

7

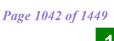
9

11

13

14

<6mm (1/4").





# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2784-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

#### For:

eurofins

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales



Authorized for release by: 9/1/2022 4:34:02 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS

**Review your project** results through

EOL

**Have a Question?** 

Received by OCD: 8/28/2023 2:17:46 PM

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 2:28:53 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2784-1 SDG: Lea County NM

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	5
Client Sample Results	7
Surrogate Summary	54
QC Sample Results	58
QC Association Summary	72
Lab Chronicle	85
Certification Summary	103
Method Summary	104
Sample Summary	105
Chain of Custody	107
Receipt Checklists	112

0	

### **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Qualifiers

$\sim$	110	
1211	V/ I	Δ
-	v -	_

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### **GC Semi VOA**

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### **HPLC/IC**

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

### Glossary

Clouding	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

**Eurofins Carlsbad** 

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

RPD

TEF

TEQ

2

3

Λ

5

7

9

11

12

14

۱

# **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **Glossary (Continued)**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

<u>ა</u>

5

7

9

11

13

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2784-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2784-1

#### Receipt

The samples were received on 8/19/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.0°C

#### **Receipt Exceptions**

The following samples were received at the laboratory outside the required temperature criteria: BH-120 (8') (890-2784-1), BH-124 (8') (890-2784-2), BH-132 (8') (890-2784-3), BH-159 (8') (890-2784-4), BH-162 (8') (890-2784-5), BH-164 (8') (890-2784-6), BH-166 (8') (890-2784-7), BH-167 (8') (890-2784-8), BH-168 (5') (890-2784-9), BH-169 (5') (890-2784-10), BH-170 (5') (890-2784-11), BH-171 (5') (890-2784-12), BH-172 (6') (890-2784-13), BH-173 (6') (890-2784-14), BH-174 (6') (890-2784-15), BH-175 (4.5') (890-2784-16), BH-176 (4.5') (890-2784-17), BH-177 (4.5') (890-2784-18), BH-178 (4.5') (890-2784-19), BH-179 (4.5') (890-2784-20), BH-180 (4.5') (890-2784-21), BH-181 (4.5') (890-2784-22), BH-182 (4.5') (890-2784-23), BH-183 (4.5') (890-2784-24), BH-184 (4.5') (890-2784-25), BH-185 (4.5') (890-2784-26), BH-186 (4.5') (890-2784-27), BH-187 (4.5') (890-2784-28), BH-188 (4.5') (890-2784-29), BH-189 (4.5') (890-2784-30), SW-38 (4.5-13') (890-2784-31), SW-42 (4.5-8') (890-2784-32), SW-43 (6-8') (890-2784-33), SW-44 (4.5-8') (890-2784-34), SW-45 (0-8') (890-2784-35), SW-46 (0-5') (890-2784-36), SW-47 (0-5') (890-2784-37), SW-48 (6-8') (890-2784-38), SW-49 (4.5-6') (890-2784-39), SW-53 (0-8') (890-2784-40), SW-54 (0-4.5') (890-2784-41), SW-55 (4.5-8') (890-2784-42), SW-56 (0-4.5') (890-2784-43), SW-57 (6-8') (890-2784-44), SW-58 (6-8') (890-2784-45), SW-69 (6-8') (890-2784-47), SW-61 (8-13') (890-2784-48), SW-62 (8-13') (890-2784-45), SW-63 (8-13') (890-2784-51), SW-65 (8-10') (890-2784-52), SW-66 (8-10') (890-2784-53), SW-67 (8-10') (890-2784-54), SW-68 (0-6') (890-2784-55), SW-69 (0-6') (890-2784-56), SW-70 (0-4.5') (890-2784-57), and SW-71 (0-4.5') (890-2784-58). There was no cooling media present in the cooler. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE\_ONE> proceed with/cancel analysis

890-2784 Sample temp 7.2/7.0 there was no temp blank and samples were taken on the 18th- client said they just brought samples from fridge with no cooler and no temp blank- wants to processed with testing

#### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-2784-A-1-E MS) and (890-2784-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-124 (8') (890-2784-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-58 (6-8') (890-2784-45). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH-120 (8') (890-2784-1), BH-124 (8') (890-2784-2), BH-132 (8') (890-2784-3), BH-159 (8') (890-2784-4), BH-162 (8') (890-2784-5), BH-164 (8') (890-2784-6), BH-166 (8') (890-2784-7), BH-167 (8') (890-2784-8), BH-168 (5') (890-2784-9), BH-169 (5') (890-2784-10), (890-2784-A-1-C MS) and (890-2784-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH-170 (5') (890-2784-11), BH-173 (6') (890-2784-14), BH-174 (6') (890-2784-15), BH-175 (4.5') (890-2784-16), BH-176 (4.5') (890-2784-17), BH-177 (4.5') (890-2784-18), BH-178 (4.5') (890-2784-19) and BH-179 (4.5') (890-2784-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-32669 and analytical batch 880-32586 was outside the upper control limits.

G

3

4

**O** 

7

9

11

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2784-1 (Continued)

### **Laboratory: Eurofins Carlsbad (Continued)**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-32669 and analytical batch 880-32586 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-32713 and analytical batch 880-32730 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-32714/2-A) and (LCSD 880-32714/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-32774/2-A) and (LCSD 880-32774/3-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-32583 and analytical batch 880-33168 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-32584 and analytical batch 880-33169 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

1

5

6

8

4.0

11

13

Lab Sample ID: 890-2784-1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-120 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 00:00	
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 00:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 00:00	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/30/22 12:01	09/01/22 00:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 00:00	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/30/22 12:01	09/01/22 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				08/30/22 12:01	09/01/22 00:00	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/30/22 12:01	09/01/22 00:00	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range			D.	MDI	1114	_	B	A a b a . d	D!! E-
Analyte	Result	Qualifier	RL	MDL	Unit ma/Ka	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result   <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (Di	Qualifier U RO) (GC)	49.9		mg/Kg			08/23/22 11:36	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <49.9  ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u>D</u>	Prepared	08/23/22 11:36  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (D	Qualifier U RO) (GC)	49.9		mg/Kg			08/23/22 11:36	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (D	Qualifier U  RO) (GC) Qualifier U F1	49.9		mg/Kg		Prepared	08/23/22 11:36  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9  ge Organics (Di Result <49.9	Qualifier U  RO) (GC) Qualifier U F1  U F1	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 08/22/22 13:43	08/23/22 11:36  Analyzed  08/22/22 22:36	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 13:43 08/22/22 13:43	08/23/22 11:36  Analyzed  08/22/22 22:36  08/22/22 22:36	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 13:43 08/22/22 13:43	08/23/22 11:36  Analyzed  08/22/22 22:36  08/22/22 22:36	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1 U F1 U Qualifier	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 13:43 08/22/22 13:43 08/22/22 13:43 Prepared	08/23/22 11:36  Analyzed  08/22/22 22:36  08/22/22 22:36  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1  U F1  U Gualifier S1-	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared  08/22/22 13:43  08/22/22 13:43  08/22/22 13:43  Prepared  08/22/22 13:43	08/23/22 11:36  Analyzed 08/22/22 22:36 08/22/22 22:36  Analyzed 08/22/22 22:36	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.9	Qualifier U  RO) (GC) Qualifier U F1  U F1  U Gualifier S1-	49.9  RL 49.9  49.9  49.9  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared  08/22/22 13:43  08/22/22 13:43  08/22/22 13:43  Prepared  08/22/22 13:43	08/23/22 11:36  Analyzed 08/22/22 22:36 08/22/22 22:36  Analyzed 08/22/22 22:36	Dil Fac

Client Sample ID: BH-124 (8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 00:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 00:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 00:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 00:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 00:20	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 00:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130				08/30/22 12:01	09/01/22 00:20	

Eurofins Carlsbad

Lab Sample ID: 890-2784-2

Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

Lab Sample ID: 890-2784-2

Lab Sample ID: 890-2784-3

**Matrix: Solid** 

Client Sample ID: BH-124 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
motification to a gaine compa	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifier	r Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85	70 - 130	08/30/22 12:01	09/01/22 00:20	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg			09/01/22 12:44	1

Mothod: 8015 NM	- Diesel Range	Organice	(DRO) (GC)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	ma/Ka			08/23/22 11:36	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/22/22 23:41	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/22/22 23:41	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/22/22 23:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	58	S1-	70 - 130				08/22/22 13:43	08/22/22 23:41	1

1-Chlorooctane	58 S1-	70 - 130
o-Terphenyl	71	70 - 130

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	298		5.02		mg/Kg			08/29/22 04:20	1

Client Sample ID: BH-132 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

### Method: 8021B - Volatile Organic Compounds (GC)

wethou, 602 fb - volatile Orga	nic Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				08/30/22 12:01	09/01/22 00:41	1
1,4-Difluorobenzene (Surr)	91		70 - 130				08/30/22 12:01	09/01/22 00:41	1

Method: Tota	I RTFX - 1	Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg		_	09/01/22 12:44	1

	Method: 8015 NM - Diesel	Range Organics (DRO	D) (GC)	١
ı	Michiga. 00 to Min - Diese	i italige Organics (Ditt		,

Analyte	•	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH		<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

Lab Sample ID: 890-2784-3

Lab Sample ID: 890-2784-4

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-132 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:03	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:03	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130				08/22/22 13:43	08/23/22 00:03	1
o-Terphenyl	80		70 - 130				08/22/22 13:43	08/23/22 00:03	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-159 (8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 01:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 01:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 01:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:01	09/01/22 01:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 01:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:01	09/01/22 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				08/30/22 12:01	09/01/22 01:01	1
1,4-Difluorobenzene (Surr)	80		70 - 130				08/30/22 12:01	09/01/22 01:01	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg	<del></del>		09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 00:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 00:24	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 00:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130				08/22/22 13:43	08/23/22 00:24	1

**Eurofins Carlsbad** 

2

3

J

8

10

12

Job ID: 890-2784-1

SDG: Lea County NM

Client Sample ID: BH-159 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

Lab Sample ID: 890-2784-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1010		25.0		mg/Kg			08/29/22 04:35	5

Client Sample ID: BH-162 (8') Lab Sample ID: 890-2784-5 **Matrix: Solid** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 8

Analyte

C10-C28)

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130				08/30/22 12:01	09/01/22 01:21	1
1,4-Difluorobenzene (Surr)	89		70 <sub>-</sub> 130				08/30/22 12:01	09/01/22 01:21	1

Total BTEX	<0.00401	U	0.00401		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Ra	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel R	ange Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:45	1

MDL Unit

mg/Kg

Prepared

08/22/22 13:43

Analyzed

08/23/22 00:45

Result Qualifier

<50.0 U

OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	08/22/22 13:43	08/23/22 00:45	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130		08/22/22 13:43	08/23/22 00:45	1
o-Terphenyl	82		70 - 130		08/22/22 13:43	08/23/22 00:45	1

50.0

Method: 300.0 - Anions, Ion Chromato	graphy -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	892		5.03		mg/Kg			08/29/22 04:59	1

Lab Sample ID: 890-2784-6

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-164 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	•
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 01:42	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 01:42	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	114		70 - 130				08/30/22 12:01	09/01/22 01:42	
1,4-Difluorobenzene (Surr)	100		70 - 130				08/30/22 12:01	09/01/22 01:42	
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	
Analyte Total TPH	Result	Qualifier	RL 49.9	MDL	Unit	D	Prepared	Analyzed	Dil Fa
-	02.1				ma/na			08/23/22 11:36	
-			10.0		mg/Kg			08/23/22 11:36	
Method: 8015B NM - Diesel Ran			10.0		mg/Kg			08/23/22 11:36	,
Method: 8015B NM - Diesel Ran Analyte	Result	Qualifier	RL	MDL	Unit Unit	<u>D</u>	Prepared	08/23/22 11:36  Analyzed	
		Qualifier		MDL		<u>D</u>	Prepared 08/22/22 13:43		Dil Fa
Analyte Gasoline Range Organics	Result	Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fa
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over	Result   <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u> </u>	08/22/22 13:43	<b>Analyzed</b> 08/23/22 01:06	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u> </u>	08/22/22 13:43 08/22/22 13:43	Analyzed 08/23/22 01:06 08/23/22 01:06	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43	Analyzed 08/23/22 01:06 08/23/22 01:06 08/23/22 01:06	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  Qualifier	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u> </u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43 <b>Prepared</b>	Analyzed 08/23/22 01:06 08/23/22 01:06 08/23/22 01:06 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  U  Qualifier  S1-	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43  Prepared 08/22/22 13:43	Analyzed 08/23/22 01:06 08/23/22 01:06 08/23/22 01:06  Analyzed 08/23/22 01:06	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  Qualifier  S1-	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43  Prepared 08/22/22 13:43	Analyzed 08/23/22 01:06 08/23/22 01:06 08/23/22 01:06  Analyzed 08/23/22 01:06	Dil Fac

Client Sample ID: BH-166 (8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 02:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 02:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 02:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:01	09/01/22 02:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:01	09/01/22 02:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:01	09/01/22 02:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				08/30/22 12:01	09/01/22 02:02	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2784-7

Matrix: Solid

Job ID: 890-2784-1 SDG: Lea County NM

ah Sample ID: 890-2784-

Client Sample ID: BH-166 (8')
Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-7 Matrix: Solid

Lab Sample ID: 890-2784-8

Matrix: Solid

Sample Depth: 8

Method: 8021B	- Volatile Ord	anic Com	oounds (C	GC) (	(Continued)	
moundar our is	TOIGHT OF	Jui 1110 001111	, , , , , , , , , , , , , , , , , , ,	, ı	- on a out	

Surrogate	%Recovery 0	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	08/30/22 12:01	09/01/22 02:02	1

Method:	Total	BTEX -	- Total	BTEX	Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/01/22 12:44	1

Method: 8015 NM - Diesel Range Organic	· (DBO) (CC)
i Metriou, ou is NW - Dieser Range Organic	SIDRUIGGI

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/K			08/23/22 11:36	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:27	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:27	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	59	S1-	70 - 130				08/22/22 13:43	08/23/22 01:27	1

1-Chlorooctane	59 S1-	70 - 130	
o-Terphenyl	71	70 - 130	

Method: 300.0 - Anions, Ion Chrom	atography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Allalyte	Result Qual		WIDE OIII	U	Frepareu	Allalyzeu	DII Fac
Chloride	233	4.96	mg/Kg			08/29/22 05:30	1

Client Sample ID: BH-167 (8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

	( <del>-</del> - /							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
106		70 - 130				08/30/22 12:01	09/01/22 02:23	1
90		70 - 130				08/30/22 12:01	09/01/22 02:23	1
	Result   <0.00200   <0.00200   <0.00200   <0.00400   <0.00200   <0.00400   <0.00400   <0.00400	106	Result         Qualifier         RL           <0.00200	Result         Qualifier         RL         MDL           <0.00200	Result         Qualifier         RL         MDL         Unit           <0.00200	Result         Qualifier         RL         MDL         Unit         D           <0.00200	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00200	Result Qualifier         RL         MDL Unit         D Prepared         Analyzed           <0.00200 U

### Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/k	(q		09/01/22 12:44	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			08/23/22 11:36	1

**Eurofins Carlsbad** 

2

5

7

9

11

13

Lab Sample ID: 890-2784-8

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-167 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:49	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:49	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	61	S1-	70 - 130				08/22/22 13:43	08/23/22 01:49	1
o-Terphenyl	70		70 - 130				08/22/22 13:43	08/23/22 01:49	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	404		4.95		mg/Kg			08/29/22 05:38	1

Lab Sample ID: 890-2784-9 Client Sample ID: BH-168 (5') Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

Sample Depth: 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 02:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 02:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 02:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 02:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 02:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 02:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				08/30/22 12:01	09/01/22 02:43	1
1,4-Difluorobenzene (Surr)	94		70 - 130				08/30/22 12:01	09/01/22 02:43	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 02:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 02:10	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 02:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	60	S1-	70 - 130				08/22/22 13:43	08/23/22 02:10	1
o-Terphenyl	71		70 <sub>-</sub> 130				08/22/22 13:43	08/23/22 02:10	1

Job ID: 890-2784-1 SDG: Lea County NM

Client Sample ID: BH-168 (5')

Date Collected: 08/18/22 00:00
Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-9 Matrix: Solid

Sample Depth: 5

Method: 300.0 - Anions, Ion Chror	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	354		4.98		mg/Kg			08/29/22 05:46	1

Client Sample ID: BH-169 (5')

Lab Sample ID: 890-2784-10

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 03:04	
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 03:04	,
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 03:04	
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/30/22 12:01	09/01/22 03:04	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 03:04	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/30/22 12:01	09/01/22 03:04	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				08/30/22 12:01	09/01/22 03:04	1
1,4-Difluorobenzene (Surr)	84		70 - 130				08/30/22 12:01	09/01/22 03:04	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	•								
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	80.5		50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 02:31	1
Diesel Range Organics (Over C10-C28)	80.5		50.0		mg/Kg		08/22/22 13:43	08/23/22 02:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 02:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	56	S1-	70 - 130				08/22/22 13:43	08/23/22 02:31	1
o-Terphenyl	69	S1-	70 - 130				08/22/22 13:43	08/23/22 02:31	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

**Eurofins Carlsbad** 

3

6

8

10

12

1 /

Lab Sample ID: 890-2784-11

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-170 (5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				08/30/22 12:01	09/01/22 04:25	1
1,4-Difluorobenzene (Surr)	87		70 - 130				08/30/22 12:01	09/01/22 04:25	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	
								00/20/22 11:00	1
Method: 8015B NM - Diesel Rani	ne Organics (D	RO) (GC)						00/25/22 11.50	1
			RL	MDL	Unit	D	Prepared		
Analyte		Qualifier		MDL		<u>D</u>	Prepared 08/22/22 13:43	Analyzed 08/23/22 03:14	Dil Fac
	Result	Qualifier		MDL	Unit mg/Kg	<u>D</u>	<u>·</u>	Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>	<u>·</u>	Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	<b>Result</b> <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	08/22/22 13:43	<b>Analyzed</b> 08/23/22 03:14	Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43	Analyzed 08/23/22 03:14 08/23/22 03:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9   <49.9   <49.9	Qualifier U U U	49.9 49.9 49.9	MDL	mg/Kg	<u> </u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43	Analyzed 08/23/22 03:14 08/23/22 03:14 08/23/22 03:14	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier  U  U  Qualifier	49.9 49.9 49.9 <b>Limits</b>	MDL	mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43 <b>Prepared</b>	Analyzed 08/23/22 03:14 08/23/22 03:14 08/23/22 03:14 Analyzed	Dil Face  1  1  1  Dil Face
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  Qualifier  S1- S1-	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43  Prepared 08/22/22 13:43	Analyzed 08/23/22 03:14 08/23/22 03:14 08/23/22 03:14  Analyzed 08/23/22 03:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  Qualifier  S1- S1-	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	08/22/22 13:43 08/22/22 13:43 08/22/22 13:43  Prepared 08/22/22 13:43	Analyzed 08/23/22 03:14 08/23/22 03:14 08/23/22 03:14  Analyzed 08/23/22 03:14	Dil Face  1  1  1  Dil Face

Client Sample ID: BH-171 (5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 04:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 04:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 04:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:01	09/01/22 04:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:01	09/01/22 04:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:01	09/01/22 04:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				08/30/22 12:01	09/01/22 04:46	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2784-12

3

5

7

10

12

13

no Ganobaa

Matrix: Solid

Lab Sample ID: 890-2784-12

Lab Sample ID: 890-2784-13

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-171 (5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 5

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	84	70 - 130	08/30/22 12:01	09/01/22 04:46	1

ı				
ı	Method:	Total RTFX	: - Total BTEX	Calculation
ı	mictilou.	TOTAL DIE	- IOLAI DIEA	Oulculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00396	U	0.00396		mg/Kg		_	09/01/22 12:44	1

Method: 8015 NM - Diesel Range C	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	75.0	50.0	mg/Kg			08/23/22 11:36	1

Method: 8015B NM - Diesel Range Orga	anics	(DRO) (GC)
	_	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 03:35	1
Diesel Range Organics (Over C10-C28)	75.0		50.0		mg/Kg		08/22/22 13:43	08/23/22 03:35	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 03:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	70	70 _ 130	08/22/22 13:43	08/23/22 03:35	1
o-Terphenyl	84	70 - 130	08/22/22 13:43	08/23/22 03:35	1

# Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180	5.04	mg/Kg			08/29/22 06:10	1

Client Sample ID: BH-172 (6')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00 Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 05:06	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 05:06	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 05:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 05:06	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 05:06	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 05:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				08/30/22 12:01	09/01/22 05:06	1
1,4-Difluorobenzene (Surr)	80		70 - 130				08/30/22 12:01	09/01/22 05:06	1

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	09/01/22 12:44	1

Method: 8015 NM - Diese	Range Organics	(DRO)	(GC)	
Method, out of Min - Diese	i Kange Organica	(DIXO)	(00)	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			08/23/22 11:36	1

**Eurofins Carlsbad** 

5

3

7

9

1 1

1 1

Lab Sample ID: 890-2784-13

Lab Sample ID: 890-2784-14

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-172 (6')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:56	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:56	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 130				08/22/22 13:43	08/23/22 03:56	1
o-Terphenyl	84		70 - 130				08/22/22 13:43	08/23/22 03:56	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-173 (6')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 05:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 05:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 05:26	1
m-Xylene & p-Xylene	< 0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 05:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 05:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				08/30/22 12:01	09/01/22 05:26	1
1,4-Difluorobenzene (Surr)	90		70 - 130				08/30/22 12:01	09/01/22 05:26	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:17	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	63	S1-	70 - 130				08/22/22 13:43	08/23/22 04:17	1

**Eurofins Carlsbad** 

2

3

5

<u>(</u>

10

12

Job ID: 890-2784-1

SDG: Lea County NM

Client Sample ID: BH-173 (6')

Lab Sample ID: 890-2784-14

Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	329		4.95		mg/Kg			08/29/22 07:20	1

Lab Sample ID: 890-2784-15 Client Sample ID: BH-174 (6')

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	
Toluene	< 0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	
Ethylbenzene	< 0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	
m-Xylene & p-Xylene	<0.00393	U	0.00393		mg/Kg		08/30/22 12:01	09/01/22 05:47	
o-Xylene	< 0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	
Xylenes, Total	<0.00393	U	0.00393		mg/Kg		08/30/22 12:01	09/01/22 05:47	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	130		70 - 130				08/30/22 12:01	09/01/22 05:47	
1,4-Difluorobenzene (Surr)	81		70 - 130				08/30/22 12:01	09/01/22 05:47	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00393	U	0.00393		mg/Kg			09/01/22 12:44	•
Method: 8015 NM - Diesel Range									
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	
Method: 8015B NM - Diesel Rang									
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:38	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:38	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:38	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	64	S1-	70 - 130				08/22/22 13:43	08/23/22 04:38	
o-Terphenyl	76		70 - 130				08/22/22 13:43	08/23/22 04:38	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Lab Sample ID: 890-2784-16

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-175 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 06:07	
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 06:07	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	113		70 - 130				08/30/22 12:01	09/01/22 06:07	
1,4-Difluorobenzene (Surr)	92		70 - 130				08/30/22 12:01	09/01/22 06:07	
Method: Total BTEX - Total BTE	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	
Method: 8015B NM - Diesel Rang	ne Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 04:59	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 04:59	
			40.0		mg/Kg		08/22/22 13:43	08/23/22 04:59	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/rtg		00/22/22 10.40	00/23/22 04.39	
Oll Range Organics (Over C28-C36)  Surrogate	<49.9 %Recovery		49.9		g/.tg		Prepared Prepared	Analyzed	
,					g/i.tg				Dil Fa
Surrogate	%Recovery	Qualifier	Limits		g.r.g		Prepared	Analyzed	
Surrogate 1-Chlorooctane	%Recovery 59 71	Qualifier S1-	Limits 70 - 130		9/1.9		<b>Prepared</b> 08/22/22 13:43	Analyzed 08/23/22 04:59	Dil Fa
Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 59 71  omatography -	Qualifier S1-	Limits 70 - 130	MDL		<u>D</u>	<b>Prepared</b> 08/22/22 13:43	Analyzed 08/23/22 04:59	Dil Fa

**Client Sample ID: BH-176 (4.5')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 06:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 06:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 06:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 06:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 06:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 06:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				08/30/22 12:01	09/01/22 06:28	1

**Eurofins Carlsbad** 

**Matrix: Solid** 

Lab Sample ID: 890-2784-17

Job ID: 890-2784-1

SDG: Lea County NM

Lab Sample ID: 890-2784-17

Lab Sample ID: 890-2784-18

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

**Client Sample ID: BH-176 (4.5')** 

Date Collected: 08/18/22 00:00

Sample Depth: 4.5

Matrix: Solid Date Received: 08/19/22 08:00

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

%Recovery Qualifier Limits Prepared Surrogate Analyzed Dil Fac 70 - 130 08/30/22 12:01 1,4-Difluorobenzene (Surr) 91 09/01/22 06:28

**Method: Total BTEX - Total BTEX Calculation** 

Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared <0.00399 Total BTEX 0.00399 09/01/22 12:44 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <50.0 50.0 08/23/22 11:36 mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

**MDL** Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac <50.0 U mg/Kg Gasoline Range Organics 50.0 08/22/22 13:43 08/23/22 05:21 (GRO)-C6-C10 <50.0 U 50.0 08/22/22 13:43 08/23/22 05:21 Diesel Range Organics (Over mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 08/22/22 13:43 08/23/22 05:21

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 58 S1-70 - 130 08/22/22 13:43 08/23/22 05:21 08/22/22 13:43 69 S1-70 - 130 08/23/22 05:21 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 5.05 08/29/22 08:00 Chloride 554 mg/Kg

Client Sample ID: BH-177 (4.5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00202 U 0.00202 mg/Kg 08/30/22 12:01 09/01/22 06:48 Toluene <0.00202 U 0.00202 08/30/22 12:01 09/01/22 06:48 mg/Kg Ethylbenzene <0.00202 U 0.00202 08/30/22 12:01 09/01/22 06:48 mg/Kg 08/30/22 12:01 09/01/22 06:48 m-Xylene & p-Xylene <0.00403 U 0.00403 mg/Kg o-Xylene <0.00202 U 0.00202 mg/Kg 08/30/22 12:01 09/01/22 06:48 Xylenes, Total <0.00403 U 0.00403 mg/Kg 08/30/22 12:01 09/01/22 06:48

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 70 - 130 4-Bromofluorobenzene (Surr) 117 08/30/22 12:01 09/01/22 06:48 1,4-Difluorobenzene (Surr) 93 70 - 130 08/30/22 12:01 09/01/22 06:48

**Method: Total BTEX - Total BTEX Calculation** 

Analyte RL MDL D Result Qualifier Unit Prepared Analyzed Dil Fac Total BTEX <0.00403 0.00403 mg/Kg 09/01/22 12:44

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <49.9 U Total TPH 49.9 08/23/22 11:36 mg/Kg

Job ID: 890-2784-1 SDG: Lea County NM

**Client Sample ID: BH-177 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

_ab	Sample	ID:	890-2784-18	
			Marketon Oallal	

Lab Sample ID: 890-2784-19

Matrix: Solid

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 05:42	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 05:42	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 05:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	59	S1-	70 - 130				08/22/22 13:43	08/23/22 05:42	1
o-Terphenyl	73		70 - 130				08/22/22 13:43	08/23/22 05:42	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
• • •									

**Client Sample ID: BH-178 (4.5')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 07:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 07:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 07:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	09/01/22 07:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 07:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	09/01/22 07:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				08/30/22 12:01	09/01/22 07:09	1
1,4-Difluorobenzene (Surr)	88		70 - 130				08/30/22 12:01	09/01/22 07:09	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:03	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:03	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	60	S1-	70 - 130				08/22/22 13:43	08/23/22 06:03	1
o-Terphenyl	72		70 - 130				08/22/22 13:43	08/23/22 06:03	1

Job ID: 890-2784-1

SDG: Lea County NM

**Client Sample ID: BH-178 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Lab Sample ID: 890-2784-19

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	632		5.02		mg/Kg			08/29/22 08:31	1

**Client Sample ID: BH-179 (4.5')** Lab Sample ID: 890-2784-20 Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	
Toluene	< 0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 07:29	
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 07:29	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	119		70 - 130				08/30/22 12:01	09/01/22 07:29	
1,4-Difluorobenzene (Surr)	90		70 - 130				08/30/22 12:01	09/01/22 07:29	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	,
Method: 8015 NM - Diesel Range	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	•								
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:24	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:24	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	60	S1-	70 - 130				08/22/22 13:43	08/23/22 06:24	1
o-Terphenyl	75		70 - 130				08/22/22 13:43	08/23/22 06:24	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2784-21

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: BH-180 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 18:05	
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 18:05	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:16	08/31/22 18:05	
1,4-Difluorobenzene (Surr)	106		70 - 130				08/30/22 12:16	08/31/22 18:05	
Method: Total BTEX - Total BTE	K Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/01/22 12:44	
Analyte Total TPH		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fa
IOIAI IFII			40.0		malka			00/22/22 11:26	
			49.9		mg/Kg			08/23/22 11:36	
	ge Organics (D	RO) (GC)							
Analyte	ge Organics (Di	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		D	Prepared 08/22/22 16:33		Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (Di Result <49.9	RO) (GC) Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	08/22/22 16:33	Analyzed 08/24/22 13:21	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (Di	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (Di Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	08/22/22 16:33	Analyzed 08/24/22 13:21	Dil Fa
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	ge Organics (Di Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	D	08/22/22 16:33 08/22/22 16:33	Analyzed 08/24/22 13:21 08/24/22 13:21	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D) Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33	Analyzed 08/24/22 13:21 08/24/22 13:21 08/24/22 13:21	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 <b>Prepared</b>	Analyzed  08/24/22 13:21  08/24/22 13:21  08/24/22 13:21  Analyzed	Dil Fa
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	ge Organics (D) Result <49.9 <49.9 <49.9  **Recovery 117 114  **Domatography -	RO) (GC) Qualifier U  U  Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 <b>Prepared</b> 08/22/22 16:33	Analyzed  08/24/22 13:21  08/24/22 13:21  08/24/22 13:21  Analyzed  08/24/22 13:21	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D) Result <49.9 <49.9 <49.9  **Recovery 117 114  **Domatography -	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 <b>Prepared</b> 08/22/22 16:33	Analyzed  08/24/22 13:21  08/24/22 13:21  08/24/22 13:21  Analyzed  08/24/22 13:21	Dil Fa

**Client Sample ID: BH-181 (4.5')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 18:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 18:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 18:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/30/22 12:16	08/31/22 18:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 18:25	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/30/22 12:16	08/31/22 18:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				08/30/22 12:16	08/31/22 18:25	

Eurofins Carlsbad

**Matrix: Solid** 

Lab Sample ID: 890-2784-22

Lab Sample ID: 890-2784-22

08/22/22 16:33

08/22/22 16:33

08/24/22 14:26 08/24/22 14:26

08/29/22 08:54

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: BH-181 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Method: 8021B - Volatile Organic Cor	nnounds (GC) (Continued)
Michiga. 002 ID - Volutile Organic Ool	iipodiida (GG) (GGiitiiided)

Surrogate	%Recovery Qua	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105	70 - 130	08/30/22 12:16	08/31/22 18:25	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	I	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			_	09/01/22 12:44	1

П	Method: 8015 NM - Diese	Donge Organice /	DBO) (CC)
П	i Methou, ou la MM - Diese	Range Organics (	וטטו וטאט

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/K			08/23/22 11:36	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 14:26	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 14:26	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane	114	70 - 130
o-Terphenyl	110	70 - 130

_							
Г							
Method: 300.0 - Anions, Ion C	Chromatography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

25.1

mg/Kg

Chloride 1560

Client Sample ID: BH-182 (4.5')

Lab Sample ID: 890-2784-23

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/30/22 12:16	08/31/22 18:46	1
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:16	08/31/22 18:46	1

### Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00400	U	0.00400		ma/Ka			09/01/22 12:44	1

### Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			08/23/22 11:36	1

**Eurofins Carlsbad** 

2

3

0

8

10

12

13

Lab Sample ID: 890-2784-23

Lab Sample ID: 890-2784-24

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-182 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 14:47	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 14:47	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/22/22 16:33	08/24/22 14:47	1
o-Terphenyl	97		70 - 130				08/22/22 16:33	08/24/22 14:47	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-183 (4.5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:06	•
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:06	,
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/30/22 12:16	08/31/22 19:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:06	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/30/22 12:16	08/31/22 19:06	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/30/22 12:16	08/31/22 19:06	1
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:16	08/31/22 19:06	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 15:17	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 15:17	•
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 15:17	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane		- Guanner	70 - 130				08/22/22 16:33	08/24/22 15:17	Dirra
, chichecolarie	30		70-700				00,22,22 10.00	33/27/22 10.11	

**Eurofins Carlsbad** 

\_\_\_\_\_\_

5

-

4 6

Job ID: 890-2784-1

SDG: Lea County NM

Client Sample ID: BH-183 (4.5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-24

Matrix: Solid

Sample Depth: 4.5

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		4.97		mg/Kg			08/29/22 09:10	1

**Client Sample ID: BH-184 (4.5')** Lab Sample ID: 890-2784-25 **Matrix: Solid** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Total DTEV

(GRO)-C6-C10

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 19:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/30/22 12:16	08/31/22 19:26	1
1,4-Difluorobenzene (Surr)	109		70 - 130				08/30/22 12:16	08/31/22 19:26	1

Iotal BTEX	<0.00400	U	0.00400		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 16:17	1

0.00400

MDL Unit

mg/Kg

Prepared

08/22/22 16:33

Analyzed

00/04/00 40:44

08/24/22 16:17

Result Qualifier

-0.00400 II

<50.0 U

Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	08/22/22 16:33	08/24/22 16:17	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130		08/22/22 16:33	08/24/22 16:17	1
o-Ternhenyl	100		70 130		08/22/22 16:33	08/24/22 16:17	1

50.0

Method: 300.0 - Anions, Ion Chromato	graphy -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	898		5.05		mg/Kg			08/29/22 09:34	1

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-185 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-2784-26

Matrix: Solid

-

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:16	08/31/22 19:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:16	08/31/22 19:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:16	08/31/22 19:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:16	08/31/22 19:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:16	08/31/22 19:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:16	08/31/22 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				08/30/22 12:16	08/31/22 19:47	1
1,4-Difluorobenzene (Surr)	110		70 - 130				08/30/22 12:16	08/31/22 19:47	1
- Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9	WIDE	mg/Kg			08/23/22 11:36	1
- -									
Method: 8015B NM - Diesel Rang	•								
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	
0 " 0 0 .					/1/				
5 5	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 16:39	
5 5	<49.9 <49.9		49.9 49.9		mg/Kg		08/22/22 16:33	08/24/22 16:39 08/24/22 16:39	1
(GRO)-C6-C10 Diesel Range Organics (Over		U							1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 16:39	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <49.9	U	49.9 49.9		mg/Kg		08/22/22 16:33 08/22/22 16:33	08/24/22 16:39 08/24/22 16:39	1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<49.9 <49.9 <b>%Recovery</b>	U	49.9 49.9 <i>Limits</i>		mg/Kg		08/22/22 16:33 08/22/22 16:33 <b>Prepared</b>	08/24/22 16:39 08/24/22 16:39 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C10-C28) OII Range Organics (Over C28-C36) Surrogate	<49.9 <49.9 <b>%Recovery</b> 116 113	U U <b>Qualifier</b>	49.9 49.9 Limits 70 - 130		mg/Kg		08/22/22 16:33 08/22/22 16:33  Prepared 08/22/22 16:33	08/24/22 16:39 08/24/22 16:39 <b>Analyzed</b> 08/24/22 16:39	Dil Face
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<49.9 <49.9  **Recovery 116 113  **Domatography -	U U <b>Qualifier</b>	49.9 49.9 Limits 70 - 130	MDL	mg/Kg mg/Kg	D	08/22/22 16:33 08/22/22 16:33  Prepared 08/22/22 16:33	08/24/22 16:39 08/24/22 16:39 <b>Analyzed</b> 08/24/22 16:39	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

**Client Sample ID: BH-186 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-2784-27

Analyzed

**Matrix: Solid** 

Dil Fac

Method: 8021B - Volatile Organic C	ompounds (	GC)
Analyte	Result	Qualifier
Benzene	<0.00200	U

Surrogate  4-Bromofluorobenzene (Surr)		Qualifier			<b>Prepared</b> 08/30/22 12:16	Analyzed 08/31/22 20:07	Dil Fac
Xylenes, Total	<0.00399	U	0.00399	mg/Kg	08/30/22 12:16	08/31/22 20:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	08/30/22 12:16	08/31/22 20:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg	08/30/22 12:16	08/31/22 20:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	08/30/22 12:16	08/31/22 20:07	1
Toluene	<0.00200	U	0.00200	mg/Kg	08/30/22 12:16	08/31/22 20:07	1
Benzene	<0.00200	U	0.00200	mg/Kg	08/30/22 12:16	08/31/22 20:07	1

RL

MDL Unit

D

Prepared

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-186 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Sample Depth: 4.5 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2784-27

Matrix: Solid

Solid

6

\_\_\_\_

10

12

13

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:16	08/31/22 20:07	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	914		50.0		mg/Kg			08/23/22 11:36	1
Analyte Gasoline Range Organics		Qualifier U		MDL	mg/Kg	D	Prepared 08/22/22 16:33	Analyzed 08/24/22 18:48	Dil Fac
Method: 8015B NM - Diesel Rang Analyte			RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
(GRO)-C6-C10	<b>\50.0</b>	U	50.0		ilig/Kg		00/22/22 10.33	06/24/22 16.46	'
Diesel Range Organics (Over C10-C28)	914		50.0		mg/Kg		08/22/22 16:33	08/24/22 18:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 18:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				08/22/22 16:33	08/24/22 18:48	1
o-Terphenyl	91		70 - 130				08/22/22 16:33	08/24/22 18:48	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		24.8		mg/Kg			08/29/22 10:05	5

Client Sample ID: BH-187 (4.5')

Date Collected: 08/18/22 00:00

Lab Sample ID: 890-2784-28

Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 20:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 20:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 20:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:16	08/31/22 20:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 20:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:16	08/31/22 20:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/30/22 12:16	08/31/22 20:28	1
1,4-Difluorobenzene (Surr)	107		70 - 130				08/30/22 12:16	08/31/22 20:28	1
Method: Total BTEX - Total B1	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9		mg/Kg			08/23/22 11:36	

Lab Sample ID: 890-2784-28

Lab Sample ID: 890-2784-29

Matrix: Solid

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-187 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5									
Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oline Denne Onnenies	-10 O	11	40.0		no ar /1/ ar		00/00/00 46:00	00/04/00 47:04	

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 17:01	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 17:01	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/22/22 16:33	08/24/22 17:01	1
o-Terphenyl	97		70 - 130				08/22/22 16:33	08/24/22 17:01	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	816		4.97		mg/Kg			08/29/22 10:13	

**Client Sample ID: BH-188 (4.5')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 20:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 20:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 20:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:16	08/31/22 20:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 20:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:16	08/31/22 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				08/30/22 12:16	08/31/22 20:48	1
1,4-Difluorobenzene (Surr)	106		70 - 130				08/30/22 12:16	08/31/22 20:48	1
Analyte Total BTEX	<0.00399	Qualifier U	0.00399	MDL	mg/Kg	<u>D</u>	Prepared	<b>Analyzed</b> 09/01/22 12:44	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range	<0.00399  e Organics (DR	U (GC)	0.00399		mg/Kg		<u> </u>	09/01/22 12:44	1
Total BTEX	<0.00399  e Organics (DR	O) (GC) Qualifier					Prepared		
Total BTEX  Method: 8015 NM - Diesel Range Analyte	<0.00399  organics (DR) Result <50.0  ge Organics (DI)	O) (GC) Qualifier	0.00399		mg/Kg  Unit mg/Kg		<u> </u>	09/01/22 12:44  Analyzed	1
Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	<0.00399  organics (DR) Result <50.0  ge Organics (DI)	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	09/01/22 12:44  Analyzed  08/23/22 11:36	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte	<0.00399  e Organics (DR) Result <50.0  ge Organics (DI) Result	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	09/01/22 12:44  Analyzed  08/23/22 11:36  Analyzed	Dil Fac Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00399  e Organics (DR) Result <50.0  ge Organics (D) Result <50.0	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00399  RL  50.0  RL  50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  Prepared  08/22/22 16:33	09/01/22 12:44  Analyzed 08/23/22 11:36  Analyzed 08/24/22 17:23	Dil Fac  Dil Fac  1
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<0.00399 e Organics (DR) Result <50.0 ge Organics (D) Result <50.0 <50.0	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00399  RL 50.0  RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  Prepared  08/22/22 16:33  08/22/22 16:33	Analyzed 08/23/22 11:36  Analyzed 08/24/22 17:23 08/24/22 17:23	Dil Fac  Dil Fac  1
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<0.00399 e Organics (DR) Result <50.0 ge Organics (D) Result <50.0 <50.0 <50.0	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00399  RL 50.0  RL 50.0  50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  Prepared  08/22/22 16:33  08/22/22 16:33	09/01/22 12:44  Analyzed 08/23/22 11:36  Analyzed 08/24/22 17:23 08/24/22 17:23	Dil Fac  Dil Fac  1  Dil Fac  1

Job ID: 890-2784-1

SDG: Lea County NM

**Client Sample ID: BH-188 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5

Lab Sample ID: 890-2784-29

Matrix: Solid

Method: 300.0 - Anions, Ion Chroma	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1360		25.0		mg/Kg			08/29/22 10:21	5

**Client Sample ID: BH-189 (4.5')** Lab Sample ID: 890-2784-30 **Matrix: Solid** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 4.5

Analyte

Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				08/30/22 12:16	08/31/22 22:59	1
1,4-Difluorobenzene (Surr)	109		70 - 130				08/30/22 12:16	08/31/22 22:59	1

Total BTEX	<0.00396 U	0.00396	mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	e Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 U	49.8	mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Ran	ge Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

MDL Unit

mg/Kg

Prepared

08/22/22 16:33

Analyzed

08/24/22 17:44

Result Qualifier

<49.8 U

o-Terphenvl	93		70 - 130		08/22/22 16:33	08/24/22 17:44	1
1-Chlorooctane	95		70 - 130		08/22/22 16:33	08/24/22 17:44	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg	08/22/22 16:33	08/24/22 17:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg	08/22/22 16:33	08/24/22 17:44	1
(GRO)-C6-C10							

49.8

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	181		5.04		mg/Kg			08/29/22 10:29	1

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-38 (4.5-13')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Sample Depth: 4.5 - 13

Lab Sample ID: 890-2784-31

Matrix: Solid	
---------------	--

5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Toluene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Ethylbenzene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
m-Xylene & p-Xylene	<0.0808	U	0.0808		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
o-Xylene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Xylenes, Total	<0.0808	U	0.0808		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		70 - 130				08/30/22 12:16	08/31/22 21:09	20
1,4-Difluorobenzene (Surr)	87		70 - 130				08/30/22 12:16	08/31/22 21:09	20
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.0808		0.0808		mg/Kg			09/01/22 12:44	,
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
<u> </u>	151	Qualifier	49.9	WIDE			Frepareu		DII Fa
Total TPH	151		49.9		mg/Kg				
•								08/23/22 11:36	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						08/23/22 11:36	•
Method: 8015B NM - Diesel Ranç Analyte		RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier	<b>RL</b> 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 08/22/22 16:33		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier		MDL		<u>D</u>		Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	Result   <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	08/22/22 16:33	<b>Analyzed</b> 08/24/22 20:15	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U	49.9	MDL	mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33	Analyzed 08/24/22 20:15 08/24/22 20:15	Dil Fa
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	Result   <49.9     151   <49.9	Qualifier U	49.9 49.9 49.9	MDL	mg/Kg	<u> </u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33	Analyzed 08/24/22 20:15 08/24/22 20:15 08/24/22 20:15	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U	49.9 49.9 49.9 <b>Limits</b>	MDL	mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 <b>Prepared</b>	Analyzed 08/24/22 20:15 08/24/22 20:15 08/24/22 20:15 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result	Qualifier  U  U  Qualifier	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	mg/Kg	<u> </u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 <b>Prepared</b> 08/22/22 16:33	Analyzed 08/24/22 20:15 08/24/22 20:15 08/24/22 20:15  Analyzed 08/24/22 20:15	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  U  U  Qualifier	49.9 49.9 49.9 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 <b>Prepared</b> 08/22/22 16:33	Analyzed 08/24/22 20:15 08/24/22 20:15 08/24/22 20:15  Analyzed 08/24/22 20:15	Dil Fac

**Client Sample ID: SW-42 (4.5-8')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Sample Depth: 4.5 - 8

Lab Sample ID: 890-2784-32

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC)

wethod: 8021B - volatile Organ	etnod: 8021B - Volatile Organic Compounds (GC)											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1			
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1			
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1			
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:16	08/31/22 23:19	1			
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1			
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:16	08/31/22 23:19	1			
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	89		70 - 130				08/30/22 12:16	08/31/22 23:19	1			

Lab Sample ID: 890-2784-32

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: SW-42 (4.5-8')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

Method: 8021B	- Volatile Ord	anic Com	oounds (C	GC) (	Continued)	
momoun our is	TOIGHT OF	Jan 0 0 0	, , , , , , , , , , , , , , , , , , ,	, ı	- on a car	

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106	70 - 130	08/30/22 12:16	08/31/22 23:19	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg		_	09/01/22 12:44	1

-				
	Method: 8015 NM - Diesel	Danes Oreanias		
	- wethod: outs nw - Diesei	Range Organics	(DRO) (	<b>5</b> 61

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

Method: 8015B	NM Discol	Dange Ore	aaniee (DD(	)) (CC)
MICHIOU. OU IOD	INIVI - DIESEI	Rallue Oli	ualiics lunc	JI (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 18:06	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 18:06	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualif	fier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119	70 - 130	08/22/22 16:33	08/24/22 18:06	1
o-Terphenyl	113	70 - 130	08/22/22 16:33	08/24/22 18:06	1
o-Terphenyl	113	70 - 130	08/22/22 16:33	08/24/22 18:06	

# ${\bf Method: 300.0 - Anions, \, lon \, Chromatography - Soluble}$

Analyte	Result Quali	ifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107	4.97		mg/Kg			08/29/22 10:44	1

Client Sample ID: SW-43 (6-8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

no compounds (	,00,							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
95		70 - 130				08/30/22 12:16	08/31/22 23:40	1
108		70 - 130				08/30/22 12:16	08/31/22 23:40	1
	Result   <0.00199   <0.00199   <0.00199   <0.00398   <0.00199   <0.00398   <0.00398		Result         Qualifier         RL           <0.00199	Result         Qualifier         RL         MDL           <0.00199	Result         Qualifier         RL         MDL         Unit           <0.00199	Result         Qualifier         RL         MDL         Unit         D           <0.00199	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00199	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           <0.00199

Method:	Total	RTFY -	Total F	RTFY	Calculation	n

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka			09/01/22 12:44	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			08/23/22 11:36	1

**Eurofins Carlsbad** 

2

3

7

0

10

12

13

-

Lab Sample ID: 890-2784-33

Matrix: Solid

Lab Sample ID: 890-2784-33

Lab Sample ID: 890-2784-34

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-43 (6-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 20:36	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 20:36	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/22/22 16:33	08/24/22 20:36	1
o-Terphenyl	100		70 - 130				08/22/22 16:33	08/24/22 20:36	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	951		5.04		mg/Kg			08/29/22 10:52	1

Client Sample ID: SW-44 (4.5-8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				08/30/22 12:16	09/01/22 00:00	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/30/22 12:16	09/01/22 00:00	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:58	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				08/22/22 16:33	08/24/22 20:58	1
o-Terphenyl	113		70 <sub>-</sub> 130				08/22/22 16:33	08/24/22 20:58	1

**Matrix: Solid** 

Lab Sample ID: 890-2784-34

08/29/22 14:49

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-44 (4.5-8')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

S

Chloride

Sample Depth: 4.5 - 8							
_							
Method: 300.0 - Anions, Ion C	hromatography - Soluble						
Δnalvte	Result Qualifier	RI	MDI Unit	D	Prenared	Analyzed	Dil Fac

5.04

mg/Kg

Client Sample ID: SW-45 (0-8') Lab Sample ID: 890-2784-35

955 F2 F1

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	
Toluene	< 0.00201	U	0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	
Ethylbenzene	0.0108		0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	
m-Xylene & p-Xylene	0.0209		0.00402		mg/Kg		08/30/22 12:16	09/01/22 00:20	
o-Xylene	0.0251		0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	
Xylenes, Total	0.0460		0.00402		mg/Kg		08/30/22 12:16	09/01/22 00:20	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	90		70 - 130				08/30/22 12:16	09/01/22 00:20	
1,4-Difluorobenzene (Surr)	97		70 - 130				08/30/22 12:16	09/01/22 00:20	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.0568		0.00402		mg/Kg			09/01/22 12:44	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	1110		50.0		mg/Kg			08/23/22 11:36	
Method: 8015B NM - Diesel Rang	•								
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	79.7		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:32	
Diesel Range Organics (Over C10-C28)	1030		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:32	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:32	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	105		70 - 130				08/22/22 16:33	08/24/22 19:32	
o-Terphenyl	99		70 - 130				08/22/22 16:33	08/24/22 19:32	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	679		5.02		mg/Kg			08/29/22 15:12	

Lab Sample ID: 890-2784-36

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-46 (0-5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				08/30/22 12:16	09/01/22 00:41	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/30/22 12:16	09/01/22 00:41	1
· Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/01/22 12:44	1
: Method: 8015 NM - Diesel Range			RI	MDI	Unit	n	Prenared	<b>∆</b> nalvzed	Dil Fac
: Method: 8015 NM - Diesel Range			DI	MDI	Unit	n	Propared	Analyzod	Dil Eac
•		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	Result   <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte	Result <49.9  ge Organics (Di	Qualifier U		MDL MDL	mg/Kg	D	Prepared Prepared		1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	=	<u> </u>	08/23/22 11:36	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Result <49.9  ge Organics (Di Result	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	=	Prepared	08/23/22 11:36  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (Di Result	Qualifier U  RO) (GC) Qualifier U	49.9		mg/Kg	=	Prepared	08/23/22 11:36  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:33 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 21:19  08/24/22 21:19	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (Di Result <49.9	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 21:19	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 Prepared	08/23/22 11:36  Analyzed  08/24/22 21:19  08/24/22 21:19  08/24/22 21:19  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33  Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed 08/24/22 21:19 08/24/22 21:19  Analyzed 08/24/22 21:19	Dil Fac  1  1  Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 Prepared	08/23/22 11:36  Analyzed  08/24/22 21:19  08/24/22 21:19  08/24/22 21:19  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33  Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed 08/24/22 21:19 08/24/22 21:19  Analyzed 08/24/22 21:19	1 Dil Fac 1 1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg	=	Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33  Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed 08/24/22 21:19 08/24/22 21:19  Analyzed 08/24/22 21:19	Dil Fac  1  1  Dil Fac

Client Sample ID: SW-47 (0-5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 0 - 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 01:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 01:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 01:01	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/30/22 12:16	09/01/22 01:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 01:01	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/30/22 12:16	09/01/22 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/30/22 12:16	09/01/22 01:01	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2784-37

3

5

7

10

12

13

Matrix: Solid

Lab Sample ID: 890-2784-37

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-47 (0-5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 5

Method: 8021B - Volatile Or	ganic Compounds	(GC)	(Continued)
motification to a to a to a to a to a to a to a to	gaine compounds	1/	(Continuou)

Surrogate	%Recovery Quali	lifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92	70 _ 130	08/30/22 12:16	09/01/22 01:01	

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg		_	09/01/22 12:44	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			08/23/22 11:36	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 21:41	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 21:41	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 21:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				08/22/22 16:33	08/24/22 21:41	1

1-Chlorooctane	116	70 - 130
o-Terphenyl	112	70 - 130

_							
Method: 300.0 - Anions, Ion Cl	hromatography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SW-48 (6-8')				Lab Sample ID: 890-2784	<b>I-38</b>
Chloride	558	4.98	mg/Kg	08/29/22 15:28	1

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

### Method: 8021B - Volatile Organic Compounds (GC)

motification collis		()							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
Toluene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				08/30/22 12:16	09/01/22 01:21	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/30/22 12:16	09/01/22 01:21	1

### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka			09/01/22 12:44	1

	Method: 8015 NM	- Diesel Rar	nge Organics	(DRO)	(GC)
--	-----------------	--------------	--------------	-------	------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117	50.0	mg/Kg			08/23/22 11:36	1

**Eurofins Carlsbad** 

**Matrix: Solid** 

Lab Sample ID: 890-2784-38

Lab Sample ID: 890-2784-39

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-48 (6-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:53	1
Diesel Range Organics (Over C10-C28)	117		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/22/22 16:33	08/24/22 19:53	1
o-Terphenyl	98		70 - 130				08/22/22 16:33	08/24/22 19:53	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.5		4.99		mg/Kg			08/29/22 15:36	1

**Client Sample ID: SW-49 (4.5-6')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 01:42	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 01:42	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 01:42	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/30/22 12:16	09/01/22 01:42	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 01:42	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/30/22 12:16	09/01/22 01:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				08/30/22 12:16	09/01/22 01:42	1
1,4-Difluorobenzene (Surr)	104		70 - 130				08/30/22 12:16	09/01/22 01:42	1
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	264		50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:10	1
Diesel Range Organics (Over C10-C28)	264		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:10	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				08/22/22 16:33	08/24/22 19:10	1

**Eurofins Carlsbad** 

2

3

7

9

1 1

12

Job ID: 890-2784-1 SDG: Lea County NM

**Client Sample ID: SW-49 (4.5-6')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 6

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-39

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Dil Fac Analyte RL MDL Unit D Analyzed Prepared 25.0 08/29/22 15:59 Chloride 975 mg/Kg

Client Sample ID: SW-53 (0-8') Lab Sample ID: 890-2784-40 **Matrix: Solid** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	
Toluene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 02:02	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 02:02	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	95		70 - 130				08/30/22 12:16	09/01/22 02:02	
1,4-Difluorobenzene (Surr)	100		70 - 130				08/30/22 12:16	09/01/22 02:02	
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/01/22 12:44	
- -									
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	
Analyte Total TPH		Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result <49.9  ge Organics (D	Qualifier U				<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9  ge Organics (D	Qualifier U  RO) (GC) Qualifier	49.9		mg/Kg		<u> </u>	08/23/22 11:36	
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  ge Organics (D Result	Qualifier U  RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	08/23/22 11:36  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg  Unit mg/Kg		Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 22:02	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 22:02  08/24/22 22:02	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 16:33 08/22/22 16:33	08/23/22 11:36  Analyzed 08/24/22 22:02 08/24/22 22:02	Dil Fa
Analyte	Result	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33 Prepared	08/23/22 11:36  Analyzed  08/24/22 22:02  08/24/22 22:02  08/24/22 22:02  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/22/22 16:33 08/22/22 16:33 08/22/22 16:33  Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed 08/24/22 22:02 08/24/22 22:02  Analyzed 08/24/22 22:02	Dil Fa

08/29/22 16:07

25.1

mg/Kg

2180

Chloride

Lab Sample ID: 890-2784-41

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-54 (0-4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 05:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 05:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 05:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 05:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 05:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 05:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:29	09/01/22 05:39	1
1,4-Difluorobenzene (Surr)	101		70 - 130				08/30/22 12:29	09/01/22 05:39	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/01/22 12:44	1
Analyta	Popult	Ouglifier	DI	MDI	Unit	n	Droporod	Analyzad	Dil Es
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result <50.0	Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	<b>Analyzed</b> 08/23/22 11:36	
	<50.0	U		MDL		<u>D</u>	Prepared		
Total TPH	<50.0 ge Organics (D	RO) (GC) Qualifier				<u>D</u>	Prepared Prepared		1
Total TPH Method: 8015B NM - Diesel Ran	<50.0	RO) (GC) Qualifier	50.0		mg/Kg			08/23/22 11:36	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics	<50.0 ge Organics (D	RO) (GC) Qualifier	50.0		mg/Kg		Prepared	08/23/22 11:36  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  ge Organics (Di Result <50.0	U RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed  08/24/22 23:07	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0  ge Organics (Di Result <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 10:46 08/23/22 10:46	08/23/22 11:36  Analyzed  08/24/22 23:07  08/24/22 23:07	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 10:46 08/23/22 10:46 08/23/22 10:46	08/23/22 11:36  Analyzed  08/24/22 23:07  08/24/22 23:07	Dil Face 1 1 1 1 Dil Face
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery	U RO) (GC) Qualifier U U	50.0  RL 50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 10:46 08/23/22 10:46 08/23/22 10:46 Prepared	08/23/22 11:36  Analyzed 08/24/22 23:07 08/24/22 23:07 08/24/22 23:07  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 ge Organics (Digital Result) <50.0 <50.0 <50.0 %Recovery 91 95	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 10:46 08/23/22 10:46 08/23/22 10:46  Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed 08/24/22 23:07 08/24/22 23:07  Analyzed 08/24/22 23:07	Dil Fac
Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <50.0 <8ecovery 91 95 omatography -	U RO) (GC) Qualifier U U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 10:46 08/23/22 10:46 08/23/22 10:46  Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed 08/24/22 23:07 08/24/22 23:07  Analyzed 08/24/22 23:07	Dil Fac

**Client Sample ID: SW-55 (4.5-8')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Toluene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Ethylbenzene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
m-Xylene & p-Xylene	<0.00394	U	0.00394		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
o-Xylene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Xylenes, Total	<0.00394	U	0.00394		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130				08/30/22 12:29	09/01/22 06:00	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2784-42

3

5

7

0

10

12

14

Matrix: Solid

Lab Sample ID: 890-2784-42

Lab Sample ID: 890-2784-43

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-55 (4.5-8')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

Method: 8021B - Volati	le Organic Comp	ounds (GC)	(Continued)
modifical coaling foliati	io organio comp	,0000	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100	70 _ 130	08/30/22 12:29	09/01/22 06:00	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00394	U	0.00394		mg/Kg		_	09/01/22 12:44	1

н				
П	Method: 8015 NM - Diesel	Dange Organica		
П	- Metriou, ou la Min - Diesei	Range Organics	יו נטאטו	961

l	Analyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ı	Total TPH		<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:29	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:29	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130				08/23/22 10:46	08/24/22 23:29	1

1-Chlorooctane	74	70 - 130
o-Terphenyl	76	70 - 130

o-Terphenyl	76	70 - 130	08.	3/23/22 10:46	08/24/22 23:29	1
Method: 300.0 - Anions, Ion Chromatograph	ıy - Soluble					

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1730	25.2	mg/Kg		_	08/29/22 16:23	5

**Client Sample ID: SW-56 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

### Method: 8021B - Volatile Organic Compounds (GC)

inic compounds (	,00,							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
<0.00399	U	0.00399		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
<0.00399	U	0.00399		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
91		70 - 130				08/30/22 12:29	09/01/22 06:20	1
102		70 - 130				08/30/22 12:29	09/01/22 06:20	1
	Result   <0.00200   <0.00200   <0.00200   <0.00200   <0.00399   <0.00200   <0.00399   <0.00399		Result   Qualifier   RL	Result         Qualifier         RL         MDL           <0.00200	Result   Qualifier   RL   MDL   Unit   mg/Kg	Result         Qualifier         RL         MDL         Unit         D           <0.00200	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00200	Result Qualifier         RL         MDL Unit         D Prepared         Analyzed           <0.00200 U

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			08/23/22 11:36	1

Lab Sample ID: 890-2784-43

Lab Sample ID: 890-2784-44

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-56 (0-4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/24/22 23:51	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/24/22 23:51	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/24/22 23:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				08/23/22 10:46	08/24/22 23:51	1
o-Terphenyl	88		70 - 130				08/23/22 10:46	08/24/22 23:51	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			5.03		mg/Kg			08/29/22 16:31	

Client Sample ID: SW-57 (6-8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				08/30/22 12:29	09/01/22 06:40	1
1,4-Difluorobenzene (Surr)	104		70 - 130				08/30/22 12:29	09/01/22 06:40	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
								,u., _ u	
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1
• •			49.9		mg/Kg	_			1
: Method: 8015B NM - Diesel Rang	ge Organics (DI		49.9 RL	MDL			Prepared		1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (DI	RO) (GC) Qualifier		MDL		D		08/23/22 11:36	
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	08/23/22 11:36  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <49.9	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed  08/25/22 00:12	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DI Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 08/23/22 10:46 08/23/22 10:46	08/23/22 11:36  Analyzed  08/25/22 00:12  08/25/22 00:12	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (DI Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	Prepared 08/23/22 10:46 08/23/22 10:46 08/23/22 10:46	08/23/22 11:36  Analyzed 08/25/22 00:12 08/25/22 00:12	Dil Fac 1 1

**Eurofins Carlsbad** 

11

14

14

Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

Client Sample ID: SW-57 (6-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

Lab Sample ID: 890-2784-44

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	65.5		5.00		mg/Kg			08/29/22 16:39	1

Client Sample ID: SW-58 (6-8') Lab Sample ID: 890-2784-45 **Matrix: Solid** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0100	U	0.0100		mg/Kg		08/30/22 12:29	09/01/22 09:42	5
Toluene	<0.0100	U	0.0100		mg/Kg		08/30/22 12:29	09/01/22 09:42	5
Ethylbenzene	<0.0100	U	0.0100		mg/Kg		08/30/22 12:29	09/01/22 09:42	5
m-Xylene & p-Xylene	<0.0200	U	0.0200		mg/Kg		08/30/22 12:29	09/01/22 09:42	5
o-Xylene	<0.0100	U	0.0100		mg/Kg		08/30/22 12:29	09/01/22 09:42	5
Xylenes, Total	<0.0200	U	0.0200		mg/Kg		08/30/22 12:29	09/01/22 09:42	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	45	S1-	70 - 130				08/30/22 12:29	09/01/22 09:42	5
1,4-Difluorobenzene (Surr)	127		70 - 130				08/30/22 12:29	09/01/22 09:42	5
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Iotal BTEX	<0.0200	U	0.0200		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Rang	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8970		49.8		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		08/23/22 10:46	08/25/22 00:33	1

Gasoline Range Organics	\49.6 U	49.0	nig/kg	06/23/22 10.40	00/23/22 00.33	ı
(GRO)-C6-C10						
Diesel Range Organics (Over	7350	49.8	mg/Kg	08/23/22 10:46	08/25/22 00:33	1
C10-C28)						
Oll Range Organics (Over	1620	49.8	mg/Kg	08/23/22 10:46	08/25/22 00:33	1
C28-C36)						
Surrogate	%Recovery Qu	ualifier Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	93	70 - 130		08/23/22 10:46	08/25/22 00:33	1
o-Terphenyl	96	70 - 130		08/23/22 10:46	08/25/22 00:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	202		4.99		mg/Kg			08/29/22 17:03	1

Lab Sample ID: 890-2784-46

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-59 (6-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/30/22 12:29	09/01/22 07:01	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/30/22 12:29	09/01/22 07:01	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
					-				
Total TPH	<50.0	U	50.0		mg/Kg		·	08/23/22 11:36	
Total TPH : : Method: 8015B NM - Diesel Ran			50.0		mg/Kg	_			
• •	ge Organics (D		50.0 RL	MDL		D	Prepared		1
: Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC) Qualifier		MDL		<u>D</u>	Prepared 08/23/22 10:46	08/23/22 11:36	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D Result	RO) (GC)  Qualifier	RL	MDL	Unit	<u>D</u>	<u>.</u>	08/23/22 11:36  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <50.0	RO) (GC) Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	08/23/22 10:46	08/23/22 11:36  Analyzed  08/25/22 00:54	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	RO) (GC) Qualifier U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/23/22 10:46 08/23/22 10:46	08/23/22 11:36  Analyzed  08/25/22 00:54  08/25/22 00:54	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/23/22 10:46 08/23/22 10:46 08/23/22 10:46	08/23/22 11:36  Analyzed 08/25/22 00:54 08/25/22 00:54	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/23/22 10:46 08/23/22 10:46 08/23/22 10:46 <b>Prepared</b>	08/23/22 11:36  Analyzed 08/25/22 00:54 08/25/22 00:54  08/25/22 00:54  Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <50.0 <50.0 <50.0 <70.0 70	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 <u>Limits</u> 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	08/23/22 10:46 08/23/22 10:46 08/23/22 10:46  Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed 08/25/22 00:54  08/25/22 00:54  Analyzed  08/25/22 00:54	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <50.0  <50.0  <50.0   **Recovery  114  115  comatography -	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 <u>Limits</u> 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	D	08/23/22 10:46 08/23/22 10:46 08/23/22 10:46  Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed 08/25/22 00:54  08/25/22 00:54  Analyzed  08/25/22 00:54	Dil Fac

Client Sample ID: SW-60 (0-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Date Received: 00/15/22 00:00

Sample Depth: 0 - 13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:29	09/01/22 07:21	1

**Eurofins Carlsbad** 

2

4

6

9

11

13

14

Lab Sample ID: 890-2784-47

Matrix: Solid

Client Sample ID: SW-60 (0-13')

Matrix: Solid

Lab Sample ID: 890-2784-47

Lab Sample ID: 890-2784-48

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 13

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
modification totaling organic compa	Julius (33)	( Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99	70 - 130	08/30/22 12:29	09/01/22 07:21	1

Mathad:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402 U	0.00402	ma/Ka			09/01/22 12:44	1

Mothod: 8015 NM -	Diesal Pance	Organics (DRO) ((	201

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/K			08/23/22 11:36	1

Method: 8015B	NM - Diesel	Range Ore	anice l	(DRO)	(GC)
Methou. ou isb	IAIN - DIESEI	Range Org	janics i	(DRU)	(GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/25/22 01:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/25/22 01:16	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/25/22 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	08/23/22 10:-	46 08/25/22 01:16	1
o-Terphenyl	91		70 - 130	08/23/22 10:-	46 08/25/22 01:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390	24.9	mg/Kg		_	08/29/22 17:32	5

Client Sample ID: SW-61 (8-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

#### Method: 9021P Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:29	09/01/22 07:42	1
1,4-Difluorobenzene (Surr)	100		70 - 130				08/30/22 12:29	09/01/22 07:42	1

Method: Total BTE	X - Total BTE	EX Calculation
-------------------	---------------	----------------

Analyte	Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka				09/01/22 12:44	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	76.1	50.0	mg/Kg			08/23/22 11:36	1

Client: Tetra Tech, Inc.

Job ID: 890-2784-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-61 (8-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		08/22/22 16:29	08/23/22 20:43	1
Diesel Range Organics (Over C10-C28)	76.1		50.0		mg/Kg		08/22/22 16:29	08/23/22 20:43	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 20:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/22/22 16:29	08/23/22 20:43	1
o-Terphenyl	88		70 - 130				08/22/22 16:29	08/23/22 20:43	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3730		49.8		mg/Kg			08/29/22 17:39	10

Client Sample ID: SW-62 (8-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2784-49

Lab Sample ID: 890-2784-48

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 08/30/22 12:29 09/01/22 08:02 mg/Kg Toluene <0.00200 U 0.00200 08/30/22 12:29 09/01/22 08:02 mg/Kg Ethylbenzene <0.00200 U 0.00200 08/30/22 12:29 09/01/22 08:02 mg/Kg <0.00400 U 0.00400 08/30/22 12:29 09/01/22 08:02 m-Xylene & p-Xylene mg/Kg 0.00200 08/30/22 12:29 09/01/22 08:02 o-Xylene <0.00200 U mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 08/30/22 12:29 09/01/22 08:02 %Recovery Surrogate Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 89 70 - 130 08/30/22 12:29 09/01/22 08:02 1,4-Difluorobenzene (Surr) 103 70 - 130 08/30/22 12:29 09/01/22 08:02 **Method: Total BTEX - Total BTEX Calculation** Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00400 U 0.00400 09/01/22 12:44 mg/Kg Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 49.9 08/23/22 11:36 **Total TPH** 1570 mg/Kg Method: 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Gasoline Range Organics <49.9 U \*1 49.9 mg/Kg 08/22/22 16:29 08/23/22 22:50 (GRO)-C6-C10 08/23/22 22:50 **Diesel Range Organics (Over** 1570 49.9 mg/Kg 08/22/22 16:29 C10-C28) 08/22/22 16:29 08/23/22 22:50 Oll Range Organics (Over C28-C36) <49 9 U 49 9 mg/Kg %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate

**Eurofins Carlsbad** 

08/23/22 22:50

08/23/22 22:50

08/22/22 16:29

08/22/22 16:29

70 - 130

70 - 130

97 92

1-Chlorooctane

o-Terphenyl

1

6

8

10

12

13

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# Client Sample ID: SW-62 (8-13')

Client Sample ID: SW-63 (8-13')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

Lab Sample ID: 890-2784-49

Matrix: Solid

Sample Depth: 8 - 13

	Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Į	Chloride	825		5.01		mg/Kg			08/29/22 17:46	1	

Lab Sample ID: 890-2784-50

Prepared

**Matrix: Solid** 

Analyzed

Dil Fac

Sample Depth: 8 - 13

Analyte

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				08/30/22 12:29	09/01/22 08:22	1
1,4-Difluorobenzene (Surr)	101		70 - 130				08/30/22 12:29	09/01/22 08:22	1

Total BTEX	<0.00403	U	0.00403		mg/Kg			09/01/22 12:44	1
 Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1
 Method: 8015B NM - Diesel Range	Organics (D	RO) (GC)							

MDL Unit

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/22/22 16:29	08/23/22 21:04	1
o-Terphenyl	89		70 - 130				08/22/22 16:29	08/23/22 21:04	1

Method: 300.0 - Anions, Ion Chroma									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	561		5.00		mg/Kg			08/29/22 17:54	1

Lab Sample ID: 890-2784-51

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-64 (8-10')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130				08/30/22 12:29	09/01/22 11:32	1
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:29	09/01/22 11:32	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range			DI.	MDI	l lait	ь	Drawarad	Analysis	Dil Faa
_			RI	MDI	Unit	n	Prenared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fac
Analyte	Result   <50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U		MDL MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg	=	<u> </u>	08/23/22 11:36	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  ge Organics (D Result	Qualifier U  RO) (GC) Qualifier U *1	50.0		mg/Kg	=	Prepared	08/23/22 11:36  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0  ge Organics (D) Result <50.0	Qualifier U  RO) (GC) Qualifier U *1	50.0 RL 50.0		mg/Kg  Unit mg/Kg	=	Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed  08/23/22 23:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *1 U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29	08/23/22 11:36  Analyzed  08/23/22 23:11  08/23/22 23:11	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *1 U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29	08/23/22 11:36  Analyzed 08/23/22 23:11 08/23/22 23:11 08/23/22 23:11	Dil Face 1 1 1 Dil Face
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <50.0	Qualifier U  RO) (GC) Qualifier U *1 U	50.0  RL  50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29 08/22/22 16:29 Prepared	08/23/22 11:36  Analyzed 08/23/22 23:11 08/23/22 23:11 08/23/22 23:11 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <50.0	Qualifier U  RO) (GC) Qualifier U*1  U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29 08/22/22 16:29 Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed 08/23/22 23:11 08/23/22 23:11  Analyzed 08/23/22 23:11	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U  RO) (GC) Qualifier U*1  U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg mg/Kg mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29 08/22/22 16:29 Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed 08/23/22 23:11 08/23/22 23:11  Analyzed 08/23/22 23:11	Dil Fac

Client Sample ID: SW-65 (8-10')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	•
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 11:52	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	•
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 11:52	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:29	09/01/22 11:52	-

**Eurofins Carlsbad** 

Matrix: Solid

Lab Sample ID: 890-2784-52

2

6

Ω

10

12

13

Lab Sample ID: 890-2784-52

Lab Sample ID: 890-2784-53

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

Client Sample ID: SW-65 (8-10') Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
---	--------------------

Surrogate	%Recovery Quali	ifier Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	105	70 - 130	08/30/22 12:29	09/01/22 11:52	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400 U	0.00400	mg/Kg			09/01/22 12:44	1

ı			
ı	Mothod: 8015 NM -	Diesel Range Organio	e (DRO) (GC)

Analyte	Result Qua	lifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			08/23/22 11:36	1

Mothod: 901ED	NM Diocol	Pango Ore	aniec /	DBO	CC
Method: 8015B	MINI - DIESEI	Range Org	janics (	DRO	(GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/23/22 23:32	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 23:32	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surroyate	Mecovery	Qualifier	Liiiits	rrepareu	Allalyzeu	L
1-Chlorooctane	96		70 - 130	08/22/22 16:29	08/23/22 23:32	
o-Terphenyl	86		70 - 130	08/22/22 16:29	08/23/22 23:32	
_						

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	765	4.95		mg/Kg			08/29/22 18:08	1

Client Sample ID: SW-66 (8-10')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00 Sample Depth: 8 - 10

#### Method: 8021B - Volatile Organic Compounds (GC)

moniour coziz rolumo organio		()							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/30/22 12:29	09/01/22 12:13	1
1,4-Difluorobenzene (Surr)	107		70 - 130				08/30/22 12:29	09/01/22 12:13	1

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg		_	09/01/22 12:44	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			08/23/22 11:36	1

Lab Sample ID: 890-2784-53

Lab Sample ID: 890-2784-54

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-66 (8-10')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:53	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:53	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				08/22/22 16:29	08/23/22 23:53	1
o-Terphenyl	96		70 - 130				08/22/22 16:29	08/23/22 23:53	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	275		5.01		mg/Kg			08/29/22 18:15	1

Client Sample ID: SW-67 (8-10')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 12:33	
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 12:33	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 12:33	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/30/22 12:29	09/01/22 12:33	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 12:33	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/30/22 12:29	09/01/22 12:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/30/22 12:29	09/01/22 12:33	1
1,4-Difluorobenzene (Surr)	105		70 - 130				08/30/22 12:29	09/01/22 12:33	1
- Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		08/22/22 16:29	08/24/22 00:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/24/22 00:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/24/22 00:14	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/22/22 16:29	08/24/22 00:14	1
o-Terphenyl	89		70 <sub>-</sub> 130				08/22/22 16:29	08/24/22 00:14	1

Job ID: 890-2784-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-54

Lab Sample ID. 690-2764-54

Matrix: Solid

Client Sample ID: SW-67 (8-10')
Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00 Sample Depth: 8 - 10

Client: Tetra Tech, Inc.

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	215		5.04		mg/Kg			08/29/22 09:12	1

Client Sample ID: SW-68 (0-6')

Date Collected: 08/18/22 00:00

Lab Sample ID: 890-2784-55

Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	,
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/30/22 12:29	09/01/22 12:53	
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/30/22 12:29	09/01/22 12:53	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	92		70 - 130				08/30/22 12:29	09/01/22 12:53	
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:29	09/01/22 12:53	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	•
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	•
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	112		70 - 130				08/22/22 16:29	08/24/22 00:36	
o-Terphenyl	102		70 - 130				08/22/22 16:29	08/24/22 00:36	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2210		24.9		mg/Kg			08/29/22 09:40	5

Lab Sample ID: 890-2784-56

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-69 (0-6')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 13:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 13:14	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 13:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 13:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 13:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				08/30/22 12:29	09/01/22 13:14	1
1,4-Difluorobenzene (Surr)	101		70 - 130				08/30/22 12:29	09/01/22 13:14	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/01/22 12:44	1
: Method: 8015 NM - Diesel Range	e Organics (DR					_			B.: F
Method: 8015 NM - Diesel Range Analyte	e Organics (DR	O) (GC) Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	
: Method: 8015 NM - Diesel Range	e Organics (DR		RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fac
Method: 8015 NM - Diesel Range Analyte	e Organics (DRO Result 1890	Qualifier		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR Result 1890 ge Organics (D	Qualifier		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR Result 1890 ge Organics (D	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg	=	<u> </u>	08/23/22 11:36	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR Result 1890 ge Organics (DI Result	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg	=	Prepared	08/23/22 11:36  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (DR Result 1890 ge Organics (DR Result <50.0	Qualifier  RO) (GC) Qualifier U*1	50.0 RL 50.0		mg/Kg  Unit mg/Kg	=	Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed  08/23/22 22:07	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR Result 1890 ge Organics (DI Result <50.0	Qualifier  RO) (GC) Qualifier U*1	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29	08/23/22 11:36  Analyzed  08/23/22 22:07  08/23/22 22:07	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	e Organics (DR Result 1890 ge Organics (DI Result <50.0	Qualifier  RO) (GC) Qualifier U*1	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29	08/23/22 11:36  Analyzed 08/23/22 22:07 08/23/22 22:07	Dil Face 1 1 1 Dil Face
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (DR Result 1890  ge Organics (DR Result < 50.0  1890  <50.0  %Recovery	Qualifier  RO) (GC) Qualifier U*1	50.0  RL  50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29 08/22/22 16:29 Prepared	08/23/22 11:36  Analyzed 08/23/22 22:07 08/23/22 22:07 08/23/22 22:07  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (DR/Result 1890  ge Organics (DR/Result < 50.0  1890  <50.0  %Recovery 104  97	Qualifier  RO) (GC) Qualifier U*1  U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29 08/22/22 16:29 Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed 08/23/22 22:07 08/23/22 22:07  Analyzed 08/23/22 22:07	Dil Fac  1  1  Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (DR/Result 1890  ge Organics (D) Result < 50.0  1890  <50.0  %Recovery 104 97  omatography -	Qualifier  RO) (GC) Qualifier U*1  U Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg mg/Kg mg/Kg	=	Prepared 08/22/22 16:29 08/22/22 16:29 08/22/22 16:29 Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed 08/23/22 22:07 08/23/22 22:07  Analyzed 08/23/22 22:07	Dil Fac

**Client Sample ID: SW-70 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

4-Bromofluorobenzene (Surr)

Method: 8021B - Volatile O	rganic Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400		mg/Kg		08/30/22 12:29	09/01/22 14:35	20
Toluene	<0.0400	U	0.0400		mg/Kg		08/30/22 12:29	09/01/22 14:35	20
Ethylbenzene	<0.0400	U	0.0400		mg/Kg		08/30/22 12:29	09/01/22 14:35	20
m-Xylene & p-Xylene	<0.0800	U	0.0800		mg/Kg		08/30/22 12:29	09/01/22 14:35	20
o-Xylene	<0.0400	U	0.0400		mg/Kg		08/30/22 12:29	09/01/22 14:35	20
Xylenes, Total	<0.0800	U	0.0800		mg/Kg		08/30/22 12:29	09/01/22 14:35	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

**Eurofins Carlsbad** 

09/01/22 14:35

08/30/22 12:29

70 - 130

94

Lab Sample ID: 890-2784-57 **Matrix: Solid** 

Lab Sample ID: 890-2784-57

Lab Sample ID: 890-2784-58

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: SW-70 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92	70 - 130	08/30/22 12:29	09/01/22 14:35	20

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0800	U	0.0800		mg/Kg			09/01/22 12:44	1

Method: 8015 NM - Diesel Range	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1770	49.8	mg/Kg			08/23/22 11:36	1

	Method: 8015B NM - Diesel Range Organics (DRO) (GC)
ı	

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		08/22/22 16:29	08/23/22 22:29	1
Diesel Range Organics (Over C10-C28)	1770		49.8		mg/Kg		08/22/22 16:29	08/23/22 22:29	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/22/22 16:29	08/23/22 22:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepare	d Analyzed	Dil Fac
1-Chlorooctane	95	70 - 130	08/22/22 1	6:29 08/23/22 22:29	1
o-Terphenyl	89	70 - 130	08/22/22 1	6:29 08/23/22 22:29	1

# Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	352	4.97	mg/Kg			08/29/22 09:58	1

**Client Sample ID: SW-71 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

#### Method: 8021B - Volatile Organic Compounds (GC)

Michiga. 002 1D - Volatile Orga	ine compounds	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 13:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 13:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 13:34	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 13:34	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 13:34	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/30/22 12:29	09/01/22 13:34	1
1,4-Difluorobenzene (Surr)	110		70 - 130				08/30/22 12:29	09/01/22 13:34	1

Method:	Total RTF)	( - Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403		ma/Ka			09/01/22 12:44	1

Method: 8015 NM - Diese	Range Organics	(DRO)	(GC)	
Method, out of Min - Diese	i Kange Organica	(DIXO)	(00)	

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			08/23/22 11:36	1

**Eurofins Carlsbad** 

2

3

7

9

1 0

12

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-71 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

Analyte

Chloride

L	.ab Sampl	e ID:	890-2784-58
			Marketon Oallal

**Matrix: Solid** 

Analyzed

08/29/22 10:07

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:57	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:57	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130				08/22/22 16:29	08/24/22 00:57	1
o-Terphenyl	98		70 <sub>-</sub> 130				08/22/22 16:29	08/24/22 00:57	1

RL

24.9

MDL Unit

mg/Kg

D

Prepared

Result Qualifier

1460

Dil Fac

5

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid				Prep Type: Total/N
		<b></b> -	D=D=:	Percent Surrogate Recovery (Acceptance Limits)
l ah Camula ID	Client Comple ID	BFB1 (70-130)	DFBZ1 (70-130)	
<b>Lab Sample ID</b> 890-2784-1	Client Sample ID  BH-120 (8')	120	96	
890-2784-1 MS	BH-120 (8')	136 S1+	103	
890-2784-1 MSD	BH-120 (8')	136 S1+	106	
390-2784-2	BH-124 (8')	143 S1+	85	
390-2784-3	BH-132 (8')	115	91	
890-2784-4	BH-159 (8')	107	80	
890-2784-5	BH-162 (8')	121	89	
890-2784-6	BH-164 (8')	114	100	
890-2784-7	BH-166 (8')	115	90	
890-2784-8	BH-167 (8')	106	90	
890-2784-9	BH-168 (5')	120	94	
890-2784-10	BH-169 (5')	128	84	
890-2784-11	BH-170 (5')	130	87	
890-2784-12	BH-171 (5')	124	84	
890-2784-13	BH-172 (6')	124	80	
890-2784-14	BH-173 (6')	123	90	
890-2784-15	BH-174 (6')	130	81	
890-2784-16	BH-175 (4.5')	113	92	
890-2784-17	BH-176 (4.5')	116	91	
890-2784-18	BH-177 (4.5')	117	93	
890-2784-19	BH-178 (4.5')	117	88	
890-2784-20	BH-179 (4.5')	119	90	
890-2784-21	BH-180 (4.5')	94	106	
890-2784-21 MS	BH-180 (4.5')	97	105	
890-2784-21 MSD	BH-180 (4.5')	98	103	
390-2784-22	BH-181 (4.5')	90	105	
890-2784-23	BH-182 (4.5')	93	108	
890-2784-24	BH-183 (4.5')	91	108	
390-2784-25	BH-184 (4.5')	93	109	
890-2784-26	BH-185 (4.5')	95	110	
890-2784-27	BH-186 (4.5')	91	108	
890-2784-28	BH-187 (4.5')	93	107	
890-2784-29	BH-188 (4.5')	96	106	
890-2784-30	BH-189 (4.5')	88	109	
890-2784-31	SW-38 (4.5-13')	100	87	
890-2784-32	SW-42 (4.5-8')	89	106	
890-2784-33	SW-43 (6-8')	95	108	
890-2784-34	SW-44 (4.5-8')	95	97	
890-2784-35	SW-45 (0-8')	90	97	
890-2784-36	SW-46 (0-5')	103	99	
890-2784-37	SW-47 (0-5')	93	92	
890-2784-38	SW-48 (6-8')	99	97	
890-2784-39	SW-49 (4.5-6')	99	104	
890-2784-40	SW-53 (0-8')	95	100	
890-2784-41	SW-54 (0-4.5')	94	101	
890-2784-41 MS	SW-54 (0-4.5')	100	103	
890-2784-41 MSD	SW-54 (0-4.5')	94	98	
890-2784-42	SW-55 (4.5-8')	92	100	
890-2784-43	SW-56 (0-4.5')	91	102	

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2784-44	SW-57 (6-8')	88	104	
890-2784-45	SW-58 (6-8')	45 S1-	127	
890-2784-46	SW-59 (6-8')	91	99	
890-2784-47	SW-60 (0-13')	94	99	
890-2784-48	SW-61 (8-13')	94	100	
890-2784-49	SW-62 (8-13')	89	103	
890-2784-50	SW-63 (8-13')	102	101	
890-2784-51	SW-64 (8-10')	89	108	
890-2784-52	SW-65 (8-10')	94	105	
890-2784-53	SW-66 (8-10')	93	107	
890-2784-54	SW-67 (8-10')	91	105	
890-2784-55	SW-68 (0-6')	92	108	
390-2784-56	SW-69 (0-6')	96	101	
890-2784-57	SW-70 (0-4.5')	94	92	
890-2784-58	SW-71 (0-4.5')	93	110	
LCS 880-33358/1-A	Lab Control Sample	115	107	
LCS 880-33361/1-A	Lab Control Sample	92	103	
LCS 880-33362/1-A	Lab Control Sample	93	95	
LCSD 880-33358/2-A	Lab Control Sample Dup	111	107	
LCSD 880-33361/2-A	Lab Control Sample Dup	82	105	
LCSD 880-33362/2-A	Lab Control Sample Dup	90	98	
MB 880-33358/5-A	Method Blank	103	93	
MB 880-33361/5-A	Method Blank	79	118	
MB 880-33362/5-A	Method Blank	82	107	
MB 880-33411/8	Method Blank	96	94	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-18428-A-1-C MS	Matrix Spike	96	85	
880-18428-A-1-D MSD	Matrix Spike Duplicate	84	75	
890-2784-1	BH-120 (8')	64 S1-	76	
890-2784-1 MS	BH-120 (8')	51 S1-	55 S1-	
890-2784-1 MSD	BH-120 (8')	52 S1-	56 S1-	
390-2784-2	BH-124 (8')	58 S1-	71	
390-2784-3	BH-132 (8')	67 S1-	80	
890-2784-4	BH-159 (8')	69 S1-	82	
890-2784-5	BH-162 (8')	68 S1-	82	
390-2784-6	BH-164 (8')	62 S1-	76	
890-2784-7	BH-166 (8')	59 S1-	71	
390-2784-8	BH-167 (8')	61 S1-	70	
390-2784-9	BH-168 (5')	60 S1-	71	
390-2784-10	BH-169 (5')	56 S1-	69 S1-	
890-2784-11	BH-170 (5')	57 S1-	66 S1-	

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

Matrix: Solid				Prep Type: Total/N/
				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2784-12	BH-171 (5')	70	84	
890-2784-13	BH-172 (6')	70	84	
890-2784-14	BH-173 (6')	63 S1-	77	
890-2784-15	BH-174 (6')	64 S1-	76	
890-2784-16	BH-175 (4.5')	59 S1-	71	
890-2784-17	BH-176 (4.5')	58 S1-	69 S1-	
890-2784-18	BH-177 (4.5')	59 S1-	73	
890-2784-19	BH-178 (4.5')	60 S1-	72	
890-2784-20	BH-179 (4.5')	60 S1-	75	
890-2784-21	BH-180 (4.5')	117	114	
890-2784-21 MS	BH-180 (4.5')	109	89	
890-2784-21 MSD	BH-180 (4.5')	109	88	
890-2784-22	BH-181 (4.5')	114	110	
890-2784-23	BH-182 (4.5')	97	97	
890-2784-24	BH-183 (4.5')	93	92	
890-2784-25	BH-184 (4.5')	111	109	
890-2784-26	BH-185 (4.5')	116	113	
890-2784-27	BH-186 (4.5')	92	91	
890-2784-28	BH-187 (4.5')	97	97	
890-2784-29	BH-188 (4.5')	98	97	
890-2784-30	BH-189 (4.5')	95	93	
890-2784-31	SW-38 (4.5-13')	118	116	
890-2784-32	SW-42 (4.5-8')	119	113	
890-2784-33	SW-43 (6-8')	99	100	
890-2784-34	SW-44 (4.5-8')	115	113	
890-2784-35	SW-45 (0-8')	105	99	
890-2784-36	SW-46 (0-5')	115	113	
890-2784-37	SW-47 (0-5')	116	112	
890-2784-38	SW-48 (6-8')	99	98	
890-2784-39	SW-49 (4.5-6')	101	98	
890-2784-40	SW-53 (0-8')	109	106	
890-2784-41	SW-54 (0-4.5')	91	95	
890-2784-42	SW-55 (4.5-8')	74	76	
890-2784-43	SW-56 (0-4.5')	82	88	
890-2784-44	SW-57 (6-8')	93	100	
890-2784-45	SW-58 (6-8')	93	96	
890-2784-46	SW-59 (6-8')			
890-2784-47	SW-60 (0-13')	114 87	115 91	
890-2784-48	, ,	97		
	SW-61 (8-13')		88	
890-2784-49	SW-62 (8-13') SW-63 (8-13')	97	92	
890-2784-50	, ,	97	89	
890-2784-51	SW-64 (8-10')	104	99	
890-2784-52	SW-65 (8-10')	96	86	
890-2784-53	SW-66 (8-10')	106	96	
890-2784-54	SW-67 (8-10')	99	89	
890-2784-55	SW-68 (0-6')	112	102	
890-2784-56	SW-69 (0-6')	104	97	
890-2784-57	SW-70 (0-4.5')	95	89	
890-2784-58	SW-71 (0-4.5')	110	98	
890-2786-A-2-C MS	Matrix Spike	96	74	

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2786-A-2-D MSD	Matrix Spike Duplicate	89	74	
LCS 880-32669/2-A	Lab Control Sample	73	84	
LCS 880-32713/2-A	Lab Control Sample	516 S1+	484 S1+	
LCS 880-32714/2-A	Lab Control Sample	521 S1+	535 S1+	
LCS 880-32774/2-A	Lab Control Sample	575 S1+	577 S1+	
LCSD 880-32669/3-A	Lab Control Sample Dup	74	86	
LCSD 880-32713/3-A	Lab Control Sample Dup	548 S1+	524 S1+	
LCSD 880-32714/3-A	Lab Control Sample Dup	568 S1+	565 S1+	
LCSD 880-32774/3-A	Lab Control Sample Dup	527 S1+	538 S1+	
MB 880-32669/1-A	Method Blank	64 S1-	79	
MB 880-32713/1-A	Method Blank	98	94	
MB 880-32714/1-A	Method Blank	96	96	
MB 880-32774/1-A	Method Blank	94	94	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33358/5-A

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33358

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	•
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	08/31/22 23:38	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	08/31/22 23:38	•

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	08/30/22 12:01	08/31/22 23:38	1
1,4-Difluorobenzene (Surr)	93		70 - 130	08/30/22 12:01	08/31/22 23:38	1

Lab Sample ID: LCS 880-33358/1-A

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33358

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09998	-	mg/Kg		100	70 - 130	
Toluene	0.100	0.09209		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.09252		mg/Kg		93	70 - 130	
m-Xylene & p-Xylene	0.200	0.1909		mg/Kg		95	70 - 130	
o-Xylene	0.100	0.1112		mg/Kg		111	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	115		70 - 130		
1,4-Difluorobenzene (Surr)	107		70 - 130		

Lab Sample ID: LCSD 880-33358/2-A

Matrix: Solid

**Analysis Batch: 33411** 

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	<b>Control Sam</b>	ple Dup
--	------------	-------------	--------------------	---------

Prep Type: Total/NA

Prep Batch: 33358

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09401		mg/Kg		94	70 - 130	6	35	
Toluene	0.100	0.08558		mg/Kg		86	70 - 130	7	35	
Ethylbenzene	0.100	0.08674		mg/Kg		87	70 - 130	6	35	
m-Xylene & p-Xylene	0.200	0.1790		mg/Kg		90	70 - 130	6	35	
o-Xylene	0.100	0.1032		mg/Kg		103	70 - 130	8	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1,4-Difluorobenzene (Surr)	107	70 - 130

Lab Sample ID: 890-2784-1 MS

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

Prep Batch: 33358

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U	0.101	0.09002		mg/Kg		89	70 - 130	
Toluene	<0.00198	U	0.101	0.08715		mg/Kg		87	70 - 130	

**Eurofins Carlsbad** 

Page 58 of 113

#### QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2784-1 MS

Lab Sample ID: 890-2784-1 MSD

**Matrix: Solid** 

Analysis Batch: 33411

Client	Sample	ID: BH-120	(8')
			(-,

Prep Type: Total/NA

Prep Batch: 33358

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00198	U	0.101	0.09489		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	<0.00397	U	0.201	0.1923		mg/Kg		96	70 - 130	
o-Xylene	<0.00198	U	0.101	0.1183		mg/Kg		118	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130		
1,4-Difluorobenzene (Surr)	103		70 - 130		

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

RPD

**Matrix: Solid Analysis Batch: 33411** Prep Batch: 33358 Sample Sample Spike MSD MSD %Rec Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.100 0.08882 Benzene <0.00198 U mg/Kg 89 70 - 130 35 Toluene <0.00198 U 0.100 0.08598 86 70 - 130 35 mg/Kg Ethylbenzene <0.00198 U 0.100 0.09412 mg/Kg 94 70 - 130 35 m-Xylene & p-Xylene <0.00397 U 0.200 0.1897 mg/Kg 95 70 - 130 35 0.100 o-Xylene <0.00198 U 0.1170 70 - 130 mg/Kg 117

MSD MSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130		
1,4-Difluorobenzene (Surr)	106		70 - 130		

Lab Sample ID: MB 880-33361/5-A

**Matrix: Solid** 

Analysis Batch: 33465

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33361

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 17:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 17:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 17:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 17:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 17:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 17:36	1

MB MB

Surrogate	%Recovery 0	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	08/30/22 12:16	08/31/22 17:36	1
1,4-Difluorobenzene (Surr)	118		70 - 130	08/30/22 12:16	08/31/22 17:36	1

Lab Sample ID: LCS 880-33361/1-A

Matrix: Solid

Analysis Batch: 33465

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 33361

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.1051		mg/Kg		105	70 - 130
Toluene	0.100	0.1026		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.09908		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1821		mg/Kg		91	70 - 130

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-33361/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 33465 Prep Batch: 33361

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits D 0.100 0.09507 95 70 - 130 o-Xylene mg/Kg

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 92 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 103

Lab Sample ID: LCSD 880-33361/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 33465** Prep Batch: 33361

Spike LCSD LCSD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit D Benzene 0.100 0.1086 mg/Kg 109 70 - 130 3 35 Toluene 0.100 0.09563 mg/Kg 96 70 - 130 7 35 Ethylbenzene 0.100 0.08726 mg/Kg 87 70 - 130 13 35 m-Xylene & p-Xylene 0.200 0.1471 mg/Kg 74 70 - 130 21 35 0.100 0.07842 78 70 - 130 35 o-Xylene mg/Kg 19

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 82 70 - 130 1,4-Difluorobenzene (Surr) 105 70 - 130

Lab Sample ID: 890-2784-21 MS Client Sample ID: BH-180 (4.5')

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 33465** Prep Batch: 33361 Sample Sample Spike MS MS %Rec

		- up.o							,0.100	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.1081		mg/Kg		107	70 - 130	
Toluene	< 0.00199	U	0.101	0.1066		mg/Kg		106	70 - 130	
Ethylbenzene	< 0.00199	U	0.101	0.1017		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1863		mg/Kg		92	70 - 130	
o-Xylene	< 0.00199	U	0.101	0.09769		mg/Kg		97	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 97 70 - 130 1,4-Difluorobenzene (Surr) 105

Lab Sample ID: 890-2784-21 MSD Client Sample ID: BH-180 (4.5')

**Matrix: Solid** 

**Analysis Batch: 33465** Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Result Qualifier Added Limit Analyte Unit %Rec Limits RPD Benzene <0.00199 U 0.100 0.1083 mg/Kg 108 70 - 130 0 35 0.100 0.1076 Toluene <0.00199 U 107 70 - 13035 mg/Kg Ethylbenzene <0.00199 U 0.100 0.1023 mg/Kg 102 70 - 130 35 m-Xylene & p-Xylene <0.00398 U 0.200 0.1866 mg/Kg 93 70 - 13035 o-Xylene <0.00199 U 0.100 0.09828 mg/Kg 98 70 - 130 35

**Eurofins Carlsbad** 

Prep Type: Total/NA Prep Batch: 33361

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2784-21 MSD

**Matrix: Solid** 

Analysis Batch: 33465

Client Sample ID: BH-180 (4.5')

Prep Type: Total/NA

Prep Batch: 33361

MSD MSD

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 98 70 - 130 1,4-Difluorobenzene (Surr) 103 70 - 130

Lab Sample ID: MB 880-33362/5-A Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 33465

Prep Type: Total/NA

Prep Batch: 33362

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <0.00200 U 0.00200 08/30/22 12:29 09/01/22 05:11 Benzene mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 08/30/22 12:29 09/01/22 05:11 <0.00200 U 0.00200 08/30/22 12:29 09/01/22 05:11 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 08/30/22 12:29 09/01/22 05:11 o-Xylene <0.00200 U 0.00200 mg/Kg 08/30/22 12:29 09/01/22 05:11 Xylenes, Total <0.00400 U 0.00400 mg/Kg 08/30/22 12:29 09/01/22 05:11

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82	70 - 130	08/30/22 12:29	09/01/22 05:11	1
1,4-Difluorobenzene (Surr)	107	70 - 130	08/30/22 12:29	09/01/22 05:11	1

Lab Sample ID: LCS 880-33362/1-A

**Matrix: Solid** 

Analysis Batch: 33465

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 33362

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08954		mg/Kg		90	70 - 130	
Toluene	0.100	0.09540		mg/Kg		95	70 - 130	
Ethylbenzene	0.100	0.09384		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	0.200	0.1720		mg/Kg		86	70 - 130	
o-Xylene	0.100	0.09358		mg/Kg		94	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	93	70 - 130
1,4-Difluorobenzene (Surr)	95	70 - 130

Lab Sample ID: LCSD 880-33362/2-A

**Matrix: Solid** 

**Analysis Batch: 33465** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33362

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08443		mg/Kg		84	70 - 130	6	35
Toluene	0.100	0.08898		mg/Kg		89	70 - 130	7	35
Ethylbenzene	0.100	0.08828		mg/Kg		88	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1627		mg/Kg		81	70 - 130	6	35
o-Xylene	0.100	0.08712		mg/Kg		87	70 - 130	7	35

LCSD LCSD

%Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 70 - 130 90

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-33362/2-A

**Matrix: Solid** 

Analysis Batch: 33465

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33362

LCSD LCSD

%Recovery Qualifier Surrogate Limits 1,4-Difluorobenzene (Surr) 98 70 - 130

Client Sample ID: SW-54 (0-4.5')

Prep Type: Total/NA

Prep Batch: 33362

Prep Type: Total/NA

70 - 130

Lab Sample ID: 890-2784-41 MS **Matrix: Solid** 

**Analysis Batch: 33465** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.1030		mg/Kg		102	70 - 130	
Toluene	<0.00202	U	0.101	0.09919		mg/Kg		99	70 - 130	
Ethylbenzene	<0.00202	U	0.101	0.09015		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.201	0.1615		mg/Kg		80	70 - 130	
o-Xylene	<0.00202	U	0.101	0.08797		mg/Kg		87	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	100	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Client Sample ID: SW-54 (0-4.5')

mg/Kg

**Matrix: Solid** 

o-Xylene

**Analysis Batch: 33465** 

Lab Sample ID: 890-2784-41 MSD

Prep Batch: 33362 MSD MSD Sample Sample Spike %Rec **RPD** Limit Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Benzene <0.00202 U 0.0998 0.09574 96 70 - 130 35 mg/Kg 0.0998 Toluene <0.00202 U 0.09569 mg/Kg 96 70 - 130 35 Ethylbenzene <0.00202 U 0.0998 0.08913 mg/Kg 89 70 - 130 35 <0.00403 U 0.200 0.1611 81 70 - 130 35 m-Xylene & p-Xylene mg/Kg

0.08747

0.0998

MSD MSD

<0.00202 U

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 880-33411/8 Client Sample ID: Method Blank **Matrix: Solid** 

**Analysis Batch: 33411** 

мв мв

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			08/31/22 13:02	1
Toluene	<0.00200	U	0.00200		mg/Kg			08/31/22 13:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			08/31/22 13:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			08/31/22 13:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			08/31/22 13:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			08/31/22 13:02	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130		08/31/22 13:02	1
1,4-Difluorobenzene (Surr)	94		70 - 130		08/31/22 13:02	1

**Eurofins Carlsbad** 

35

Prep Type: Total/NA

Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-32669/1-A

Analysis Batch: 32586

1-Chlorooctane

o-Terphenyl

Matrix: Solid

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 32669

08/22/22 13:43

08/22/22 13:43

08/22/22 21:31

08/22/22 21:31

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/22/22 21:31	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/22/22 21:31	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/22/22 21:31	1
	440	440							
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Lab Sample ID: LCS 880-32669/2-A

Matrix: Solid

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

70 - 130

70 - 130

Analysis Batch: 32586 Prep Batch: 32669

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	719.7		mg/Kg		72	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	892.1		mg/Kg		89	70 - 130	

 Surrogate
 %Recovery 1-Chlorooctane
 Qualifier 73
 Limits 70 - 130

 o-Terphenyl
 84
 70 - 130

Lab Sample ID: LCSD 880-32669/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 32586 Prep Batch: 32669

LCSD LCSD RPD Spike %Rec Added Analyte Result Qualifier RPD Limit Unit D %Rec Limits Gasoline Range Organics 1000 724.7 mg/Kg 72 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 912.3 mg/Kg 91 70 - 130 20

 C10-C28)

 LCSD LCSD

 Surrogate
 %Recovery qualifier
 Limits

 1-Chlorooctane
 74
 70 - 130

 o-Terphenyl
 86
 70 - 130

64 S1-

79

Lab Sample ID: 890-2784-1 MS Client Sample ID: BH-120 (8')

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 32586 Prep Batch: 32669

MS MS Sample Sample Spike %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Gasoline Range Organics <49.9 U F1 999 522.3 F1 mg/Kg 50 70 - 130 (GRO)-C6-C10 <49.9 U F1 999 Diesel Range Organics (Over 558.6 F1 mg/Kg 56 70 - 130 C10-C28)

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2784-1 MS Client Sample ID: BH-120 (8')

**Matrix: Solid** 

Analysis Batch: 32586

Prep Type: Total/NA Prep Batch: 32669

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 51 S1-70 - 130 o-Terphenyl 55 S1-70 - 130

Lab Sample ID: 890-2784-1 MSD Client Sample ID: BH-120 (8')

**Matrix: Solid** 

Analysis Batch: 32586

Prep Type: Total/NA

Prep Batch: 32669 RPD

Sample Sample Spike MSD MSD %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <49.9 U F1 998 552.9 F1 53 70 - 1306 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 998 58 <49.9 U F1 578.2 F1 mg/Kg 70 - 1303 20 C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 52 S1 70 - 130 1-Chlorooctane 56 S1-70 - 130 o-Terphenyl

MB MB

Lab Sample ID: MB 880-32713/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 32730** 

Prep Type: Total/NA

Prep Batch: 32713

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac 08/23/22 15:45 Gasoline Range Organics <50.0 U 50.0 mg/Kg 08/22/22 16:29 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 08/22/22 16:29 08/23/22 15:45 C10-C28) 50.0 OII Range Organics (Over C28-C36) <50.0 U 08/22/22 16:29 08/23/22 15:45 mg/Kg

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 08/23/22 15:45 1-Chlorooctane 98 08/22/22 16:29 94 70 - 130 08/22/22 16:29 o-Terphenyl 08/23/22 15:45

Lab Sample ID: LCS 880-32713/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** 

Analysis Batch: 32730

Prep Type: Total/NA Prep Batch: 32713

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits D 1000 Gasoline Range Organics 819.0 82 70 - 130 mg/Kg (GRO)-C6-C10 1000 925.9 93 70 - 130 Diesel Range Organics (Over mg/Kg C10-C28)

LCS LCS %Recovery Qualifier Surrogate Limits 1-Chlorooctane 516 S1+ 70 - 130 o-Terphenyl 484 S1+ 70 - 130

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-32713/3-A

**Matrix: Solid** 

**Analysis Batch: 32730** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 32713

Prep Batch: 32713 RPD

Spike LCSD LCSD Result Qualifier RPD Limit Analyte babbA Unit %Rec Limits D Gasoline Range Organics 1000 1054 \*1 mg/Kg 105 70 - 130 25 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1016 mg/Kg 102 70 - 130 9 20

C10-C28)

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 548 S1+ o-Terphenyl 524 S1+ 70 - 130

Lab Sample ID: 890-2786-A-2-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 32730** 

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <49.9 U \*1 999 770.6 70 - 130 Gasoline Range Organics mg/Kg 76 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 934.1 mg/Kg 91 70 - 130

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 96 70 - 130 o-Terphenyl 74 70 - 130

Lab Sample ID: 890-2786-A-2-D MSD

**Matrix: Solid** 

Analysis Batch: 32730

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 32713

Sample Sample Spike MSD MSD %Rec RPD Limit Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD <49.9 U \*1 998 789.4 78 20 Gasoline Range Organics 70 - 130 2 mg/Kg (GRO)-C6-C10 998 953.1 93 70 - 130 2 20 Diesel Range Organics (Over <49.9 L mg/Kg

C10-C28)

MSD MSD Qualifier Limits Surrogate %Recovery 1-Chlorooctane 89 70 - 130 74 70 - 130 o-Terphenyl

MD MD

Lab Sample ID: MB 880-32714/1-A

**Matrix: Solid** 

**Analysis Batch: 32806** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32714

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 11:55	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 11:55	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 11:55	1

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-32714/1-A

**Matrix: Solid** 

Analysis Batch: 32806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32714

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	d A	nalyzed	Dil Fac
1-Chlorooctane	96		70 - 130	08/22/22 1	6:33 08/2	24/22 11:55	1
o-Terphenyl	96		70 - 130	08/22/22 1	6:33 08/2	24/22 11:55	1

Lab Sample ID: LCS 880-32714/2-A **Client Sample ID: Lab Control Sample** 

Analysis Batch: 32806

**Matrix: Solid** Prep Type: Total/NA Prep Batch: 32714

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 1006 101 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1017 mg/Kg 102 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	521	S1+	70 - 130
o-Terphenyl	535	S1+	70 - 130

Lab Sample ID: LCSD 880-32714/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Prep Type: Total/NA **Analysis Batch: 32806** Prep Batch: 32714 Spike LCSD LCSD

Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics 1000 1165 mg/Kg 116 70 - 130 15 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1078 mg/Kg 108 70 - 130 6 20 C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	568	S1+	70 - 130
o-Terphenyl	565	S1+	70 - 130

Client Sample ID: BH-180 (4.5') Lab Sample ID: 890-2784-21 MS

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 32806 Prep Batch: 32714

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<49.9	U	999	1194		mg/Kg		117	70 - 130		_
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	999	1048		mg/Kg		105	70 - 130		
C10-C28)											

C10-C28)

MS MS

Surrogate	%Recovery Qualifie	r Limits
1-Chlorooctane	109	70 - 130
o-Terphenyl	89	70 - 130

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2784-21 MSD

Analysis Batch: 32806

**Matrix: Solid** 

ISD						Client Sample ID: BH-180 (4.5')	
						Prep Type: Total/NA	
						Prep Batch: 32714	
	Sample	Sample	Spike	MSD	MSD	%Rec RPD	

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1033		mg/Kg		101	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1050		mg/Kg		105	70 - 130	0	20

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 109 70 - 130 o-Terphenyl 88

Lab Sample ID: MB 880-32774/1-A Client Sample ID: Method Blank

Matrix: Solid

**Analysis Batch: 32808** 

Prep Type: Total/NA

Prep Batch: 32774

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL I	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	1	mg/Kg		08/23/22 10:46	08/24/22 16:17	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0	ı	mg/Kg		08/23/22 10:46	08/24/22 16:17	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	ı	mg/Kg		08/23/22 10:46	08/24/22 16:17	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	08/23/22 10:46	08/24/22 16:17	1
o-Terphenyl	94		70 - 130	08/23/22 10:46	08/24/22 16:17	1

Lab Sample ID: LCS 880-32774/2-A

**Matrix: Solid** 

**Analysis Batch: 32808** 

Client Sample ID:	Lab Control Sample
	Prop Type: Total/NA

Prep Type: Total/NA

Prep Batch: 32774

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1065		mg/Kg	<u> </u>	106	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1056		mg/Kg		106	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	575	S1+	70 - 130
o-Terphenyl	577	S1+	70 - 130

Lab Sample ID: LCSD 880-32774/3-A

Matrix: Solid

Analysis Batch: 32808

<b>Client San</b>	iple ID: Lal	<b>Control</b>	Sample	Dup
-------------------	--------------	----------------	--------	-----

Prep Type: Total/NA

Prep Batch: 32774

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1046		mg/Kg		105	70 - 130	2	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	982.3		mg/Kg		98	70 - 130	7	20	
C10-C28)										

## **QC Sample Results**

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

### Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

538 S1+

Lab Sample ID: LCSD 880-32774/3-A

**Matrix: Solid** 

**Analysis Batch: 32808** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32774

LCSD LCSD %Recovery Qualifier Surrogate 1-Chlorooctane 527 S1+

Lab Sample ID: 880-18428-A-1-C MS

**Matrix: Solid** 

o-Terphenyl

**Analysis Batch: 32808** 

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 32774

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1043		mg/Kg		101	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	972.4		mg/Kg		97	70 - 130	

Limits

70 - 130

70 - 130

MS MS

Lab Sample ID: 880-18428-A-1-D MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	85		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32774

Sample Sample Spike MSD MSD Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics <49.9 U 998 953.0 mg/Kg 92 70 - 130 9 20 (GRO)-C6-C10 998 Diesel Range Organics (Over <49.9 U 885.0 mg/Kg 89 70 - 130 20 C10-C28)

**Matrix: Solid** 

**Analysis Batch: 32808** 

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	75		70 - 130

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32582/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33167** 

мв мв Dil Fac Analyte Result Qualifier RL MDL Unit Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 08/29/22 02:22

Lab Sample ID: LCS 880-32582/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 33167

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	248.2		mg/Kg		99	90 - 110	

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-32582/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33167** 

Spike LCSD LCSD RPD %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 249.1 mg/Kg 100 90 - 110 20

Lab Sample ID: 890-2784-4 MS Client Sample ID: BH-159 (8') **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33167** 

Sample Sample Spike MS MS %Rec Qualifier Analyte Result Added Result Qualifier Unit D %Rec Limits Chloride 1010 1250 2342 mg/Kg 107 90 - 110

Lab Sample ID: 890-2784-4 MSD Client Sample ID: BH-159 (8') **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33167** 

MSD MSD RPD Spike %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 1250 2338 1010 mg/Kg 106 90 - 110

Lab Sample ID: MB 880-32583/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 33168** 

мв мв

Result Qualifier MDL Unit Analyte RL Prepared Analyzed Dil Fac 5.00 Chloride <5.00 08/29/22 06:57 mg/Kg

Lab Sample ID: LCS 880-32583/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

LCS LCS

**Matrix: Solid** 

**Analysis Batch: 33168** 

Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 249.3 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 880-32583/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

Matrix: Solid

**Analysis Batch: 33168** 

Spike LCSD LCSD %Rec Added RPD Analyte Result Qualifier Unit D %Rec Limits Limit Chloride 250 249.3 mg/Kg 100 90 - 110

Lab Sample ID: 890-2784-14 MS Client Sample ID: BH-173 (6')

**Matrix: Solid** 

**Analysis Batch: 33168** 

MS MS %Rec Sample Sample Spike Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec Chloride 329 248 557.9 mg/Kg 92 90 - 110

Lab Sample ID: 890-2784-14 MSD Client Sample ID: BH-173 (6')

**Matrix: Solid** 

**Analysis Batch: 33168** 

Released to Imaging: 9/1/2023 2:28:53 PM

Spike Sample MSD MSD %Rec RPD Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 329 248 563.7 mg/Kg 95 90 - 110 20

**Eurofins Carlsbad** 

RPD

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2784-24 MS Client Sample ID: BH-183 (4.5') **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 33168

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chloride 1050 249 1247 4 mg/Kg 78 90 - 110

Lab Sample ID: 890-2784-24 MSD Client Sample ID: BH-183 (4.5') **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 33168

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1050		249	1247	4	mg/Kg		78	90 - 110	0	20

Lab Sample ID: MB 880-32584/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 33169

мв мв Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 08/29/22 14:25 mg/Kg

Lab Sample ID: LCS 880-32584/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 33169

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits	
Chloride	250	251.5	mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-32584/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33169** 

	Spike	LUGD	LUGD				/ortec		KFD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	252.0		mg/Kg		101	90 - 110	0	20	

Lab Sample ID: 890-2784-34 MS Client Sample ID: SW-44 (4.5-8') **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33169** 

-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	055	E2 E1	252	1151	<u></u>	ma/Ka		78	00 110		-

Lab Sample ID: 890-2784-34 MSD Client Sample ID: SW-44 (4.5-8') **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 33169** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	955	F2 F1	252	1151	F1	mg/Kg		78	90 - 110	0	20	

Lab Sample ID: 890-2784-44 MS Client Sample ID: SW-57 (6-8')

**Matrix: Solid** 

**Analysis Batch: 33169** 

Analysis Daton. 00103										
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	65.5		250	323.5		mg/Kg		103	90 - 110	

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Client Sample ID: SW-57 (6-8')

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample Dup

Client Sample ID: SW-67 (8-10')

Client Sample ID: SW-67 (8-10')

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2784-44 MSD

**Analysis Batch: 33169** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	65.5		250	322.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: MB 880-32585/1-A

**Matrix: Solid** 

**Matrix: Solid** 

**Analysis Batch: 33170** 

MB MB

MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 08/29/22 08:44

Lab Sample ID: LCS 880-32585/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 33170

LCS LCS %Rec Spike Analyte Added Result Qualifier Unit Limits Chloride 250 250.5 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 880-32585/3-A

**Matrix: Solid** 

**Analysis Batch: 33170** 

LCSD LCSD Spike RPD %Rec Analyte Added Result Qualifier %Rec Limit Unit Limits 250 248.0 Chloride 90 - 110 mg/Kg

Lab Sample ID: 890-2784-54 MS

**Matrix: Solid** 

Analysis Batch: 33170

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	215		252	478.7	-	ma/Ka		105	90 - 110	

Lab Sample ID: 890-2784-54 MSD

Matrix: Solid

Analysis Batch: 33170

7												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	215		252	486.1		mg/Kg		108	90 - 110	2	20	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

## **GC VOA**

#### Prep Batch: 33358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2784-1	BH-120 (8')	Total/NA	Solid	5035	
890-2784-2	BH-124 (8')	Total/NA	Solid	5035	
890-2784-3	BH-132 (8')	Total/NA	Solid	5035	
890-2784-4	BH-159 (8')	Total/NA	Solid	5035	
890-2784-5	BH-162 (8')	Total/NA	Solid	5035	
890-2784-6	BH-164 (8')	Total/NA	Solid	5035	
890-2784-7	BH-166 (8')	Total/NA	Solid	5035	
890-2784-8	BH-167 (8')	Total/NA	Solid	5035	
890-2784-9	BH-168 (5')	Total/NA	Solid	5035	
890-2784-10	BH-169 (5')	Total/NA	Solid	5035	
890-2784-11	BH-170 (5')	Total/NA	Solid	5035	
890-2784-12	BH-171 (5')	Total/NA	Solid	5035	
890-2784-13	BH-172 (6')	Total/NA	Solid	5035	
890-2784-14	BH-173 (6')	Total/NA	Solid	5035	
890-2784-15	BH-174 (6')	Total/NA	Solid	5035	
890-2784-16	BH-175 (4.5')	Total/NA	Solid	5035	
890-2784-17	BH-176 (4.5')	Total/NA	Solid	5035	
890-2784-18	BH-177 (4.5')	Total/NA	Solid	5035	
890-2784-19	BH-178 (4.5')	Total/NA	Solid	5035	
890-2784-20	BH-179 (4.5')	Total/NA	Solid	5035	
MB 880-33358/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33358/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33358/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2784-1 MS	BH-120 (8')	Total/NA	Solid	5035	
890-2784-1 MSD	BH-120 (8')	Total/NA	Solid	5035	

#### Prep Batch: 33361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2784-21	BH-180 (4.5')	Total/NA	Solid	5035	
890-2784-22	BH-181 (4.5')	Total/NA	Solid	5035	
890-2784-23	BH-182 (4.5')	Total/NA	Solid	5035	
890-2784-24	BH-183 (4.5')	Total/NA	Solid	5035	
890-2784-25	BH-184 (4.5')	Total/NA	Solid	5035	
890-2784-26	BH-185 (4.5')	Total/NA	Solid	5035	
890-2784-27	BH-186 (4.5')	Total/NA	Solid	5035	
890-2784-28	BH-187 (4.5')	Total/NA	Solid	5035	
890-2784-29	BH-188 (4.5')	Total/NA	Solid	5035	
890-2784-30	BH-189 (4.5')	Total/NA	Solid	5035	
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	5035	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	5035	
890-2784-33	SW-43 (6-8')	Total/NA	Solid	5035	
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	5035	
890-2784-35	SW-45 (0-8')	Total/NA	Solid	5035	
890-2784-36	SW-46 (0-5')	Total/NA	Solid	5035	
890-2784-37	SW-47 (0-5')	Total/NA	Solid	5035	
890-2784-38	SW-48 (6-8')	Total/NA	Solid	5035	
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	5035	
890-2784-40	SW-53 (0-8')	Total/NA	Solid	5035	
MB 880-33361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

**Eurofins Carlsbad** 

2

3

\_

7

9

11

13

14

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

## **GC VOA (Continued)**

#### Prep Batch: 33361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-21 MS	BH-180 (4.5')	Total/NA	Solid	5035	
890-2784-21 MSD	BH-180 (4.5')	Total/NA	Solid	5035	

#### Prep Batch: 33362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	5035	
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	5035	
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	5035	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	5035	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	5035	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	5035	
890-2784-47	SW-60 (0-13')	Total/NA	Solid	5035	
890-2784-48	SW-61 (8-13')	Total/NA	Solid	5035	
890-2784-49	SW-62 (8-13')	Total/NA	Solid	5035	
890-2784-50	SW-63 (8-13')	Total/NA	Solid	5035	
890-2784-51	SW-64 (8-10')	Total/NA	Solid	5035	
890-2784-52	SW-65 (8-10')	Total/NA	Solid	5035	
890-2784-53	SW-66 (8-10')	Total/NA	Solid	5035	
890-2784-54	SW-67 (8-10')	Total/NA	Solid	5035	
890-2784-55	SW-68 (0-6')	Total/NA	Solid	5035	
890-2784-56	SW-69 (0-6')	Total/NA	Solid	5035	
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	5035	
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	5035	
MB 880-33362/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33362/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33362/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2784-41 MS	SW-54 (0-4.5')	Total/NA	Solid	5035	
890-2784-41 MSD	SW-54 (0-4.5')	Total/NA	Solid	5035	

#### Analysis Batch: 33411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Total/NA	Solid	8021B	33358
890-2784-2	BH-124 (8')	Total/NA	Solid	8021B	33358
890-2784-3	BH-132 (8')	Total/NA	Solid	8021B	33358
890-2784-4	BH-159 (8')	Total/NA	Solid	8021B	33358
890-2784-5	BH-162 (8')	Total/NA	Solid	8021B	33358
890-2784-6	BH-164 (8')	Total/NA	Solid	8021B	33358
890-2784-7	BH-166 (8')	Total/NA	Solid	8021B	33358
890-2784-8	BH-167 (8')	Total/NA	Solid	8021B	33358
890-2784-9	BH-168 (5')	Total/NA	Solid	8021B	33358
890-2784-10	BH-169 (5')	Total/NA	Solid	8021B	33358
890-2784-11	BH-170 (5')	Total/NA	Solid	8021B	33358
890-2784-12	BH-171 (5')	Total/NA	Solid	8021B	33358
890-2784-13	BH-172 (6')	Total/NA	Solid	8021B	33358
890-2784-14	BH-173 (6')	Total/NA	Solid	8021B	33358
890-2784-15	BH-174 (6')	Total/NA	Solid	8021B	33358
890-2784-16	BH-175 (4.5')	Total/NA	Solid	8021B	33358
890-2784-17	BH-176 (4.5')	Total/NA	Solid	8021B	33358
890-2784-18	BH-177 (4.5')	Total/NA	Solid	8021B	33358
890-2784-19	BH-178 (4.5')	Total/NA	Solid	8021B	33358
890-2784-20	BH-179 (4.5')	Total/NA	Solid	8021B	33358

Eurofins Carlsbad

2

5

4

8

10

12

Ш,

Released to Imaging: 9/1/2023 2:28:53 PM

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

## GC VOA (Continued)

#### **Analysis Batch: 33411 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-33358/5-A	Method Blank	Total/NA	Solid	8021B	33358
MB 880-33411/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-33358/1-A	Lab Control Sample	Total/NA	Solid	8021B	33358
LCSD 880-33358/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33358
890-2784-1 MS	BH-120 (8')	Total/NA	Solid	8021B	33358
890-2784-1 MSD	BH-120 (8')	Total/NA	Solid	8021B	33358

#### Analysis Batch: 33465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
390-2784-21	BH-180 (4.5')	Total/NA	Solid	8021B	3336
390-2784-22	BH-181 (4.5')	Total/NA	Solid	8021B	3336
390-2784-23	BH-182 (4.5')	Total/NA	Solid	8021B	3336
390-2784-24	BH-183 (4.5')	Total/NA	Solid	8021B	3336
890-2784-25	BH-184 (4.5')	Total/NA	Solid	8021B	3336
890-2784-26	BH-185 (4.5')	Total/NA	Solid	8021B	3336
890-2784-27	BH-186 (4.5')	Total/NA	Solid	8021B	3336
890-2784-28	BH-187 (4.5')	Total/NA	Solid	8021B	3336
890-2784-29	BH-188 (4.5')	Total/NA	Solid	8021B	3336
890-2784-30	BH-189 (4.5')	Total/NA	Solid	8021B	3336
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8021B	3336
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8021B	3336
890-2784-33	SW-43 (6-8')	Total/NA	Solid	8021B	3336
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	8021B	3336
890-2784-35	SW-45 (0-8')	Total/NA	Solid	8021B	3336
890-2784-36	SW-46 (0-5')	Total/NA	Solid	8021B	3336
890-2784-37	SW-47 (0-5')	Total/NA	Solid	8021B	3336
890-2784-38	SW-48 (6-8')	Total/NA	Solid	8021B	3336
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8021B	3336
890-2784-40	SW-53 (0-8')	Total/NA	Solid	8021B	3336
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	8021B	3336
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	8021B	3336
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	8021B	3336
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8021B	3336
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8021B	3336
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8021B	3336
890-2784-47	SW-60 (0-13')	Total/NA	Solid	8021B	3336
890-2784-48	SW-61 (8-13')	Total/NA	Solid	8021B	3336
890-2784-49	SW-62 (8-13')	Total/NA	Solid	8021B	3336
890-2784-50	SW-63 (8-13')	Total/NA	Solid	8021B	3336
890-2784-51	SW-64 (8-10')	Total/NA	Solid	8021B	3336
890-2784-52	SW-65 (8-10')	Total/NA	Solid	8021B	3336
890-2784-53	SW-66 (8-10')	Total/NA	Solid	8021B	3336
890-2784-54	SW-67 (8-10')	Total/NA	Solid	8021B	3336
890-2784-55	SW-68 (0-6')	Total/NA	Solid	8021B	3336
890-2784-56	SW-69 (0-6')	Total/NA	Solid	8021B	3336
390-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8021B	3336
390-2784-58	SW-71 (0-4.5')	Total/NA	Solid	8021B	3336
MB 880-33361/5-A	Method Blank	Total/NA	Solid	8021B	3336
MB 880-33362/5-A	Method Blank	Total/NA	Solid	8021B	3336
LCS 880-33361/1-A	Lab Control Sample	Total/NA	Solid	8021B	3336
LCS 880-33362/1-A	Lab Control Sample	Total/NA	Solid	8021B	3336

Eurofins Carlsbad

2

5

8

10

14

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **GC VOA (Continued)**

#### **Analysis Batch: 33465 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-33361/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33361
LCSD 880-33362/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33362
890-2784-21 MS	BH-180 (4.5')	Total/NA	Solid	8021B	33361
890-2784-21 MSD	BH-180 (4.5')	Total/NA	Solid	8021B	33361
890-2784-41 MS	SW-54 (0-4.5')	Total/NA	Solid	8021B	33362
890-2784-41 MSD	SW-54 (0-4.5')	Total/NA	Solid	8021B	33362

#### Analysis Batch: 33551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
390-2784-1	BH-120 (8')	Total/NA	Solid	Total BTEX	
390-2784-2	BH-124 (8')	Total/NA	Solid	Total BTEX	
890-2784-3	BH-132 (8')	Total/NA	Solid	Total BTEX	
390-2784-4	BH-159 (8')	Total/NA	Solid	Total BTEX	
890-2784-5	BH-162 (8')	Total/NA	Solid	Total BTEX	
890-2784-6	BH-164 (8')	Total/NA	Solid	Total BTEX	
890-2784-7	BH-166 (8')	Total/NA	Solid	Total BTEX	
890-2784-8	BH-167 (8')	Total/NA	Solid	Total BTEX	
890-2784-9	BH-168 (5')	Total/NA	Solid	Total BTEX	
890-2784-10	BH-169 (5')	Total/NA	Solid	Total BTEX	
890-2784-11	BH-170 (5')	Total/NA	Solid	Total BTEX	
890-2784-12	BH-171 (5')	Total/NA	Solid	Total BTEX	
890-2784-13	BH-172 (6')	Total/NA	Solid	Total BTEX	
890-2784-14	BH-173 (6')	Total/NA	Solid	Total BTEX	
890-2784-15	BH-174 (6')	Total/NA	Solid	Total BTEX	
890-2784-16	BH-175 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-17	BH-176 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-18	BH-177 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-19	BH-178 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-20	BH-179 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-21	BH-180 (4.5')	Total/NA	Solid	Total BTEX	
390-2784-22	BH-181 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-23	BH-182 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-24	BH-183 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-25	BH-184 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-26	BH-185 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-27	BH-186 (4.5')	Total/NA	Solid	Total BTEX	
390-2784-28	BH-187 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-29	BH-188 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-30	BH-189 (4.5')	Total/NA	Solid	Total BTEX	
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	Total BTEX	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	Total BTEX	
890-2784-33	SW-43 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	Total BTEX	
890-2784-35	SW-45 (0-8')	Total/NA	Solid	Total BTEX	
890-2784-36	SW-46 (0-5')	Total/NA	Solid	Total BTEX	
890-2784-37	SW-47 (0-5')	Total/NA	Solid	Total BTEX	
890-2784-38	SW-48 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	Total BTEX	
890-2784-40	SW-53 (0-8')	Total/NA	Solid	Total BTEX	
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	Total BTEX	
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	Total BTEX	

**Eurofins Carlsbad** 

9

3

5

b

8

1 በ

4.0

13

14

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### **GC VOA (Continued)**

### **Analysis Batch: 33551 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	Total BTEX	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-47	SW-60 (0-13')	Total/NA	Solid	Total BTEX	
890-2784-48	SW-61 (8-13')	Total/NA	Solid	Total BTEX	
890-2784-49	SW-62 (8-13')	Total/NA	Solid	Total BTEX	
890-2784-50	SW-63 (8-13')	Total/NA	Solid	Total BTEX	
890-2784-51	SW-64 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-52	SW-65 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-53	SW-66 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-54	SW-67 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-55	SW-68 (0-6')	Total/NA	Solid	Total BTEX	
890-2784-56	SW-69 (0-6')	Total/NA	Solid	Total BTEX	
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	Total BTEX	
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

#### Analysis Batch: 32586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Total/NA	Solid	8015B NM	32669
890-2784-2	BH-124 (8')	Total/NA	Solid	8015B NM	32669
890-2784-3	BH-132 (8')	Total/NA	Solid	8015B NM	32669
890-2784-4	BH-159 (8')	Total/NA	Solid	8015B NM	32669
890-2784-5	BH-162 (8')	Total/NA	Solid	8015B NM	32669
890-2784-6	BH-164 (8')	Total/NA	Solid	8015B NM	32669
890-2784-7	BH-166 (8')	Total/NA	Solid	8015B NM	32669
890-2784-8	BH-167 (8')	Total/NA	Solid	8015B NM	32669
890-2784-9	BH-168 (5')	Total/NA	Solid	8015B NM	32669
890-2784-10	BH-169 (5')	Total/NA	Solid	8015B NM	32669
890-2784-11	BH-170 (5')	Total/NA	Solid	8015B NM	32669
890-2784-12	BH-171 (5')	Total/NA	Solid	8015B NM	32669
890-2784-13	BH-172 (6')	Total/NA	Solid	8015B NM	32669
890-2784-14	BH-173 (6')	Total/NA	Solid	8015B NM	32669
890-2784-15	BH-174 (6')	Total/NA	Solid	8015B NM	32669
890-2784-16	BH-175 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-17	BH-176 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-18	BH-177 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-19	BH-178 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-20	BH-179 (4.5')	Total/NA	Solid	8015B NM	32669
MB 880-32669/1-A	Method Blank	Total/NA	Solid	8015B NM	32669
LCS 880-32669/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32669
LCSD 880-32669/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32669
890-2784-1 MS	BH-120 (8')	Total/NA	Solid	8015B NM	32669
890-2784-1 MSD	BH-120 (8')	Total/NA	Solid	8015B NM	32669

#### Prep Batch: 32669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Total/NA	Solid	8015NM Prep	
890-2784-2	BH-124 (8')	Total/NA	Solid	8015NM Prep	

**Eurofins Carlsbad** 

Page 76 of 113

3

4

6

8

10

46

13

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### GC Semi VOA (Continued)

### Prep Batch: 32669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2784-3	BH-132 (8')	Total/NA	Solid	8015NM Prep	
890-2784-4	BH-159 (8')	Total/NA	Solid	8015NM Prep	
890-2784-5	BH-162 (8')	Total/NA	Solid	8015NM Prep	
890-2784-6	BH-164 (8')	Total/NA	Solid	8015NM Prep	
890-2784-7	BH-166 (8')	Total/NA	Solid	8015NM Prep	
890-2784-8	BH-167 (8')	Total/NA	Solid	8015NM Prep	
890-2784-9	BH-168 (5')	Total/NA	Solid	8015NM Prep	
890-2784-10	BH-169 (5')	Total/NA	Solid	8015NM Prep	
890-2784-11	BH-170 (5')	Total/NA	Solid	8015NM Prep	
890-2784-12	BH-171 (5')	Total/NA	Solid	8015NM Prep	
890-2784-13	BH-172 (6')	Total/NA	Solid	8015NM Prep	
890-2784-14	BH-173 (6')	Total/NA	Solid	8015NM Prep	
890-2784-15	BH-174 (6')	Total/NA	Solid	8015NM Prep	
890-2784-16	BH-175 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-17	BH-176 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-18	BH-177 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-19	BH-178 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-20	BH-179 (4.5')	Total/NA	Solid	8015NM Prep	
MB 880-32669/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32669/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32669/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2784-1 MS	BH-120 (8')	Total/NA	Solid	8015NM Prep	
890-2784-1 MSD	BH-120 (8')	Total/NA	Solid	8015NM Prep	

#### Prep Batch: 32713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-48	SW-61 (8-13')	Total/NA	Solid	8015NM Prep	
890-2784-49	SW-62 (8-13')	Total/NA	Solid	8015NM Prep	
890-2784-50	SW-63 (8-13')	Total/NA	Solid	8015NM Prep	
890-2784-51	SW-64 (8-10')	Total/NA	Solid	8015NM Prep	
890-2784-52	SW-65 (8-10')	Total/NA	Solid	8015NM Prep	
890-2784-53	SW-66 (8-10')	Total/NA	Solid	8015NM Prep	
890-2784-54	SW-67 (8-10')	Total/NA	Solid	8015NM Prep	
890-2784-55	SW-68 (0-6')	Total/NA	Solid	8015NM Prep	
890-2784-56	SW-69 (0-6')	Total/NA	Solid	8015NM Prep	
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-32713/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32713/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32713/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2786-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2786-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Prep Batch: 32714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-21	BH-180 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-22	BH-181 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-23	BH-182 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-24	BH-183 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-25	BH-184 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-26	BH-185 (4.5')	Total/NA	Solid	8015NM Prep	

**Eurofins Carlsbad** 

2

0

5

0

9

11

13

14

Т

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

#### **GC Semi VOA (Continued)**

### Prep Batch: 32714 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-27	BH-186 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-28	BH-187 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-29	BH-188 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-30	BH-189 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8015NM Prep	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8015NM Prep	
890-2784-33	SW-43 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	8015NM Prep	
890-2784-35	SW-45 (0-8')	Total/NA	Solid	8015NM Prep	
890-2784-36	SW-46 (0-5')	Total/NA	Solid	8015NM Prep	
890-2784-37	SW-47 (0-5')	Total/NA	Solid	8015NM Prep	
890-2784-38	SW-48 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8015NM Prep	
890-2784-40	SW-53 (0-8')	Total/NA	Solid	8015NM Prep	
MB 880-32714/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32714/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32714/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2784-21 MS	BH-180 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-21 MSD	BH-180 (4.5')	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 32730**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-48	SW-61 (8-13')	Total/NA	Solid	8015B NM	32713
890-2784-49	SW-62 (8-13')	Total/NA	Solid	8015B NM	32713
890-2784-50	SW-63 (8-13')	Total/NA	Solid	8015B NM	32713
890-2784-51	SW-64 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-52	SW-65 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-53	SW-66 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-54	SW-67 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-55	SW-68 (0-6')	Total/NA	Solid	8015B NM	32713
890-2784-56	SW-69 (0-6')	Total/NA	Solid	8015B NM	32713
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8015B NM	32713
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	8015B NM	32713
MB 880-32713/1-A	Method Blank	Total/NA	Solid	8015B NM	32713
LCS 880-32713/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32713
LCSD 880-32713/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32713
890-2786-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	32713
890-2786-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	32713

#### Prep Batch: 32774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	8015NM Prep	
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-47	SW-60 (0-13')	Total/NA	Solid	8015NM Prep	
MB 880-32774/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32774/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32774/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Eurofins Carlsbad** 

2

3

4

7

10

12

15

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### GC Semi VOA (Continued)

#### Prep Batch: 32774 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18428-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-18428-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bato
890-2784-1	BH-120 (8')	Total/NA	Solid	8015 NM	
890-2784-2	BH-124 (8')	Total/NA	Solid	8015 NM	
890-2784-3	BH-132 (8')	Total/NA	Solid	8015 NM	
890-2784-4	BH-159 (8')	Total/NA	Solid	8015 NM	
890-2784-5	BH-162 (8')	Total/NA	Solid	8015 NM	
890-2784-6	BH-164 (8')	Total/NA	Solid	8015 NM	
890-2784-7	BH-166 (8')	Total/NA	Solid	8015 NM	
890-2784-8	BH-167 (8')	Total/NA	Solid	8015 NM	
890-2784-9	BH-168 (5')	Total/NA	Solid	8015 NM	
890-2784-10	BH-169 (5')	Total/NA	Solid	8015 NM	
390-2784-11	BH-170 (5')	Total/NA	Solid	8015 NM	
890-2784-12	BH-171 (5')	Total/NA	Solid	8015 NM	
890-2784-13	BH-172 (6')	Total/NA	Solid	8015 NM	
890-2784-14	BH-173 (6')	Total/NA	Solid	8015 NM	
890-2784-15	BH-174 (6')	Total/NA	Solid	8015 NM	
890-2784-16	BH-175 (4.5')	Total/NA	Solid	8015 NM	
890-2784-17	BH-176 (4.5')	Total/NA	Solid	8015 NM	
890-2784-18	BH-177 (4.5')	Total/NA	Solid	8015 NM	
890-2784-19	BH-178 (4.5')	Total/NA	Solid	8015 NM	
890-2784-20	BH-179 (4.5')	Total/NA	Solid	8015 NM	
390-2784-21	BH-180 (4.5')	Total/NA	Solid	8015 NM	
390-2784-22	BH-181 (4.5')	Total/NA	Solid	8015 NM	
890-2784-23	BH-182 (4.5')	Total/NA	Solid	8015 NM	
890-2784-24	BH-183 (4.5')	Total/NA	Solid	8015 NM	
890-2784-25	BH-184 (4.5')	Total/NA	Solid	8015 NM	
390-2784-26	BH-185 (4.5')	Total/NA	Solid	8015 NM	
890-2784-27	BH-186 (4.5')	Total/NA	Solid	8015 NM	
890-2784-28	BH-187 (4.5')	Total/NA	Solid	8015 NM	
890-2784-29	BH-188 (4.5')	Total/NA	Solid	8015 NM	
390-2784-30	BH-189 (4.5')	Total/NA	Solid	8015 NM	
390-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8015 NM	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8015 NM	
390-2784-33	SW-43 (6-8')	Total/NA	Solid	8015 NM	
390-2784-34	SW-44 (4.5-8')	Total/NA	Solid	8015 NM	
890-2784-35	SW-45 (0-8')	Total/NA	Solid	8015 NM	
890-2784-36	SW-46 (0-5')	Total/NA	Solid	8015 NM	
890-2784-37	SW-47 (0-5')	Total/NA	Solid	8015 NM	
890-2784-38	SW-48 (6-8')	Total/NA	Solid	8015 NM	
390-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8015 NM	
390-2784-40	SW-53 (0-8')	Total/NA	Solid	8015 NM	
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	8015 NM	
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	8015 NM	
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	8015 NM	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8015 NM	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8015 NM	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8015 NM	

**Eurofins Carlsbad** 

2

3

4

6

8

10

12

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### GC Semi VOA (Continued)

#### Analysis Batch: 32780 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-47	SW-60 (0-13')	Total/NA	Solid	8015 NM	
890-2784-48	SW-61 (8-13')	Total/NA	Solid	8015 NM	
890-2784-49	SW-62 (8-13')	Total/NA	Solid	8015 NM	
890-2784-50	SW-63 (8-13')	Total/NA	Solid	8015 NM	
890-2784-51	SW-64 (8-10')	Total/NA	Solid	8015 NM	
890-2784-52	SW-65 (8-10')	Total/NA	Solid	8015 NM	
890-2784-53	SW-66 (8-10')	Total/NA	Solid	8015 NM	
890-2784-54	SW-67 (8-10')	Total/NA	Solid	8015 NM	
890-2784-55	SW-68 (0-6')	Total/NA	Solid	8015 NM	
890-2784-56	SW-69 (0-6')	Total/NA	Solid	8015 NM	
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8015 NM	
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	8015 NM	

#### Analysis Batch: 32806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-21	BH-180 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-22	BH-181 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-23	BH-182 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-24	BH-183 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-25	BH-184 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-26	BH-185 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-27	BH-186 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-28	BH-187 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-29	BH-188 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-30	BH-189 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8015B NM	32714
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8015B NM	32714
890-2784-33	SW-43 (6-8')	Total/NA	Solid	8015B NM	32714
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	8015B NM	32714
890-2784-35	SW-45 (0-8')	Total/NA	Solid	8015B NM	32714
890-2784-36	SW-46 (0-5')	Total/NA	Solid	8015B NM	32714
890-2784-37	SW-47 (0-5')	Total/NA	Solid	8015B NM	32714
890-2784-38	SW-48 (6-8')	Total/NA	Solid	8015B NM	32714
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8015B NM	32714
890-2784-40	SW-53 (0-8')	Total/NA	Solid	8015B NM	32714
MB 880-32714/1-A	Method Blank	Total/NA	Solid	8015B NM	32714
LCS 880-32714/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32714
LCSD 880-32714/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32714
890-2784-21 MS	BH-180 (4.5')	Total/NA	Solid	8015B NM	32714
890-2784-21 MSD	BH-180 (4.5')	Total/NA	Solid	8015B NM	32714

#### **Analysis Batch: 32808**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	8015B NM	32774
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	8015B NM	32774
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	8015B NM	32774
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8015B NM	32774
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8015B NM	32774
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8015B NM	32774
890-2784-47	SW-60 (0-13')	Total/NA	Solid	8015B NM	32774
MB 880-32774/1-A	Method Blank	Total/NA	Solid	8015B NM	32774

**Eurofins Carlsbad** 

2

3

4

6

8

9

10

2

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

### GC Semi VOA (Continued)

### **Analysis Batch: 32808 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-32774/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32774
LCSD 880-32774/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32774
880-18428-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	32774
880-18428-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	32774

#### **HPLC/IC**

#### Leach Batch: 32582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Soluble	Solid	DI Leach	
890-2784-2	BH-124 (8')	Soluble	Solid	DI Leach	
890-2784-3	BH-132 (8')	Soluble	Solid	DI Leach	
890-2784-4	BH-159 (8')	Soluble	Solid	DI Leach	
890-2784-5	BH-162 (8')	Soluble	Solid	DI Leach	
890-2784-6	BH-164 (8')	Soluble	Solid	DI Leach	
890-2784-7	BH-166 (8')	Soluble	Solid	DI Leach	
890-2784-8	BH-167 (8')	Soluble	Solid	DI Leach	
890-2784-9	BH-168 (5')	Soluble	Solid	DI Leach	
890-2784-10	BH-169 (5')	Soluble	Solid	DI Leach	
890-2784-11	BH-170 (5')	Soluble	Solid	DI Leach	
890-2784-12	BH-171 (5')	Soluble	Solid	DI Leach	
890-2784-13	BH-172 (6')	Soluble	Solid	DI Leach	
MB 880-32582/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32582/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32582/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-4 MS	BH-159 (8')	Soluble	Solid	DI Leach	
890-2784-4 MSD	BH-159 (8')	Soluble	Solid	DI Leach	

#### Leach Batch: 32583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2784-14	BH-173 (6')	Soluble	Solid	DI Leach	_
890-2784-15	BH-174 (6')	Soluble	Solid	DI Leach	
890-2784-16	BH-175 (4.5')	Soluble	Solid	DI Leach	
390-2784-17	BH-176 (4.5')	Soluble	Solid	DI Leach	
390-2784-18	BH-177 (4.5')	Soluble	Solid	DI Leach	
890-2784-19	BH-178 (4.5')	Soluble	Solid	DI Leach	
390-2784-20	BH-179 (4.5')	Soluble	Solid	DI Leach	
390-2784-21	BH-180 (4.5')	Soluble	Solid	DI Leach	
390-2784-22	BH-181 (4.5')	Soluble	Solid	DI Leach	
390-2784-23	BH-182 (4.5')	Soluble	Solid	DI Leach	
390-2784-24	BH-183 (4.5')	Soluble	Solid	DI Leach	
90-2784-25	BH-184 (4.5')	Soluble	Solid	DI Leach	
90-2784-26	BH-185 (4.5')	Soluble	Solid	DI Leach	
90-2784-27	BH-186 (4.5')	Soluble	Solid	DI Leach	
90-2784-28	BH-187 (4.5')	Soluble	Solid	DI Leach	
390-2784-29	BH-188 (4.5')	Soluble	Solid	DI Leach	
90-2784-30	BH-189 (4.5')	Soluble	Solid	DI Leach	
390-2784-31	SW-38 (4.5-13')	Soluble	Solid	DI Leach	
90-2784-32	SW-42 (4.5-8')	Soluble	Solid	DI Leach	
90-2784-33	SW-43 (6-8')	Soluble	Solid	DI Leach	
MB 880-32583/1-A	Method Blank	Soluble	Solid	DI Leach	

**Eurofins Carlsbad** 

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

### **HPLC/IC** (Continued)

#### Leach Batch: 32583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-32583/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32583/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-14 MS	BH-173 (6')	Soluble	Solid	DI Leach	
890-2784-14 MSD	BH-173 (6')	Soluble	Solid	DI Leach	
890-2784-24 MS	BH-183 (4.5')	Soluble	Solid	DI Leach	
890-2784-24 MSD	BH-183 (4.5')	Soluble	Solid	DI Leach	

#### Leach Batch: 32584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-34	SW-44 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-35	SW-45 (0-8')	Soluble	Solid	DI Leach	
890-2784-36	SW-46 (0-5')	Soluble	Solid	DI Leach	
890-2784-37	SW-47 (0-5')	Soluble	Solid	DI Leach	
890-2784-38	SW-48 (6-8')	Soluble	Solid	DI Leach	
890-2784-39	SW-49 (4.5-6')	Soluble	Solid	DI Leach	
890-2784-40	SW-53 (0-8')	Soluble	Solid	DI Leach	
890-2784-41	SW-54 (0-4.5')	Soluble	Solid	DI Leach	
890-2784-42	SW-55 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-43	SW-56 (0-4.5')	Soluble	Solid	DI Leach	
890-2784-44	SW-57 (6-8')	Soluble	Solid	DI Leach	
890-2784-45	SW-58 (6-8')	Soluble	Solid	DI Leach	
890-2784-46	SW-59 (6-8')	Soluble	Solid	DI Leach	
890-2784-47	SW-60 (0-13')	Soluble	Solid	DI Leach	
890-2784-48	SW-61 (8-13')	Soluble	Solid	DI Leach	
890-2784-49	SW-62 (8-13')	Soluble	Solid	DI Leach	
890-2784-50	SW-63 (8-13')	Soluble	Solid	DI Leach	
890-2784-51	SW-64 (8-10')	Soluble	Solid	DI Leach	
890-2784-52	SW-65 (8-10')	Soluble	Solid	DI Leach	
890-2784-53	SW-66 (8-10')	Soluble	Solid	DI Leach	
MB 880-32584/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32584/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32584/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-34 MS	SW-44 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-34 MSD	SW-44 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-44 MS	SW-57 (6-8')	Soluble	Solid	DI Leach	
890-2784-44 MSD	SW-57 (6-8')	Soluble	Solid	DI Leach	

#### Leach Batch: 32585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-54	SW-67 (8-10')	Soluble	Solid	DI Leach	_
890-2784-55	SW-68 (0-6')	Soluble	Solid	DI Leach	
890-2784-56	SW-69 (0-6')	Soluble	Solid	DI Leach	
890-2784-57	SW-70 (0-4.5')	Soluble	Solid	DI Leach	
890-2784-58	SW-71 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-32585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-54 MS	SW-67 (8-10')	Soluble	Solid	DI Leach	
890-2784-54 MSD	SW-67 (8-10')	Soluble	Solid	DI Leach	

**Eurofins Carlsbad** 

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

### HPLC/IC

#### Analysis Batch: 33167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Soluble	Solid	300.0	32582
890-2784-2	BH-124 (8')	Soluble	Solid	300.0	32582
890-2784-3	BH-132 (8')	Soluble	Solid	300.0	32582
890-2784-4	BH-159 (8')	Soluble	Solid	300.0	32582
890-2784-5	BH-162 (8')	Soluble	Solid	300.0	32582
890-2784-6	BH-164 (8')	Soluble	Solid	300.0	32582
890-2784-7	BH-166 (8')	Soluble	Solid	300.0	32582
890-2784-8	BH-167 (8')	Soluble	Solid	300.0	32582
890-2784-9	BH-168 (5')	Soluble	Solid	300.0	32582
890-2784-10	BH-169 (5')	Soluble	Solid	300.0	32582
890-2784-11	BH-170 (5')	Soluble	Solid	300.0	32582
890-2784-12	BH-171 (5')	Soluble	Solid	300.0	32582
890-2784-13	BH-172 (6')	Soluble	Solid	300.0	32582
MB 880-32582/1-A	Method Blank	Soluble	Solid	300.0	32582
LCS 880-32582/2-A	Lab Control Sample	Soluble	Solid	300.0	32582
LCSD 880-32582/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32582
890-2784-4 MS	BH-159 (8')	Soluble	Solid	300.0	32582
890-2784-4 MSD	BH-159 (8')	Soluble	Solid	300.0	32582

#### **Analysis Batch: 33168**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-14	BH-173 (6')	Soluble	Solid	300.0	32583
890-2784-15	BH-174 (6')	Soluble	Solid	300.0	32583
890-2784-16	BH-175 (4.5')	Soluble	Solid	300.0	32583
890-2784-17	BH-176 (4.5')	Soluble	Solid	300.0	32583
890-2784-18	BH-177 (4.5')	Soluble	Solid	300.0	32583
890-2784-19	BH-178 (4.5')	Soluble	Solid	300.0	32583
890-2784-20	BH-179 (4.5')	Soluble	Solid	300.0	32583
890-2784-21	BH-180 (4.5')	Soluble	Solid	300.0	32583
890-2784-22	BH-181 (4.5')	Soluble	Solid	300.0	32583
890-2784-23	BH-182 (4.5')	Soluble	Solid	300.0	32583
890-2784-24	BH-183 (4.5')	Soluble	Solid	300.0	32583
390-2784-25	BH-184 (4.5')	Soluble	Solid	300.0	32583
890-2784-26	BH-185 (4.5')	Soluble	Solid	300.0	32583
390-2784-27	BH-186 (4.5')	Soluble	Solid	300.0	32583
390-2784-28	BH-187 (4.5')	Soluble	Solid	300.0	32583
890-2784-29	BH-188 (4.5')	Soluble	Solid	300.0	32583
890-2784-30	BH-189 (4.5')	Soluble	Solid	300.0	32583
890-2784-31	SW-38 (4.5-13')	Soluble	Solid	300.0	32583
890-2784-32	SW-42 (4.5-8')	Soluble	Solid	300.0	32583
890-2784-33	SW-43 (6-8')	Soluble	Solid	300.0	32583
MB 880-32583/1-A	Method Blank	Soluble	Solid	300.0	32583
LCS 880-32583/2-A	Lab Control Sample	Soluble	Solid	300.0	32583
LCSD 880-32583/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32583
890-2784-14 MS	BH-173 (6')	Soluble	Solid	300.0	32583
890-2784-14 MSD	BH-173 (6')	Soluble	Solid	300.0	32583
890-2784-24 MS	BH-183 (4.5')	Soluble	Solid	300.0	32583
890-2784-24 MSD	BH-183 (4.5')	Soluble	Solid	300.0	32583

**Eurofins Carlsbad** 

2

3

1

6

8

9

11

12

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

#### HPLC/IC

#### Analysis Batch: 33169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-34	SW-44 (4.5-8')	Soluble	Solid	300.0	32584
890-2784-35	SW-45 (0-8')	Soluble	Solid	300.0	32584
890-2784-36	SW-46 (0-5')	Soluble	Solid	300.0	32584
890-2784-37	SW-47 (0-5')	Soluble	Solid	300.0	32584
890-2784-38	SW-48 (6-8')	Soluble	Solid	300.0	32584
890-2784-39	SW-49 (4.5-6')	Soluble	Solid	300.0	32584
890-2784-40	SW-53 (0-8')	Soluble	Solid	300.0	32584
890-2784-41	SW-54 (0-4.5')	Soluble	Solid	300.0	32584
890-2784-42	SW-55 (4.5-8')	Soluble	Solid	300.0	32584
890-2784-43	SW-56 (0-4.5')	Soluble	Solid	300.0	32584
890-2784-44	SW-57 (6-8')	Soluble	Solid	300.0	32584
890-2784-45	SW-58 (6-8')	Soluble	Solid	300.0	32584
890-2784-46	SW-59 (6-8')	Soluble	Solid	300.0	32584
890-2784-47	SW-60 (0-13')	Soluble	Solid	300.0	32584
890-2784-48	SW-61 (8-13')	Soluble	Solid	300.0	32584
890-2784-49	SW-62 (8-13')	Soluble	Solid	300.0	32584
890-2784-50	SW-63 (8-13')	Soluble	Solid	300.0	32584
890-2784-51	SW-64 (8-10')	Soluble	Solid	300.0	32584
890-2784-52	SW-65 (8-10')	Soluble	Solid	300.0	32584
890-2784-53	SW-66 (8-10')	Soluble	Solid	300.0	32584
MB 880-32584/1-A	Method Blank	Soluble	Solid	300.0	32584
LCS 880-32584/2-A	Lab Control Sample	Soluble	Solid	300.0	32584
LCSD 880-32584/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32584
890-2784-34 MS	SW-44 (4.5-8')	Soluble	Solid	300.0	32584
890-2784-34 MSD	SW-44 (4.5-8')	Soluble	Solid	300.0	32584
890-2784-44 MS	SW-57 (6-8')	Soluble	Solid	300.0	32584
890-2784-44 MSD	SW-57 (6-8')	Soluble	Solid	300.0	32584

#### Analysis Batch: 33170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-54	SW-67 (8-10')	Soluble	Solid	300.0	32585
890-2784-55	SW-68 (0-6')	Soluble	Solid	300.0	32585
890-2784-56	SW-69 (0-6')	Soluble	Solid	300.0	32585
890-2784-57	SW-70 (0-4.5')	Soluble	Solid	300.0	32585
890-2784-58	SW-71 (0-4.5')	Soluble	Solid	300.0	32585
MB 880-32585/1-A	Method Blank	Soluble	Solid	300.0	32585
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	300.0	32585
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32585
890-2784-54 MS	SW-67 (8-10')	Soluble	Solid	300.0	32585
890-2784-54 MSD	SW-67 (8-10')	Soluble	Solid	300.0	32585

**Eurofins Carlsbad** 

\_\_\_\_\_

3

\_\_\_

7

10

12

13

Client Sample ID: BH-120 (8')

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-1 Date Collected: 08/18/22 00:00 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 00:00	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/22/22 22:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33167	08/29/22 04:12	CH	EET MID

Client Sample ID: BH-124 (8') Lab Sample ID: 890-2784-2

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 00:20	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/22/22 23:41	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 04:20	CH	EET MID

Client Sample ID: BH-132 (8') Lab Sample ID: 890-2784-3 Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 00:41	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 00:03	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 04:28	CH	EET MID

Client Sample ID: BH-159 (8') Lab Sample ID: 890-2784-4

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 01:01	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

**Eurofins Carlsbad** 

Page 85 of 113

**Matrix: Solid** 

Client Sample ID: BH-159 (8')

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-4 Date Collected: 08/18/22 00:00

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 00:24	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33167	08/29/22 04:35	CH	EET MID

Client Sample ID: BH-162 (8') Lab Sample ID: 890-2784-5

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 01:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 00:45	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 04:59	CH	EET MID

Client Sample ID: BH-164 (8') Lab Sample ID: 890-2784-6 Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 01:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 01:06	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33167	08/29/22 11:32	CH	EET MID

Client Sample ID: BH-166 (8') Lab Sample ID: 890-2784-7

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 02:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	32669 32586	08/22/22 13:43 08/23/22 01:27	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

Client Sample ID: BH-166 (8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 05:30	CH	EET MID

Client Sample ID: BH-167 (8') Lab Sample ID: 890-2784-8

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 02:23	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 01:49	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 05:38	CH	EET MID

Lab Sample ID: 890-2784-9 Client Sample ID: BH-168 (5')

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 02:43	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 02:10	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 05:46	CH	EET MID

Client Sample ID: BH-169 (5') Lab Sample ID: 890-2784-10

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 03:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 02:31	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 05:54	CH	EET MID

**Eurofins Carlsbad** 

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-11

Client Sample ID: BH-170 (5') Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 04:25	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 03:14	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 06:02	CH	EET MID

Lab Sample ID: 890-2784-12

Date Collected: 08/18/22 00:00

Client Sample ID: BH-171 (5')

Date Received: 08/19/22 08:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 04:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 03:35	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 06:10	CH	EET MID

Client Sample ID: BH-172 (6') Lab Sample ID: 890-2784-13

Date Collected: 08/18/22 00:00 **Matrix: Solid** Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 05:06	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 03:56	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32582	08/21/22 19:23	SMC	EET MIC
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 06:17	CH	EET MID

Client Sample ID: BH-173 (6') Lab Sample ID: 890-2784-14 Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 05:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-2784-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-173 (6')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-14

Matrix: Solid

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 04:17	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 07:20	CH	EET MID

Lab Sample ID: 890-2784-15 Client Sample ID: BH-174 (6') Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.09 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 05:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 04:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 07:44	CH	EET MID

Client Sample ID: BH-175 (4.5') Lab Sample ID: 890-2784-16

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 06:07	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 04:59	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 07:52	CH	EET MID

Lab Sample ID: 890-2784-17 Client Sample ID: BH-176 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 06:28	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.00 g	10 mL	32669 32586	08/22/22 13:43 08/23/22 05:21	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

300.0

Analysis

Lab Sample ID: 890-2784-17

Client Sample ID: BH-176 (4.5')

Date Collected: 08/18/22 00:00

Lab Sample ID

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 08:00	CH	EET MID

Client Sample ID: BH-177 (4.5')

Lab Sample ID: 890-2784-18

Matrix: Solid

**EET MID** 

Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Date Received: 08/19/22 08:00

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 5035 4.96 g 33358 08/30/22 12:01 EL EET MID Prep 5 mL Total/NA 8021B 5 mL 5 mL 09/01/22 06:48 MR Analysis 1 33411 **EET MID** Total/NA Total BTEX 33551 09/01/22 12:44 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 32780 08/23/22 11:36 SM **EET MID** 32669 08/22/22 13:43 EET MID Total/NA Prep 8015NM Prep 10.03 g 10 mL DM 8015B NM 32586 08/23/22 05:42 **EET MID** Total/NA Analysis 1 SM Soluble DI Leach 5.01 g 50 mL 32583 08/21/22 19:29 SMC **EET MID** Leach

Client Sample ID: BH-178 (4.5')

Lab Sample ID: 890-2784-19

0 mL

33168

0 mL

08/29/22 08:07

СН

5

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 07:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 06:03	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 08:31	CH	EET MID

Client Sample ID: BH-179 (4.5')

Lab Sample ID: 890-2784-20

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 07:29	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 06:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 08:39	CH	EET MID

**Eurofins Carlsbad** 

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-21

Client Sample ID: BH-180 (4.5') Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 18:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 13:21	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33168	08/29/22 08:47	CH	EET MID

**Client Sample ID: BH-181 (4.5')** Lab Sample ID: 890-2784-22

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.04 g 5 mL 33361 08/30/22 12:16 EL EET MID Total/NA 8021B 5 mL 33465 08/31/22 18:25 **EET MID** Analysis 1 5 mL MR Total/NA Total BTEX 33551 09/01/22 12:44 SM Analysis **EET MID** 1 Total/NA Analysis 8015 NM 32780 08/23/22 11:36 SM **EET MID** Total/NA 32714 Prep 8015NM Prep 10.03 g 08/22/22 16:33 DM **EET MID** 10 mL Total/NA Analysis 8015B NM 32806 08/24/22 14:26 SM **EET MID** Soluble 08/21/22 19:29 Leach DI Leach 4.99 g 50 mL 32583 SMC **EET MID** Soluble Analysis 300.0 5 0 mL 0 mL 33168 08/29/22 08:54 СН **EET MID** 

Client Sample ID: BH-182 (4.5')

Lab Sample ID: 890-2784-23 Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 18:46	MR	EET MIC
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MIC
Total/NA	Analysis	8015B NM		1			32806	08/24/22 14:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32583	08/21/22 19:29	SMC	EET MIC
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 09:02	CH	EET MID

Lab Sample ID: 890-2784-24 Client Sample ID: BH-183 (4.5') Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 19:06	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

**Eurofins Carlsbad** 

Page 91 of 113

**Client Sample ID: BH-183 (4.5')** Lab Sample ID: 890-2784-24

Date Collected: 08/18/22 00:00 Matrix: Solid Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 15:17	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 09:10	CH	EET MID

Lab Sample ID: 890-2784-25 **Client Sample ID: BH-184 (4.5')** 

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 19:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 16:17	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 09:34	CH	EET MID

**Client Sample ID: BH-185 (4.5')** Lab Sample ID: 890-2784-26

Date Collected: 08/18/22 00:00 **Matrix: Solid** Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 19:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 16:39	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 09:42	CH	EET MID

Lab Sample ID: 890-2784-27 Client Sample ID: BH-186 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 20:07	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	32714 32806	08/22/22 16:33 08/24/22 18:48	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

Job ID: 890-2784-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-186 (4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-27

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33168	08/29/22 10:05	CH	EET MID

**Client Sample ID: BH-187 (4.5')** Lab Sample ID: 890-2784-28

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 20:28	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 17:01	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 10:13	CH	EET MID

Client Sample ID: BH-188 (4.5') Lab Sample ID: 890-2784-29

Date Collected: 08/18/22 00:00 **Matrix: Solid** Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 20:48	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 17:23	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33168	08/29/22 10:21	CH	EET MID

**Client Sample ID: BH-189 (4.5')** Lab Sample ID: 890-2784-30

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

<del>_</del>	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 22:59	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 17:44	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 10:29	CH	EET MID

**Eurofins Carlsbad** 

**Client Sample ID: SW-38 (4.5-13')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-31

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	33465	08/31/22 21:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 20:15	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 10:36	CH	EET MID

Client Sample ID: SW-42 (4.5-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-32

Matrix: Solid

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.96 g 5 mL 33361 08/30/22 12:16 EL EET MID Total/NA 8021B 5 mL 08/31/22 23:19 **EET MID** Analysis 1 5 mL 33465 MR Total/NA Total BTEX 33551 09/01/22 12:44 SM Analysis **EET MID** 1 Total/NA Analysis 8015 NM 32780 08/23/22 11:36 SM **EET MID** Total/NA 32714 Prep 8015NM Prep 10.03 g 08/22/22 16:33 DM EET MID 10 mL Total/NA Analysis 8015B NM 32806 08/24/22 18:06 SM **EET MID** Soluble Leach DI Leach 5.03 g 50 mL 32583 08/21/22 19:29 SMC **EET MID** Soluble Analysis 300.0 0 mL 0 mL 33168 08/29/22 10:44 СН **EET MID** 

Client Sample ID: SW-43 (6-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-33

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 23:40	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 20:36	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 10:52	CH	EET MID

**Client Sample ID: SW-44 (4.5-8')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 00:00	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

**Eurofins Carlsbad** 

Client Sample ID: SW-44 (4.5-8')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-34

Matrix: Solid

**Matrix: Solid** 

Batch	Batch		Dil	Initial	Final E	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 20:58	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 14:49	CH	EET MID

Client Sample ID: SW-45 (0-8') Lab Sample ID: 890-2784-35

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 00:20	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 19:32	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 15:12	CH	EET MID

Client Sample ID: SW-46 (0-5') Lab Sample ID: 890-2784-36 Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 00:41	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 21:19	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33169	08/29/22 15:20	CH	EET MID

Lab Sample ID: 890-2784-37 Client Sample ID: SW-47 (0-5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 01:01	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	32714 32806	08/22/22 16:33 08/24/22 21:41	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

Client Sample ID: SW-47 (0-5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-37

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 15:28	CH	EET MID

Client Sample ID: SW-48 (6-8')

Lab Sample ID: 890-2784-38

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 01:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 19:53	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 15:36	CH	EET MID

**Client Sample ID: SW-49 (4.5-6')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Sample	ID:	890-2784-39
------------	-----	-------------

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 01:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 19:10	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33169	08/29/22 15:59	CH	EET MID

Client Sample ID: SW-53 (0-8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

08/29/22 15:59	СН	EET MID
Lab Samp	le ID:	890-2784-40 Matrix: Solid
		Watrix. John

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 02:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 22:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33169	08/29/22 16:07	CH	EET MID

**Eurofins Carlsbad** 

2

3

6

8

10

12

14

SDG: Lea County NM

Client Sample ID: SW-54 (0-4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-41

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 05:39	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/24/22 23:07	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 16:15	CH	EET MID

**Client Sample ID: SW-55 (4.5-8')** Lab Sample ID: 890-2784-42

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 5.08 g 5 mL 33362 08/30/22 12:29 EL EET MID Total/NA 8021B 5 mL 33465 09/01/22 06:00 **EET MID** Analysis 1 5 mL MR Total/NA Total BTEX 33551 09/01/22 12:44 SM Analysis 1 **EET MID** Total/NA Analysis 8015 NM 32780 08/23/22 11:36 SM **EET MID** Total/NA 32774 Prep 8015NM Prep 10.01 g 08/23/22 10:46 DM **EET MID** 10 mL Total/NA Analysis 8015B NM 32808 08/24/22 23:29 ΑJ **EET MID** Soluble Leach 08/21/22 19:35 SMC DI Leach 4.97 g 50 mL 32584 EET MID Soluble Analysis 300.0 5 0 mL 0 mL 33169 08/29/22 16:23 СН **EET MID** 

**Client Sample ID: SW-56 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-43

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 06:20	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/24/22 23:51	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 16:31	CH	EET MID

Client Sample ID: SW-57 (6-8')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-44

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 06:40	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

**Eurofins Carlsbad** 

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-44

Matrix: Solid

Date Collected: 08/18/22 00:00
Date Received: 08/19/22 08:00

Client Sample ID: SW-57 (6-8')

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/25/22 00:12	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 16:39	CH	EET MID

Client Sample ID: SW-58 (6-8')

Lab Sample ID: 890-2784-45

Date Collected: 08/18/22 00:00 Matrix: Solid

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	33465	09/01/22 09:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/25/22 00:33	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 17:03	CH	EET MID

Client Sample ID: SW-59 (6-8')

Lab Sample ID: 890-2784-46

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 07:01	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/25/22 00:54	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 17:10	CH	EET MID

Client Sample ID: SW-60 (0-13')

Lab Sample ID: 890-2784-47

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 07:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	32774 32808	08/23/22 10:46 08/25/22 01:16	DM AJ	EET MID EET MID

**Eurofins Carlsbad** 

3

6

8

*J* 

. .

**Matrix: Solid** 

**Matrix: Solid** 

V4 /0000

Client Sample ID: SW-60 (0-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-47

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33169	08/29/22 17:32	CH	EET MID

Client Sample ID: SW-61 (8-13') Lab Sample ID: 890-2784-48

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 07:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 20:43	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		10	0 mL	0 mL	33169	08/29/22 17:39	CH	EET MID

Client Sample ID: SW-62 (8-13') Lab Sample ID: 890-2784-49

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 08:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 22:50	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 17:46	CH	EET MID

Client Sample ID: SW-63 (8-13') Lab Sample ID: 890-2784-50

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 08:22	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 21:04	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 17:54	CH	EET MID

**Eurofins Carlsbad** 

Client Sample ID: SW-64 (8-10')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-51

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 11:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g	10 mL	32713 32730	08/22/22 16:29 08/23/22 23:11	DM AJ	EET MID
	,			ı						
Soluble	Leach	DI Leach			4.98 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 18:01	CH	EET MID

Client Sample ID: SW-65 (8-10')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-52

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 11:52	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 23:32	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 18:08	CH	EET MID

Client Sample ID: SW-66 (8-10')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-53

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 12:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 23:53	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 18:15	CH	EET MID

Client Sample ID: SW-67 (8-10')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Cample ID.	000 2704 54
Lab Sample ID:	090-2/04-54
	Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 12:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

**Eurofins Carlsbad** 

Page 100 of 113

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: SW-67 (8-10') Lab Sample ID: 890-2784-54

Date Collected: 08/18/22 00:00 Matrix: Solid Date Received: 08/19/22 08:00

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
	Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32713	08/22/22 16:29	DM	EET MID
	Total/NA	Analysis	8015B NM		1			32730	08/24/22 00:14	AJ	EET MID
	Soluble	Leach	DI Leach			4.96 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
l	Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 09:12	CH	EET MID

Client Sample ID: SW-68 (0-6') Lab Sample ID: 890-2784-55

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 12:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/24/22 00:36	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33170	08/29/22 09:40	CH	EET MID

Client Sample ID: SW-69 (0-6') Lab Sample ID: 890-2784-56

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 13:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 22:07	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		10	0 mL	0 mL	33170	08/29/22 09:49	CH	EET MID

**Client Sample ID: SW-70 (0-4.5')** Lab Sample ID: 890-2784-57

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	33465	09/01/22 14:35	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.04 g	10 mL	32713 32730	08/22/22 16:29 08/23/22 22:29	DM AJ	EET MID EET MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

**Matrix: Solid** 

9/1/2022

### **Lab Chronicle**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: SW-70 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-57

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 09:58	CH	EET MID

Client Sample ID: SW-71 (0-4.5')

Lab Sample ID: 890-2784-58

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 13:34	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/24/22 00:57	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33170	08/29/22 10:07	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

2

4

6

40

11 12

13

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

#### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	Expiration Date
		ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, but	t the laboratory is not certific	ed by the governing authority. This list ma	av include analytes fo
the agency does not of	• •	it the laboratory is not certific	su by the governing authority. This list his	ay include analytes to
,	• •	Matrix	Analyte	ay include analytes to
the agency does not of	fer certification.	,	, , ,	ay illoude allalytes lo

### **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

022

4

9

<u>11</u>

13

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2784-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2784-1	BH-120 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-2	BH-124 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-3	BH-132 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-4	BH-159 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-5	BH-162 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-6	BH-164 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-7	BH-166 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-8	BH-167 (8')	Solid	08/18/22 00:00	08/19/22 08:00	8
890-2784-9	BH-168 (5')	Solid	08/18/22 00:00	08/19/22 08:00	5
890-2784-10	BH-169 (5')	Solid	08/18/22 00:00	08/19/22 08:00	5
890-2784-11	BH-170 (5')	Solid	08/18/22 00:00	08/19/22 08:00	5
890-2784-12	BH-171 (5')	Solid	08/18/22 00:00	08/19/22 08:00	5
890-2784-13	BH-172 (6')	Solid	08/18/22 00:00	08/19/22 08:00	6
890-2784-14	BH-173 (6')	Solid	08/18/22 00:00	08/19/22 08:00	6
890-2784-15	BH-174 (6')	Solid	08/18/22 00:00	08/19/22 08:00	6
890-2784-16	BH-175 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-17	BH-176 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-18	BH-177 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-19	BH-178 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-20	BH-179 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-21	BH-180 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-22	BH-181 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-23	BH-182 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-24	BH-183 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-25	BH-184 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-26	BH-185 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-27	BH-186 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-28	BH-187 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-29	BH-188 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	4.5
890-2784-30	• •	Solid	08/18/22 00:00	08/19/22 08:00	4.5
	BH-189 (4.5')				
890-2784-31	SW-38 (4.5-13')	Solid	08/18/22 00:00	08/19/22 08:00	4.5 - 13
890-2784-32	SW-42 (4.5-8')	Solid	08/18/22 00:00	08/19/22 08:00	4.5 - 8
890-2784-33	SW-43 (6-8')	Solid	08/18/22 00:00	08/19/22 08:00	6-8
890-2784-34	SW-44 (4.5-8')	Solid	08/18/22 00:00	08/19/22 08:00	4.5 - 8
890-2784-35	SW-45 (0-8')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 8
890-2784-36	SW-46 (0-5')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 5
890-2784-37	SW-47 (0-5')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 5
890-2784-38	SW-48 (6-8')	Solid	08/18/22 00:00	08/19/22 08:00	6 - 8
890-2784-39	SW-49 (4.5-6')	Solid	08/18/22 00:00	08/19/22 08:00	4.5 - 6
890-2784-40	SW-53 (0-8')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 8
890-2784-41	SW-54 (0-4.5')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 4.5
890-2784-42	SW-55 (4.5-8')	Solid	08/18/22 00:00	08/19/22 08:00	4.5 - 8
890-2784-43	SW-56 (0-4.5')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 4.5
890-2784-44	SW-57 (6-8')	Solid	08/18/22 00:00	08/19/22 08:00	6 - 8
890-2784-45	SW-58 (6-8')	Solid	08/18/22 00:00	08/19/22 08:00	6 - 8
890-2784-46	SW-59 (6-8')	Solid	08/18/22 00:00	08/19/22 08:00	6 - 8
890-2784-47	SW-60 (0-13')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 13
890-2784-48	SW-61 (8-13')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 13
890-2784-49	SW-62 (8-13')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 13
890-2784-50	SW-63 (8-13')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 13
890-2784-51	SW-64 (8-10')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 10
890-2784-52	SW-65 (8-10')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 10
890-2784-53	SW-66 (8-10')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 10
	SW-67 (8-10')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 10

2

A

7

8

10

. .

13

### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2784-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2784-55	SW-68 (0-6')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 6
890-2784-56	SW-69 (0-6')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 6
890-2784-57	SW-70 (0-4.5')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 4.5
890-2784-58	SW-71 (0-4.5')	Solid	08/18/22 00:00	08/19/22 08:00	0 - 4.5

	Relinquished by:	,	Relinquished by:	11	Relinguished by:											( LABUSE )	AB #		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	7	The state of the s
	by: Date: Time:			1 8/8/22	by: Date: Time:	ВН-169 (5")	BH-168 (5')	BH-167 (5')	Вн-166 (8')	BH-164 (9')	ВН-162 (8')	BH-159 (8')	ВН-132 (8')	BH-124 (8')	BH-120 (8')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	and the state of t
	Received by:		Receive	( (me /	Z)	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	DATE TIME	YEAR: 2020	SAMPLING		Sampler Signature:		Project 朱		Site Manager	Inc.	
	Date: Time:		Time:	18 C.G. 19.3 A	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATEF SOIL HCL HNO <sub>3</sub> ICE None	~	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Mdiand, lexas /9/05 Tel (432) 682-4559 Fax (432) 682-3946	SUTAV WAIT STEEL, SEE TOU
(Circle) HAND DELIVERED	1.0		Sample Temperature	OO LAB USE ONLY		×	×	×	×	×	×	×	×		×		ED (Y 021B 1005 15M ( 70C	BTE (Ext to GRO	DRO - 0	DRO - I	Hg			ANALYS		
<u>а</u> Г	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH: Same Day 24 hr 4	X STANDARD	REMARKS	×	×	×	×	×	×	×	×	×	×	PCB's 8 NORM PLM (As Chloride Chloride	Vol. 8 Semi. 082 /	s platiles 2608 / Vol. 8 608	624 270C/62 TDS	5		lice				
	Report		48 hr 72 hr													Anion/C	_		emistry (	see att	acned	ust)				

ORIGINAL COPY

	Relinquished by:		Relinquished by:	Yen	1	Relinquished by:											( LABUSE )	LAB#		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:		굺	Analysis Red
	Date: Time:	3	Date: Time:	4 Pac 214/155	1 11 11 11 11 11	Date: Time:	BH-179 (4.5')	BH-178 (4.5')	BH-177 (4.5')	BH-176 (4.5')	BH-175 (4.5')	BH-174 (6')	BH-173 (6')	ВН-172 (6')	BH-171 (5')	BH-170 (5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions		Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
	Received by:		Received by:	1 100	7/25	Received by:	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	DATE	YEAR: 2020	SAMPLING		Odilipies Oignacaio.	1	Project #:		Site Manager			
	74 a.	1	Date: Time:	P. C. C. 4		Date: Time:	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Midland, Texas 79705 Tel (432) 682-4559	CYAST COAST OF THE
	<u>,                                    </u>			Q.	_	ė.		>		V		×	×	×		V	# CON	RED (	ERS Y/N)									
Cicles usin per lyegen	-	to the second	Sample Temperature		LAB USE ONLY		×	×	×		×	×		×	×	×	TPH T TPH 8 PAH 8 Total M	X1005 015M 270C letals	(Ext to	EX 8260 0 C35) - DRO - I Ba Cd Cr Ba Cd C	ORO - Pb Se	Hg			ANALYSIS RE			
Sell Asuss	Special Rep	Rush Charg	L NOOT, OR			REMARKS:											TCLP S TCLP S RCI GC/MS	Volatile Semi V S Vol. S Semi	olatile 8260B	s		City			REQUEST (Circle or Specify			
Tracking #	Special Report Limits or TRRP Report	Rush Charges Authorized	Same Day 24 III 40 III		DARD		×	×	×	×	×	×	×	×	×	×	Chlorid	Asbest le de :	os) Sulfate ter Ch	emistry (	(see a	ttached	d list)		fy Method No.)			rage
	port			3													Anion	Catio	n Bala	nce								201

Page 108 of 113

ORIGINAL COPY

Relinquished by:	No medial de la companya de la compa	Relinquiet 6d h	1	Relinquished by:											( LABUSE )	LAB #		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
y; Date: Time:	Caro	Y	Z/6/18 -2 H	y: // Date: Time:	ВН-189 (4.5)	Вн-188 (4.5')	ВН-187 (4.5')	Вн-186 (4.5)	Вн-185 (4.5')	BH-184 (4.5')	Вн-183 (4.5')	Вн-182 (4.5')	BH-181 (4.5')	BH-180 (4.5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Received by:	Coccinco o).	Received by:	( ( ( ( )	Received by:	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #		Site Manager:	
Date:		) Date:	10 8 JC	Date:	×	×	×	×	×	×	×	×	×	×	WATEI SOIL HCL HNO <sub>3</sub>	₹	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	901W Wall Sireet, Sie Midand,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
Time:	Š	Time:	) }	Time:											Wone # CONT		RS				Ö	m		ao
7	Sample Temperature		LAB USE ONLY		×	×	×	×	×	×	×	×	×	×	PAH 82	1005 15M ( 70C	(Ext to	- DRO - C	)RO - I				ANALYSIS	
Spe [	7 [		×	REMARKS											TCLP M TCLP V TCLP S RCI	etals . platil <b>e</b> emi V	Ag As s olatiles					:	REQUEST (Circle or S	
Special Report Limits or TRRP Report	0	RUSH: Same Day 2	STANDARD												PCB's 8 NORM PLM (As	Semi. 8082 /	Vol. 8 608	/ <b>624</b> 2 <b>70</b> C/62!	5				specify Wethod	
or TRRP Report		24 hr 48 hr 72 h			×	×	×	×	×	×	×	×	×	×	Chloride Chloride Genera Anion/C	e S l Wat		emistry (s	see att	ached	list)		nod No.)	
		2													Hold									

Page 109 of 113

ORIGINAL COPY

	Nemiquisited by.	Delinguished hy	Relinquished by	Val	Relinquished by:											( LABUSE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	(	큐		Analysis Ro
	Care.	. Date: Time:		the 8/19/2	1	SW-53 (0-8')	SW-49 (4.5-6')	SW-48 (6-8')	SW-47 (0-5')	SW-46 (0-5')	SW-45 (0-8')	SW-44 (4.5-8')	SW-43 (6-8')	SW-42 (4.5-8')	SW-38 (4.5-13')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions		letra lech, inc.		Analysis Request of Chain of Custody Record
		Received by:	Received by:	(100)	Received by:	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	8/18/2022	DATE	YEAR: 2020	SAMPLING		Samples Signature.		Project #		Site Manager				
		Date: Time:	Date: Time:	0	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Tel (432) 682-4559	901VV Wall Street, Ste 100 Midland, Texas 79705	
(Circle) HAND DELIVERED		した。	Sample Temperature		A AR LISE ONLY	×	×	×	×	×	×	×	×		×	PAH 8 Total M	RED ( 8021B X1005 015M 270C letals	ERS Y/N) BTI 6 (Ext to	EX 8260	ORO - Pb Se	Hg			ANALYSIS REC				
RED FEDEX UPS Tracking#	Special Report Limits or TRRP Report	Rush Charges Authorized	ROSH: Same Day 24 III 40		70	×	×	×	×	×	×	×	×	×	×	TCLP \ TCLP \ TCLP \ RCI GC/MS GC/MS PCB's NORM PLM (A Chlorid	Vol. Semi Vol. Semi 8082	es /olatile: 8260B . Vol. 8 / 608 os)	s / 624 3270C/62	5		liet)		REQUEST  (Circle or Specify Method No.				Page
	Report		72 111													Anion/				Soc di	.aored	not)						4 of 6

Released to Imaging: 9/1/2023 2:28

Analysis Reques

9/1/2022

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2784-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2784 List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

4

1

4

6

0

4 4

12

1/

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2784-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 08/22/22 08:49 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 2784

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

2

4

5

7

9

11

12



# **Environment Testing America**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2785-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 9/1/2022 12:08:19 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2785-1 SDG: Lea County NM

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	20

3

4

6

8

40

11

12

13

# Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

2

**Qualifiers** 

**GC VOA** 

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.
U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

 NEG
 Negative / Absent

 POS
 Positive / Present

 PQL
 Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2785-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2785-1

#### Receipt

The samples were received on 8/19/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.0°C

#### **Receipt Exceptions**

The following samples were received at the laboratory outside the required temperature criteria: BH-110 (6') (890-2785-1), BH-154 (8') (890-2785-2) and SW-41 (6-13') (890-2785-3). There was no cooling media present in the cooler. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE\_ONE> proceed with/cancel analysis

890-2785 Sample temp 7.2/7.0 there was no temp blank and samples were taken on the 18th- client said they just brought samples from fridge with no cooler and no temp blank- wants to processed with testing

#### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (890-2781-A-1-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-32668 and analytical batch 880-32588 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

2

3

4

\_

7

ŏ

10

10

13

| | 4

Client: Tetra Tech, Inc. Job ID: 890-2785-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-110 (6')

Date Collected: 08/18/22 12:00 Date Received: 08/19/22 08:00

Lab Sample ID: 890-2785-1 **Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	09/01/22 02:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	09/01/22 02:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	09/01/22 02:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 11:43	09/01/22 02:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	09/01/22 02:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 11:43	09/01/22 02:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				08/30/22 11:43	09/01/22 02:53	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/30/22 11:43	09/01/22 02:53	1
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	П	0.00399		mg/Kg			09/01/22 12:38	

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <49.9 U 08/23/22 14:48

49.9

mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Gasoline Range Organics <49.9 U 49.9 08/22/22 13:39 08/23/22 04:59 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 49.9 08/22/22 13:39 08/23/22 04:59 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <49.9 U 49.9 mg/Kg 08/22/22 13:39 08/23/22 04:59 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 107 70 - 130 08/22/22 13:39 08/23/22 04:59 70 - 130 08/22/22 13:39 08/23/22 04:59 o-Terphenyl 96

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 388 4.98 08/29/22 10:38 Chloride mg/Kg

Client Sample ID: BH-154 (8') Lab Sample ID: 890-2785-2 Date Collected: 08/18/22 12:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 11:43	09/01/22 03:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 11:43	09/01/22 03:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 11:43	09/01/22 03:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 11:43	09/01/22 03:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 11:43	09/01/22 03:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 11:43	09/01/22 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				08/30/22 11:43	09/01/22 03:19	1
1,4-Difluorobenzene (Surr)	95		70 - 130				08/30/22 11:43	09/01/22 03:19	1

Client: Tetra Tech, Inc. Job ID: 890-2785-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-154 (8')

Lab Sample ID: 890-2785-2 Date Collected: 08/18/22 12:00 Matrix: Solid Date Received: 08/19/22 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:38	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 14:48	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/23/22 05:21	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/23/22 05:21	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/23/22 05:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				08/22/22 13:39	08/23/22 05:21	1
o-Terphenyl	104		70 - 130				08/22/22 13:39	08/23/22 05:21	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.9		5.03		mg/Kg			08/29/22 10:47	1

Client Sample ID: SW-41 (6-13') Lab Sample ID: 890-2785-3 Date Collected: 08/18/22 12:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	2
Toluene	< 0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Ethylbenzene	< 0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
m-Xylene & p-Xylene	<0.0806	U	0.0806		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
o-Xylene	< 0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Xylenes, Total	<0.0806	U	0.0806		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130				08/30/22 11:43	09/01/22 00:23	2
1,4-Difluorobenzene (Surr)  Method: Total BTEX - Total BT		Overliff and	70 <sub>-</sub> 130	MDI	I I m 14		08/30/22 11:43	09/01/22 00:23	
Method: Total BTEX - Total BT Analyte	EX Calculation Result	Qualifier	RL	MDL	Unit	D	08/30/22 11:43 Prepared	Analyzed	
Method: Total BTEX - Total BT Analyte Total BTEX	EX Calculation Result <0.0806	U		MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX	EX Calculation Result <0.0806  ge Organics (DR	U (GC)	RL		mg/Kg	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte	EX Calculation Result <0.0806  ge Organics (DRO Result	O) (GC) Qualifier				<u>D</u>		Analyzed 09/01/22 12:38 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte	EX Calculation Result <0.0806  ge Organics (DR	O) (GC) Qualifier	RL		mg/Kg	<u> </u>	Prepared	Analyzed 09/01/22 12:38	Dil Fa
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte	EX Calculation Result <0.0806  ge Organics (DRO Result <49.9	O) (GC) Qualifier			mg/Kg	<u> </u>	Prepared	Analyzed 09/01/22 12:38 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH	EX Calculation Result <0.0806  ge Organics (DR) Result <49.9  inge Organics (D	O) (GC) Qualifier		MDL	mg/Kg	<u> </u>	Prepared	Analyzed 09/01/22 12:38 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH  Method: 8015B NM - Diesel Ra	EX Calculation Result <0.0806  ge Organics (DR) Result <49.9  inge Organics (D	O) (GC) Qualifier U  RO) (GC) Qualifier	RL 0.0806	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 09/01/22 12:38  Analyzed 08/23/22 14:48	Dil Fac

# **Client Sample Results**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2785-1

SDG: Lea County NM

Client Sample ID: SW-41 (6-13')

Date Collected: 08/18/22 12:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2785-3

Matrix: Solid

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC) (C	ontinued)					
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/22/22 13:39	08/23/22 05:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			08/22/22 13:39	08/23/22 05:42	1
o-Terphenyl	99		70 - 130			08/22/22 13:39	08/23/22 05:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	707		4.99		mg/Kg			08/29/22 10:56	1

Eurofins Carlsbad

2

4

7

ŏ

10

12

13

М

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-18581-A-21-E MS	Matrix Spike	101	104	
880-18581-A-21-F MSD	Matrix Spike Duplicate	110	108	
890-2785-1	BH-110 (6')	115	97	
890-2785-2	BH-154 (8')	107	95	
890-2785-3	SW-41 (6-13')	113	93	
LCS 880-33353/1-A	Lab Control Sample	107	106	
LCSD 880-33353/2-A	Lab Control Sample Dup	101	101	
MB 880-33353/5-A	Method Blank	74	82	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2781-A-1-E MS	Matrix Spike	117	90
890-2781-A-1-F MSD	Matrix Spike Duplicate	87	76
890-2785-1	BH-110 (6')	107	96
890-2785-2	BH-154 (8')	113	104
890-2785-3	SW-41 (6-13')	109	99
LCS 880-32668/2-A	Lab Control Sample	98	91
LCSD 880-32668/3-A	Lab Control Sample Dup	92	91
MB 880-32668/1-A	Method Blank	101	96

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Tetra Tech, Inc. Job ID: 890-2785-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33353/5-A

**Matrix: Solid** Analysis Batch: 33469 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33353

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	08/31/22 20:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	08/31/22 20:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	08/31/22 20:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 11:43	08/31/22 20:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 11:43	08/31/22 20:07	1
Xvlenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 11:43	08/31/22 20:07	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74	70 - 130	08/30/22 11:43	08/31/22 20:07	1
1,4-Difluorobenzene (Surr)	82	70 - 130	08/30/22 11:43	08/31/22 20:07	1

Lab Sample ID: LCS 880-33353/1-A

Matrix: Solid

Analysis Batch: 33469

Prep Type: Total/NA

Prep Batch: 33353

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1114	-	mg/Kg		111	70 - 130	
Toluene	0.100	0.1082		mg/Kg		108	70 - 130	
Ethylbenzene	0.100	0.1049		mg/Kg		105	70 - 130	
m-Xylene & p-Xylene	0.200	0.2121		mg/Kg		106	70 - 130	
o-Xylene	0.100	0.1197		mg/Kg		120	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-33353/2-A

**Matrix: Solid** 

Analysis Batch: 33469

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	<b>Control Sam</b>	ple Dup
--	------------	-------------	--------------------	---------

Prep Type: Total/NA

Prep Batch: 33353

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit 0.09634 96 Benzene 0.100 mg/Kg 70 - 130 14 35 Toluene 0.100 0.09803 mg/Kg 98 70 - 130 10 35 Ethylbenzene 0.100 0.09504 mg/Kg 95 70 - 130 10 35 0.200 0.1926 m-Xylene & p-Xylene mg/Kg 96 70 - 130 10 35 0.100 0.1063 70 - 130 o-Xylene mg/Kg 106 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-18581-A-21-E MS

**Matrix: Solid** 

Analysis Batch: 33469

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33353

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.1065		mg/Kg		105	70 - 130	
Toluene	< 0.00199	U	0.101	0.1017		mg/Kg		101	70 - 130	

Prep Batch: 33353

# QC Sample Results

Job ID: 890-2785-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-18581-A-21-E MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** Analysis Batch: 33469

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.101	0.09276		mg/Kg		92	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1866		mg/Kg		92	70 - 130	
o-Xylene	<0.00199	U	0.101	0.1040		mg/Kg		103	70 - 130	

Limits

MS MS Qualifier Surrogate %Recovery

70 - 130 4-Bromofluorobenzene (Surr) 101 1,4-Difluorobenzene (Surr) 104 70 - 130

Lab Sample ID: 880-18581-A-21-F MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

**Matrix: Solid** Analysis Batch: 33469

Analysis Batch: 33469									Prep	Batch:	33353
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.1162		mg/Kg		116	70 - 130	9	35
Toluene	<0.00199	U	0.100	0.1098		mg/Kg		110	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.100	0.1011		mg/Kg		101	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2022		mg/Kg		101	70 - 130	8	35
o-Xylene	< 0.00199	U	0.100	0.1134		mg/Kg		113	70 - 130	9	35

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 110 1,4-Difluorobenzene (Surr) 108 70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-32668/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 32588

	MB	MB						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		08/22/22 13:39	08/22/22 21:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/22/22 13:39	08/22/22 21:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/22/22 13:39	08/22/22 21:31	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	08/22/22 13:39	08/22/22 21:31	1
o-Terphenyl	96		70 - 130	08/22/22 13:39	08/22/22 21:31	1

Lab Sample ID: LCS 880-32668/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 32588** 

Spike LCS LCS %Rec Added Qualifier Analyte Result Unit %Rec Limits 1000 962.3 96 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10

942.6

mg/Kg

94

70 - 130

1000

Diesel Range Organics (Over C10-C28)

Prep Batch: 32668

Prep Batch: 32668

Prep Batch: 32668

Job ID: 890-2785-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-32668/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

**Matrix: Solid** Analysis Batch: 32588

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 - 130 o-Terphenyl 91 70 - 130

Lab Sample ID: LCSD 880-32668/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 32588** Prep Batch: 32668

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 887.7 89 70 - 1308 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 941.0 94 mg/Kg 70 - 1300 20 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 92 70 - 130 1-Chlorooctane 91 70 - 130 o-Terphenyl

Lab Sample ID: 890-2781-A-1-E MS Client Sample ID: Matrix Spike

**Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 32588** Prep Batch: 32668 Sample Sample MS MS Spike

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 UF1 999 1306 mg/Kg 127 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1201 mg/Kg 120 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 117 o-Terphenyl 90 70 - 130

Lab Sample ID: 890-2781-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 32588 Prep Batch: 32668

Sample Sample MSD MSD RPD Spike %Rec Result Qualifier Added Result Qualifier Unit %Rec Limits RPD

Analyte Limit U F1 998 1415 F1 Gasoline Range Organics <49.9 138 70 - 130 8 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 998 1042 mg/Kg 104 70 - 130 14 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 87 70 - 130 76 70 - 130 o-Terphenyl

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2785-1 SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32585/1-A

**Matrix: Solid** 

Analysis Batch: 33170

Client Sample ID: Method Blank

**Prep Type: Soluble** 

Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 08/29/22 08:44

Lab Sample ID: LCS 880-32585/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33170** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 250.5 mg/Kg 100 90 - 110

MB MB

Lab Sample ID: LCSD 880-32585/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 33170

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 248.0 mg/Kg 90 - 110

Lab Sample ID: 890-2784-A-54-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 33170** 

Spike MS MS Sample Sample %Rec Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits Chloride 215 252 478.7 105 90 - 110 mg/Kg

Lab Sample ID: 890-2784-A-54-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 33170

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 252 215 486.1 mg/Kg 108 90 - 110 20

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **GC VOA**

## Prep Batch: 33353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Total/NA	Solid	5035	
890-2785-2	BH-154 (8')	Total/NA	Solid	5035	
890-2785-3	SW-41 (6-13')	Total/NA	Solid	5035	
MB 880-33353/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33353/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33353/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18581-A-21-E MS	Matrix Spike	Total/NA	Solid	5035	
880-18581-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### **Analysis Batch: 33469**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Total/NA	Solid	8021B	33353
890-2785-2	BH-154 (8')	Total/NA	Solid	8021B	33353
890-2785-3	SW-41 (6-13')	Total/NA	Solid	8021B	33353
MB 880-33353/5-A	Method Blank	Total/NA	Solid	8021B	33353
LCS 880-33353/1-A	Lab Control Sample	Total/NA	Solid	8021B	33353
LCSD 880-33353/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33353
880-18581-A-21-E MS	Matrix Spike	Total/NA	Solid	8021B	33353
880-18581-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33353

#### Analysis Batch: 33548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Total/NA	Solid	Total BTEX	
890-2785-2	BH-154 (8')	Total/NA	Solid	Total BTEX	
890-2785-3	SW-41 (6-13')	Total/NA	Solid	Total BTEX	

## **GC Semi VOA**

### **Analysis Batch: 32588**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Total/NA	Solid	8015B NM	32668
890-2785-2	BH-154 (8')	Total/NA	Solid	8015B NM	32668
890-2785-3	SW-41 (6-13')	Total/NA	Solid	8015B NM	32668
MB 880-32668/1-A	Method Blank	Total/NA	Solid	8015B NM	32668
LCS 880-32668/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32668
LCSD 880-32668/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32668
890-2781-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	32668
890-2781-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	32668

### Prep Batch: 32668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Total/NA	Solid	8015NM Prep	
890-2785-2	BH-154 (8')	Total/NA	Solid	8015NM Prep	
890-2785-3	SW-41 (6-13')	Total/NA	Solid	8015NM Prep	
MB 880-32668/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32668/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32668/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2781-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2781-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## GC Semi VOA

## **Analysis Batch: 32787**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Total/NA	Solid	8015 NM	
890-2785-2	BH-154 (8')	Total/NA	Solid	8015 NM	
890-2785-3	SW-41 (6-13')	Total/NA	Solid	8015 NM	
_					

### **HPLC/IC**

#### Leach Batch: 32585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Soluble	Solid	DI Leach	<del></del> .
890-2785-2	BH-154 (8')	Soluble	Solid	DI Leach	
890-2785-3	SW-41 (6-13')	Soluble	Solid	DI Leach	
MB 880-32585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-A-54-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2784-A-54-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### **Analysis Batch: 33170**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2785-1	BH-110 (6')	Soluble	Solid	300.0	32585
890-2785-2	BH-154 (8')	Soluble	Solid	300.0	32585
890-2785-3	SW-41 (6-13')	Soluble	Solid	300.0	32585
MB 880-32585/1-A	Method Blank	Soluble	Solid	300.0	32585
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	300.0	32585
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32585
890-2784-A-54-B MS	Matrix Spike	Soluble	Solid	300.0	32585
890-2784-A-54-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	32585

Client: Tetra Tech, Inc. Job ID: 890-2785-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-110 (6') Lab Sample ID: 890-2785-1 Date Collected: 08/18/22 12:00

Matrix: Solid Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33353	08/30/22 11:43	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33469	09/01/22 02:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33548	09/01/22 12:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			32787	08/23/22 14:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32668	08/22/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1			32588	08/23/22 04:59	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 10:38	CH	EET MID

Client Sample ID: BH-154 (8') Lab Sample ID: 890-2785-2

Date Collected: 08/18/22 12:00 Matrix: Solid Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33353	08/30/22 11:43	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33469	09/01/22 03:19	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33548	09/01/22 12:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			32787	08/23/22 14:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32668	08/22/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1			32588	08/23/22 05:21	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 10:47	СН	EET MID

Client Sample ID: SW-41 (6-13') Lab Sample ID: 890-2785-3

Date Collected: 08/18/22 12:00 **Matrix: Solid** Date Received: 08/19/22 08:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33353	08/30/22 11:43	EL	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	33469	09/01/22 00:23	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33548	09/01/22 12:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			32787	08/23/22 14:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32668	08/22/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1			32588	08/23/22 05:42	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 10:56	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	Expiration Date 06-30-23	
		ELAP	T104704400-22-24		
The following englytes	and the street and the state of a contract that				
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for	
,	• '	t the laboratory is not certifi  Matrix	ed by the governing authority. This list ma	ay include analytes for	
the agency does not of	fer certification.	•	, , ,	ay include analytes for	

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

u

3

4

6

9

11

12

# **Sample Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2785-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2785-1	BH-110 (6')	Solid	08/18/22 12:00	08/19/22 08:00
890-2785-2	BH-154 (8')	Solid	08/18/22 12:00	08/19/22 08:00
890-2785-3	SW-41 (6-13')	Solid	08/18/22 12:00	08/19/22 08:00

3

4

<u>၁</u>

8

9

11

12

	Reinquisned by:		Relinguished by:	Relinquished by:		NS.	B	-H	( CABUSE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	[		Analysis Requ	
	Date: Time:		22	Date: Time:		SW-41 (6-13')	BH-154 (8')	BH-110 (6')		SAMPLE IDENTIFICATION			v: Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions		Tetra Tech. Inc.	Analysis Request of Chain of Custody Record	
	Received by.		Received by:	Received by:		8/18/2022	8/18/2022	8/18/2022	DATE TIME	YEAR. 2020	MPLING		Sampier Signature:	1	Project #		Site Manager (				
	Date.		S mili	Date: Time:		×	×	×	HCL HNO <sub>3</sub> ICE None	.K	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 682-4559 Fax (432) 682-3946	Widland, Texas 79705	890-2785 C	
(Circle) HAND DELIVERED FE		0 0	E ONLY perature	REMARKS:		×	×	×	PAH 8: Total M	RED ( B021E X1005 015M 270C etals fetals	Y/N) B BTE 5 (Ext to C GRO Ag As E Ag As es	- DRO - 0 Ba Cd Cr Ba Cd C	ORO - I	Hg			ANALYSIS REQUEST			Chair of Custody	
FEDEX UPS Tracking#	Special Report Limits or TRRP Report	Rush Charges Authorized	STANDARD  RUSH: Same Day 24 hr 48 hr 72 hr	RKS:		×	×	×	PCB's NORM PLM (A Chlorid Chloric	Semi 8082 sbest e le S	i. Vol. 8 / 608 los) Sulfate	TDS		tached	list)		or Specify Method No.)			Page 1 of	
				L					Hold												

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number

SDG Number

Job Number: 890-2785-1 SDG Number: Lea County NM

Login Number: 2785 List Source: Eurofins Carlsbad

List Number: 1 Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

4

2

4

6

8

10

12

13

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2785-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 08/22/22 08:49 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 2785

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



**Environment Testing America** 

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2791-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

eurofins

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 9/2/2022 10:38:17 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS

Received by OCD: 8/28/2023 2:17:46 PM

**Review your project** results through EOL

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 2:28:53 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Client: Tetra Tech, Inc.

Laboratory Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	13
Lab Chronicle	15
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

2

3

4

6

8

10

12

16

# **Definitions/Glossary**

Job ID: 890-2791-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

**Qualifiers** 

**GC VOA** 

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits. Indicates the analyte was analyzed for but not detected.

U

**GC Semi VOA** 

Qualifier **Qualifier Description** 

S1-Surrogate recovery exceeds control limits, low biased. U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

**EDL** Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

**PQL Practical Quantitation Limit** 

**PRES** Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2791-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-2791-1

#### Receipt

The samples were received on 8/19/2022 3:48 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 26.6°C

#### **Receipt Exceptions**

The following samples were received at the laboratory outside the required temperature criteria: SW-72 (0-4.5') (890-2791-1), BH-190 (4.5') (890-2791-2), BH-191 (4.5') (890-2791-3), BH-192 (4.5) (890-2791-4) and BH-193 (4.5') (890-2791-5). This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE\_ONE> proceed with/cancel analysis.

Samples received out of temp range 26.8/26.6 client wanted to proceed with sampling.

#### GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33466 and analytical batch 880-33557 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The following samples were diluted because the initial analysis produced a significant negative result - the absolute value exceeded the reporting limit (RL): SW-72 (0-4.5') (890-2791-1) and BH-193 (4.5') (890-2791-5). Reporting limits (RLs) are elevated as a result.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: BH-193 (4.5') (890-2791-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

3

А

5

6

o

1 1

12

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2791-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-72 (0-4.5')** 

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2791-1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0502	U	0.0502		mg/Kg		08/31/22 14:40	09/01/22 21:12	25
Toluene	<0.0502	U	0.0502		mg/Kg		08/31/22 14:40	09/01/22 21:12	25
Ethylbenzene	<0.0502	U	0.0502		mg/Kg		08/31/22 14:40	09/01/22 21:12	25
m-Xylene & p-Xylene	<0.100	U	0.100		mg/Kg		08/31/22 14:40	09/01/22 21:12	25
o-Xylene	<0.0502	U	0.0502		mg/Kg		08/31/22 14:40	09/01/22 21:12	25
Xylenes, Total	<0.100	U	0.100		mg/Kg		08/31/22 14:40	09/01/22 21:12	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	104		70 - 130				08/31/22 14:40	09/01/22 21:12	25
1,4-Difluorobenzene (Surr)	92		70 - 130				08/31/22 14:40	09/01/22 21:12	25
- Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.100	U	0.100		mg/Kg			09/02/22 11:24	1
_									
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Rango Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
_			RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/25/22 16:03	
Analyte Total TPH	Result 921	Qualifier		MDL		<u>D</u>	Prepared		
Analyte	Result 921 ge Organics (D	Qualifier				<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result 921 ge Organics (D	Qualifier  RO) (GC)  Qualifier	49.9		mg/Kg		<u> </u>	08/25/22 16:03	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rangen	Result 921 ge Organics (D Result	Qualifier  RO) (GC)  Qualifier	49.9		mg/Kg		Prepared	08/25/22 16:03  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Result 921 ge Organics (D Result	Qualifier  RO) (GC)  Qualifier	49.9		mg/Kg		Prepared	08/25/22 16:03  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   921	Qualifier  RO) (GC)  Qualifier  U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 15:10 08/23/22 15:10	08/25/22 16:03  Analyzed  08/25/22 01:58	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 921  ge Organics (D Result <a href="#">&lt;49.9</a>	Qualifier  RO) (GC)  Qualifier  U	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 08/23/22 15:10	08/25/22 16:03  Analyzed  08/25/22 01:58	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   921	Qualifier  RO) (GC) Qualifier U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 15:10 08/23/22 15:10	08/25/22 16:03  Analyzed  08/25/22 01:58  08/25/22 01:58	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   921	Qualifier  RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 15:10 08/23/22 15:10 08/23/22 15:10	08/25/22 16:03  Analyzed 08/25/22 01:58 08/25/22 01:58	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   921	Qualifier  RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 15:10 08/23/22 15:10 08/23/22 15:10 Prepared	08/25/22 16:03  Analyzed  08/25/22 01:58  08/25/22 01:58  08/25/22 01:58  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   921	Qualifier  RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/23/22 15:10 08/23/22 15:10 08/23/22 15:10  Prepared 08/23/22 15:10	08/25/22 16:03  Analyzed 08/25/22 01:58  08/25/22 01:58  Analyzed 08/25/22 01:58	Dil Fac

**Client Sample ID: BH-190 (4.5')** Lab Sample ID: 890-2791-2 Date Collected: 08/19/22 12:00 **Matrix: Solid** 

0.0495

mg/Kg

6.36

Chloride

Date Received: 08/19/22 15:48

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:29	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:29	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399		mg/Kg		08/31/22 14:40	09/01/22 18:29	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:29	1
Xylenes, Total	<0.00399	U F1	0.00399		mg/Kg		08/31/22 14:40	09/01/22 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/31/22 14:40	09/01/22 18:29	1
1,4-Difluorobenzene (Surr)	101		70 - 130				08/31/22 14:40	09/01/22 18:29	1

**Eurofins Carlsbad** 

08/24/22 15:18

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-2791-1 SDG: Lea County NM

Client Sample ID: BH-190 (4.5')

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48 **Lab Sample ID: 890-2791-2** 

Matrix: Solid

-0.00000								
<0.00399	U	0.00399		mg/Kg			09/02/22 11:24	1
rganics (DR	O) (GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
234		49.9		mg/Kg			08/25/22 16:03	1
Organics (D	RO) (GC)							
•	, , ,	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
234		49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
113	-	70 - 130				08/23/22 15:10	08/25/22 08:35	1
113		70 - 130				08/23/22 15:10	08/25/22 08:35	1
	Prganics (DR/Result 234  Organics (DI/Result <49.9  234  49.9  **Recovery 113	Organics (DRO) (GC) Result Qualifier 234  Organics (DRO) (GC) Result Qualifier  <49.9 U  **Recovery Qualifier  113	Organics (DRO) (GC)           Result 234         Qualifier 49.9           Organics (DRO) (GC)         Result 49.9           <49.9	Result 234         Qualifier Qualifier         RL 49.9         MDL 49.9           Organics (DRO) (GC)         Result Qualifier RL 49.9         MDL 49.9           <49.9 U 49.9	Arganics (DRO) (GC)         Result Qualifier         RL 49.9         MDL Unit mg/Kg           Organics (DRO) (GC)         Result Qualifier         RL 49.9         MDL Unit mg/Kg           <49.9 U 49.9	Arganics (DRO) (GC)         Result Qualifier         RL MDL Unit mg/Kg         D mg/Kg           Organics (DRO) (GC)         Result Qualifier         RL MDL Unit mg/Kg         D mg/Kg           <49.9 U 49.9 mg/Kg	Result 234         Qualifier Algorithm         RL MDL Unit mg/Kg         D mg/Kg           Organics (DRO) (GC)         Result 249.9         MDL Unit Mg/Kg         D Prepared Mg/Kg           <49.9	Organics (DRO) (GC)         Result Qualifier         RL 49.9         MDL Unit mg/Kg         D Prepared Malyzed 08/25/22 16:03           Organics (DRO) (GC)         Result Qualifier         RL 49.9         MDL Unit mg/Kg         D Prepared Malyzed Malyzed 08/23/22 15:10         Analyzed Malyzed Malyzed Mg/Kg           234         49.9         mg/Kg         08/23/22 15:10         08/25/22 08:35           49.9         U         49.9         mg/Kg         08/23/22 15:10         08/25/22 08:35           49.9         U         49.9         mg/Kg         08/23/22 15:10         08/25/22 08:35           **Recovery Qualifier Limits Times         **Prepared Analyzed O8/23/22 15:10         **O8/25/22 08:35

5.02

mg/Kg

Client Sample ID: BH-191 (4.5')

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48

Chloride

REMOVED FROM ANALYSIS TABLE

686

Lab Sample ID: 890-2791-3

08/24/22 15:25

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				08/31/22 14:40	09/01/22 18:49	1
								00/01/00 10 10	
	103  EX Calculation		70 - 130				08/31/22 14:40	09/01/22 18:49	1
1,4-Difluorobenzene (Surr)  Method: Total BTEX - Total BTE  Analyte	EX Calculation Result	Qualifier	RL	MDL	Unit	<u>D</u>	08/31/22 14:40 Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX	EX Calculation Result <0.00402	U		MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX  Method: 8015 NM - Diesel Rang	EX Calculation Result <0.00402  ge Organics (DR	U (GC)	RL		mg/Kg		Prepared	Analyzed 09/02/22 11:24	Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte	EX Calculation Result <0.00402  ge Organics (DR) Result	U		MDL MDL	mg/Kg	<u>D</u>		Analyzed 09/02/22 11:24 Analyzed	Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX  Method: 8015 NM - Diesel Rang	EX Calculation Result <0.00402  ge Organics (DR	U (GC)	RL		mg/Kg		Prepared	Analyzed 09/02/22 11:24	Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte	EX Calculation Result <0.00402  ge Organics (DRO Result 1800	O) (GC) Qualifier			mg/Kg		Prepared	Analyzed 09/02/22 11:24 Analyzed	Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Rang	EX Calculation Result <0.00402  ge Organics (DR) Result 1800  nge Organics (D	O) (GC) Qualifier			mg/Kg  Unit mg/Kg		Prepared	Analyzed 09/02/22 11:24 Analyzed	Dil Fac
Method: Total BTEX - Total BTE Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte Total TPH	EX Calculation Result <0.00402  ge Organics (DR) Result 1800  nge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	RL 0.00402 RL 50.0	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 09/02/22 11:24  Analyzed 08/25/22 16:03	Dil Fac

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-191 (4.5')

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2791-3

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/23/22 15:10	08/25/22 02:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			08/23/22 15:10	08/25/22 02:41	1
o-Terphenyl	96		70 - 130			08/23/22 15:10	08/25/22 02:41	1

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride24925.2mg/Kg08/24/22 15:495

Client Sample ID: BH-192 (4.5)

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2791-4

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/31/22 14:40	09/01/22 19:09	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/31/22 14:40	09/01/22 19:09	1
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T / I DTE\/									

Analyta	Popult	Qualifier	RL	MDL	Unit	D	Dropored	Anglyzod	Dil Fac
Analyte				MDL			Prepared	Analyzed	Dii Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/02/22 11:24	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2050		49.9		mg/Kg			08/25/22 16:03	1
- Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 03:02	
									1
(GRO)-C6-C10									1
(GRO)-C6-C10  Diesel Range Organics (Over	2050		49.9		mg/Kg		08/23/22 15:10	08/25/22 03:02	1
(GRO)-C6-C10  Diesel Range Organics (Over C10-C28)	2050		49.9		mg/Kg		08/23/22 15:10	08/25/22 03:02	1
Diesel Range Organics (Over	<b>2050</b> <49.9	U	49.9 49.9		mg/Kg		08/23/22 15:10 08/23/22 15:10	08/25/22 03:02 08/25/22 03:02	1 1

Method: 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	48.0	5.01	mg/Kg			08/24/22 15:57	1

70 - 130

70 - 130

101

95

**Eurofins Carlsbad** 

08/25/22 03:02

08/25/22 03:02

08/23/22 15:10

08/23/22 15:10

1-Chlorooctane

o-Terphenyl

3

5

7

8

10

12

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2791-1 SDG: Lea County NM

Client Sample ID: BH-193 (4.5')
Date Collected: 08/19/22 12:00

Date Received: 08/19/22 15:48

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2791-5

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0497	U	0.0497		mg/Kg		08/31/22 14:40	09/01/22 21:32	25
Toluene	< 0.0497	U	0.0497		mg/Kg		08/31/22 14:40	09/01/22 21:32	2
Ethylbenzene	<0.0497	U	0.0497		mg/Kg		08/31/22 14:40	09/01/22 21:32	2
m-Xylene & p-Xylene	<0.0994	U	0.0994		mg/Kg		08/31/22 14:40	09/01/22 21:32	2
o-Xylene	< 0.0497	U	0.0497		mg/Kg		08/31/22 14:40	09/01/22 21:32	2
Xylenes, Total	<0.0994	U	0.0994		mg/Kg		08/31/22 14:40	09/01/22 21:32	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	96		70 - 130				08/31/22 14:40	09/01/22 21:32	2
1,4-Difluorobenzene (Surr)	85		70 - 130				08/31/22 14:40	09/01/22 21:32	2
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.0994	U	0.0994		mg/Kg			09/02/22 11:24	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Total TPH	16000		250		mg/Kg			08/25/22 16:03	
Method: 8015B NM - Diesel Rang									
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		08/23/22 15:10	08/25/22 03:23	
Diesel Range Organics (Over C10-C28)	16000		250		mg/Kg		08/23/22 15:10	08/25/22 03:23	
Oll Range Organics (Over C28-C36)	<250	U	250		mg/Kg		08/23/22 15:10	08/25/22 03:23	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	69	S1-	70 - 130				08/23/22 15:10	08/25/22 03:23	
p-Terphenyl	101		70 - 130				08/23/22 15:10	08/25/22 03:23	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	271		24.9		mg/Kg			08/24/22 16:20	

# **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-2791-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2791-1	SW-72 (0-4.5')	104	92	
890-2791-2	BH-190 (4.5')	93	101	
890-2791-2 MS	BH-190 (4.5')	94	109	
890-2791-2 MSD	BH-190 (4.5')	93	108	
890-2791-3	BH-191 (4.5')	88	103	
890-2791-4	BH-192 (4.5)	91	103	
890-2791-5	BH-193 (4.5')	96	85	
LCS 880-33466/1-A	Lab Control Sample	94	99	
LCSD 880-33466/2-A	Lab Control Sample Dup	96	101	
MB 880-33466/5-A	Method Blank	78	116	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2791-1	SW-72 (0-4.5')	112	105	
890-2791-2	BH-190 (4.5')	113	113	
890-2791-3	BH-191 (4.5')	104	96	
890-2791-4	BH-192 (4.5)	101	95	
890-2791-5	BH-193 (4.5')	69 S1-	101	

**Surrogate Legend** 

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

# QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-2791-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33466/5-A

Lab Sample ID: LCS 880-33466/1-A

Lab Sample ID: LCSD 880-33466/2-A

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 33557

Analysis Batch: 33557

**Matrix: Solid** Analysis Batch: 33557 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33466

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/31/22 14:40	09/01/22 18:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 18:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/31/22 14:40	09/01/22 18:00	1

MB MB

Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78	70 - 130	08/31/22 14:40	09/01/22 18:00	1
1,4-Difluorobenzene (Surr)	116	70 - 130	08/31/22 14:40	09/01/22 18:00	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 33466

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1098 mg/Kg 110 70 - 130 Toluene 0.100 0.1103 mg/Kg 110 70 - 130 0.100 0.1076 108 Ethylbenzene mg/Kg 70 - 130 0.200 99 70 - 130 m-Xylene & p-Xylene 0.1975 mg/Kg 0.100 0.1037 70 - 130 o-Xylene mg/Kg 104

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 33466

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1142		mg/Kg		114	70 - 130	4	35	
Toluene	0.100	0.1143		mg/Kg		114	70 - 130	4	35	
Ethylbenzene	0.100	0.1120		mg/Kg		112	70 - 130	4	35	
m-Xylene & p-Xylene	0.200	0.2059		mg/Kg		103	70 - 130	4	35	
o-Xylene	0.100	0.1080		mg/Kg		108	70 - 130	4	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 890-2791-2 MS

**Matrix: Solid** 

Analysis Batch: 33557

Client Sample ID: BH-190 (4.5') Prep Type: Total/NA

Prep Batch: 33466

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.09295		mg/Kg		93	70 - 130	
Toluene	<0.00200	U	0.0998	0.06941		mg/Kg		70	70 - 130	

Job ID: 890-2791-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2791-2 MS Client Sample ID: BH-190 (4.5') **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 33557 Prep Batch: 33466

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00200	U F1	0.0998	0.04751	F1	mg/Kg		48	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.08400	F1	mg/Kg		42	70 - 130
o-Xylene	< 0.00200	U F1	0.0998	0.04484	F1	mg/Kg		45	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-2791-2 MSD **Client Sample ID: BH-190 (4.5') Matrix: Solid** Prep Type: Total/NA Prep Batch: 33466

**Analysis Batch: 33557** 

/ indigoto Datom Coco.											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0994	0.09702		mg/Kg		98	70 - 130	4	35
Toluene	<0.00200	U	0.0994	0.07575		mg/Kg		76	70 - 130	9	35
Ethylbenzene	<0.00200	U F1	0.0994	0.05323	F1	mg/Kg		54	70 - 130	11	35
m-Xylene & p-Xylene	<0.00399	U F1	0.199	0.09324	F1	mg/Kg		47	70 - 130	10	35
o-Xylene	<0.00200	U F1	0.0994	0.05060	F1	mg/Kg		51	70 - 130	12	35

		MSD	MSD	
Sı	urrogate	%Recovery	Qualifier	Limits
4-	Bromofluorobenzene (Surr)	93		70 - 130
1,	4-Difluorobenzene (Surr)	108		70 - 130

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32736/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 32797

۱		MB	MB							
	Analyte	esult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<5.00	U	5.00		mg/Kg			08/24/22 12:02	1

Lab Sample ID: LCS 880-32736/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble Matrix: Solid** 

Analysis Batch: 32797

Chloride

Spike LCS LCS %Rec Added Analyte Result Qualifier Limits Unit %Rec Chloride 250 243.9 mg/Kg 98 90 - 110

250

Lab Sample ID: LCSD 880-32736/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid **Prep Type: Soluble Analysis Batch: 32797** 

LCSD LCSD RPD Spike %Rec Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec

243.8

mg/Kg

98

90 - 110

20

# **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2791-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2791-2 MS **Client Sample ID: BH-190 (4.5')** 

**Matrix: Solid Prep Type: Soluble** Analysis Batch: 32797

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added Analyte Unit %Rec Limits Chloride 686 251 919.6 mg/Kg 93 90 - 110

Lab Sample ID: 890-2791-2 MSD Client Sample ID: BH-190 (4.5')

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 32797

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier RPD Added Result Qualifier Limits Limit Analyte Unit D %Rec Chloride 686 251 918.4 mg/Kg 93 90 - 110 0 20

Released to Imaging: 9/1/2023 2:28:53 PM

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **GC VOA**

## Prep Batch: 33466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	5035	
890-2791-2	BH-190 (4.5')	Total/NA	Solid	5035	
890-2791-3	BH-191 (4.5')	Total/NA	Solid	5035	
890-2791-4	BH-192 (4.5)	Total/NA	Solid	5035	
890-2791-5	BH-193 (4.5')	Total/NA	Solid	5035	
MB 880-33466/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33466/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33466/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2791-2 MS	BH-190 (4.5')	Total/NA	Solid	5035	
890-2791-2 MSD	BH-190 (4.5')	Total/NA	Solid	5035	

### Analysis Batch: 33557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	8021B	33466
890-2791-2	BH-190 (4.5')	Total/NA	Solid	8021B	33466
890-2791-3	BH-191 (4.5')	Total/NA	Solid	8021B	33466
890-2791-4	BH-192 (4.5)	Total/NA	Solid	8021B	33466
890-2791-5	BH-193 (4.5')	Total/NA	Solid	8021B	33466
MB 880-33466/5-A	Method Blank	Total/NA	Solid	8021B	33466
LCS 880-33466/1-A	Lab Control Sample	Total/NA	Solid	8021B	33466
LCSD 880-33466/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33466
890-2791-2 MS	BH-190 (4.5')	Total/NA	Solid	8021B	33466
890-2791-2 MSD	BH-190 (4.5')	Total/NA	Solid	8021B	33466

### Analysis Batch: 33637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	Total BTEX	
890-2791-2	BH-190 (4.5')	Total/NA	Solid	Total BTEX	
890-2791-3	BH-191 (4.5')	Total/NA	Solid	Total BTEX	
890-2791-4	BH-192 (4.5)	Total/NA	Solid	Total BTEX	
890-2791-5	BH-193 (4.5')	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

### Prep Batch: 32793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-2791-2	BH-190 (4.5')	Total/NA	Solid	8015NM Prep	
890-2791-3	BH-191 (4.5')	Total/NA	Solid	8015NM Prep	
890-2791-4	BH-192 (4.5)	Total/NA	Solid	8015NM Prep	
890-2791-5	BH-193 (4.5')	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 32806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	8015B NM	32793
890-2791-2	BH-190 (4.5')	Total/NA	Solid	8015B NM	32793
890-2791-3	BH-191 (4.5')	Total/NA	Solid	8015B NM	32793
890-2791-4	BH-192 (4.5)	Total/NA	Solid	8015B NM	32793
890-2791-5	BH-193 (4.5')	Total/NA	Solid	8015B NM	32793

# **QC Association Summary**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2791-1

SDG: Lea County NM

## GC Semi VOA

#### Analysis Batch: 32998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	8015 NM	
890-2791-2	BH-190 (4.5')	Total/NA	Solid	8015 NM	
890-2791-3	BH-191 (4.5')	Total/NA	Solid	8015 NM	
890-2791-4	BH-192 (4.5)	Total/NA	Solid	8015 NM	
890-2791-5	BH-193 (4.5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 32736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Soluble	Solid	DI Leach	
890-2791-2	BH-190 (4.5')	Soluble	Solid	DI Leach	
890-2791-3	BH-191 (4.5')	Soluble	Solid	DI Leach	
890-2791-4	BH-192 (4.5)	Soluble	Solid	DI Leach	
890-2791-5	BH-193 (4.5')	Soluble	Solid	DI Leach	
MB 880-32736/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32736/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32736/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2791-2 MS	BH-190 (4.5')	Soluble	Solid	DI Leach	
890-2791-2 MSD	BH-190 (4.5')	Soluble	Solid	DI Leach	

#### Analysis Batch: 32797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Soluble	Solid	300.0	32736
890-2791-2	BH-190 (4.5')	Soluble	Solid	300.0	32736
890-2791-3	BH-191 (4.5')	Soluble	Solid	300.0	32736
890-2791-4	BH-192 (4.5)	Soluble	Solid	300.0	32736
890-2791-5	BH-193 (4.5')	Soluble	Solid	300.0	32736
MB 880-32736/1-A	Method Blank	Soluble	Solid	300.0	32736
LCS 880-32736/2-A	Lab Control Sample	Soluble	Solid	300.0	32736
LCSD 880-32736/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32736
890-2791-2 MS	BH-190 (4.5')	Soluble	Solid	300.0	32736
890-2791-2 MSD	BH-190 (4.5')	Soluble	Solid	300.0	32736

Client: Tetra Tech, Inc. Job ID: 890-2791-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-72 (0-4.5')** 

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48 Lab Sample ID: 890-2791-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33466	08/31/22 14:40	MR	EET MIC
Total/NA	Analysis	8021B		25	5 mL	5 mL	33557	09/01/22 21:12	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33637	09/02/22 11:24	AJ	EET MIC
Total/NA	Analysis	8015 NM		1			32998	08/25/22 16:03	SM	EET MIC
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32793	08/23/22 15:10	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/25/22 01:58	SM	EET MID
Soluble	Leach	DI Leach			5,05 g	50 mL	32736	08/23/22 09:11	KS	EET MIC
Soluble	Analysis	300.0		1			32797	08/24/22 15:18	SMC	EET MID

**Client Sample ID: BH-190 (4.5')** 

Date Collected: 08/19/22 12:00

Date Received: 08/19/22 15:48

Lab Sample ID: 890-2791-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33466	08/31/22 14:40	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33557	09/01/22 18:29	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33637	09/02/22 11:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32998	08/25/22 16:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32793	08/23/22 15:10	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/25/22 08:35	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32736	08/23/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			32797	08/24/22 15:25	SMC	EET MID

**Client Sample ID: BH-191 (4.5')** 

Date Collected: 08/19/22 12:00

Date Received: 08/19/22 15:48

Lab Sample ID: 890-2791-3

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33466	08/31/22 14:40	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33557	09/01/22 18:49	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33637	09/02/22 11:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32998	08/25/22 16:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32793	08/23/22 15:10	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/25/22 02:41	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32736	08/23/22 09:11	KS	EET MID
Soluble	Analysis	300.0		5			32797	08/24/22 15:49	SMC	EET MID

Client Sample ID: BH-192 (4.5)

Date Collected: 08/19/22 12:00

Date Received: 08/19/22 15:48

Lab Sample	ID: 890-2791-4
	Matrix: Solid

nalyst	Lab	
R	EET MID	
-	EET MID	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33466	08/31/22 14:40	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33557	09/01/22 19:09	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33637	09/02/22 11:24	AJ	EET MID

## **Lab Chronicle**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-192 (4.5)

Date Collected: 08/19/22 12:00 Date Received: 08/19/22 15:48 Lab Sample ID: 890-2791-4

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32998	08/25/22 16:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32793	08/23/22 15:10	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/25/22 03:02	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32736	08/23/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			32797	08/24/22 15:57	SMC	EET MID

Client Sample ID: BH-193 (4.5')

Lab Sample ID: 890-2791-5

Date Collected: 08/19/22 12:00

Date Received: 08/19/22 15:48

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33466	08/31/22 14:40	MR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	33557	09/01/22 21:32	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33637	09/02/22 11:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			32998	08/25/22 16:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32793	08/23/22 15:10	DM	EET MID
Total/NA	Analysis	8015B NM		5			32806	08/25/22 03:23	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32736	08/23/22 09:11	KS	EET MID
Soluble	Analysis	300.0		5			32797	08/24/22 16:20	SMC	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for
the agency does not of	fer certification.	•	, , ,	·,,
the agency does not of Analysis Method	fer certification .  Prep Method	Matrix	Analyte	,
0 ,		Matrix Solid	, , ,	

3

4

5

7

9

4 4

12

4 /

## **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

\_

5

7

10

11

13

# **Sample Summary**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2791-1	SW-72 (0-4.5')	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-2	BH-190 (4.5')	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-3	BH-191 (4.5')	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-4	BH-192 (4.5)	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-5	BH-193 (4.5')	Solid	08/19/22 12:00	08/19/22 15:48

4

3

4

6

0

9

11

12

3

4

**6** 

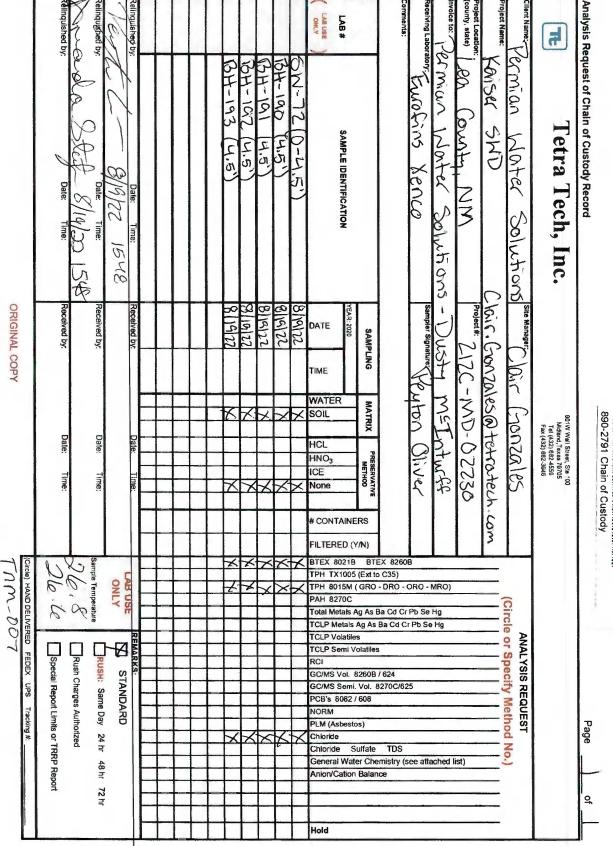
8

10

12

1

890-2791 Chain of Custody



## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2791-1 SDG Number: Lea County NM

Login Number: 2791 List Number: 1

List Source: Eurofins Carlsbad

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2791-1

SDG Number: Lea County NM

List Source: Eurofins Midland List Creation: 08/23/22 10:32 AM

Creator: Rodriguez, Leticia

Login Number: 2791

List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	·
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Euronnis Carisbau

2

3

4

5

7

\_

1 1

12

13

14

<6mm (1/4").



Released to Imaging: 9/1/2023 2:28:53 PM

# **Environment Testing America**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3009-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 10/1/2022 7:08:10 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3009-1

SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

4

6

8

10

11

13

## Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 890-3009-1

Project/Site: Kaiser SWD

SDG: Lea County NM

\_\_\_\_\_

**Qualifiers** 

**GC VOA** 

 Qualifier
 Qualifier Description

 S1+
 Surrogate recovery exceeds control limits, high biased.

U Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier Description

\*1 LCS/LCSD RPD exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier Qualifier Description

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

3

Л

-

6

9

10

12

#### **Case Narrative**

Job ID: 890-3009-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Job ID: 890-3009-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3009-1

#### Receipt

The samples were received on 9/20/2022 10:22 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

#### **GC VOA**

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCSD 880-35620/2-A) and (880-19424-A-41-E MS). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-35018 and analytical batch 880-35120 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Matrix: Solid

Lab Sample ID: 890-3009-1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3009-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-185 (13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130				09/28/22 14:52	10/01/22 13:44	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:52	10/01/22 13:44	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/01/22 19:44	1
Mathadi 2015 NM - Diagal Dansa	o Overenies (DD	0) (00)							
Method: 8015 NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
							rreparea	Allulyzou	
	<50.0	U	50.0		ma/Ka			09/23/22 16:01	
Total IPH	<50.0	U	50.0		mg/Kg			09/23/22 16:01	1
Total TPH : Method: 8015B NM - Diesel Ran			50.0		mg/Kg			09/23/22 16:01	1
: Method: 8015B NM - Diesel Ran	ge Organics (D		50.0 <b>RL</b>	MDL		D	Prepared	09/23/22 16:01  Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC)  Qualifier		MDL		<u>D</u>	Prepared 09/21/22 08:32		·
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC)  Qualifier  U *1	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <50.0	RO) (GC) Qualifier U*1	RL	MDL	Unit mg/Kg	<u>D</u>	09/21/22 08:32	<b>Analyzed</b> 09/23/22 04:27	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	RO) (GC) Qualifier U *1 U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32	Analyzed 09/23/22 04:27	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <50.0 <50.0	RO) (GC) Qualifier U *1 U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32	Analyzed 09/23/22 04:27 09/23/22 04:27 09/23/22 04:27	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (D Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U *1 U		MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 <b>Prepared</b>	Analyzed 09/23/22 04:27 09/23/22 04:27 09/23/22 04:27 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D  Result  <50.0  <50.0  <50.0  <80.0  80.0  80.0  80.0  121  111	RO) (GC) Qualifier U*1 U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 <b>Prepared</b> 09/21/22 08:32	Analyzed 09/23/22 04:27 09/23/22 04:27 09/23/22 04:27  Analyzed 09/23/22 04:27	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <50.0  <50.0  <50.0   **Recovery  121  111  omatography -	RO) (GC) Qualifier U*1 U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 <b>Prepared</b> 09/21/22 08:32	Analyzed 09/23/22 04:27 09/23/22 04:27 09/23/22 04:27  Analyzed 09/23/22 04:27	Dil Fac

Client Sample ID: BH-186 (13')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 14:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 14:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 14:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:52	10/01/22 14:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 14:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:52	10/01/22 14:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/28/22 14:52	10/01/22 14:04	

**Eurofins Carlsbad** 

Lab Sample ID: 890-3009-2

2

3

a

10

12

13

**Matrix: Solid** 

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

104

94

Job ID: 890-3009-1 SDG: Lea County NM

Client Sample ID: BH-186 (13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 13

1-Chlorooctane

o-Terphenyl

Lab Samp	le ID:	890-30	09-2
----------	--------	--------	------

Matrix: Solid

Matrix: So

09/23/22 04:06

09/23/22 04:06

09/21/22 08:32

09/21/22 08:32

Method: 8021	B - Volatile	Organic	Compounds	(GC	) (Continu	ied)
_				_		

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90	70 - 130	09/28/22 14:52	10/01/22 14:04	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/01/22 19:44	1

Method: 8015 NM - Diesel Range (	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	84.3	49.9	mg/Kg			09/23/22 16:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		09/21/22 08:32	09/23/22 04:06	1
Diesel Range Organics (Over C10-C28)	84.3		49.9		mg/Kg		09/21/22 08:32	09/23/22 04:06	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/21/22 08:32	09/23/22 04:06	1

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		25.1		mg/Kg			09/23/22 22:58	5

70 - 130

70 - 130

2

Δ

<u>ر</u>

7

9

10

12

. .

# **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-3009-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19424-A-41-E MS	Matrix Spike	131 S1+	108	
880-19424-A-41-F MSD	Matrix Spike Duplicate	136 S1+	109	
890-3009-1	BH-185 (13')	125	91	
890-3009-2	BH-186 (13')	117	90	
LCS 880-35620/1-A	Lab Control Sample	127	104	
LCSD 880-35620/2-A	Lab Control Sample Dup	140 S1+	106	
MB 880-35620/5-A	Method Blank	107	86	
MB 880-35630/5-A	Method Blank	101	89	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
380-19424-A-53-C MS	Matrix Spike	85	76	
880-19424-A-53-D MSD	Matrix Spike Duplicate	82	74	
890-3009-1	BH-185 (13')	121	111	
390-3009-2	BH-186 (13')	104	94	
_CS 880-35018/2-A	Lab Control Sample	113	105	
LCSD 880-35018/3-A	Lab Control Sample Dup	98	86	
MB 880-35018/1-A	Method Blank	105	103	

**Surrogate Legend** 

1CO = 1-Chlorooctane

Released to Imaging: 9/1/2023 2:28:53 PM

OTPH = o-Terphenyl

Client: Tetra Tech, Inc. Job ID: 890-3009-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35620/5-A

**Matrix: Solid** 

Analysis Batch: 35744

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35620

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:52	10/01/22 07:33	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:52	10/01/22 07:33	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	₽d	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/28/22 1	4:52	10/01/22 07:33	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/28/22 1	4:52	10/01/22 07:33	1

Lab Sample ID: LCS 880-35620/1-A

**Matrix: Solid** 

Analysis Batch: 35744

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 35620

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09300 mg/Kg 93 70 - 130 Toluene 0.100 0.08450 mg/Kg 85 70 - 130 0.100 0.09159 92 Ethylbenzene mg/Kg 70 - 130 0.200 0.1871 94 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.1192 70 - 130 o-Xylene mg/Kg 119

LCS LCS

Surrogate	%Recovery (	Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-35620/2-A

**Matrix: Solid** 

Analysis Batch: 35744

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 35620

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08642		mg/Kg		86	70 - 130	7	35	
Toluene	0.100	0.08244		mg/Kg		82	70 - 130	2	35	
Ethylbenzene	0.100	0.09331		mg/Kg		93	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1962		mg/Kg		98	70 - 130	5	35	
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	1	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130
1.4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-19424-A-41-E MS

**Matrix: Solid** 

Analysis Batch: 35744

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 35620

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09638		mg/Kg		96	70 - 130	 
Toluene	<0.00201	U	0.101	0.08691		mg/Kg		86	70 - 130	

**Eurofins Carlsbad** 

Job ID: 890-3009-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-19424-A-41-E MS

Lab Sample ID: 880-19424-A-41-F MSD

**Matrix: Solid** 

Analysis Batch: 35744

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35620

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.101	0.09656		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1955		mg/Kg		97	70 - 130	
o-Xylene	<0.00201	U	0.101	0.1131		mg/Kg		112	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35620

Analysis Batch: 35744

**Matrix: Solid** 

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.0994 Benzene <0.00201 U 0.1013 mg/Kg 102 70 - 130 5 35 0.09069 Toluene <0.00201 U 0.0994 mg/Kg 91 70 - 130 4 35 Ethylbenzene <0.00201 U 0.0994 0.1024 mg/Kg 103 70 - 130 6 35 0.199 0.2076 104 70 - 130 35 m-Xylene & p-Xylene <0.00402 U mg/Kg 6 0.0994 <0.00201 U 0.1207 121 70 - 130 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: MB 880-35630/5-A

**Matrix: Solid** 

Analysis Batch: 35744

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35630

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:29	09/30/22 20:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:29	09/30/22 20:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:29	09/30/22 20:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 16:29	09/30/22 20:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:29	09/30/22 20:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 16:29	09/30/22 20:58	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/28/22 16:29	09/30/22 20:58	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/28/22 16:29	09/30/22 20:58	1

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35018/1-A

Matrix: Solid

Analysis Batch: 35120

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35018

MB MB Result Qualifier RL MDL Unit Prepared Gasoline Range Organics <50.0 U 50.0 09/21/22 08:32 09/22/22 19:31 mg/Kg

(GRO)-C6-C10

Client: Tetra Tech, Inc. Job ID: 890-3009-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-35018/1-A

**Matrix: Solid** 

Analysis Batch: 35120

Prep Type: Total/NA

Prep Batch: 35018

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/21/22 08:32	09/22/22 19:31	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/21/22 08:32	09/22/22 19:31	1

MB MB

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	105		70 - 130	09/21/22 08:32	09/22/22 19:31	1
l	o-Terphenyl	103		70 - 130	09/21/22 08:32	09/22/22 19:31	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-35018/2-A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 35120 Prep Batch: 35018

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1066 107 70 - 130 mg/Kg (GRO)-C6-C10 1000 1068 Diesel Range Organics (Over mg/Kg 107 70 - 130

C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-35018/3-A

**Matrix: Solid** 

Analysis Batch: 35120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35018

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	821.3	*1	mg/Kg		82	70 - 130	26	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	889.0		mg/Kg		89	70 - 130	18	20	
C10-C28)										

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 - 130 o-Terphenyl 86 70 - 130

Lab Sample ID: 880-19424-A-53-C MS

**Matrix: Solid** 

Analysis Batch: 35120

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 35018

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U \*1 996 826.0 70 - 130 Gasoline Range Organics 83 mg/Kg (GRO)-C6-C10 996 868.7 Diesel Range Organics (Over <49.9 U mg/Kg 70 - 130

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	76		70 - 130

Job ID: 890-3009-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-19424-A-53-D MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 35120 Prep Batch: 35018

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U *1	999	786.3		mg/Kg		79	70 - 130	5	20
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	999	872.5		mg/Kg		87	70 - 130	0	20

C10-C28)

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 82 o-Terphenyl 74 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35023/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 35314

мв мв

MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 09/23/22 22:29

Lab Sample ID: LCS 880-35023/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 35314

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 250	246.3		mg/Kg		99	90 - 110	 

Lab Sample ID: LCSD 880-35023/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 35314

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	247.2		ma/Ka			90 110		20	

Lab Sample ID: 890-3009-1 MS Client Sample ID: BH-185 (13')

**Matrix: Solid** 

Analysis Batch: 35314

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	591		1240	1868		mg/Kg		103	90 - 110	

Lab Sample ID: 890-3009-1 MSD Client Sample ID: BH-185 (13') **Prep Type: Soluble** 

Matrix: Solid

Analysis Batch: 35314

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	591		1240	1873		mg/Kg		103	90 - 110	0	20

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

## **QC Association Summary**

Client: Tetra Tech, Inc. Job ID: 890-3009-1 Project/Site: Kaiser SWD SDG: Lea County NM

## **GC VOA**

#### Prep Batch: 35620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	5035	
890-3009-2	BH-186 (13')	Total/NA	Solid	5035	
MB 880-35620/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35620/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35620/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19424-A-41-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19424-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Prep Batch: 35630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35630/5-A	Method Blank	Total/NA	Solid	5035	

#### Analysis Batch: 35744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	8021B	35620
890-3009-2	BH-186 (13')	Total/NA	Solid	8021B	35620
MB 880-35620/5-A	Method Blank	Total/NA	Solid	8021B	35620
MB 880-35630/5-A	Method Blank	Total/NA	Solid	8021B	35630
LCS 880-35620/1-A	Lab Control Sample	Total/NA	Solid	8021B	35620
LCSD 880-35620/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35620
880-19424-A-41-E MS	Matrix Spike	Total/NA	Solid	8021B	35620
880-19424-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35620

#### **Analysis Batch: 35877**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	Total BTEX	
890-3009-2	BH-186 (13')	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

#### Prep Batch: 35018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	8015NM Prep	
890-3009-2	BH-186 (13')	Total/NA	Solid	8015NM Prep	
MB 880-35018/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35018/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35018/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19424-A-53-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19424-A-53-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 35120**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	8015B NM	35018
890-3009-2	BH-186 (13')	Total/NA	Solid	8015B NM	35018
MB 880-35018/1-A	Method Blank	Total/NA	Solid	8015B NM	35018
LCS 880-35018/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35018
LCSD 880-35018/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35018
880-19424-A-53-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35018
880-19424-A-53-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35018

# **QC Association Summary**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-3009-1

SDG: Lea County NM

## GC Semi VOA

## Analysis Batch: 35298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	8015 NM	
890-3009-2	BH-186 (13')	Total/NA	Solid	8015 NM	

## HPLC/IC

#### Leach Batch: 35023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Soluble	Solid	DI Leach	_
890-3009-2	BH-186 (13')	Soluble	Solid	DI Leach	
MB 880-35023/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3009-1 MS	BH-185 (13')	Soluble	Solid	DI Leach	
890-3009-1 MSD	BH-185 (13')	Soluble	Solid	DI Leach	

## Analysis Batch: 35314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Soluble	Solid	300.0	35023
890-3009-2	BH-186 (13')	Soluble	Solid	300.0	35023
MB 880-35023/1-A	Method Blank	Soluble	Solid	300.0	35023
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	300.0	35023
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35023
890-3009-1 MS	BH-185 (13')	Soluble	Solid	300.0	35023
890-3009-1 MSD	BH-185 (13')	Soluble	Solid	300.0	35023

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

2

Ė

6

8

10

12

15

Client: Tetra Tech, Inc. Job ID: 890-3009-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-185 (13')

Date Received: 09/20/22 10:22

Lab Sample ID: 890-3009-1 Date Collected: 09/19/22 00:00 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35620	09/28/22 14:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35744	10/01/22 13:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35877	10/01/22 19:44	AJ	EET MIC
Total/NA	Analysis	8015 NM		1			35298	09/23/22 16:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35018	09/21/22 08:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35120	09/23/22 04:27	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35023	09/21/22 10:05	SMC	EET MIC
Soluble	Analysis	300.0		5			35314	09/23/22 22:44	CH	EET MID

Client Sample ID: BH-186 (13') Lab Sample ID: 890-3009-2

Date Collected: 09/19/22 00:00 Matrix: Solid

Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35620	09/28/22 14:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35744	10/01/22 14:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35877	10/01/22 19:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35298	09/23/22 16:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35018	09/21/22 08:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35120	09/23/22 04:06	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		5			35314	09/23/22 22:58	CH	EET MID

**Laboratory References:** 

Released to Imaging: 9/1/2023 2:28:53 PM

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3009-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	<b>Expiration Date</b>
		ELAP	T104704400-22-24	06-30-23
The following englytes	and the street and the state of a contract that			
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for
,	• '	t the laboratory is not certifi  Matrix	ed by the governing authority. This list ma	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

3

4

6

9

10

12

## **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3009-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

3

4

6

Q

10

12

IJ

## **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3009-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3009-1	BH-185 (13')	Solid	09/19/22 00:00	09/20/22 10:22	13
890-3009-2	BH-186 (13')	Solid	09/19/22 00:00	09/20/22 10:22	13

	Relinquished by:	Relinquished by:	Relinquished by						( LABUSE )	LAB#		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4		Analysis Re
	Date: Time:	: Date: Time:	1/20/22 Time:				BH-186 (13')	ВН-185 (13')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	16114 1611, 1110.	Totan Took Inc	Analysis Request of Chain of Custody Record
OBICINIAI COBY	Received by:	Received by:	Received by:				9/19/2022	9/19/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:			
	Date: Time:	Date: Time:	2				×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 682-4559	SOTOV WAIT STEET, SE 100 Midland, Texas 79705	
(Circle) HAND DELIVERED	00 CD	7	LAB USE ONLY [X	890-300			×	×	TCLP M	270C etals olatile	Y/N) BTE (Ext to (GRO-	DRO - Calculation	ORO - Pb Se	Hg			ANALYSIS REQUEST			
FEDEX UPS Tracking#	Rush Charges Authorized Special Report Limits or TRRP Report	ROSH: Same Day 24 m 40 m 72 m		890-3009 Chain of Custody			×	×	PCB's NORM PLM (A Chlorid Chlorid	Vol. 8 Semi. 8082 / sbeste e S	Vol. 8 Vol. 8 608 Os)	624 270C/62 TDS emistry (		tached	list)		or Specify Method No.)			Page 1 of
		Ξ	Ī						Hold											-

Page 18 of 20

10/1/2022

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3009-1

SDG Number: Lea County NM

Login Number: 3009 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is 6mm (1/4").	N/A	

**Eurofins Carlsbad** Page 19 of 20 10/1/2022

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3009-1

SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

Creator: Rodriguez, Leticia

Login Number: 3009

List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Released to Imaging: 9/1/2023 2:28:53 PM



Released to Imaging: 9/1/2023 2:28:53 PM

# **Environment Testing America**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3010-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 10/3/2022 6:53:25 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3010-1 SDG: Lea County NM

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	14
Lab Chronicle	16
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

2

3

4

6

8

10

## **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

#### **Qualifiers**

GC	<b>VOA</b>
Qua	lifier

*_	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.

**Qualifier Description** 

S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

#### **GC Semi VOA**

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

Qualifier	Qualifier Description

U Indicates the analyte was analyzed for but not detected.

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Estimated Detection Limit (Dioxin)

Limit of Quantitation (DoD/DOE)

Limit of Detection (DoD/DOE)

#### **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

MCL MDA

DLC

EDL

LOD

LOQ

Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry) Method Detection Limit MDL Minimum Level (Dioxin)

ML MPN Most Probable Number MQL Method Quantitation Limit NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present **PQL** Practical Quantitation Limit

**PRES** Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-3010-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3010-1

#### Receipt

The samples were received on 9/20/2022 10:22 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

#### **GC VOA**

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-35625 and analytical batch 880-35815 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: Trench-1 (10') (890-3010-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-35172 and analytical batch 880-35220 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

6

\_

9

10

12

13

| | 4

Matrix: Solid

Lab Sample ID: 890-3010-1

Client: Tetra Tech, Inc.

Job ID: 890-3010-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: Trench-1 (10')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U *+ *1	0.201		mg/Kg		09/29/22 16:18	10/03/22 18:54	100
Toluene	12.5	*+ *1	0.201		mg/Kg		09/29/22 16:18	10/03/22 18:54	100
Ethylbenzene	23.9	*+ *1	0.201		mg/Kg		09/29/22 16:18	10/03/22 18:54	100
m-Xylene & p-Xylene	35.1	*+ *1	0.402		mg/Kg		09/29/22 16:18	10/03/22 18:54	100
o-Xylene	14.3	*+ *1	0.201		mg/Kg		09/29/22 16:18	10/03/22 18:54	100
Xylenes, Total	49.4	*+ *1	0.402		mg/Kg		09/29/22 16:18	10/03/22 18:54	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	196	S1+	70 - 130				09/29/22 16:18	10/03/22 18:54	100
1,4-Difluorobenzene (Surr)	82		70 - 130				09/29/22 16:18	10/03/22 18:54	100
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	85.8		0.402		mg/Kg			10/02/22 08:53	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4270		49.9		mg/Kg			09/26/22 13:20	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	936		49.9		mg/Kg		09/22/22 11:26	09/24/22 03:48	1
Diesel Range Organics (Over C10-C28)	2930		49.9		mg/Kg		09/22/22 11:26	09/24/22 03:48	1
Oll Range Organics (Over C28-C36)	404		49.9		mg/Kg		09/22/22 11:26	09/24/22 03:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/22/22 11:26	09/24/22 03:48	1
o-Terphenyl	102		70 - 130				09/22/22 11:26	09/24/22 03:48	1
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	991		25.2		mg/Kg			09/23/22 23:03	- 5

Client Sample ID: Trench-2 (5')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *-	0.00201		mg/Kg		09/28/22 16:17	10/01/22 21:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/01/22 21:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/01/22 21:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 16:17	10/01/22 21:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/01/22 21:30	1
Xylenes, Total	< 0.00402	U	0.00402		mg/Kg		09/28/22 16:17	10/01/22 21:30	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3010-2

Matrix: Solid

3

4

0

8

10

12

Matrix: Solid

Lab Sample ID: 890-3010-2

09/23/22 23:08

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: Trench-2 (5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 5

Chloride

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/28/22 16:17	10/01/22 21:30	1
1,4-Difluorobenzene (Surr)	104		70 - 130				09/28/22 16:17	10/01/22 21:30	1
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/02/22 08:53	1
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/26/22 13:20	1
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Ra	•					_			
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/22 11:26	09/23/22 21:40	1
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	П	49.9		mg/Kg		09/22/22 11:26	09/23/22 21:40	1
C10-C28)	140.0	O	49.9		mg/rtg		09/22/22 11.20	09/25/22 21.40	'
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 11:26	09/23/22 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				09/22/22 11:26	09/23/22 21:40	1
o-Terphenyl	103		70 - 130				09/22/22 11:26	09/23/22 21:40	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							

50.4

mg/Kg

4770

## **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19417-A-1-E MS	Matrix Spike	109	105	
880-19417-A-1-F MSD	Matrix Spike Duplicate	112	100	
890-3010-1	Trench-1 (10')	196 S1+	82	
890-3010-2	Trench-2 (5')	116	104	
890-3015-A-1-E MS	Matrix Spike	101	94	
890-3015-A-1-F MSD	Matrix Spike Duplicate	108	107	
LCS 880-35625/1-A	Lab Control Sample	109	100	
LCS 880-35724/1-A	Lab Control Sample	76	73	
LCSD 880-35625/2-A	Lab Control Sample Dup	104	99	
LCSD 880-35724/2-A	Lab Control Sample Dup	128	123	
MB 880-35625/5-A	Method Blank	101	114	
MB 880-35628/5-A	Method Blank	105	105	
MB 880-35692/5-A	Method Blank	99	83	
IVID 000-33032/3-A		100	76	

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-3010-1	Trench-1 (10')	110	102	
90-3010-2	Trench-2 (5')	95	103	
90-3010-2 MS	Trench-2 (5')	90	88	
90-3010-2 MSD	Trench-2 (5')	103	99	
CS 880-35172/2-A	Lab Control Sample	99	105	
CSD 880-35172/3-A	Lab Control Sample Dup	106	108	
1B 880-35172/1-A	Method Blank	120	139 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35625/5-A

**Matrix: Solid** 

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35625

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 16:17	10/01/22 20:00	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/28/22 16:17	10/01/22 20:00	1
1,4-Difluorobenzene (Surr)	114		70 - 130	09/28/22 16:17	10/01/22 20:00	1

Lab Sample ID: LCS 880-35625/1-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35625

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.06312	*-	mg/Kg		63	70 - 130	
Toluene	0.100	0.07231		mg/Kg		72	70 - 130	
Ethylbenzene	0.100	0.07030		mg/Kg		70	70 - 130	
m-Xylene & p-Xylene	0.200	0.1471		mg/Kg		74	70 - 130	
o-Xylene	0.100	0.07531		mg/Kg		75	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	109	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-35625/2-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	<b>Control Sam</b>	ple Dup
--	------------	-------------	--------------------	---------

Prep Type: Total/NA

Prep Batch: 35625

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.06587	*-	mg/Kg		66	70 - 130	4	35
Toluene	0.100	0.07114		mg/Kg		71	70 - 130	2	35
Ethylbenzene	0.100	0.07179		mg/Kg		72	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1452		mg/Kg		73	70 - 130	1	35
o-Xylene	0.100	0.07431		mg/Kg		74	70 - 130	1	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1.4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-19417-A-1-E MS

**Matrix: Solid** 

Analysis Batch: 35815

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 35625

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U *-	0.101	0.09573		mg/Kg		95	70 - 130	
Toluene	<0.00201	U	0.101	0.09812		mg/Kg		98	70 - 130	

Job ID: 890-3010-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-19417-A-1-E MS

**Matrix: Solid** 

Analysis Batch: 35815

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35625

	Sample	Sample	<b>Spike</b>	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00201	U	0.101	0.08958		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1802		mg/Kg		90	70 - 130
o-Xylene	<0.00201	U	0.101	0.09000		mg/Kg		89	70 - 130

MS MS

Surrogate	%Recovery Qu	ıalifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35625

Lab Sample ID: 880-19417-A-1-F MSD **Matrix: Solid** 

**Analysis Batch: 35815** 

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.0990 Benzene <0.00201 U \*-0.09175 mg/Kg 93 70 - 130 4 35 Toluene 0.0990 <0.00201 U 0.1021 mg/Kg 103 70 - 130 4 35 Ethylbenzene <0.00201 U 0.0990 0.1028 mg/Kg 104 70 - 130 35 14 <0.00402 U 0.198 0.2097 106 70 - 130 35 m-Xylene & p-Xylene mg/Kg 15 0.0990 <0.00201 U 0.1043 105 70 - 130 o-Xylene mg/Kg 15

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	112	70 - 130
1.4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: MB 880-35628/5-A

**Matrix: Solid** 

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35628

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 16:25	10/01/22 06:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 16:25	10/01/22 06:46	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105	70 - 130	09/28/22 16:25	10/01/22 06:46	1
1 4-Difluorobenzene (Surr)	105	70 130	09/28/22 16:25	10/01/22 06:46	1

Lab Sample ID: MB 880-35692/5-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35692

		MB	MB						-	
Analyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.	00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
Toluene	<0.	00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
Ethylbenzene	<0.	00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
m-Xylene & p-	Xylene <0	00400	U	0.00400		mg/Kg		09/29/22 11:56	10/02/22 22:18	1

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-35692/5-A

Lab Sample ID: MB 880-35724/5-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 35692

A	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
0	-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
X	ylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/22 11:56	10/02/22 22:18	1

MD MD

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/29/22 11:56	10/02/22 22:18	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/29/22 11:56	10/02/22 22:18	1

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 35724

**Matrix: Solid** Analysis Batch: 35890

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/22 16:18	10/03/22 08:58	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/29/22 16:18	10/03/22 08:58	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/29/22 16:18	10/03/22 08:58	1

Lab Sample ID: LCS 880-35724/1-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sam	ple ID: Lab	Control Sample

**Prep Type: Total/NA** 

Prep Batch: 35724

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07829		mg/Kg		78	70 - 130	
Toluene	0.100	0.08089		mg/Kg		81	70 - 130	
Ethylbenzene	0.100	0.07734		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	0.200	0.1621		mg/Kg		81	70 - 130	
o-Xylene	0.100	0.08300		mg/Kg		83	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	76	70 - 130
1,4-Difluorobenzene (Surr)	73	70 - 130

Lab Sample ID: LCSD 880-35724/2-A

Matrix: Solid

Analysis Batch: 35890

<b>Client Sample</b>	ID: Lab	Control	Sample	Dup
----------------------	---------	---------	--------	-----

Prep Type: Total/NA

Prep Batch: 35724

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1318	*+ *1	mg/Kg		132	70 - 130	51	35
Toluene	0.100	0.1408	*+ *1	mg/Kg		141	70 - 130	54	35
Ethylbenzene	0.100	0.1312	*+ *1	mg/Kg		131	70 - 130	52	35
m-Xylene & p-Xylene	0.200	0.2759	*+ *1	mg/Kg		138	70 - 130	52	35
o-Xylene	0.100	0.1422	*+ *1	mg/Kg		142	70 - 130	53	35

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3010-1

SDG: Lea County NM

Prep Type: Total/NA Prep Batch: 35724

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	123		70 - 130

Lab Sample ID: 890-3015-A-1-E MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 35890** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U *+ *1	0.0998	0.09073		mg/Kg		91	70 - 130	
Toluene	<0.00200	U *+ *1	0.0998	0.09593		mg/Kg		96	70 - 130	
Ethylbenzene	<0.00200	U *+ *1	0.0998	0.08487		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	<0.00401	U *+ *1	0.200	0.1756		mg/Kg		88	70 - 130	
o-Xylene	<0.00200	U *+ *1	0.0998	0.09418		mg/Kg		94	70 - 130	

MS MS Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 101 70 - 130

1,4-Difluorobenzene (Surr) 94

Lab Sample ID: 890-3015-A-1-F MSD

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Prep Batch: 35724

Spike MSD MSD %Rec RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Benzene 0.0990 <0.00200 U\*+\*1 0.09916 mg/Kg 100 70 - 130 9 35 <0.00200 U \*+ \*1 Toluene 0.0990 0.1009 102 70 - 130 35 mg/Kg 5 Ethylbenzene <0.00200 U \*+ \*1 0.0990 0.08894 90 70 - 130 35 mg/Kg m-Xylene & p-Xylene <0.00401 U\*+\*1 0.198 0.1820 mg/Kg 92 70 - 130 35 o-Xylene <0.00200 U\*+\*1 0.0990 0.09773 mg/Kg 99 70 - 130 35

MSD MSD %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 108 1,4-Difluorobenzene (Surr) 107 70 - 130

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35172/1-A

**Matrix: Solid** 

Analysis Batch: 35220

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 35172

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1

ı	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	120		70 - 130	09/22/22 11:26	09/23/22 20:35	1
	o-Terphenyl	139	S1+	70 - 130	09/22/22 11:26	09/23/22 20:35	1

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-35172/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** Analysis Batch: 35220 Prep Type: Total/NA Prep Batch: 35172

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	960.3		mg/Kg		96	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	891.9		mg/Kg		89	70 - 130	
C10-C28)								

	LUS LU.	3
Surrogate	%Recovery Qua	alifier Limits
1-Chlorooctane	99	70 - 130
o-Terphenyl	105	70 - 130

Lab Sample ID: LCSD 880-35172/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

**Analysis Batch: 35220** 

Prep Batch: 35172 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit 1000 960.5 96 70 - 130 0 Gasoline Range Organics mg/Kg

(GRO)-C6-C10 Diesel Range Organics (Over 1000 951.2 mg/Kg 95 70 - 130 6 C10-C28)

	LUSD	LUSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	108		70 - 130

100D 100D

MS MS

Lab Sample ID: 890-3010-2 MS Client Sample ID: Trench-2 (5')

**Matrix: Solid** 

Prep Type: Total/NA Analysis Batch: 35220 Prep Batch: 35172

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	887.9		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	998.1		mg/Kg		100	70 - 130	

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	90	70 - 130
o-Terphenyl	88	70 - 130

Lab Sample ID: 890-3010-2 MSD Client Sample ID: Trench-2 (5') Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 35220									Prep	Batch:	35172
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1050		mg/Kg		103	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1135		mg/Kg		114	70 - 130	13	20

MSD MSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 103

**Eurofins Carlsbad** 

Prep Type: Total/NA

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3010-1 SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3010-2 MSD **Matrix: Solid** 

Analysis Batch: 35220

Client Sample ID: Trench-2 (5')

Prep Type: Total/NA

Prep Batch: 35172

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35023/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

Matrix: Solid

Analysis Batch: 35314

MB MB Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride <5.00 5.00 09/23/22 22:29 U mg/Kg

Lab Sample ID: LCS 880-35023/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 35314** 

LCS LCS Spike %Rec Added Result Qualifier Analyte Unit D %Rec Limits Chloride 250 246.3 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-35023/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 35314

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 247.2 90 - 110 mg/Kg 20

Lab Sample ID: 890-3009-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 35314

Spike MS MS %Rec Sample Sample Analyte Qualifier Added Qualifier Unit %Rec Result Result Limits Chloride 591 1240 1868 103 90 - 110 mg/Kg

Lab Sample ID: 890-3009-A-1-D MSD

**Matrix: Solid** 

**Analysis Batch: 35314** 

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Qualifier Limits RPD Limit Analyte Result Unit %Rec Chloride 1240 103 591 90 - 110 20 1873 mg/Kg

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike Duplicate

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**GC VOA** 

Prei	o Ba	atch	ո։ 3	5625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-2	Trench-2 (5')	Total/NA	Solid	5035	
MB 880-35625/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35625/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35625/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19417-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19417-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

# Prep Batch: 35628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35628/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 35692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35692/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 35724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Total/NA	Solid	5035	
MB 880-35724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### **Analysis Batch: 35815**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-2	Trench-2 (5')	Total/NA	Solid	8021B	35625
MB 880-35625/5-A	Method Blank	Total/NA	Solid	8021B	35625
MB 880-35628/5-A	Method Blank	Total/NA	Solid	8021B	35628
LCS 880-35625/1-A	Lab Control Sample	Total/NA	Solid	8021B	35625
LCSD 880-35625/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35625
880-19417-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35625
880-19417-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35625

## Analysis Batch: 35881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Total/NA	Solid	Total BTEX	
890-3010-2	Trench-2 (5')	Total/NA	Solid	Total BTEX	

## Analysis Batch: 35890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Total/NA	Solid	8021B	35724
MB 880-35692/5-A	Method Blank	Total/NA	Solid	8021B	35692
MB 880-35724/5-A	Method Blank	Total/NA	Solid	8021B	35724
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	8021B	35724
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35724
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35724
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35724

**Eurofins Carlsbad** 

9

2

4

6

\_

10

12

13

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# GC Semi VOA

## Prep Batch: 35172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Total/NA	Solid	8015NM Prep	
890-3010-2	Trench-2 (5')	Total/NA	Solid	8015NM Prep	
MB 880-35172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3010-2 MS	Trench-2 (5')	Total/NA	Solid	8015NM Prep	
890-3010-2 MSD	Trench-2 (5')	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 35220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Total/NA	Solid	8015B NM	35172
890-3010-2	Trench-2 (5')	Total/NA	Solid	8015B NM	35172
MB 880-35172/1-A	Method Blank	Total/NA	Solid	8015B NM	35172
LCS 880-35172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35172
LCSD 880-35172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35172
890-3010-2 MS	Trench-2 (5')	Total/NA	Solid	8015B NM	35172
890-3010-2 MSD	Trench-2 (5')	Total/NA	Solid	8015B NM	35172

## Analysis Batch: 35412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Total/NA	Solid	8015 NM	
890-3010-2	Trench-2 (5')	Total/NA	Solid	8015 NM	

## HPLC/IC

### Leach Batch: 35023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Soluble	Solid	DI Leach	
890-3010-2	Trench-2 (5')	Soluble	Solid	DI Leach	
MB 880-35023/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3009-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3009-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 35314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3010-1	Trench-1 (10')	Soluble	Solid	300.0	35023
890-3010-2	Trench-2 (5')	Soluble	Solid	300.0	35023
MB 880-35023/1-A	Method Blank	Soluble	Solid	300.0	35023
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	300.0	35023
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35023
890-3009-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	35023
890-3009-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35023

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

2

5

7

8

10

4.0

13

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: Trench-1 (10')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3010-1

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35724	09/29/22 16:18	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	35890	10/03/22 18:54	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35881	10/02/22 08:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35412	09/26/22 13:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 03:48	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		5			35314	09/23/22 23:03	CH	EET MID

Client Sample ID: Trench-2 (5')

Lab Sample ID: 890-3010-2

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/01/22 21:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35881	10/02/22 08:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35412	09/26/22 13:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/23/22 21:40	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		10			35314	09/23/22 23:08	CH	EET MID

**Laboratory References:** 

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following englytes	and the street and the state of a contract that			
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for
,	• '	t the laboratory is not certifi  Matrix	ed by the governing authority. This list ma	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

3

4

O -

4.6

11

13

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

3

4

6

9

12

13

\_ \_ \_

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3010-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3010-1	Trench-1 (10')	Solid	09/19/22 00:00	09/20/22 10:22	10
890-3010-2	Trench-2 (5')	Solid	09/19/22 00:00	09/20/22 10:22	5

Tetra Tech, Inc.    Tetra Tech, Inc.   Tetra Tech, Inc.   Tetra Trios	Relinquished by:	Relinguished by:				LAB#		Receiving Laboratory: Comments:	Project Location: (county, state) Invoice to:	Project Name:	Client Name;	7
Sampler Signature:  Clair Gonzales (Clair Gonzales)  Clair Gonzales (Clair Gonzales)  Clair Gonzales (Clair Gonzales)  Clair Gonzales (Clair Gonzales)  Clair Gonzales (Clair Gonzales)  Clair Gonzales (Clair Gonzales)  ANALYSIS REQ.  Peyton Oliver  Peyton Oliver  Perservanve  None  ANALYSIS REQ.  Cir  None  Project #  212C-MD-02230  ANALYSIS REQ.  Cir  None  PRESERVANVE  ANALYSIS REQ.  Cir  None  PRESERVANVE  ANALYSIS REQ.  Cir  Time:  # CONTAINERS  FILTERED (Y/N)  X X BTEX 8021B BTEX 8260B  TPH TX1005 (Ext to C35)  X X TPH 8015M (GRO - DRO - ORO - MRO)  PAH 8270C  Total Metals Ag As Ba Cd Cr Pb Se Hg  Total Metals Ag As Ba Cd Cr Pb Se Hg  Total Metals Ag As Ba Cd Cr Pb Se Hg  Total Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Metals Ag As Ba Cd Cr Pb Se Hg	Date:	Date: 0/10/22		Heilwitz (7)	Trench-1 (10')	SAMPLE IDENTIFICATION				Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc
# CONTAINERS  # CONTAINERS  FILTERED (Y/N)    X	Received by:	Received by:		31 312022	9/19/2022		SAMPLING		Project #:	Clair.(	Site Manager:	
# CONTAINERS    FILTERED (Y/N)						HCL HNO <sub>3</sub>		Peyton Oliver	212C-MD-02230	Gonzales@tetratech.com	Clair Gonzales	Mdland, Texas 79705 Tel (432) 682-4559 Few (432) 682-3946
TCLP Semi Volatiles	ひ、の □ Rus	LAB USE ONLY  Sample Temperature	890-3010 Chain			FILTERED ( BTEX 8021E TPH TX1003 TPH 8015M PAH 8270C Total Metals TCLP Metals TCLP Volatile	(Y/N)  BTE  (Y/N)  BTE  (Ext to  (GRO  Ag As B  Ag As E  es	C35) DRO - ORO - MRO Ba Cd Cr Pb Se Hg Ba Cd Cr Pb Se Hg			~ 20 l	

Page 20 of 22

Creator: Clifton, Cloe

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3010-1 SDG Number: Lea County NM

Login Number: 3010 List Source: Eurofins Carlsbad List Number: 1

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3010-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 3010

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Ė

7

9

11

42





# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3011-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

eurofins

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 10/3/2022 6:54:20 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

**Review your project** results through EOL

.....LINKS

Received by OCD: 8/28/2023 2:17:46 PM

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 2:28:53 PM

Results relate only to the items tested and the sample(s) as received by the laboratory.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3011-1 SDG: Lea County NM

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	30
QC Sample Results	33
QC Association Summary	46
Lab Chronicle	54
Certification Summary	64
Method Summary	65
Sample Summary	66
Chain of Custody	67
Receipt Checklists	71

2

3

4

6

8

10

12

13

# **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

### **Qualifiers**

GC	<b>VOA</b>
Qua	ifier

*_	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

**Qualifier Description** 

## **GC Semi VOA**

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

### HPLC/IC

Qualifier Qualific	er Description
--------------------	----------------

Indicates the analyte was analyzed for but not detected.

# **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC

Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit MI Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present Practical Quantitation Limit PQL

**PRES** Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

**RPD** Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-3011-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3011-1

#### Receipt

The samples were received on 9/20/2022 10:22 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

#### GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-35621 and analytical batch 880-35814 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH-195 (8') (890-3011-12), BH-200 (4.5') (890-3011-17) and BH-201 (4.5') (890-3011-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-35625 and analytical batch 880-35815 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-206 (4.5') (890-3011-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-205 (4.5') (890-3011-22). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-35103 and analytical batch 880-35007 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: SW-74 (8-13') (890-3011-28). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-35262 and analytical batch 880-35322 was outside the upper control limits.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-35172 and analytical batch 880-35220 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

3

4

7

10

12

13

Lab Sample ID: 890-3011-1

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: H-1 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	
Toluene	<0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	•
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	•
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 06:49	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 06:49	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/28/22 14:59	10/01/22 06:49	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/28/22 14:59	10/01/22 06:49	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/22 19:48	1
: Method: 8015 NM - Diesel Range	e Organics (DR		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
• •		O) (GC)							
• •	e Organics (DR	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR) Result <a href="https://example.com/result-49.9">&lt; 49.9</a>	Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR) Result 49.9 ge Organics (DI)	Qualifier U RO) (GC)	49.9		mg/Kg	=	· ·	09/23/22 12:25	1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	e Organics (DR) Result 49.9 ge Organics (DR) Result	Qualifier U RO) (GC) Qualifier	49.9	MDL	mg/Kg	<u>D</u>	Prepared	09/23/22 12:25  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR) Result 49.9 ge Organics (DI)	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	=	· ·	09/23/22 12:25	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR) Result 49.9 ge Organics (DR) Result	Qualifier U  RO) (GC) Qualifier U	49.9		mg/Kg	=	Prepared	09/23/22 12:25  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <49.9 ge Organics (DI Result <49.9	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/22/22 20:34	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR Result <49.9 ge Organics (DI Result <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 20:34 09/22/22 20:34	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR Result <49.9 ge Organics (DI Result <49.9 <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 20:34 09/22/22 20:34	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ge Organics (DR Result <49.9 ge Organics (DI Result <49.9 <49.9 <49.9	Qualifier U  RO) (GC) Qualifier U  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45 Prepared	09/23/22 12:25  Analyzed 09/22/22 20:34 09/22/22 20:34  09/22/22 20:34  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (DR Result <49.9 ge Organics (DI Result <49.9 <49.9 <49.9 **Recovery** 88 101	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45  Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 20:34  09/22/22 20:34  Analyzed 09/22/22 20:34	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (DR Result <49.9  ge Organics (D) Result <49.9  49.9  49.9  49.9  **Recovery 88  101  comatography -	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45  Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 20:34  09/22/22 20:34  Analyzed 09/22/22 20:34	Dil Fac

Client Sample ID: H-2 (0-2')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130				09/28/22 14:59	10/01/22 07:16	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3011-2

Matrix: Solid

2

3

5

7

9

11

13

14

no Ganobaa

Lab Sample ID: 890-3011-2

09/22/22 08:45 09/22/22 21:39

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: H-2 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
---	--------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99	70 - 130	09/28/22 14:59	10/01/22 07:16	1

Method: Tot	al BTEX - Tota	al BTEX Ca	alculation
mounou. Tot	u. D. L		aiouiutioii

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/01/22 19:48	1

Mothod: 8015 NM -	Diesal Pance	Organics (DRO) ((	201

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/K			09/23/22 12:25	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
Mictiliou. 00 10D	ITIN - DICSCI	itunge org	juilles	(DIXO)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 21:39	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 21:39	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 21:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				09/22/22 08:45	09/22/22 21:39	1

1-Chlorooctane	86	70 - 130	
o-Terphenyl	94	70 - 130	

Method: 300.0 - Anions, Ion Chrom	atography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Chloride	20.1	5.00	mg/Kg	09/23/22 23:27 1
Client Sample ID: H-3 (0-2')				Lab Sample ID: 890-3011-3

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

motifica. COLID Tolatile Orga	illo compoundo (	(33)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 07:42	1
Toluene	< 0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 07:42	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 07:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 07:42	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 07:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 07:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				09/28/22 14:59	10/01/22 07:42	1
1,4-Difluorobenzene (Surr)	96		70 - 130				09/28/22 14:59	10/01/22 07:42	1

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka			10/01/22 19:48	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/23/22 12:25	1

**Eurofins Carlsbad** 

5

3

4

6

<del>ا</del>

10

12

13

14

Matrix: Solid

Lab Sample ID: 890-3011-3

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: H-3 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:00	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				09/22/22 08:45	09/22/22 22:00	1
o-Terphenyl	118		70 - 130				09/22/22 08:45	09/22/22 22:00	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.3		5.00		mg/Kg			09/23/22 23:32	1

Client Sample ID: H-4 (0-2') Lab Sample ID: 890-3011-4 Date Collected: 09/19/22 00:00 Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				09/28/22 14:59	10/01/22 08:08	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:59	10/01/22 08:08	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 22:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 22:22	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 22:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				09/22/22 08:45	09/22/22 22:22	1
o-Terphenyl	115		70 - 130				09/22/22 08:45	09/22/22 22:22	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

Client Sample ID: H-4 (0-2') Lab Sample ID: 890-3011-4 Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22 Sample Depth: 0 - 2

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.5		5.00		mg/Kg			09/23/22 23:37	1

Client Sample ID: H-5 (0-2') Lab Sample ID: 890-3011-5 Matrix: Solid

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	
Toluene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 08:35	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 08:35	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	116		70 - 130				09/28/22 14:59	10/01/22 08:35	
1,4-Difluorobenzene (Surr)	95		70 - 130				09/28/22 14:59	10/01/22 08:35	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier	RL	MDL	11	D	Prepared	Amalumad	Dil Fac
Analyte Total TPH				MDL			Prepared	Analyzed	
10tal 1PH - -	<50.0	U	50.0		mg/Kg			09/23/22 12:25	•
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:43	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:43	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	95		70 - 130				09/22/22 08:45	09/22/22 22:43	1
o-Terphenyl	104		70 - 130				09/22/22 08:45	09/22/22 22:43	:
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-3011-6

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: H-6 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				09/28/22 14:59	10/01/22 09:01	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/28/22 14:59	10/01/22 09:01	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Range			DI	MDI	Unit	Ь	Propared	Analyzad	Dil Eac
_			ΡI	MDI	Unit	n	Propared	Analyzad	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	Dil Fac
Analyte	Result   <50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U		MDL MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg	=		09/23/22 12:25	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  Ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U	50.0		mg/Kg	=	Prepared	09/23/22 12:25  Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0  ge Organics (Dige Result <50.0)	Qualifier U  RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/22/22 23:05	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U  U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/22/22 23:05  09/22/22 23:05	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0	Qualifier U  RO) (GC) Qualifier U  U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 23:05 09/22/22 23:05	Dil Face 1 1 1 Dil Face
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   <50.0	Qualifier U  RO) (GC) Qualifier U  U	50.0  RL  50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45 Prepared	09/23/22 12:25  Analyzed 09/22/22 23:05 09/22/22 23:05 09/22/22 23:05 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <50.0	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45  Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 23:05 09/22/22 23:05  Analyzed 09/22/22 23:05	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U  RO) (GC) Qualifier U  U  Qualifier	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg mg/Kg mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45  Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/22/22 23:05 09/22/22 23:05  Analyzed 09/22/22 23:05	Dil Fac

Client Sample ID: H-7 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 09:37	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 09:37	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 09:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 09:37	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 09:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 09:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/28/22 14:59	10/01/22 09:37	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3011-7

Matrix: Solid

2

3

7

9

11

Lab Sample ID: 890-3011-7

Lab Sample ID: 890-3011-8

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-3011-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: H-7 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compou	unds (GC) (Continued)
---	-----------------------

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88	70 - 130	09/28/22 14:59	10/01/22 09:37	1

Method: Tot	al BTEX - Tota	al BTEX Ca	alculation
mounou. Tot	u. D. L		aiouiutioii

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/22 19:48	1

Mothod: 8015 NM -	Diosal Panga	Organice	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			09/23/22 12:25	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
Mictiliou. 00 10D	ITIN - DICSCI	itunge org	juilles	(DIXO)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/22/22 08:45	09/22/22 23:26	

70 - 130

<del>_</del>		
Method: 300 0 - Anions	Ion Chromatography - Soluble	

93

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.7	5.03	mg/Kg			09/23/22 23:52	1

Client Sample ID: BH-191 (8')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 8

o-Terphenyl

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	• voiatile Organic	Compounds (GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Toluene	<0.00200	U *-	0.00200	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			09/28/22 14:59	10/01/22 10:04	1
1,4-Difluorobenzene (Surr)	90		70 - 130			09/28/22 14:59	10/01/22 10:04	1

Mothod:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Pı	repared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401		ma/Ka				10/01/22 19:48	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
---	-------------------	----------------	------------	------	-----

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	94.3	50.0	mg/Kg			09/23/22 12:25	1

**Eurofins Carlsbad** 

9

3

4

6

8

4.0

Lab Sample ID: 890-3011-8

Lab Sample ID: 890-3011-9

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-191 (8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 02:18	1
(GRO)-C6-C10									
Diesel Range Organics (Over	94.3		50.0		mg/Kg		09/22/22 08:45	09/23/22 02:18	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/22/22 08:45	09/23/22 02:18	1
o-Terphenyl	119		70 - 130				09/22/22 08:45	09/23/22 02:18	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-192 (8')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 10:30	1
Toluene	<0.00202	U *-	0.00202		mg/Kg		09/28/22 14:59	10/01/22 10:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 10:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/28/22 14:59	10/01/22 10:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 10:30	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/28/22 14:59	10/01/22 10:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				09/28/22 14:59	10/01/22 10:30	1
1,4-Difluorobenzene (Surr)	99		70 - 130				09/28/22 14:59	10/01/22 10:30	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 23:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 23:47	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 23:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				09/22/22 08:45	09/22/22 23:47	1
o-Terphenyl	92		70 <sub>-</sub> 130				09/22/22 08:45	09/22/22 23:47	1

**Eurofins Carlsbad** 

3

4

6

8

10

11

13

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1

SDG: Lea County NM

Client Sample ID: BH-192 (8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8

Lab Sample ID: 890-3011-9

Matrix: Solid

Method	ethod: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride		249		4.99		mg/Kg			09/24/22 00:12	1

Client Sample ID: BH-193 (8') Lab Sample ID: 890-3011-10

Date Collected: 09/19/22 00:00 Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				09/28/22 14:59	10/01/22 10:57	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:59	10/01/22 10:57	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	64.0		50.0		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 01:56	1
Diesel Range Organics (Over C10-C28)	64.0		50.0		mg/Kg		09/22/22 08:45	09/23/22 01:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 01:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/22/22 08:45	09/23/22 01:56	1
o-Terphenyl	94		70 - 130				09/22/22 08:45	09/23/22 01:56	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Pocult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte	Result	Qualifici	IXL.	MIDL	Oilit		ricparca	Allalyzea	Diriac

Lab Sample ID: 890-3011-11

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-194 (8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Toluene	< 0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				09/28/22 14:59	10/01/22 12:42	1
1,4-Difluorobenzene (Surr)	92		70 - 130				09/28/22 14:59	10/01/22 12:42	1
- Method: Total BTEX - Total BTI	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Rang	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	986		49.9		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	1
Diesel Range Organics (Over C10-C28)	817		49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	1
Oll Range Organics (Over C28-C36)	169		49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/22/22 08:45	09/23/22 02:40	1
o-Terphenyl	117		70 - 130				09/22/22 08:45	09/23/22 02:40	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.8		5.00		mg/Kg			09/24/22 00:31	1

Client Sample ID: BH-195 (8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 13:08	1
Toluene	<0.00198	U *-	0.00198		mg/Kg		09/28/22 14:59	10/01/22 13:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 13:08	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/28/22 14:59	10/01/22 13:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 13:08	1
Xylenes, Total	< 0.00397	U	0.00397		mg/Kg		09/28/22 14:59	10/01/22 13:08	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3011-12

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-3011-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-195 (8')

Lab Sample ID: 890-3011-12

Date Collected: 09/19/22 00:00 Matrix: Solid
Date Received: 09/20/22 10:22

Sample Depth: 8

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				09/28/22 14:59	10/01/22 13:08	
1,4-Difluorobenzene (Surr)	9	S1-	70 - 130				09/28/22 14:59	10/01/22 13:08	
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397		mg/Kg			10/01/22 19:48	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
			49.9		mg/Kg			09/23/22 12:25	
	<49.9 ge Organics (DI		49.9		mg/Kg			33/E0/EE 1E.E0	
Total TPH	<49.9	U	49.9		mg/Kg			33/20/22 12.20	
Total TPH :     Method: 8015B NM - Diesel Rang   Analyte	ge Organics (DI		49.9	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (DI	RO) (GC) Qualifier		MDL		<u>D</u>	Prepared 09/22/22 08:45		Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (DI Result <49.9	RO) (GC) Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	09/22/22 08:45	<b>Analyzed</b> 09/23/22 00:09	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (DI	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	<del></del>	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/22/22 08:45 09/22/22 08:45	Analyzed 09/23/22 00:09 09/23/22 00:09	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u> </u>	09/22/22 08:45	<b>Analyzed</b> 09/23/22 00:09	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (DI Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/22/22 08:45 09/22/22 08:45	Analyzed 09/23/22 00:09 09/23/22 00:09	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DI Result <49.9 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/22/22 08:45 09/22/22 08:45 09/22/22 08:45	Analyzed 09/23/22 00:09 09/23/22 00:09 09/23/22 00:09	1

Client Sample ID: BH-196 (4.5')

Lab Sample ID: 890-3011-13

RL

5.05

MDL Unit

mg/Kg

D

Prepared

Analyzed

09/24/22 00:36

Result Qualifier

34.5

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 13:34	1
Toluene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 14:59	10/01/22 13:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 13:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 13:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 13:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 13:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				09/28/22 14:59	10/01/22 13:34	1
1,4-Difluorobenzene (Surr)	90		70 - 130				09/28/22 14:59	10/01/22 13:34	1
Method: Total BTEX - Total B1	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

**Eurofins Carlsbad** 

2

Л

6

0

10

12

13

Dil Fac

**Matrix: Solid** 

Lab Sample ID: 890-3011-13

Lab Sample ID: 890-3011-14

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-3011-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-196 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 00:30	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 00:30	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 00:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/22/22 08:45	09/23/22 00:30	1
o-Terphenyl	102		70 - 130				09/22/22 08:45	09/23/22 00:30	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-197 (4.5')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:00	
Toluene	<0.00198	U *-	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/28/22 14:59	10/01/22 14:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/28/22 14:59	10/01/22 14:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				09/28/22 14:59	10/01/22 14:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:59	10/01/22 14:00	1
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result 96.5	Qualifier	<b>RL</b> 50.0	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	Dil Fac
Total TPH	96.5			MDL		<u>D</u>	Prepared		
Total TPH  Method: 8015B NM - Diesel Rang	96.5 ge Organics (D			MDL	mg/Kg	<u>D</u> 	Prepared Prepared		
	96.5 ge Organics (D	RO) (GC) Qualifier	50.0		mg/Kg			09/23/22 12:25	1
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over	96.5 ge Organics (D Result	RO) (GC) Qualifier	50.0		mg/Kg		Prepared	09/23/22 12:25  Analyzed	1 Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	96.5 ge Organics (D Result <50.0	RO) (GC) Qualifier	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/23/22 03:01	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	96.5 ge Organics (D Result <50.0 96.5	RO) (GC) Qualifier U	50.0  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/23/22 03:01  09/23/22 03:01	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	96.5 ge Organics (D Result <50.0 96.5 <50.0	RO) (GC) Qualifier U	50.0  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 09/22/22 08:45 09/22/22 08:45	09/23/22 12:25  Analyzed 09/23/22 03:01 09/23/22 03:01	1 Dil Fac

**Eurofins Carlsbad** 

2

3

0

8

12

Lab Sample ID: 890-3011-14

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-197 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1710		24.9		mg/Kg			09/24/22 00:46	5

Client Sample ID: BH-198 (4.5')

Date Collected: 09/19/22 00:00

Lab Sample ID: 890-3011-15

Matrix: Solid

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	
Toluene	<0.00202	U *-	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/28/22 14:59	10/01/22 14:26	
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/28/22 14:59	10/01/22 14:26	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	121		70 - 130				09/28/22 14:59	10/01/22 14:26	
1,4-Difluorobenzene (Surr)	94		70 - 130				09/28/22 14:59	10/01/22 14:26	
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00403	U	0.00403		mg/Kg			10/01/22 19:48	•
Method: 8015 NM - Diesel Range	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.8	U	49.8		mg/Kg			09/23/22 12:25	
Method: 8015B NM - Diesel Rang									
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 01:13	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 01:13	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 01:13	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	88		70 - 130				09/22/22 08:45	09/23/22 01:13	
o-Terphenyl	95		70 - 130				09/22/22 08:45	09/23/22 01:13	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
					mg/Kg			09/24/22 00:51	

Lab Sample ID: 890-3011-16

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: BH-199 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:52	1
Toluene	<0.00198	U *-	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:52	1
m-Xylene & p-Xylene	< 0.00396	U	0.00396		mg/Kg		09/28/22 14:59	10/01/22 14:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 14:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/28/22 14:59	10/01/22 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				09/28/22 14:59	10/01/22 14:52	1
1,4-Difluorobenzene (Surr)	93		70 - 130				09/28/22 14:59	10/01/22 14:52	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/01/22 19:48	1
Analyte	Result	Qualifier	RL	MDI	Unit	D	Prepared		
							riepaieu	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	
Total TPH  Method: 8015B NM - Diesel Ran					mg/Kg				
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)	49.9			=	<u> </u>	09/23/22 12:25	1
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	RO) (GC) Qualifier	49.9	MDL	Unit	<u>D</u>	Prepared	09/23/22 12:25  Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	ge Organics (D	RO) (GC) Qualifier	49.9			=	<u> </u>	09/23/22 12:25	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC) Qualifier	49.9		Unit	=	Prepared	09/23/22 12:25  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <49.9	RO) (GC) Qualifier U	49.9  RL 49.9		Unit mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/23/22 01:35	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	RO) (GC) Qualifier U	49.9  RL 49.9  49.9		Unit mg/Kg mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/23/22 01:35  09/23/22 01:35	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 <49.9	RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9		Unit mg/Kg mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45	09/23/22 12:25  Analyzed 09/23/22 01:35 09/23/22 01:35	Dil Face 1 1 1 Dil Face
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	ge Organics (D Result <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U	49.9  RL 49.9  49.9  49.9  Limits		Unit mg/Kg mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45 Prepared	09/23/22 12:25  Analyzed 09/23/22 01:35 09/23/22 01:35 09/23/22 01:35  Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 90 100	RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		Unit mg/Kg mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45  Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/23/22 01:35 09/23/22 01:35  Analyzed 09/23/22 01:35	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  <49.9  <49.9   **Recovery  90  100  omatography -	RO) (GC) Qualifier U U Qualifier	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		Unit mg/Kg mg/Kg mg/Kg	=	Prepared 09/22/22 08:45 09/22/22 08:45 09/22/22 08:45  Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed 09/23/22 01:35 09/23/22 01:35  Analyzed 09/23/22 01:35	Dil Fac

Client Sample ID: BH-200 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3011-17

Matrix: Solid

Method: 8021B - Volatile Orga	inic Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0201	U	0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Toluene	<0.0201	U *-	0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Ethylbenzene	0.0529		0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
m-Xylene & p-Xylene	0.116		0.0402		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Xylenes, Total	0.116		0.0402		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				09/28/22 14:59	10/01/22 16:10	10

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-200 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3011-17

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87		70 - 130				09/28/22 14:59	10/01/22 16:10	10
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.169		0.0402		mg/Kg	<u> </u>		10/01/22 19:48	1
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2290		50.0		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Ra	nge Organics (DI	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• • •	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 09/22/22 08:45	Analyzed 09/23/22 03:23	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	<b>Result</b> <50.0	Qualifier	50.0	MDL	mg/Kg	<u>D</u>	09/22/22 08:45	09/23/22 03:23	1
Analyte Gasoline Range Organics	Result	Qualifier		MDL		<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<b>Result</b> <50.0	Qualifier	50.0	MDL	mg/Kg	<u>D</u>	09/22/22 08:45	09/23/22 03:23	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result  <50.0 2020	Qualifier	50.0	MDL	mg/Kg	<u>D</u>	09/22/22 08:45	09/23/22 03:23	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	Result  <50.0 2020	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	09/22/22 08:45	09/23/22 03:23	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0   2020   267	Qualifier U	50.0 50.0 50.0	MDL	mg/Kg	<u> </u>	09/22/22 08:45 09/22/22 08:45 09/22/22 08:45	09/23/22 03:23 09/23/22 03:23 09/23/22 03:23	1

RL

25.1

MDL Unit

mg/Kg

**Client Sample ID: BH-201 (4.5')** 

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte

Chloride

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

3220

Lab Sample ID: 890-3011-18

Analyzed

09/23/22 19:57

Prepared

**Matrix: Solid** 

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0230		0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Toluene	<0.0200	U *-	0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Ethylbenzene	0.374		0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
m-Xylene & p-Xylene	1.01		0.0399		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
o-Xylene	0.368		0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Xylenes, Total	1.38		0.0399		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	230	S1+	70 - 130				09/28/22 14:59	10/01/22 16:36	10
1,4-Difluorobenzene (Surr)	98		70 - 130				09/28/22 14:59	10/01/22 16:36	10
- Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.78		0.0399		mg/Kg			10/01/22 19:48	

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-201 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 4.5 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3011-18

Lab Sample ID: 890-3011-19

Matrix: Solid

4

5

7

10

12

13

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2040		49.9		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Rar	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	117		49.9		mg/Kg		09/22/22 08:45	09/23/22 03:44	1
Diesel Range Organics (Over C10-C28)	1690		49.9		mg/Kg		09/22/22 08:45	09/23/22 03:44	1
Oll Range Organics (Over C28-C36)	234		49.9		mg/Kg		09/22/22 08:45	09/23/22 03:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/22/22 08:45	09/23/22 03:44	1
o-Terphenyl	94		70 - 130				09/22/22 08:45	09/23/22 03:44	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3480		24.8		mg/Kg			09/23/22 20:11	5

Method: 8021B - Volatile Organic Compounds (GC)

Client Sample ID: BH-202 (4.5')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 15:18	1
Toluene	< 0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 15:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 15:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 15:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 15:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 15:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				09/28/22 14:59	10/01/22 15:18	1
1,4-Difluorobenzene (Surr)	94		70 - 130				09/28/22 14:59	10/01/22 15:18	1
- Method: Total BTEX - Total B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/22 19:48	

Method: 8015 NM - Diesel Range Organics (DRO) (GC)										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1

Method: 8015B NM - Diesel Range	thod: 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 11:43	1	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 11:43	1	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 11:43	1	

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

Client Sample ID: BH-202 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

_ab	Sample	ID:	890-3011-19	
-----	--------	-----	-------------	--

. Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/23/22 11:03	09/24/22 11:43	1
o-Terphenyl	98		70 - 130	09/23/22 11:03	09/24/22 11:43	1

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResult ChlorideQualifierRL MDL Unit mg/KgD PreparedAnalyzed Dil Fac Dil

Client Sample ID: BH-203 (4.5')

Date Collected: 09/19/22 00:00

Lab Sample ID: 890-3011-20

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	
Toluene	<0.00198	U *-	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	,
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/28/22 14:59	10/01/22 15:44	
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/28/22 14:59	10/01/22 15:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	120		70 - 130				09/28/22 14:59	10/01/22 15:44	
1,4-Difluorobenzene (Surr)	92		70 - 130				09/28/22 14:59	10/01/22 15:44	•
- Method: Total BTEX - Total BTE)	K Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			10/01/22 19:48	1
- Method: 8015 NM - Diesel Range	Organics (DR)	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	
- Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	117		70 - 130				09/23/22 11:03	09/24/22 12:48	1
7 - 07.11.01.00.01.01.10			70 - 130				09/23/22 11:03	09/24/22 12:48	
o-Terphenyl	110		70 - 700						
		Soluble	701760						
o-Terphenyl	omatography -	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-204 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-3011-21

Matrix: Solid

5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U *-	0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Toluene	<0.0200	U	0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
m-Xylene & p-Xylene	0.0689		0.0399		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
o-Xylene	0.170		0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Xylenes, Total	0.239		0.0399		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	789	S1+	70 - 130				09/28/22 16:17	10/01/22 22:31	10
1,4-Difluorobenzene (Surr)	96		70 - 130				09/28/22 16:17	10/01/22 22:31	10
Method: Total BTEX - Total BTE	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.239		0.0399		mg/Kg			10/01/22 19:48	•
Method: 8015 NM - Diesel Rang	je Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	857		50.0		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Rar	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	1
Diesel Range Organics (Over C10-C28)	739		50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	,
Oll Range Organics (Over C28-C36)	118		50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	91		70 - 130				09/22/22 11:26	09/24/22 05:14	7
o-Terphenyl	94		70 - 130				09/22/22 11:26	09/24/22 05:14	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2870		24.9		mg/Kg			09/23/22 20:27	

**Client Sample ID: BH-205 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3011-22

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds	(GC)	
Analyte Resul	t Qua	

Welliou. 602 ID - Volatile Organi	ic compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U *+ *1	0.200		mg/Kg		09/29/22 16:18	10/03/22 19:15	100
Toluene	1.92	*+ *1	0.200		mg/Kg		09/29/22 16:18	10/03/22 19:15	100
Ethylbenzene	3.18	*+ *1	0.200		mg/Kg		09/29/22 16:18	10/03/22 19:15	100
m-Xylene & p-Xylene	17.6	*+ *1	0.399		mg/Kg		09/29/22 16:18	10/03/22 19:15	100
o-Xylene	8.12	*+ *1	0.200		mg/Kg		09/29/22 16:18	10/03/22 19:15	100
Xylenes, Total	25.7	*+ *1	0.399		mg/Kg		09/29/22 16:18	10/03/22 19:15	100
o-Xylene	8.12	*+ *1	0.200		mg/Kg		09/29/22 16:18	10/03/22 19:15	100

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc. Job ID: 890-3011-1 SDG: Lea County NM

**Client Sample ID: BH-205 (4.5')** Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22 Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3011-22

**Matrix: Solid** 

	_

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130	09/29/22 16:18	10/03/22 19:15	100
1,4-Difluorobenzene (Surr)	84		70 - 130	09/29/22 16:18	10/03/22 19:15	100

**Method: Total BTEX - Total BTEX Calculation** 

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX 0.399 10/01/22 19:48 30.8 mg/Kg

Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3640		49.9		mg/Kg			09/23/22 12:25	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	582	49.9	mg/Kg		09/22/22 11:26	09/24/22 04:09	1
Diesel Range Organics (Over C10-C28)	2690	49.9	mg/Kg		09/22/22 11:26	09/24/22 04:09	1
Oll Range Organics (Over C28-C36)	372	49.9	mg/Kg		09/22/22 11:26	09/24/22 04:09	1

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 09/22/22 11:26 09/24/22 04:09 1-Chlorooctane 120 o-Terphenyl 115 70 - 130 09/22/22 11:26 09/24/22 04:09

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte Result Qualifier MDL Dil Fac RL Unit D Prepared Analyzed Chloride 25.0 09/23/22 20:41 1410 mg/Kg

Client Sample ID: BH-206 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3011-23

**Matrix: Solid** 

Method: 8021B - Volatile Orga	anic Compounds	(GC)
A 14 -	Desuit	A

mountain colline and and and and and and and and and and		()						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U *-	0.0199	mg/Kg		09/28/22 16:17	10/01/22 23:12	10
Toluene	<0.0199	U	0.0199	mg/Kg	3	09/28/22 16:17	10/01/22 23:12	10
Ethylbenzene	0.415		0.0199	mg/Kg	J	09/28/22 16:17	10/01/22 23:12	10
m-Xylene & p-Xylene	1.12		0.0398	mg/Kg	3	09/28/22 16:17	10/01/22 23:12	10
o-Xylene	0.709		0.0199	mg/Kg	J	09/28/22 16:17	10/01/22 23:12	10
Xylenes, Total	1.83		0.0398	mg/Kg	J	09/28/22 16:17	10/01/22 23:12	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			09/28/22 16:17	10/01/22 23:12	10
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130			09/28/22 16:17	10/01/22 23:12	10

**Method: Total BTEX - Total BTEX Calculation** 

Analyte MDL Unit Result Qualifier RLD Prepared Analyzed Dil Fac 0.0398 10/01/22 19:48 **Total BTEX** 2.24 mg/Kg

Job ID: 890-3011-1

SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

**Client Sample ID: BH-206 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 4.5

REMOVED FROM **ANALYSIS TABLE** 

Lab Sample ID: 890-3011-23

Lab Sample ID: 890-3011-24

**Matrix: Solid** 

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1390		50.0		mg/Kg			09/23/22 12:25	1
Method: 8015B NM - Diesel Rai	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	169		50.0		mg/Kg		09/22/22 11:26	09/24/22 04:31	1
Diesel Range Organics (Over C10-C28)	1060		50.0		mg/Kg		09/22/22 11:26	09/24/22 04:31	1
Oll Range Organics (Over C28-C36)	159		50.0		mg/Kg		09/22/22 11:26	09/24/22 04:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				09/22/22 11:26	09/24/22 04:31	1
o-Terphenyl	94		70 - 130				09/22/22 11:26	09/24/22 04:31	1
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1930		25.0		mg/Kg			09/23/22 20:46	5

Client Sample ID: BH-207 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *-	0.00202		mg/Kg		09/28/22 16:17	10/01/22 21:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/28/22 16:17	10/01/22 21:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/28/22 16:17	10/01/22 21:51	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/28/22 16:17	10/01/22 21:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/28/22 16:17	10/01/22 21:51	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/28/22 16:17	10/01/22 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				09/28/22 16:17	10/01/22 21:51	1
1,4-Difluorobenzene (Surr)	104		70 - 130				09/28/22 16:17	10/01/22 21:51	1
Method: Total BTEX - Total BTEX Analyte Total BTEX		Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/01/22 19:48	
Analyte Total BTEX Method: 8015 NM - Diesel Range	Result <0.00403  Organics (DR	U (GC)	0.00403		mg/Kg			10/01/22 19:48	
<b>Analyte</b> Total BTEX	Result <0.00403 Organics (DR	O) (GC) Qualifier			mg/Kg	<u>D</u>	Prepared  Prepared		Dil Fa
Analyte Total BTEX Method: 8015 NM - Diesel Range Analyte	Result <pre></pre> <pre></pre>	U (GC) Qualifier U	0.00403	MDL	mg/Kg			10/01/22 19:48  Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <pre></pre> <pre></pre>	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00403 RL 50.0	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	10/01/22 19:48  Analyzed  09/23/22 12:25	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <pre></pre> <pre></pre>	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00403  RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	10/01/22 19:48  Analyzed  09/23/22 12:25  Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <pre></pre> <pre></pre>	O) (GC) Qualifier U  RO) (GC) Qualifier U	0.00403  RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	10/01/22 19:48  Analyzed  09/23/22 12:25  Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <pre></pre> <pre></pre>	O) (GC) Qualifier U  RO) (GC) Qualifier U	0.00403  RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  Prepared  09/22/22 11:26	10/01/22 19:48  Analyzed 09/23/22 12:25  Analyzed 09/24/22 03:26	Dil Fac

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1

SDG: Lea County NM

**Client Sample ID: BH-207 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Lab Sample ID: 890-3011-24

Lab Sample ID: 890-3011-25

**Matrix: Solid** 

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/22/22 11:26	09/24/22 03:26	1
o-Terphenyl	111		70 - 130				09/22/22 11:26	09/24/22 03:26	1
Method: 300.0 - Anions, Ion Chror	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4000		49.7		mg/Kg			09/23/22 20:51	10

Client Sample ID: SW-62 (8-13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/28/22 16:17	10/01/22 22:11	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/28/22 16:17	10/01/22 22:11	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	112		70 - 130				09/28/22 16:17	10/01/22 22:11	
1,4-Difluorobenzene (Surr)	105		70 - 130				09/28/22 16:17	10/01/22 22:11	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/22 19:48	•
Method: 8015 NM - Diesel Range	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			09/23/22 12:25	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:36	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:36	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:36	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	110		70 - 130				09/22/22 11:26	09/24/22 05:36	
o-Terphenyl	115		70 - 130				09/22/22 11:26	09/24/22 05:36	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
			4.96					09/23/22 20:56	

Matrix: Solid

Lab Sample ID: 890-3011-26

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-72 (0-8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *-	0.00199		mg/Kg		09/28/22 16:17	10/02/22 01:22	
Toluene	< 0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 01:22	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 01:22	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 01:22	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 01:22	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 01:22	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	108		70 - 130				09/28/22 16:17	10/02/22 01:22	-
1,4-Difluorobenzene (Surr)	96		70 - 130				09/28/22 16:17	10/02/22 01:22	
Method: Total BTEX - Total BTI	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/22 19:48	
Method: 8015 NM - Diesel Ranç Analyte	Result	O) (GC) Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result 436	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	
Analyte	Result 436 nge Organics (Di	Qualifier  RO) (GC)		MDL		<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Rai Analyte	Result 436 nge Organics (Di Result	Qualifier  RO) (GC)  Qualifier	49.9	MDL	mg/Kg	<u>D</u>	Prepared	09/23/22 12:25  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics	Result 436 nge Organics (Di	Qualifier  RO) (GC)  Qualifier	49.9		mg/Kg		· ·	09/23/22 12:25	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 436 nge Organics (Di Result	Qualifier  RO) (GC)  Qualifier	49.9		mg/Kg		Prepared	09/23/22 12:25  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	Result 436  nge Organics (Di Result <49.9	Qualifier  RO) (GC)  Qualifier	49.9  RL 49.9		mg/Kg  Unit mg/Kg		Prepared 09/22/22 11:26	09/23/22 12:25  Analyzed  09/24/22 04:53	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 436  nge Organics (Di Result <49.9	Qualifier  RO) (GC) Qualifier  U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 09/22/22 11:26 09/22/22 11:26	09/23/22 12:25  Analyzed 09/24/22 04:53	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result   436	Qualifier  RO) (GC) Qualifier  U	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 09/22/22 11:26 09/22/22 11:26 09/22/22 11:26	09/23/22 12:25  Analyzed 09/24/22 04:53 09/24/22 04:53	Dil Fa
Analyte Total TPH Method: 8015B NM - Diesel Rai	Result   436	Qualifier  RO) (GC) Qualifier  U	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 09/22/22 11:26 09/22/22 11:26 09/22/22 11:26 Prepared	09/23/22 12:25  Analyzed 09/24/22 04:53 09/24/22 04:53  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   436     436     436     436       436         436	Qualifier  RO) (GC) Qualifier  U	49.9  RL 49.9  49.9  49.9  Limits 70.130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 09/22/22 11:26 09/22/22 11:26 09/22/22 11:26  Prepared 09/22/22 11:26	09/23/22 12:25  Analyzed 09/24/22 04:53 09/24/22 04:53  Analyzed 09/24/22 04:53	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rai Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier  RO) (GC) Qualifier  U	49.9  RL 49.9  49.9  49.9  Limits 70.130		mg/Kg  Unit mg/Kg mg/Kg mg/Kg		Prepared 09/22/22 11:26 09/22/22 11:26 09/22/22 11:26  Prepared 09/22/22 11:26	09/23/22 12:25  Analyzed 09/24/22 04:53 09/24/22 04:53  Analyzed 09/24/22 04:53	Dil Fac

Client Sample ID: SW-73 (6-13')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 6 - 13

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 16:17	10/02/22 01:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/02/22 01:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/02/22 01:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/28/22 16:17	10/02/22 01:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/02/22 01:42	1
Xylenes, Total	< 0.00401	U	0.00401		mg/Kg		09/28/22 16:17	10/02/22 01:42	1

**Eurofins Carlsbad** 

Matrix: Solid

9

3

\_

\_

0

10

12

4 4

Lab Sample ID: 890-3011-27

Lab Sample ID: 890-3011-27

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-73 (6-13')

Sample Depth: 6 - 13

Date Collected: 09/19/22 00:00	Matrix: Solid
Date Received: 09/20/22 10:22	
Sample Donth: 6 - 13	

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 70 - 130 09/28/22 16:17 10/02/22 01:42 4-Bromofluorobenzene (Surr) 108 1,4-Difluorobenzene (Surr) 98 70 - 130 09/28/22 16:17 10/02/22 01:42

**Method: Total BTEX - Total BTEX Calculation** 

Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Total BTEX <0.00401 0.00401 10/01/22 19:48 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC) RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <49.9 49.9 09/23/22 12:25

mg/Kg Method: 8015B NM - Diesel Range Organics (DRO) (GC) MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Gasoline Range Organics <49.9 U mg/Kg 49.9 09/21/22 15:33 09/22/22 03:11 (GRO)-C6-C10

<49.9 U 49.9 09/21/22 15:33 09/22/22 03:11 Diesel Range Organics (Over mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <49.9 U 49.9 mg/Kg 09/21/22 15:33 09/22/22 03:11 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac

1-Chlorooctane 108 70 - 130 09/21/22 15:33 09/22/22 03:11 09/22/22 03:11 123 70 - 130 09/21/22 15:33 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 5.02 09/23/22 21:05 Chloride 394 mg/Kg

Client Sample ID: SW-74 (8-13') Lab Sample ID: 890-3011-28 **Matrix: Solid** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

Method: 8021B - Volatile Organic Compounds (GC)

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00199 U \*-0.00199 mg/Kg 09/28/22 16:17 10/02/22 02:03 < 0.00199 0.00199 09/28/22 16:17 10/02/22 02:03 Toluene mg/Kg <0.00199 U 0.00199 09/28/22 16:17 10/02/22 02:03 Ethylbenzene mg/Kg 10/02/22 02:03 m-Xylene & p-Xylene <0.00398 U 0.00398 09/28/22 16:17 mg/Kg o-Xylene <0.00199 U 0.00199 mg/Kg 09/28/22 16:17 10/02/22 02:03 Xylenes, Total <0.00398 U 0.00398 mg/Kg 09/28/22 16:17 10/02/22 02:03 %Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac

4-Bromofluorobenzene (Surr) 108 70 - 13009/28/22 16:17 10/02/22 02:03 1,4-Difluorobenzene (Surr) 99 70 - 130 09/28/22 16:17 10/02/22 02:03

**Method: Total BTEX - Total BTEX Calculation** 

Analyte MDL D Result Qualifier RL Unit Prepared Analyzed Dil Fac Total BTEX <0.00398 0.00398 mg/Kg 10/01/22 19:48

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed

Dil Fac Total TPH <50.0 U 50.0 09/23/22 12:25 mg/Kg

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-74 (8-13")

Da Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

Ni- n4 O- n- n   1D- OM 74 (0.401)	Lab 0 ID- 000 0044 00
lient Sample ID: SW-74 (8-13')	Lab Sample ID: 890-3011-28
ate Collected: 09/19/22 00:00	Matrix: Solid

Method: 8015B NM - Diesel Rang	e Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 03:32	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 03:32	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 03:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				09/21/22 15:33	09/22/22 03:32	1
o-Terphenyl	132	S1+	70 - 130				09/21/22 15:33	09/22/22 03:32	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800		25.2		mg/Kg			09/23/22 21:20	5

**Client Sample ID: SW-75 (0-4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 4.5

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3011-29

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.0199 U \*-0.0199 09/28/22 16:17 10/02/22 04:26 mg/Kg 10 Toluene <0.0199 0.0199 09/28/22 16:17 10/02/22 04:26 mg/Kg 10 0.0199 09/28/22 16:17 10/02/22 04:26 Ethylbenzene 0.390 mg/Kg 10 0.0398 09/28/22 16:17 10/02/22 04:26 10 m-Xylene & p-Xylene 2.35 mg/Kg 10/02/22 04:26 o-Xylene 0.839 0.0199 mg/Kg 09/28/22 16:17 10 **Xylenes, Total** 3.19 0.0398 mg/Kg 09/28/22 16:17 10/02/22 04:26 10 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 137 S1+ 70 - 130 09/28/22 16:17 10/02/22 04:26 10 1,4-Difluorobenzene (Surr) 70 - 130 09/28/22 16:17 10/02/22 04:26 74 10 **Method: Total BTEX - Total BTEX Calculation** Analyte Qualifier MDL Unit Result Prepared Analyzed Dil Fac Total BTEX 0.0398 3.58 10/01/22 19:48 mg/Kg Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 49.9 09/23/22 12:25 **Total TPH** 1340 mg/Kg Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac **Gasoline Range Organics** 174 49.9 mg/Kg 09/21/22 15:33 09/22/22 03:53 (GRO)-C6-C10 09/21/22 15:33 **Diesel Range Organics (Over** 1020 49.9 mg/Kg 09/22/22 03:53 C10-C28) **Oll Range Organics (Over** 49 9 mg/Kg 09/21/22 15:33 09/22/22 03:53 142 C28-C36) Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 101 70 - 130 09/21/22 15:33 09/22/22 03:53

**Eurofins Carlsbad** 

09/22/22 03:53

09/21/22 15:33

70 - 130

110

o-Terphenyl

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

RL

4.99

MDL Unit

mg/Kg

D

Prepared

**Client Sample ID: SW-75 (0-4.5')** 

**Client Sample ID: SW-76 (0-4.5')** 

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 0 - 4.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 0 - 4.5

Analyte

Chloride

**REMOVED FROM ANALYSIS TABLE** 

**REMOVED FROM** 

**ANALYSIS TABLE** 

Result Qualifier

228

3960

Lab Sample ID: 890-3011-29

Analyzed

09/23/22 21:25

Lab Sample ID: 890-3011-30

Matrix: Solid

**Matrix: Solid** 

Dil Fac

ac

ас

10

Method: 8021B - Volatile Organic	Compounds (	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U *-	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	
Toluene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 16:17	10/02/22 02:23	
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 16:17	10/02/22 02:23	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	110		70 - 130				09/28/22 16:17	10/02/22 02:23	
1,4-Difluorobenzene (Surr)	95		70 - 130				09/28/22 16:17	10/02/22 02:23	
Method: Total BTEX - Total BTEX	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/22 19:48	
Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH		Qualifier	50.0	WIDL	mg/Kg		Frepareu	09/23/22 12:25	DII FA
Total IPH	60.1		30.0		mg/Kg			09/23/22 12.23	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 04:14	
Diesel Range Organics (Over C10-C28)	60.1		50.0		mg/Kg		09/21/22 15:33	09/22/22 04:14	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 04:14	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	99		70 - 130				09/21/22 15:33	09/22/22 04:14	
o-Terphenyl	114		70 - 130				09/21/22 15:33	09/22/22 04:14	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

09/23/22 21:39

49.6

mg/Kg

Chloride

Matrix: Solid

Lab Sample ID: 890-3011-31

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-77 (0-4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 16:17	10/02/22 02:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/02/22 02:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/02/22 02:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/28/22 16:17	10/02/22 02:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/02/22 02:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/28/22 16:17	10/02/22 02:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				09/28/22 16:17	10/02/22 02:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130				09/28/22 16:17	10/02/22 02:44	1
- Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/22 19:48	1
Analyte		Qualifier	RL	MDL			Prepared	Analyzed	
									Dil Fac
Total TPH	81.7		49.9		mg/Kg			09/23/22 12:25	1
- -	ge Organics (D							09/23/22 12:25	1
Method: 8015B NM - Diesel Ranç Analyte	ge Organics (D	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier		MDL		D	Prepared 09/21/22 15:33		1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D Result <49.9	Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	09/21/22 15:33	<b>Analyzed</b> 09/22/22 04:35	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 15:33 09/21/22 15:33	Analyzed 09/22/22 04:35 09/22/22 04:35	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9 81.7	Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 15:33 09/21/22 15:33 09/21/22 15:33	Analyzed 09/22/22 04:35 09/22/22 04:35 09/22/22 04:35	1 Dil Fac 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	ge Organics (D Result <49.9 81.7 <49.9 %Recovery	Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	D	09/21/22 15:33 09/21/22 15:33 09/21/22 15:33 <i>Prepared</i>	Analyzed 09/22/22 04:35 09/22/22 04:35 09/22/22 04:35 Analyzed	Dil Fac  1  1  Dil Fac  Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ge Organics (D Result <49.9  81.7  <49.9  %Recovery  101  113	Qualifier  U  U  Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/21/22 15:33 09/21/22 15:33 09/21/22 15:33 <b>Prepared</b> 09/21/22 15:33	Analyzed 09/22/22 04:35 09/22/22 04:35 09/22/22 04:35  Analyzed 09/22/22 04:35	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D  Result  <49.9  81.7  <49.9  **Recovery  101  113  omatography -	Qualifier  U  U  Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	09/21/22 15:33 09/21/22 15:33 09/21/22 15:33 <b>Prepared</b> 09/21/22 15:33	Analyzed 09/22/22 04:35 09/22/22 04:35 09/22/22 04:35  Analyzed 09/22/22 04:35	Dil Fac

**Eurofins Carlsbad** 

3

4

6

8

10

12

13

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	recent ourlogate Necovery (Acceptance Limits)
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
380-19417-A-1-E MS	Matrix Spike	109	105	
880-19417-A-1-F MSD	Matrix Spike Duplicate	112	100	
390-3011-1	H-1 (0-2')	110	95	
990-3011-1 MS	H-1 (0-2')	108	90	
90-3011-1 MSD	H-1 (0-2')	119	97	
990-3011-2	H-2 (0-2')	125	99	
390-3011-3	H-3 (0-2')	113	96	
390-3011-4	H-4 (0-2')	113	91	
390-3011- <del>4</del> 390-3011-5		116	95	
90-3011-6	H-5 (0-2')			
	H-6 (0-2')	118	95	
90-3011-7	H-7 (0-2')	122	88	
90-3011-8	BH-191 (8')	113	90	
90-3011-9	BH-192 (8')	123	99	
90-3011-10	BH-193 (8')	123	91	
90-3011-11	BH-194 (8')	118	92	
90-3011-12	BH-195 (8')	120	9 S1-	
90-3011-13	BH-196 (4.5')	122	90	
90-3011-14	BH-197 (4.5')	126	91	
90-3011-15	BH-198 (4.5')	121	94	
90-3011-16	BH-199 (4.5')	126	93	
90-3011-17	BH-200 (4.5')	135 S1+	87	
90-3011-18	BH-201 (4.5')	230 S1+	98	
90-3011-19	BH-202 (4.5')	126	94	
90-3011-20	BH-203 (4.5')	120	92	
90-3011-21	BH-204 (4.5')	789 S1+	96	
90-3011-22	BH-205 (4.5')	155 S1+	84	
90-3011-23	BH-206 (4.5')	126	65 S1-	
90-3011-24	BH-207 (4.5')	117	104	
90-3011-25	SW-62 (8-13')	112	105	
90-3011-26	SW-72 (0-8')	108	96	
90-3011-27	SW-73 (6-13')	108	98	
90-3011-28	SW-74 (8-13')	108	99	
90-3011-29	SW-75 (0-4.5')	137 S1+	74	
90-3011-30	SW-76 (0-4.5')	110	95	
90-3011-31	SW-77 (0-4.5')	108	101	
90-3015-A-1-E MS	Matrix Spike	101	94	
90-3015-A-1-F MSD	Matrix Spike Duplicate	108	107	
CS 880-35621/1-A	Lab Control Sample	110	99	
CS 880-35625/1-A	Lab Control Sample	109	100	
CS 880-35724/1-A	Lab Control Sample	76	73	
CSD 880-35621/2-A	Lab Control Sample Dup	106	90	
CSD 880-35625/2-A	Lab Control Sample Dup	104	99	
CSD 880-35724/2-A	Lab Control Sample Dup	128	123	
IB 880-35621/5-A	Method Blank	76	89	
MB 880-35625/5-A	Method Blank	101	114	
MB 880-35628/5-A	Method Blank	105	105	
4B 880-35692/5-A	Method Blank	99	83	
	Method Blank	99 70		
MB 880-35720/5-A MB 880-35724/5-A	Method Blank	100	92 76	

Eurofins Carlsbad

3

O

11

40

# **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr) DFBZ = 1,4-Difluorobenzene (Surr)

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

-				Dorgant Surrageta Bassyony (Assentance Limite)
		1001	ОТРН1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19485-A-21-F MS	Matrix Spike	97	102	
880-19485-A-21-G MSD	Matrix Spike Duplicate	97	101	
890-3010-A-2-C MS	Matrix Spike	90	88	
890-3010-A-2-D MSD	Matrix Spike Duplicate	103	99	
890-3011-1	Н-1 (0-2')	88	101	
890-3011-1 MS	H-1 (0-2')	98	94	
890-3011-1 MSD	H-1 (0-2')	96	93	
890-3011-2	H-2 (0-2')	86	94	
890-3011-3	H-3 (0-2')	107	118	
890-3011-4	H-4 (0-2')	105	115	
890-3011-5	H-5 (0-2')	95	104	
890-3011-6	H-6 (0-2')	115	126	
890-3011-7	H-7 (0-2')	88	93	
890-3011-8	BH-191 (8')	110	119	
890-3011-9	BH-192 (8')	82	92	
890-3011-10	BH-193 (8')	88	94	
890-3011-11	BH-194 (8')	106	117	
890-3011-12	BH-195 (8')	87	94	
890-3011-13	BH-196 (4.5')	96	102	
890-3011-14	BH-197 (4.5')	97	111	
890-3011-15	BH-198 (4.5')	88	95	
890-3011-16		90	100	
890-3011-17	BH-199 (4.5')	90 89	90	
	BH-200 (4.5')			
890-3011-18	BH-201 (4.5')	96	94	
890-3011-19 890-3011-19 MS	BH-202 (4.5') BH-202 (4.5')	105	98	
		110	87	
890-3011-19 MSD	BH-202 (4.5')	112	89	
890-3011-20	BH-203 (4.5')	117	110	
890-3011-21	BH-204 (4.5')	91	94	
890-3011-22	BH-205 (4.5')	120	115	
890-3011-23	BH-206 (4.5')	95	94	
890-3011-24	BH-207 (4.5')	104	111	
890-3011-25	SW-62 (8-13')	110	115	
890-3011-26	SW-72 (0-8')	115	121	
890-3011-27	SW-73 (6-13')	108	123	
890-3011-28	SW-74 (8-13')	121	132 S1+	
890-3011-29	SW-75 (0-4.5')	101	110	
890-3011-30	SW-76 (0-4.5')	99	114	
890-3011-31	SW-77 (0-4.5')	101	113	
LCS 880-35103/2-A	Lab Control Sample	91	99	
LCS 880-35130/2-A	Lab Control Sample	95	96	
LCS 880-35172/2-A	Lab Control Sample	99	105	
LCS 880-35262/2-A	Lab Control Sample	107	96	
LCSD 880-35103/3-A	Lab Control Sample Dup	93	105	
LCSD 880-35130/3-A	Lab Control Sample Dup	100	103	
LCSD 880-35172/3-A	Lab Control Sample Dup	106	108	

# **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
LCSD 880-35262/3-A	Lab Control Sample Dup	109	93	
MB 880-35103/1-A	Method Blank	116	134 S1+	
MB 880-35130/1-A	Method Blank	110	124	
MB 880-35172/1-A	Method Blank	120	139 S1+	
MB 880-35262/1-A	Method Blank	132 S1+	124	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Ternhenyl				

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35621/5-A

Lab Sample ID: LCS 880-35621/1-A

Matrix: Solid Analysis Batch: 35814 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35621

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 06:24	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	•
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 06:24	

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76	70 - 130	09/28/22 14:59	10/01/22 06:24	1
1 4-Difluorobenzene (Surr)	89	70 - 130	09/28/22 14:59	10/01/22 06:24	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 35621

Prep Type: Total/NA

Prep Batch: 35621

35

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.07727 mg/Kg 77 70 - 130 Toluene 0.100 0.06855 \*mg/Kg 69 70 - 130 0.100 79 Ethylbenzene 0.07924 mg/Kg 70 - 130 0.200 79 70 - 130 m-Xylene & p-Xylene 0.1579 mg/Kg 0.100 0.08291 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: LCSD 880-35621/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Matrix: Solid

Analysis Batch: 35814

Analysis Batch: 35814

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07697		mg/Kg		77	70 - 130	0	35
Toluene	0.100	0.07904		mg/Kg		79	70 - 130	14	35
Ethylbenzene	0.100	0.07910		mg/Kg		79	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1571		mg/Kg		79	70 - 130	1	35

0.08282

mg/Kg

0.100

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1.4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 890-3011-1 MS

Matrix: Solid

o-Xylene

Analysis Batch: 35814

Client Sample ID: H-1 (0-2')

70 - 130

Prep Type: Total/NA

Prep Batch: 35621

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.09391		mg/Kg		93	70 - 130	
Toluene	< 0.00199	U *-	0.101	0.09305		mg/Kg		92	70 - 130	

**Eurofins Carlsbad** 

2

1

6

1

-

4.6

11

13

## **QC Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3011-1 MS

**Matrix: Solid** 

Analysis Batch: 35814

Client Sample ID: H-1 (0-2')
Prep Type: Total/NA

Prep Batch: 35621

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.101	0.09436		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1865		mg/Kg		93	70 - 130	
o-Xylene	<0.00199	U	0.101	0.09355		mg/Kg		93	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Client Sample ID: H-1 (0-2')

Prep Type: Total/NA

Prep Batch: 35621

Lab Sample ID: 890-3011-1 MSD Matrix: Solid

Analysis Batch: 35814

_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.0996	0.09949		mg/Kg		100	70 - 130	6	35
Toluene	<0.00199	U *-	0.0996	0.1008		mg/Kg		101	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.0996	0.09957		mg/Kg		100	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1958		mg/Kg		98	70 - 130	5	35
o-Xylene	<0.00199	U	0.0996	0.09977		mg/Kg		100	70 - 130	6	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-35625/5-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Method Blank Prep Type: Total/NA

10/01/22 20:00

Prep Batch: 35625

i Tep Daten. 33023

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1

0.00400

MB MB

<0.00400 U

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/28/22	2 16:17	10/01/22 20:00	1
1,4-Difluorobenzene (Surr)	114		70 - 130	09/28/22	2 16:17	10/01/22 20:00	1

mg/Kg

Lab Sample ID: LCS 880-35625/1-A

Matrix: Solid

Xylenes, Total

Analysis Batch: 35815

Client Sample ID: Lab Control Sample Prep Type: Total/NA

09/28/22 16:17

Prep Batch: 35625

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.06312	*_	mg/Kg		63	70 - 130	
Toluene	0.100	0.07231		mg/Kg		72	70 - 130	
Ethylbenzene	0.100	0.07030		mg/Kg		70	70 - 130	
m-Xylene & p-Xylene	0.200	0.1471		mg/Kg		74	70 - 130	

**Eurofins Carlsbad** 

2

3

4

6

9

10

12

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 35625

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-35625/1-A

**Matrix: Solid Analysis Batch: 35815** 

Prep Batch: 35625 LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits o-Xylene 0.100 0.07531 75 70 - 130 mg/Kg

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-35625/2-A

**Matrix: Solid** 

**Analysis Batch: 35815** 

Prep Batch: 35625 Spike LCSD LCSD RPD Added Result Qualifier Limit Analyte Unit %Rec Limits **RPD** 0.06587 \*-Benzene 0.100 mg/Kg 66 70 - 130 4 35 Toluene 0.100 0.07114 mg/Kg 71 70 - 130 2 35 0.100 0.07179 70 - 130 Ethylbenzene mg/Kg 72 35 0.200 0.1452 73 70 - 130 35 m-Xylene & p-Xylene mg/Kg o-Xylene 0.100 0.07431 mg/Kg 74 70 - 130

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-19417-A-1-E MS

**Matrix: Solid** 

Analysis Batch: 35815

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00201	U *-	0.101	0.09573		mg/Kg		95	70 - 130
Toluene	<0.00201	U	0.101	0.09812		mg/Kg		98	70 - 130
Ethylbenzene	<0.00201	U	0.101	0.08958		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1802		mg/Kg		90	70 - 130
o-Xylene	<0.00201	U	0.101	0.09000		mg/Kg		89	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-19417-A-1-F MSD

**Matrix: Solid** 

Analysis Batch: 35815										Batch:	35625
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U *-	0.0990	0.09175		mg/Kg		93	70 - 130	4	35
Toluene	<0.00201	U	0.0990	0.1021		mg/Kg		103	70 - 130	4	35
Ethylbenzene	<0.00201	U	0.0990	0.1028		mg/Kg		104	70 - 130	14	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.2097		mg/Kg		106	70 - 130	15	35
o-Xylene	<0.00201	U	0.0990	0.1043		mg/Kg		105	70 - 130	15	35

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-19417-A-1-F MSD

**Matrix: Solid** 

Analysis Batch: 35815

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35625

MSD MSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 112 70 - 130 1,4-Difluorobenzene (Surr) 100 70 - 130

Lab Sample ID: MB 880-35628/5-A Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 35815

Prep Type: Total/NA

Prep Batch: 35628

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 09/28/22 16:25 <0.00200 U 0.00200 10/01/22 06:46 Benzene mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 09/28/22 16:25 10/01/22 06:46 Ethylbenzene <0.00200 U 0.00200 09/28/22 16:25 10/01/22 06:46 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 09/28/22 16:25 10/01/22 06:46 o-Xylene <0.00200 U 0.00200 mg/Kg 09/28/22 16:25 10/01/22 06:46 Xylenes, Total <0.00400 U 0.00400 mg/Kg 09/28/22 16:25 10/01/22 06:46

MB MB

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105	70 - 130	09/28/22 16:25	10/01/22 06:46	1
1,4-Difluorobenzene (Surr)	105	70 - 130	09/28/22 16:25	10/01/22 06:46	1

Lab Sample ID: MB 880-35692/5-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35692

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/22 11:56	10/02/22 22:18	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/29/22 11:56	10/02/22 22:18	1
1.4-Difluorobenzene (Surr)	83		70 - 130	09/29/22 11:56	10/02/22 22:18	1

Lab Sample ID: MB 880-35720/5-A

Released to Imaging: 9/1/2023 2:28:53 PM

**Matrix: Solid** 

Analysis Batch: 35814

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35720

	MB	MB
Analyte	Result	Qua

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/22 15:53	09/30/22 16:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/22 15:53	09/30/22 16:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/22 15:53	09/30/22 16:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/22 15:53	09/30/22 16:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/22 15:53	09/30/22 16:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/22 15:53	09/30/22 16:57	1

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-35720/5-A

**Matrix: Solid** 

Surrogate

Analysis Batch: 35814

Client Sample ID: Method Blank

Prep Type: Total/NA

Dil Fac

Prep Batch: 35720

%Recovery Qualifier Limits Prepared Analyzed 4-Bromofluorobenzene (Surr) 70 70 - 130 09/29/22 15:53 09/30/22 16:57

Lab Sample ID: MB 880-35724/5-A

**Matrix: Solid** 

Analysis Batch: 35890

1,4-Difluorobenzene (Surr)

Client Sample ID: Method Blank Prep Type: Total/NA

09/30/22 16:57

09/29/22 15:53

Prep Batch: 35724

MR MR

MB MB

92

	IIID	1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/22 16:18	10/03/22 08:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/22 16:18	10/03/22 08:58	1

70 - 130

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/29/22 16:18	10/03/22 08:58	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/29/22 16:18	10/03/22 08:58	1

Lab Sample ID: LCS 880-35724/1-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35724

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07829		mg/Kg		78	70 - 130	
Toluene	0.100	0.08089		mg/Kg		81	70 - 130	
Ethylbenzene	0.100	0.07734		mg/Kg		77	70 - 130	
m-Xylene & p-Xylene	0.200	0.1621		mg/Kg		81	70 - 130	
o-Xylene	0.100	0.08300		mg/Kg		83	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	76	70 - 130
1,4-Difluorobenzene (Surr)	73	70 - 130

Lab Sample ID: LCSD 880-35724/2-A

Released to Imaging: 9/1/2023 2:28:53 PM

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35724 RPD

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1318	*+ *1	mg/Kg		132	70 - 130	51	35
Toluene	0.100	0.1408	*+ *1	mg/Kg		141	70 - 130	54	35
Ethylbenzene	0.100	0.1312	*+ *1	mg/Kg		131	70 - 130	52	35
m-Xylene & p-Xylene	0.200	0.2759	*+ *1	mg/Kg		138	70 - 130	52	35
o-Xylene	0.100	0.1422	*+ *1	mg/Kg		142	70 - 130	53	35

LCSD LCSD

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 128 70 - 130

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-35724/2-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35724

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1,4-Difluorobenzene (Surr) 123 70 - 130

Lab Sample ID: 890-3015-A-1-E MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

Analysis Batch: 35890

Prep Type: Total/NA

Prep Batch: 35724

		Sample	Sample	Spike	MS	MS				%Rec	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	<0.00200	U *+ *1	0.0998	0.09073	-	mg/Kg		91	70 - 130	
	Toluene	<0.00200	U *+ *1	0.0998	0.09593		mg/Kg		96	70 - 130	
	Ethylbenzene	<0.00200	U *+ *1	0.0998	0.08487		mg/Kg		85	70 - 130	
l	m-Xylene & p-Xylene	<0.00401	U *+ *1	0.200	0.1756		mg/Kg		88	70 - 130	
	o-Xylene	<0.00200	U *+ *1	0.0998	0.09418		mg/Kg		94	70 - 130	
ı											

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	94	70 - 130

Lab Sample ID: 890-3015-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 35890** 

Prep Type: Total/NA

Prep Batch: 35724

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U *+ *1	0.0990	0.09916		mg/Kg		100	70 - 130	9	35
Toluene	<0.00200	U *+ *1	0.0990	0.1009		mg/Kg		102	70 - 130	5	35
Ethylbenzene	<0.00200	U *+ *1	0.0990	0.08894		mg/Kg		90	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U *+ *1	0.198	0.1820		mg/Kg		92	70 - 130	4	35
o-Xylene	<0.00200	U *+ *1	0.0990	0.09773		mg/Kg		99	70 - 130	4	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	108	70 _ 130
1,4-Difluorobenzene (Surr)	107	70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35103/1-A

**Matrix: Solid** 

**Analysis Batch: 35007** 

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 35103

мв мв Analyte Result Qualifier MDL Unit RL Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 09/21/22 15:33 09/21/22 19:44 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/21/22 15:33 09/21/22 19:44 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 09/21/22 15:33 09/21/22 19:44 mg/Kg

мв мв

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116	70 - 130	09/21/22 15:33	09/21/22 19:44	1
o-Terphenyl	134 S1+	70 - 130	09/21/22 15:33	09/21/22 19:44	1

**Eurofins Carlsbad** 

Job ID: 890-3011-1

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-35103/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** Analysis Batch: 35007

Prep Type: Total/NA Prep Batch: 35103 Spike LCS LCS

							,0.100	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1038		mg/Kg		104	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	978.2		mg/Kg		98	70 - 130	
C10-C28)								

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 91 o-Terphenyl 99 70 - 130

Lab Sample ID: LCSD 880-35103/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

(GRO)-C6-C10

**Analysis Batch: 35007** 

Diesel Range Organics (Over

Prep Batch: 35103 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 946.6 95 9 Gasoline Range Organics mg/Kg 70 - 130 20

1014

mg/Kg

101

70 - 130

Client Sample ID: Matrix Spike Duplicate

1000

C10-C28) LCSD LCSD

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 93 70 - 130 o-Terphenyl 105 70 - 130

Lab Sample ID: 880-19485-A-21-F MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 35007** 

Prep Batch: 35103 Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits U 996 94

<49.9 Gasoline Range Organics 70 - 130 962.8 mg/Kg (GRO)-C6-C10 996 1097 mg/Kg 108 70 - 130 Diesel Range Organics (Over <49.9 LI C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 97 70 - 130 70 - 130 o-Terphenyl 102

Lab Sample ID: 880-19485-A-21-G MSD

**Matrix: Solid** 

**Analysis Batch: 35007** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	912.2		mg/Kg		89	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1095		mg/Kg		108	70 - 130	0	20

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 97

**Eurofins Carlsbad** 

Prep Type: Total/NA

Prep Batch: 35103

Prep Type: Total/NA

4

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-19485-A-21-G MSD **Matrix: Solid** 

**Analysis Batch: 35007** 

**Analysis Batch: 35122** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35103

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 101 70 - 130

Lab Sample ID: MB 880-35130/1-A Client Sample ID: Method Blank **Matrix: Solid** 

Prep Type: Total/NA

Prep Batch: 35130

мв мв Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 09/22/22 08:45 09/22/22 19:31 (GRO)-C6-C10 50.0 Diesel Range Organics (Over <50.0 U mg/Kg 09/22/22 08:45 09/22/22 19:31 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 09/22/22 08:45 09/22/22 19:31

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/22/22 08:45	09/22/22 19:31	1
o-Terphenyl	124		70 - 130	09/22/22 08:45	09/22/22 19:31	1

Lab Sample ID: LCS 880-35130/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

**Analysis Batch: 35122** 

Prep Type: Total/NA

Prep Batch: 35130

	<b>Бріке</b>	LUS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	914.4		mg/Kg		91	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	844.8		mg/Kg		84	70 - 130	
C10_C28)								

C10-C28)

LCS LCS

Surrogate	%Recovery Q	ualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-35130/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Released to Imaging: 9/1/2023 2:28:53 PM

**Analysis Batch: 35122** 

Prep Type: Total/NA

Prep Batch: 35130

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	883.3		mg/Kg		88	70 - 130	3	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	908.3		mg/Kg		91	70 - 130	7	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	103		70 - 130

Client Sample ID: H-1 (0-2')

Client Sample ID: H-1 (0-2')

Prep Type: Total/NA

Prep Batch: 35130

**RPD** 

0

2

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

<49.9 U

Lab Sample ID: 890-3011-1 MS

Diesel Range Organics (Over

Matrix: Solid									Prep '	Type: Total/NA
Analysis Batch: 35122									Prep	Batch: 35130
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	996	923.1		mg/Kg		91	70 - 130	
(GRO)-C6-C10										

1069

mg/Kg

Unit

107

%Rec

70 - 130

%Rec

Limits

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

70 - 130

Prep Type: Total/NA

Prep Batch: 35172

996

C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-3011-1 MSD

**Matrix: Solid** 

**Analysis Batch: 35122** 

Sample Sample Spike MSD MSD Added Analyte Result Qualifier Result Qualifier

<49.9 U 999 927.6 91 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1052 mg/Kg 105 70 - 130 C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: MB 880-35172/1-A

**Matrix: Solid** 

**Analysis Batch: 35220** 

мв мв

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
	<50.0 <50.0	Result         Qualifier           <50.0	<50.0 U 50.0 <50.0 U 50.0	<50.0 U 50.0 <50.0 U	<50.0 U 50.0 mg/Kg <50.0 U 50.0 mg/Kg	<50.0 U 50.0 mg/Kg <50.0 U 50.0 mg/Kg	<50.0 U	<50.0 U         50.0 mg/Kg         09/22/22 11:26         09/23/22 20:35           <50.0 U

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	09/22/22 11:26	09/23/22 20:35	1
o-Terphenyl	139	S1+	70 - 130	09/22/22 11:26	09/23/22 20:35	1

Lab Sample ID: LCS 880-35172/2-A

**Matrix: Solid** 

Diesel Range Organics (Over

Analysis Batch: 35220							Prep	Batch: 35172
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	960.3		mg/Kg		96	70 - 130	
(GRO)-C6-C10								

891.9

mg/Kg

1000

C10-C28)

**Eurofins Carlsbad** 

Prep Type: Total/NA

RPD

Limit

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

LCS LCS

Lab Sample ID: LCS 880-35172/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Analysis Batch: 35220

Prep Type: Total/NA

Prep Batch: 35172

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 99 70 - 130 o-Terphenyl 105 70 - 130

Lab Sample ID: LCSD 880-35172/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 35220

Prep Type: Total/NA

Prep Batch: 35172

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 70 - 130 Gasoline Range Organics 1000 960.5 96 0 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 951.2 mg/Kg 95 70 - 1306 20 C10-C28)

LCSD LCSD

Sample Sample

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 890-3010-A-2-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 35220** 

Prep Type: Total/NA

Prep Batch: 35172

	Sample	Sample	Spike	IVIO	IVIO				70 KeC	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	996	887.9		mg/Kg		87	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	996	998.1		mg/Kg		100	70 - 130	
C10 C20\										

C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 890-3010-A-2-D MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 35220

**Matrix: Solid** 

Prep Type: Total/NA Prep Batch: 35172

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<49.9	U	999	1050		mg/Kg		103	70 - 130	17	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.9	U	999	1135		mg/Kg		114	70 - 130	13	20	
C10 C20\												

C10-C28)

	INISD	IVISD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	99		70 - 130

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-35262/1-A

Matrix: Solid Analysis Batch: 35322 Client Sample ID: Method Blank
Prep Type: Total/NA

Prep Batch: 35262

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/23/22 11:03	09/24/22 10:38	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/23/22 11:03	09/24/22 10:38	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/23/22 11:03	09/24/22 10:38	1
	***	MD							

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130	09/23/22 11:03	09/24/22 10:38	1
o-Terphenyl	124		70 - 130	09/23/22 11:03	09/24/22 10:38	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 35262

LCS LCS Spike Added Result Qualifier Analyte Unit D %Rec Limits 887.2 Gasoline Range Organics 1000 mg/Kg 89 70 - 130 (GRO)-C6-C10 1000 1002 Diesel Range Organics (Over mg/Kg 100 70 - 130 C10-C28)

LCS LCS

l	Surrogate	%Recovery Qua	lifier Limits
	1-Chlorooctane	107	70 - 130
l	o-Terphenyl	96	70 - 130

Lab Sample ID: LCSD 880-35262/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Lab Sample ID: LCS 880-35262/2-A

**Matrix: Solid** 

Analysis Batch: 35322

Analysis Batch: 35322

Prep Type: Total/NA

Prep Batch: 35262

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	921.2		mg/Kg		92	70 - 130	4	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	973.8		mg/Kg		97	70 - 130	3	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	109	70 - 130
o-Terphenyl	93	70 - 130

Lab Sample ID: 890-3011-19 MS Client Sample ID: BH-202 (4.5')

**Matrix: Solid** 

Analysis Batch: 35322

Prep Type: Total/NA

Prep Batch: 35262

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	996	861.2		mg/Kg		86	70 - 130	 
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	996	965.0		mg/Kg		92	70 - 130	
C10-C28)										

**Eurofins Carlsbad** 

2

3

<u>-</u>
5

6

8

10

12

13

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3011-19 MS Client Sample ID: BH-202 (4.5') **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 35322 Prep Batch: 35262

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-3011-19 MSD Client Sample ID: BH-202 (4.5')

**Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 35322 Prep Batch: 35262

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	999	892.1		mg/Kg		89	70 - 130	4	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	999	971.0		mg/Kg		93	70 - 130	1	20
C10-C28)											

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 112 89 70 - 130 o-Terphenyl

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35024/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 35313

мв мв

Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride 5.00 <5.00 U mg/Kg 09/23/22 19:42

Lab Sample ID: LCS 880-35024/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 35313

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 246.5 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-35024/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** 

**Analysis Batch: 35313** 

Spike LCSD LCSD %Rec RPD Added Analyte Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 247.9 99 90 - 110 20 mg/Kg

Lab Sample ID: 890-3011-17 MS Client Sample ID: BH-200 (4.5') **Prep Type: Soluble** 

**Matrix: Solid** Analysis Batch: 35313

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 3220 1260 4518 mg/Kg 104 90 - 110

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3011-17 MSD Client Sample ID: BH-200 (4.5') **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 35313

Sample Sample Spike MSD MSD RPD %Rec Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 3220 1260 4521 mg/Kg 104 90 - 110 20

Lab Sample ID: 890-3011-27 MS Client Sample ID: SW-73 (6-13')

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 35313** Sample Sample Spike MS MS %Rec

Qualifier Added Analyte Result Result Qualifier Unit D %Rec Limits Chloride 394 252 632.7 mg/Kg 95 90 - 110

Lab Sample ID: 890-3011-27 MSD Client Sample ID: SW-73 (6-13')

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 35313** 

MSD MSD RPD Spike %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 394 252 632.9 mg/Kg 90 - 110

Lab Sample ID: MB 880-35023/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 35314** 

мв мв Result Qualifier MDL Unit RL

Analyte Prepared Analyzed Dil Fac 5.00 09/23/22 22:29 Chloride <5.00 mg/Kg

Lab Sample ID: LCS 880-35023/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

LCS LCS

**Matrix: Solid** 

Analysis Batch: 35314

Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 246.3 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-35023/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 35314

Spike LCSD LCSD %Rec RPD Added RPD Analyte Result Qualifier Unit D %Rec Limits Limit Chloride 250 247 2 mg/Kg 90 - 110

Lab Sample ID: 890-3011-7 MS Client Sample ID: H-7 (0-2') **Prep Type: Soluble** 

**Matrix: Solid Analysis Batch: 35314** 

MS MS Sample Sample Spike %Rec

Added Result Qualifier Result Qualifier Limits Analyte Unit D %Rec Chloride 26.7 252 284.1 mg/Kg 102 90 - 110

Lab Sample ID: 890-3011-7 MSD Client Sample ID: H-7 (0-2')

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 35314** Spike MSD MSD %Rec RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** 

Limit Chloride 26.7 252 284.2 mg/Kg 102 90 - 110 20

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

## **GC VOA**

Prep Batch: 35621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3011-1	H-1 (0-2')	Total/NA	Solid	5035	
890-3011-2	H-2 (0-2')	Total/NA	Solid	5035	
890-3011-3	H-3 (0-2')	Total/NA	Solid	5035	
890-3011-4	H-4 (0-2')	Total/NA	Solid	5035	
890-3011-5	H-5 (0-2')	Total/NA	Solid	5035	
890-3011-6	H-6 (0-2')	Total/NA	Solid	5035	
890-3011-7	H-7 (0-2')	Total/NA	Solid	5035	
890-3011-8	BH-191 (8')	Total/NA	Solid	5035	
890-3011-9	BH-192 (8')	Total/NA	Solid	5035	
890-3011-10	BH-193 (8')	Total/NA	Solid	5035	
890-3011-11	BH-194 (8')	Total/NA	Solid	5035	
890-3011-12	BH-195 (8')	Total/NA	Solid	5035	
890-3011-13	BH-196 (4.5')	Total/NA	Solid	5035	
890-3011-14	BH-197 (4.5')	Total/NA	Solid	5035	
890-3011-15	BH-198 (4.5')	Total/NA	Solid	5035	
890-3011-16	BH-199 (4.5')	Total/NA	Solid	5035	
890-3011-17	BH-200 (4.5')	Total/NA	Solid	5035	
890-3011-18	BH-201 (4.5')	Total/NA	Solid	5035	
890-3011-19	BH-202 (4.5')	Total/NA	Solid	5035	
890-3011-20	BH-203 (4.5')	Total/NA	Solid	5035	
MB 880-35621/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35621/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35621/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3011-1 MS	H-1 (0-2')	Total/NA	Solid	5035	
890-3011-1 MSD	H-1 (0-2')	Total/NA	Solid	5035	

## Prep Batch: 35625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3011-21	BH-204 (4.5')	Total/NA	Solid	5035	
890-3011-23	BH-206 (4.5')	Total/NA	Solid	5035	
890-3011-24	BH-207 (4.5')	Total/NA	Solid	5035	
890-3011-25	SW-62 (8-13')	Total/NA	Solid	5035	
890-3011-26	SW-72 (0-8')	Total/NA	Solid	5035	
890-3011-27	SW-73 (6-13')	Total/NA	Solid	5035	
890-3011-28	SW-74 (8-13')	Total/NA	Solid	5035	
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	5035	
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	5035	
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	5035	
MB 880-35625/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35625/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35625/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19417-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19417-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Prep Batch: 35628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35628/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 35692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35692/5-A	Method Blank	Total/NA	Solid	5035	

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **GC VOA**

## Prep Batch: 35720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35720/5-A	Method Blank	Total/NA	Solid	5035	

#### Prep Batch: 35724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-22	BH-205 (4.5')	Total/NA	Solid	5035	
MB 880-35724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 35814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Total/NA	Solid	8021B	35621
890-3011-2	H-2 (0-2')	Total/NA	Solid	8021B	35621
890-3011-3	H-3 (0-2')	Total/NA	Solid	8021B	35621
890-3011-4	H-4 (0-2')	Total/NA	Solid	8021B	35621
890-3011-5	H-5 (0-2')	Total/NA	Solid	8021B	35621
890-3011-6	H-6 (0-2')	Total/NA	Solid	8021B	35621
890-3011-7	H-7 (0-2')	Total/NA	Solid	8021B	35621
890-3011-8	BH-191 (8')	Total/NA	Solid	8021B	35621
890-3011-9	BH-192 (8')	Total/NA	Solid	8021B	35621
890-3011-10	BH-193 (8')	Total/NA	Solid	8021B	35621
890-3011-11	BH-194 (8')	Total/NA	Solid	8021B	35621
890-3011-12	BH-195 (8')	Total/NA	Solid	8021B	35621
890-3011-13	BH-196 (4.5')	Total/NA	Solid	8021B	35621
890-3011-14	BH-197 (4.5')	Total/NA	Solid	8021B	35621
890-3011-15	BH-198 (4.5')	Total/NA	Solid	8021B	35621
890-3011-16	BH-199 (4.5')	Total/NA	Solid	8021B	35621
890-3011-17	BH-200 (4.5')	Total/NA	Solid	8021B	35621
890-3011-18	BH-201 (4.5')	Total/NA	Solid	8021B	35621
890-3011-19	BH-202 (4.5')	Total/NA	Solid	8021B	35621
890-3011-20	BH-203 (4.5')	Total/NA	Solid	8021B	35621
MB 880-35621/5-A	Method Blank	Total/NA	Solid	8021B	35621
MB 880-35720/5-A	Method Blank	Total/NA	Solid	8021B	35720
LCS 880-35621/1-A	Lab Control Sample	Total/NA	Solid	8021B	35621
LCSD 880-35621/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35621
890-3011-1 MS	H-1 (0-2')	Total/NA	Solid	8021B	35621
890-3011-1 MSD	H-1 (0-2')	Total/NA	Solid	8021B	35621

#### Analysis Batch: 35815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-21	BH-204 (4.5')	Total/NA	Solid	8021B	35625
890-3011-23	BH-206 (4.5')	Total/NA	Solid	8021B	35625
890-3011-24	BH-207 (4.5')	Total/NA	Solid	8021B	35625
890-3011-25	SW-62 (8-13')	Total/NA	Solid	8021B	35625
890-3011-26	SW-72 (0-8')	Total/NA	Solid	8021B	35625
890-3011-27	SW-73 (6-13')	Total/NA	Solid	8021B	35625
890-3011-28	SW-74 (8-13')	Total/NA	Solid	8021B	35625
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	8021B	35625
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	8021B	35625

**Eurofins Carlsbad** 

2

3

4

6

8

9

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **GC VOA (Continued)**

## **Analysis Batch: 35815 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	8021B	35625
MB 880-35625/5-A	Method Blank	Total/NA	Solid	8021B	35625
MB 880-35628/5-A	Method Blank	Total/NA	Solid	8021B	35628
LCS 880-35625/1-A	Lab Control Sample	Total/NA	Solid	8021B	35625
LCSD 880-35625/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35625
880-19417-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35625
880-19417-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35625

#### Analysis Batch: 35879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3011-1	H-1 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-2	H-2 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-3	H-3 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-4	H-4 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-5	H-5 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-6	H-6 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-7	H-7 (0-2')	Total/NA	Solid	Total BTEX	
890-3011-8	BH-191 (8')	Total/NA	Solid	Total BTEX	
890-3011-9	BH-192 (8')	Total/NA	Solid	Total BTEX	
890-3011-10	BH-193 (8')	Total/NA	Solid	Total BTEX	
890-3011-11	BH-194 (8')	Total/NA	Solid	Total BTEX	
890-3011-12	BH-195 (8')	Total/NA	Solid	Total BTEX	
890-3011-13	BH-196 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-14	BH-197 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-15	BH-198 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-16	BH-199 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-17	BH-200 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-18	BH-201 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-19	BH-202 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-20	BH-203 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-21	BH-204 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-22	BH-205 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-23	BH-206 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-24	BH-207 (4.5')	Total/NA	Solid	Total BTEX	
890-3011-25	SW-62 (8-13')	Total/NA	Solid	Total BTEX	
890-3011-26	SW-72 (0-8')	Total/NA	Solid	Total BTEX	
890-3011-27	SW-73 (6-13')	Total/NA	Solid	Total BTEX	
890-3011-28	SW-74 (8-13')	Total/NA	Solid	Total BTEX	
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	Total BTEX	
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	Total BTEX	
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	Total BTEX	

### Analysis Batch: 35890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-22	BH-205 (4.5')	Total/NA	Solid	8021B	35724
MB 880-35692/5-A	Method Blank	Total/NA	Solid	8021B	35692
MB 880-35724/5-A	Method Blank	Total/NA	Solid	8021B	35724
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	8021B	35724
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35724
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35724
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35724

**Eurofins Carlsbad** 

2

3

4

6

8

3

11

13

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

# GC Semi VOA

## Analysis Batch: 35007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-27	SW-73 (6-13')	Total/NA	Solid	8015B NM	35103
890-3011-28	SW-74 (8-13')	Total/NA	Solid	8015B NM	35103
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	8015B NM	35103
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	8015B NM	35103
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	8015B NM	35103
MB 880-35103/1-A	Method Blank	Total/NA	Solid	8015B NM	35103
LCS 880-35103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35103
LCSD 880-35103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35103
880-19485-A-21-F MS	Matrix Spike	Total/NA	Solid	8015B NM	35103
880-19485-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35103

#### Prep Batch: 35103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-27	SW-73 (6-13')	Total/NA	Solid	8015NM Prep	
890-3011-28	SW-74 (8-13')	Total/NA	Solid	8015NM Prep	
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-35103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19485-A-21-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19485-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 35122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-2	H-2 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-3	H-3 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-4	H-4 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-5	H-5 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-6	H-6 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-7	H-7 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-8	BH-191 (8')	Total/NA	Solid	8015B NM	35130
890-3011-9	BH-192 (8')	Total/NA	Solid	8015B NM	35130
890-3011-10	BH-193 (8')	Total/NA	Solid	8015B NM	35130
890-3011-11	BH-194 (8')	Total/NA	Solid	8015B NM	35130
890-3011-12	BH-195 (8')	Total/NA	Solid	8015B NM	35130
890-3011-13	BH-196 (4.5')	Total/NA	Solid	8015B NM	35130
890-3011-14	BH-197 (4.5')	Total/NA	Solid	8015B NM	35130
890-3011-15	BH-198 (4.5')	Total/NA	Solid	8015B NM	35130
890-3011-16	BH-199 (4.5')	Total/NA	Solid	8015B NM	35130
890-3011-17	BH-200 (4.5')	Total/NA	Solid	8015B NM	35130
890-3011-18	BH-201 (4.5')	Total/NA	Solid	8015B NM	35130
MB 880-35130/1-A	Method Blank	Total/NA	Solid	8015B NM	35130
LCS 880-35130/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35130
LCSD 880-35130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35130
890-3011-1 MS	H-1 (0-2')	Total/NA	Solid	8015B NM	35130
890-3011-1 MSD	H-1 (0-2')	Total/NA	Solid	8015B NM	35130

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

## GC Semi VOA

Prep Batch: 35130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3011-1	H-1 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-2	H-2 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-3	H-3 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-4	H-4 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-5	H-5 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-6	H-6 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-7	H-7 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-8	BH-191 (8')	Total/NA	Solid	8015NM Prep	
890-3011-9	BH-192 (8')	Total/NA	Solid	8015NM Prep	
890-3011-10	BH-193 (8')	Total/NA	Solid	8015NM Prep	
890-3011-11	BH-194 (8')	Total/NA	Solid	8015NM Prep	
890-3011-12	BH-195 (8')	Total/NA	Solid	8015NM Prep	
890-3011-13	BH-196 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-14	BH-197 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-15	BH-198 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-16	BH-199 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-17	BH-200 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-18	BH-201 (4.5')	Total/NA	Solid	8015NM Prep	
MB 880-35130/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35130/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3011-1 MS	H-1 (0-2')	Total/NA	Solid	8015NM Prep	
890-3011-1 MSD	H-1 (0-2')	Total/NA	Solid	8015NM Prep	

## Prep Batch: 35172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-21	BH-204 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-22	BH-205 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-23	BH-206 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-24	BH-207 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-25	SW-62 (8-13')	Total/NA	Solid	8015NM Prep	
890-3011-26	SW-72 (0-8')	Total/NA	Solid	8015NM Prep	
MB 880-35172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3010-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3010-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 35220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-21	BH-204 (4.5')	Total/NA	Solid	8015B NM	35172
890-3011-22	BH-205 (4.5')	Total/NA	Solid	8015B NM	35172
890-3011-23	BH-206 (4.5')	Total/NA	Solid	8015B NM	35172
890-3011-24	BH-207 (4.5')	Total/NA	Solid	8015B NM	35172
890-3011-25	SW-62 (8-13')	Total/NA	Solid	8015B NM	35172
890-3011-26	SW-72 (0-8')	Total/NA	Solid	8015B NM	35172
MB 880-35172/1-A	Method Blank	Total/NA	Solid	8015B NM	35172
LCS 880-35172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35172
LCSD 880-35172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35172
890-3010-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35172
890-3010-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35172

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-3011-1

SDG: Lea County NM

# GC Semi VOA

## Prep Batch: 35262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-19	BH-202 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-20	BH-203 (4.5')	Total/NA	Solid	8015NM Prep	
MB 880-35262/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35262/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35262/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3011-19 MS	BH-202 (4.5')	Total/NA	Solid	8015NM Prep	
890-3011-19 MSD	BH-202 (4.5')	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 35274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Total/NA	Solid	8015 NM	
890-3011-2	H-2 (0-2')	Total/NA	Solid	8015 NM	
890-3011-3	H-3 (0-2')	Total/NA	Solid	8015 NM	
890-3011-4	H-4 (0-2')	Total/NA	Solid	8015 NM	
890-3011-5	H-5 (0-2')	Total/NA	Solid	8015 NM	
890-3011-6	H-6 (0-2')	Total/NA	Solid	8015 NM	
890-3011-7	H-7 (0-2')	Total/NA	Solid	8015 NM	
890-3011-8	BH-191 (8')	Total/NA	Solid	8015 NM	
890-3011-9	BH-192 (8')	Total/NA	Solid	8015 NM	
890-3011-10	BH-193 (8')	Total/NA	Solid	8015 NM	
890-3011-11	BH-194 (8')	Total/NA	Solid	8015 NM	
890-3011-12	BH-195 (8')	Total/NA	Solid	8015 NM	
890-3011-13	BH-196 (4.5')	Total/NA	Solid	8015 NM	
890-3011-14	BH-197 (4.5')	Total/NA	Solid	8015 NM	
890-3011-15	BH-198 (4.5')	Total/NA	Solid	8015 NM	
890-3011-16	BH-199 (4.5')	Total/NA	Solid	8015 NM	
890-3011-17	BH-200 (4.5')	Total/NA	Solid	8015 NM	
890-3011-18	BH-201 (4.5')	Total/NA	Solid	8015 NM	
890-3011-19	BH-202 (4.5')	Total/NA	Solid	8015 NM	
890-3011-20	BH-203 (4.5')	Total/NA	Solid	8015 NM	
890-3011-21	BH-204 (4.5')	Total/NA	Solid	8015 NM	
890-3011-22	BH-205 (4.5')	Total/NA	Solid	8015 NM	
890-3011-23	BH-206 (4.5')	Total/NA	Solid	8015 NM	
890-3011-24	BH-207 (4.5')	Total/NA	Solid	8015 NM	
890-3011-25	SW-62 (8-13')	Total/NA	Solid	8015 NM	
890-3011-26	SW-72 (0-8')	Total/NA	Solid	8015 NM	
890-3011-27	SW-73 (6-13')	Total/NA	Solid	8015 NM	
890-3011-28	SW-74 (8-13')	Total/NA	Solid	8015 NM	
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	8015 NM	
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	8015 NM	
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	8015 NM	

## Analysis Batch: 35322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-19	BH-202 (4.5')	Total/NA	Solid	8015B NM	35262
890-3011-20	BH-203 (4.5')	Total/NA	Solid	8015B NM	35262
MB 880-35262/1-A	Method Blank	Total/NA	Solid	8015B NM	35262
LCS 880-35262/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35262
LCSD 880-35262/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35262
890-3011-19 MS	BH-202 (4.5')	Total/NA	Solid	8015B NM	35262
890-3011-19 MSD	BH-202 (4.5')	Total/NA	Solid	8015B NM	35262

Eurofins Carlsbad

Page 51 of 72

2

3

4

6

8

11

13

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

## HPLC/IC

#### Leach Batch: 35023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Soluble	Solid	DI Leach	_
890-3011-2	H-2 (0-2')	Soluble	Solid	DI Leach	
890-3011-3	H-3 (0-2')	Soluble	Solid	DI Leach	
890-3011-4	H-4 (0-2')	Soluble	Solid	DI Leach	
390-3011-5	H-5 (0-2')	Soluble	Solid	DI Leach	
890-3011-6	H-6 (0-2')	Soluble	Solid	DI Leach	
890-3011-7	H-7 (0-2')	Soluble	Solid	DI Leach	
890-3011-8	BH-191 (8')	Soluble	Solid	DI Leach	
390-3011-9	BH-192 (8')	Soluble	Solid	DI Leach	
890-3011-10	BH-193 (8')	Soluble	Solid	DI Leach	
890-3011-11	BH-194 (8')	Soluble	Solid	DI Leach	
890-3011-12	BH-195 (8')	Soluble	Solid	DI Leach	
390-3011-13	BH-196 (4.5')	Soluble	Solid	DI Leach	
390-3011-14	BH-197 (4.5')	Soluble	Solid	DI Leach	
390-3011-15	BH-198 (4.5')	Soluble	Solid	DI Leach	
390-3011-16	BH-199 (4.5')	Soluble	Solid	DI Leach	
MB 880-35023/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
390-3011-7 MS	H-7 (0-2')	Soluble	Solid	DI Leach	
890-3011-7 MSD	H-7 (0-2')	Soluble	Solid	DI Leach	

#### Leach Batch: 35024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-3011-17	BH-200 (4.5')	Soluble	Solid	DI Leach	
890-3011-18	BH-201 (4.5')	Soluble	Solid	DI Leach	
890-3011-19	BH-202 (4.5')	Soluble	Solid	DI Leach	
890-3011-20	BH-203 (4.5')	Soluble	Solid	DI Leach	
890-3011-21	BH-204 (4.5')	Soluble	Solid	DI Leach	
890-3011-22	BH-205 (4.5')	Soluble	Solid	DI Leach	
890-3011-23	BH-206 (4.5')	Soluble	Solid	DI Leach	
890-3011-24	BH-207 (4.5')	Soluble	Solid	DI Leach	
890-3011-25	SW-62 (8-13')	Soluble	Solid	DI Leach	
390-3011-26	SW-72 (0-8')	Soluble	Solid	DI Leach	
390-3011-27	SW-73 (6-13')	Soluble	Solid	DI Leach	
390-3011-28	SW-74 (8-13')	Soluble	Solid	DI Leach	
390-3011-29	SW-75 (0-4.5')	Soluble	Solid	DI Leach	
390-3011-30	SW-76 (0-4.5')	Soluble	Solid	DI Leach	
390-3011-31	SW-77 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-35024/1-A	Method Blank	Soluble	Solid	DI Leach	
_CS 880-35024/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35024/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
390-3011-17 MS	BH-200 (4.5')	Soluble	Solid	DI Leach	
890-3011-17 MSD	BH-200 (4.5')	Soluble	Solid	DI Leach	
390-3011-27 MS	SW-73 (6-13')	Soluble	Solid	DI Leach	
890-3011-27 MSD	SW-73 (6-13')	Soluble	Solid	DI Leach	

#### Analysis Batch: 35313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-17	BH-200 (4.5')	Soluble	Solid	300.0	35024
890-3011-18	BH-201 (4.5')	Soluble	Solid	300.0	35024

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **HPLC/IC** (Continued)

## **Analysis Batch: 35313 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-19	BH-202 (4.5')	Soluble	Solid	300.0	35024
890-3011-20	BH-203 (4.5')	Soluble	Solid	300.0	35024
890-3011-21	BH-204 (4.5')	Soluble	Solid	300.0	35024
890-3011-22	BH-205 (4.5')	Soluble	Solid	300.0	35024
890-3011-23	BH-206 (4.5')	Soluble	Solid	300.0	35024
890-3011-24	BH-207 (4.5')	Soluble	Solid	300.0	35024
890-3011-25	SW-62 (8-13')	Soluble	Solid	300.0	35024
890-3011-26	SW-72 (0-8')	Soluble	Solid	300.0	35024
890-3011-27	SW-73 (6-13')	Soluble	Solid	300.0	35024
890-3011-28	SW-74 (8-13')	Soluble	Solid	300.0	35024
890-3011-29	SW-75 (0-4.5')	Soluble	Solid	300.0	35024
890-3011-30	SW-76 (0-4.5')	Soluble	Solid	300.0	35024
890-3011-31	SW-77 (0-4.5')	Soluble	Solid	300.0	35024
MB 880-35024/1-A	Method Blank	Soluble	Solid	300.0	35024
LCS 880-35024/2-A	Lab Control Sample	Soluble	Solid	300.0	35024
LCSD 880-35024/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35024
890-3011-17 MS	BH-200 (4.5')	Soluble	Solid	300.0	35024
890-3011-17 MSD	BH-200 (4.5')	Soluble	Solid	300.0	35024
890-3011-27 MS	SW-73 (6-13')	Soluble	Solid	300.0	35024
890-3011-27 MSD	SW-73 (6-13')	Soluble	Solid	300.0	35024

#### Analysis Batch: 35314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Soluble	Solid	300.0	35023
890-3011-2	H-2 (0-2')	Soluble	Solid	300.0	35023
890-3011-3	H-3 (0-2')	Soluble	Solid	300.0	35023
890-3011-4	H-4 (0-2')	Soluble	Solid	300.0	35023
890-3011-5	H-5 (0-2')	Soluble	Solid	300.0	35023
890-3011-6	H-6 (0-2')	Soluble	Solid	300.0	35023
890-3011-7	H-7 (0-2')	Soluble	Solid	300.0	35023
890-3011-8	BH-191 (8')	Soluble	Solid	300.0	35023
890-3011-9	BH-192 (8')	Soluble	Solid	300.0	35023
890-3011-10	BH-193 (8')	Soluble	Solid	300.0	35023
890-3011-11	BH-194 (8')	Soluble	Solid	300.0	35023
890-3011-12	BH-195 (8')	Soluble	Solid	300.0	35023
890-3011-13	BH-196 (4.5')	Soluble	Solid	300.0	35023
890-3011-14	BH-197 (4.5')	Soluble	Solid	300.0	35023
890-3011-15	BH-198 (4.5')	Soluble	Solid	300.0	35023
890-3011-16	BH-199 (4.5')	Soluble	Solid	300.0	35023
MB 880-35023/1-A	Method Blank	Soluble	Solid	300.0	35023
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	300.0	35023
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35023
890-3011-7 MS	H-7 (0-2')	Soluble	Solid	300.0	35023
890-3011-7 MSD	H-7 (0-2')	Soluble	Solid	300.0	35023

**Eurofins Carlsbad** 

2

3

А

\_

8

3

11

13

Job ID: 890-3011-1

SDG: Lea County NM

Client Sample ID: H-1 (0-2')

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 06:49	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 20:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:13	СН	EET MID

Lab Sample ID: 890-3011-2

Client Sample ID: H-2 (0-2') Date Collected: 09/19/22 00:00 Matrix: Solid

Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 07:16	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 21:39	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:27	CH	EET MID

Client Sample ID: H-3 (0-2') Lab Sample ID: 890-3011-3

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 07:42	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 22:00	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:32	CH	EET MID

Client Sample ID: H-4 (0-2') Lab Sample ID: 890-3011-4

Date Collected: 09/19/22 00:00 **Matrix: Solid** Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 08:08	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Date Received: 09/20/22 10:22

Soluble

300.0

Analysis

**EET MID** 

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: H-4 (0-2') Lab Sample ID: 890-3011-4 Date Collected: 09/19/22 00:00

**Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8015 NM 35274 Analysis 09/23/22 12:25 SM **EET MID** Total/NA Prep 8015NM Prep 10.02 g 10 mL 35130 09/22/22 08:45 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 35122 09/22/22 22:22 SM EET MID Soluble 50 mL 35023 09/21/22 10:05 SMC Leach DI Leach 5 g **EET MID** 

Client Sample ID: H-5 (0-2') Lab Sample ID: 890-3011-5

1

Date Collected: 09/19/22 00:00 **Matrix: Solid** Date Received: 09/20/22 10:22

35314

09/23/22 23:37

СН

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 08:35	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 22:43	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:42	CH	EET MID

Client Sample ID: H-6 (0-2') Lab Sample ID: 890-3011-6 Date Collected: 09/19/22 00:00 **Matrix: Solid** Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 09:01	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 23:05	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:47	CH	EET MID

Client Sample ID: H-7 (0-2') Lab Sample ID: 890-3011-7 Date Collected: 09/19/22 00:00 **Matrix: Solid** 

Date Received: 09/20/22 10:22

=	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 09:37	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 23:26	SM	EET MID

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: H-7 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:52	CH	EET MID

Client Sample ID: BH-191 (8')

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Collected: 09/19/22 00:00
Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 10:04	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 02:18	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:07	CH	EET MID

Client Sample ID: BH-192 (8')

Lab Sample ID: 890-3011-9

Date Collected: 09/19/22 00:00 Matrix: Solid
Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 10:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 23:47	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:12	CH	EET MID

Client Sample ID: BH-193 (8')

Lab Sample ID: 890-3011-10

Date Collected: 09/19/22 00:00 Matrix: Solid
Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 10:57	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 01:56	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:26	CH	EET MID

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

3

4

6

7

9

11

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-194 (8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Lab Sample ID: 890-3011-11

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 12:42	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 02:40	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:31	CH	EET MID

Client Sample ID: BH-195 (8')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Lab Sample ID: 890-3011-12

**Matrix: Solid** 

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.04 g 5 mL 35621 09/28/22 14:59 EL EET MID Total/NA 8021B 10/01/22 13:08 **EET MID** Analysis 1 5 mL 5 mL 35814 AJ Total/NA Total BTEX 35879 10/01/22 19:48 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 35274 09/23/22 12:25 SM **EET MID** Total/NA 35130 Prep 8015NM Prep 10.02 g 10 mL 09/22/22 08:45 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 35122 09/23/22 00:09 SM **EET MID** Soluble 35023 09/21/22 10:05 Leach DI Leach 4.95 g 50 mL SMC **EET MID** Soluble Analysis 300.0 35314 09/24/22 00:36 СН **EET MID** 

Client Sample ID: BH-196 (4.5')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 13:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 00:30	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		5			35314	09/24/22 00:41	CH	EET MID

**Client Sample ID: BH-197 (4.5')** 

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Lab Sample ID: 890-3011-	-14
Matrix: So	olid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 14:00	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID

Client Sample ID: BH-197 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-14

Matrix: Solid

**Matrix: Solid** 

**EET MID** 

**EET MID** 

**EET MID** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 03:01	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		5			35314	09/24/22 00:46	CH	EET MID

Client Sample ID: BH-198 (4.5')

Lab Sample ID: 890-3011-15

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab Total/NA 5035 Prep 4.96 g 5 mL 35621 09/28/22 14:59 EL **EET MID** Total/NA Analysis 8021B 5 mL 5 mL 35814 10/01/22 14:26 **EET MID** AJ 1 Total/NA Total BTEX 35879 **EET MID** Analysis 1 10/01/22 19:48 AJ Total/NA Analysis 8015 NM 35274 09/23/22 12:25 SM **EET MID** 1 Total/NA Prep 8015NM Prep 10.04 g 10 mL 35130 09/22/22 08:45 DM **EET MID** 

Client Sample ID: BH-199 (4.5')

Date Collected: 09/19/22 00:00

Lab Sample ID: 890-3011-16

Matrix: Solid

5

1 uL

5.01 g

1 uL

50 mL

35122

35023

35314

09/23/22 01:13

09/21/22 10:05

09/24/22 00:51

SM

SMC

СН

Date Received: 09/20/22 10:22

Analysis

Leach

Analysis

8015B NM

DI Leach

300.0

Total/NA

Soluble

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 14:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 01:35	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:55	CH	EET MID

Client Sample ID: BH-200 (4.5')

Lab Sample ID: 890-3011-17

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35814	10/01/22 16:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g 1 uL	10 mL 1 uL	35130 35122	09/22/22 08:45 09/23/22 03:23	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

3

\_

6

8

10

12

14

Client Sample ID: BH-200 (4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-17

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 19:57	CH	EET MID

Client Sample ID: BH-201 (4.5')

Lab Sample ID: 890-3011-18

Date Collected: 09/19/22 00:00 Matrix: Solid

Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35814	10/01/22 16:36	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 03:44	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:11	CH	EET MID

Client Sample ID: BH-202 (4.5')

Lab Sample ID: 890-3011-19

Date Collected: 09/19/22 00:00 Matrix: Solid

Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 15:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MIC
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35262	09/23/22 11:03	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35322	09/24/22 11:43	SM	EET MIC
Soluble	Leach	DI Leach			5.01 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:16	CH	EET MID

Client Sample ID: BH-203 (4.5')

Lab Sample ID: 890-3011-20

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 15:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35262	09/23/22 11:03	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35322	09/24/22 12:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		1			35313	09/23/22 20:22	CH	EET MID

**Eurofins Carlsbad** 

3

4

6

7

9

10

13

mo Canobaa

**Client Sample ID: BH-204 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-21

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35815	10/01/22 22:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 05:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:27	CH	EET MID

**Client Sample ID: BH-205 (4.5')** Lab Sample ID: 890-3011-22

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35724	09/29/22 16:18	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	35890	10/03/22 19:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 04:09	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:41	CH	EET MID

**Client Sample ID: BH-206 (4.5')** Lab Sample ID: 890-3011-23

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35815	10/01/22 23:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 04:31	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:46	CH	EET MID

**Client Sample ID: BH-207 (4.5')** Lab Sample ID: 890-3011-24

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/01/22 21:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Page 60 of 72

**Matrix: Solid** 

**Client Sample ID: BH-207 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-24

Matrix: Solid

**Matrix: Solid** 

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 03:26	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		10			35313	09/23/22 20:51	CH	EET MID

Client Sample ID: SW-62 (8-13') Lab Sample ID: 890-3011-25

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/01/22 22:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 05:36	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		1			35313	09/23/22 20:56	CH	EET MID

Client Sample ID: SW-72 (0-8') Lab Sample ID: 890-3011-26

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/02/22 01:22	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 04:53	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		1			35313	09/23/22 21:01	CH	EET MID

Lab Sample ID: 890-3011-27 Client Sample ID: SW-73 (6-13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/02/22 01:42	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	35103 35007	09/21/22 15:33 09/22/22 03:11	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

Page 61 of 72

Client Sample ID: SW-73 (6-13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-27

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		1			35313	09/23/22 21:05	CH	EET MID

Client Sample ID: SW-74 (8-13')

Lab Sample ID: 890-3011-28

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/02/22 02:03	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35103	09/21/22 15:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35007	09/22/22 03:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 21:20	CH	EET MID

Client Sample ID: SW-75 (0-4.5')

Lab Sample ID: 890-3011-29

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5035 5.03 g 5 mL 35625 09/28/22 16:17 MNR **EET MID** Total/NA 8021B 5 mL 5 mL 10/02/22 04:26 **EET MID** Analysis 10 35815 AJ Total/NA Analysis Total BTEX 35879 10/01/22 19:48 AJ **EET MID** 1 Total/NA Analysis 8015 NM 1 35274 09/23/22 12:25 SM **EET MID** Total/NA Prep 8015NM Prep 10.02 g 10 mL 35103 09/21/22 15:33 DM **EET MID** Total/NA Analysis 35007 **EET MID** 8015B NM 1 1 uL 1 uL 09/22/22 03:53 SM

5.01 g

1

50 mL

35024

35313

**Client Sample ID: SW-76 (0-4.5')** 

Leach

Analysis

DI Leach

300.0

Lab Sample ID: 890-3011-30

SMC

CH

09/22/22 11:54

09/23/22 21:25

Matrix: Solid

EET MID

**EET MID** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Soluble

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/02/22 02:23	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35103	09/21/22 15:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35007	09/22/22 04:14	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		10			35313	09/23/22 21:39	CH	EET MID

**Eurofins Carlsbad** 

3

4

6

7

40

12

14

ansbau

### Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-77 (0-4.5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Lab Sample ID: 890-3011-31

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/02/22 02:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35103	09/21/22 15:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35007	09/22/22 04:35	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 21:44	CH	EET MID

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

1

3

4

6

0

9

10

12

13

14

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	The following analytes are included in this report, the agency does not offer certification.	ogram	Identification Number	Expiration Date			
Texas	NEL  the following analytes are included in this report, but the agency does not offer certification.  The propriet of the control of the con	ELAP	T104704400-22-24	06-30-23			
The following analytes	are included in this report by	it the leberatory is not cortifi	ad by the gayerning outbority. This list my	arrimalizada amaliztaa farr			
,	• •	it the laboratory is not certifi	ed by the governing authority. This list his	ay include arialytes for			
0 ,	fer certification.	Matrix	Analyte	ay include analytes for			
the agency does not of	fer certification.	•	, , ,	ay include analytes for			

Released to Imaging: 9/1/2023 2:28:53 PM

### **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

1

3

4

9

10

-

13

14

## **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

890-3011-31

SW-77 (0-4.5')

Job ID: 890-3011-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3011-1	H-1 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-2	H-2 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-3	H-3 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-4	H-4 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-5	H-5 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-6	H-6 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-7	H-7 (0-2')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 2
890-3011-8	BH-191 (8')	Solid	09/19/22 00:00	09/20/22 10:22	8
890-3011-9	BH-192 (8')	Solid	09/19/22 00:00	09/20/22 10:22	8
890-3011-10	BH-193 (8')	Solid	09/19/22 00:00	09/20/22 10:22	8
890-3011-11	BH-194 (8')	Solid	09/19/22 00:00	09/20/22 10:22	8
890-3011-12	BH-195 (8')	Solid	09/19/22 00:00	09/20/22 10:22	8
890-3011-13	BH-196 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-14	BH-197 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-15	BH-198 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-16	BH-199 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-17	BH-200 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-18	BH-201 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-19	BH-202 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-20	BH-203 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-21	BH-204 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-22	BH-205 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-23	BH-206 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-24	BH-207 (4.5')	Solid	09/19/22 00:00	09/20/22 10:22	4.5
890-3011-25	SW-62 (8-13')	Solid	09/19/22 00:00	09/20/22 10:22	8 - 13
890-3011-26	SW-72 (0-8')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 8
890-3011-27	SW-73 (6-13')	Solid	09/19/22 00:00	09/20/22 10:22	6 - 13
890-3011-28	SW-74 (8-13')	Solid	09/19/22 00:00	09/20/22 10:22	8 - 13
890-3011-29	SW-75 (0-4.5')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 4.5
890-3011-30	SW-76 (0-4.5')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 4.5

Solid

09/19/22 00:00

09/20/22 10:22 0 - 4.5

	Relinquished by:	Relinguished by:	lasto	Relinquished by:											LAB#			Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Olient Name:	급	]
	Date: Time: Received by:		Date: Time:	BH-193 (8")	BH-192 (8')	BH-191 (8')	H-7 (0-2')	H-6 (0-2')	H-5 (0-2')	H-4 (0-2')	H-3 (0-2')	H-2 (0-2')	H-1 (0-2')	SAMPLE IDENTIFICATION					Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tecn, Inc.	Taken Tank Inc	
	Received by:	Received by:	CON CALL	Regreted by:	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:	Clair.	Site Manager		
	Date: Time:	Care	1	O 中・公分公と Time:	×	×	×	×	×	×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 662-4559	Midland, Texas 79705
(Cirde) H		Sample	000	LABUSE	×	×	×	×	×	×	×	×	×		# CONTA FILTEREI BTEX 802 TPH TX10 TPH 8015	D (Y 21B 005 (	RS (N) BTE Ext to			MRO)			ANALY:		
HAND DELIVERED FEDEX UPS Trace	Special Report	Rush Charges Authorized	RUSH: Same Day	SE ONLY X STANDARD											PAH 8270 Total Meta TCLP Met TCLP Vola TCLP Sen RCI GC/MS Vol GC/MS Se PCB's 80	oc als A als A atiles ni Vo ol. 82 emi. \	g As B g As I latiles 260B /	Ba Cd Cr Ba Cd Ci	Pb Se r Pb Se	Hg		890-3011 Chain of Custody	\( \( \)		
Tracking #:	Special Report Limits or TRRP Report		Day 24 hr 48 hr 72 hr	ď	×	×	×	×	×	×	×	×	×	×	NORM PLM (Asbo Chloride Chloride General \ Anion/Ca	Sı Wate	ulfate or Che	emistry (	see att	ached l	list)				

Page 67 of 72

Relinquished by:	Reling rished by	Control of the contro	Delinaished										CABUSE TABLE	- AD		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:		4	
by: Date: Time:	by: Date: Time:	1/2	3H-203 (4.5')	BH-202 (4.5')	BH-201 (4.5)	BH-200 (4.5')	ВН-199 (4.5)	BH-198 (4.5')	BH-197 (4.5')	BH-196 (4.5')	BH-195 (8')	ВН-194 (8')	ORIGINAL DOCUMENT OF TOOL	SAMPLE DENTIFICATION			oratory: Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions		Tetra Tech, Inc.	
Received by:	Received by:	Che a	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	9/19/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager		•	
Date: Time:	Date: Time:	S)	X   X	×	×	×	×	×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Midland, Texas 78705 Tel (432) 682-4559	SOLIAN ANSWERS SEE 100
	Sample Temperature	LAB USE ONLY	×	×	×	×		×	×	×	×	×	# CONTA FILTERE BTEX 80: TPH TX1 TPH 801: PAH 827: Total Meta TCLP Meta	21B 005 ( 5M ( 0C als A	RS (/N) BTE (Ext to GRO-	DRO - C	ORO - N	Hg			ANALYSIS REQ			
Special Report Limits or TRRP Report	Rush Charges Authorized	X STANDARD	REMARKS:	×	×	×	×	×	×	×	×	×	TCLP Vol. TCLP Ser RCI GC/MS V. GC/MS S. PCB'S 80 NORM PLM (Asb Chloride Chloride General V Anion/Ca	mi Vol. 8. emi. 1082/10 Silvate	260B / Vol. 8 608 s)	624 270C/62: TDS	5		list)		REQUEST (Circle or Specify Method No.)			

Page 68 of 72

9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 0/10/10/2022 Pate: Time: Received by:	Time:	16
9/19/202 9/19/202 9/19/202 9/19/202 9/19/202 9/19/202 9/19/202 9/19/202 9/19/202 Prepaived t	Rep & & & & & & & & & & & & & & & & & & &	
N N N N N N N	19/2022 19/2022 19/2022 19/2022 19/2022 19/2022 19/2022 19/2022	9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022 9/19/2022
	9/2022 19/2022 19/2022 19/2022 19/2022 19/2022 19/2022	9/2022 9/2022 9/2022 9/2022 9/2022 9/2022 9/2022 9/2022
* * * * * * *	* * * * * * * *	* * * * * * * * *
****	* * * * * * *	* * * * * * * *
××××	××××	×××××
××	×××	× × × ×
×	××	XXX
	×	× × × ×

Page 69 of 72

Relinquished by:	Relinguished by:	Relinguished by:					LAB #		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
: Date: Time:	: Date: Time:	Mone:			OWE ( (C-1.2)	SW-77 (O.A.F.)	SAMPLE IDENTIFICATION			tery: Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Received by:	Received by:	Received by:			GLISTEDEE	0/10/2022	DATE 2020	SAMPLING		Sampler Signature:		Project #:	<u>Clair.</u>	Site Manager	
Date: Time:	Date: lime:	8				x	WATER SOIL HCL HNO <sub>3</sub> ICE None	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	901W Wall Sireet, Sel 100 Midand, Texas 79705 Tei (432) 882-4559 Fax (432) 887-3946
(Circle) HAND DELIVERED	Sample Temperature	LAB USE ONLY					# CONTAINE FILTERED (* BTEX 8021B TPH TX1005 TPH 8015M PAH 8270C Total Metals TCLP Metals TCLP Volatile	Y/N)  BTE  (Ext to (GRO  Ag As E	EX 82600 0 C35) - DRO - (	ORO - I Pb Se	Hg			ANALYSIS REQUEST	
Special Report Limits or TRRP Report	ć	X STANDARD				×	TCLP Semi V RCI GC/MS Vol. 6 GC/MS Semi PCB's 8082 6 NORM PLM (Asbesti Chloride	/olatiles 8260B . Vol. 8 / 608 os)	/ 624 3270C/62 TDS emistry (		tached	list)		EST le or Specify Method No.)	

Page 70 of 72

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3011-1

SDG Number: Lea County NM

Login Number: 3011 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question Answer Comment

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate

HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3011-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

Login Number: 3011 List Number: 2

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

Released to Imaging: 9/1/2023 2:28:53 PM

# **Environment Testing**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3411-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 11/14/2022 3:38:41 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3411-1

SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	19
QC Sample Results	21
QC Association Summary	27
Lab Chronicle	31
Certification Summary	37
Method Summary	38
Sample Summary	39
Chain of Custody	40
Receipt Checklists	42

6.1

r	

### **Definitions/Glossary**

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

**Qualifiers** 

**GC VOA** Qualifier

**Qualifier Description** S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier **Qualifier Description** \*1 LCS/LCSD RPD exceeds control limits. F1 MS and/or MSD recovery exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

**Glossary** 

%R

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

**CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Percent Recovery

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present PQL

**Practical Quantitation Limit** 

Presumptive **PRES** QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TFO

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-3411-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3411-1

#### Receipt

The samples were received on 11/7/2022 2:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 29.8°C

#### GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-210 (10') (890-3411-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39141 and analytical batch 880-39275 was outside the upper control limits.

Method 8015MOD\_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-39141 and analytical batch 880-39275 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39128 and 880-39128 and analytical batch 880-39334 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

3

4

7

9

10

12

13

14

Lab Sample ID: 890-3411-1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-200 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:14	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/12/22 22:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:14	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/12/22 22:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				11/09/22 15:36	11/12/22 22:14	1
1,4-Difluorobenzene (Surr)	106		70 - 130				11/09/22 15:36	11/12/22 22:14	1
- Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/14/22 16:13	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	74.9	Qualifier	FL 50.0	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/14/22 14:30	
Total TPH	74.9	<u>·</u>	50.0	MDL		<u> </u>	Prepared		
Total TPH	74.9 sel Range Orga	<u>·</u>	50.0			<u>D</u>	Prepared Prepared		1
Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	74.9 sel Range Orga	nics (DRO) Qualifier	50.0 (GC)		mg/Kg			11/14/22 14:30	1
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	74.9 sel Range Orga Result	nics (DRO) Qualifier	50.0 (GC)		mg/Kg		Prepared	11/14/22 14:30 Analyzed	Dil Fac
Total TPH  Method: SW846 8015B NM - Dies	74.9 sel Range Orga Result <50.0	nics (DRO) Qualifier U	50.0 (GC) RL 50.0		mg/Kg  Unit mg/Kg		Prepared 11/09/22 15:38	11/14/22 14:30  Analyzed  11/11/22 13:54	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	74.9 sel Range Orga Result <50.0 74.9	nics (DRO) Qualifier U	50.0 (GC)  RL  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/09/22 15:38 11/09/22 15:38	Analyzed 11/11/22 13:54 11/11/22 13:54	1 Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	74.9 sel Range Orga Result <50.0 74.9 <50.0	nics (DRO) Qualifier U	50.0 (GC)  RL  50.0  50.0  50.0		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/09/22 15:38 11/09/22 15:38	Analyzed 11/11/22 13:54 11/11/22 13:54 11/11/22 13:54	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	74.9  sel Range Orga Result <50.0  74.9  <50.0  %Recovery	nics (DRO) Qualifier U	50.0  (GC)  RL  50.0  50.0  50.0  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/09/22 15:38 11/09/22 15:38 11/09/22 15:38 Prepared	Analyzed 11/11/22 13:54 11/11/22 13:54 11/11/22 13:54 Analyzed	Dil Fac
Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	74.9  sel Range Orga Result <50.0  74.9  <50.0  %Recovery  97  104	ualifier U Qualifier	50.0  (GC)  RL  50.0  50.0  50.0  Limits  70 - 130  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/09/22 15:38 11/09/22 15:38 11/09/22 15:38 Prepared 11/09/22 15:38	Analyzed 11/11/22 13:54 11/11/22 13:54 11/11/22 13:54 Analyzed 11/11/22 13:54	Dil Fac  1  1  Dil Fac  Dil Fac
Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	74.9  sel Range Orga Result <50.0  74.9  <50.0  %Recovery 97 104  s, Ion Chromato	ualifier U Qualifier	50.0  (GC)  RL  50.0  50.0  50.0  Limits  70 - 130  70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/09/22 15:38 11/09/22 15:38 11/09/22 15:38 Prepared 11/09/22 15:38	Analyzed 11/11/22 13:54 11/11/22 13:54 11/11/22 13:54 Analyzed 11/11/22 13:54	1 1 1 Dil Fac

Client Sample ID: BH-201 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 22:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 22:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 22:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/12/22 22:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 22:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/12/22 22:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				11/09/22 15:36	11/12/22 22:35	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3411-2

Lab Sample ID: 890-3411-2

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-201 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Method: SW846 8021B -	<b>Volatile Organic Compounds</b>	(GC) (Continued)
-----------------------	-----------------------------------	------------------

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114	70 - 130	11/09/22 15:36	11/12/22 22:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg				11/14/22 16:13	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.3		50.0	mg/K	 g		11/14/22 14:30	1

Method: SW846 8015B NM - Diesel Range Organics	(DRO)	(GC)	١
motified. Offerto College Ithin Biodol Rungo Organico	(5.10)	, , , , ,	,

		,	<b>`</b>						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:16	1
Diesel Range Organics (Over C10-C28)	74.3		50.0		mg/Kg		11/09/22 15:38	11/11/22 14:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepar	red	Analyzed	Dil F
1-Chlorooctane	102		70 - 130	11/09/22	15:38	11/11/22 14:16	
o-Terphenyl	109		70 - 130	11/09/22	15:38	11/11/22 14:16	

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		49.6		mg/Kg			11/12/22 01:40	10

Client Sample ID: BH-204 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 10

1		
Method: SW846 8021B	- Volatilo Organic C	'ampounde (CC)
I MELITOU. SYVOHO OUZ IL	• Voiatile Organic C	onibounus (GC)

Method: 3W040 0021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/12/22 22:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 22:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/12/22 22:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				11/09/22 15:36	11/12/22 22:56	1
1 4-Difluorobenzene (Surr)	116		70 130				11/09/22 15:36	11/12/22 22:56	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401	ma/Ka			11/14/22 16:13	1

Analyte	• •	Qualifier	RL	MDL Un	it	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 L	J	50.0	mg	/Kg			11/14/22 14:30	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3411-3

Matrix: Solid

Released to Imaging: 9/1/2023 2:28:53 PM

Lab Sample ID: 890-3411-3

Lab Sample ID: 890-3411-4

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-204 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Method: SW846 8015B NM - Dies Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte		Qualifier	NL	IVIDL	OIIIL		Frepareu	Allalyzeu	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:37	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:37	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130				11/09/22 15:38	11/11/22 14:37	1
o-Terphenyl	118		70 - 130				11/09/22 15:38	11/11/22 14:37	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2010		25.0		mg/Kg			11/12/22 01:47	5

Client Sample ID: BH-205 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 23:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 23:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 23:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/09/22 15:36	11/12/22 23:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 23:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/09/22 15:36	11/12/22 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				11/09/22 15:36	11/12/22 23:17	1
1,4-Difluorobenzene (Surr)	114		70 - 130				11/09/22 15:36	11/12/22 23:17	1
Analyte		Qualifier	RL	MDL			Prepared	Analyzed	
Total BTEX  Method: SW846 8015 NM - Diese	<0.00399	ics (DRO) (	0.00399 GC)		mg/Kg	— —		11/14/22 16:13	Dil Fac
Total BTEX  Method: SW846 8015 NM - Diese Analyte	<0.00399	ics (DRO) (Qualifier	0.00399		mg/Kg  Unit mg/Kg		Prepared		
Total BTEX	<0.00399  el Range Organ Result <50.0  sel Range Orga Result	ics (DRO) ((Qualifier U)	0.00399  RL 50.0  (GC) RL	MDL	Unit	<u>D</u>	Prepared Prepared	11/14/22 16:13  Analyzed  11/14/22 14:30  Analyzed	Dil Fac
Total BTEX  Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	<0.00399  Range Organ Result <p>&lt;50.0</p> sel Range Organ	ics (DRO) ((Qualifier U)	0.00399  GC)  RL  50.0  (GC)	MDL	Unit mg/Kg		Prepared	11/14/22 16:13  Analyzed  11/14/22 14:30	Dil Fac
Total BTEX  Method: SW846 8015 NM - Diese Analyte  Total TPH  Method: SW846 8015B NM - Diese	<0.00399  el Range Organ Result <50.0  sel Range Orga Result	ics (DRO) (Qualifier U nics (DRO) Qualifier U U	0.00399  RL 50.0  (GC) RL	MDL	Unit mg/Kg		Prepared Prepared	11/14/22 16:13  Analyzed  11/14/22 14:30  Analyzed	Dil Fac
Total BTEX  Method: SW846 8015 NM - Diese Analyte  Total TPH  Method: SW846 8015B NM - Diese Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<0.00399  Plange Organ Result <p>&lt;50.0</p> sel Range Orga Result <50.0 sel Range Orga Result <50.0	ics (DRO) (Control of the control of	0.00399  RL 50.0  (GC)  RL 50.0	MDL	Unit mg/Kg  Unit mg/Kg		Prepared  Prepared  11/09/22 15:38	Analyzed  11/11/22 14:30  Analyzed  11/11/22 14:59	Dil Fac
Total BTEX  Method: SW846 8015 NM - Diese Analyte  Total TPH  Method: SW846 8015B NM - Diese Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<0.00399 El Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0	ics (DRO) (CQualifier U)  mics (DRO) Qualifier U  Qualifier U  U  U	0.00399  RL 50.0  (GC)  RL 50.0  50.0	MDL	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared  Prepared  11/09/22 15:38  11/09/22 15:38	Analyzed 11/14/22 14:30  Analyzed 11/11/22 14:59 11/11/22 14:59	Dil Fac  Dil Fac  1  1  1
Total BTEX  Method: SW846 8015 NM - Diese Analyte  Total TPH  Method: SW846 8015B NM - Diese Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00399 El Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0 <50.0	ics (DRO) (CQualifier U)  mics (DRO) Qualifier U  Qualifier U  U  U	0.00399  RL 50.0  (GC) RL 50.0  50.0  50.0	MDL	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared  11/09/22 15:38  11/09/22 15:38	Analyzed 11/14/22 14:30  Analyzed 11/11/22 14:59 11/11/22 14:59 11/11/22 14:59	Dil Fac

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-205 (10') Lab Sample ID: 890-3411-4

Date Collected: 11/07/22 00:00 Matrix: Solid Date Received: 11/07/22 14:58

Sample Depth: 10

Method: MCAWW 300.0 - Anions, lo	n Chromato	graphy - Solu	uble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1480		25.1		mg/Kg			11/12/22 01:54	5

Client Sample ID: BH-206 (10') Lab Sample ID: 890-3411-5

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				11/09/22 15:36	11/12/22 23:37	1
1,4-Difluorobenzene (Surr)	116		70 - 130				11/09/22 15:36	11/12/22 23:37	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/14/22 16:13	1
- Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (	GC)						
	Desuit	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	114	IVIDE	0	_	opa. oa	raidiyeda	Diriac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:21	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/09/22 15:38	11/11/22 15:21	1
o-Terphenyl	109		70 - 130				11/09/22 15:38	11/11/22 15:21	1

Method: MCAWW 300.0 - Anions, Id	on Chromato	graphy - So	luble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2290		25.2		mg/Kg			11/12/22 02:01	5

Lab Sample ID: 890-3411-6

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-208 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 23:58	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 23:58	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 23:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/12/22 23:58	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/12/22 23:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/12/22 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				11/09/22 15:36	11/12/22 23:58	1
1,4-Difluorobenzene (Surr)	114		70 - 130				11/09/22 15:36	11/12/22 23:58	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte		ics (DRO) ( Qualifier	GC)	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9	WIDE	mg/Kg	=		11/14/22 14:30	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:43	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:43	
Circuity Organios (Over 020-000)	10.0								1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	
,		Qualifier	Limits 70 - 130				Prepared 11/09/22 15:38	Analyzed 11/11/22 15:43	Dil Fac
Surrogate	%Recovery	Qualifier							Dil Fac
Surrogate 1-Chlorooctane o-Terphenyl Method: MCAWW 300.0 - Anions	%Recovery 94 102 s, lon Chromato	ography - So	70 - 130 70 - 130 Dluble				11/09/22 15:38	11/11/22 15:43	Dil Fac
Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 94 102 s, lon Chromato		70 - 130 70 - 130	MDL	Unit mg/Kg	<u>D</u>	11/09/22 15:38	11/11/22 15:43	Dil Fac

Client Sample ID: BH-209 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 00:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 00:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 00:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 00:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 00:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 00:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/09/22 15:36	11/13/22 00:19	

**Eurofins Carlsbad** 

Lab Sample ID: 890-3411-7

Job ID: 890-3411-1

SDG: Lea County NM

Lab Sample ID: 890-3411-7

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: BH-209 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Method: SW846 8021B - Volatile (	Organic Compounds	(GC)	(Continued)
modification of the country to the country to	rigariio Compoundo		( Continuou)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	115	70 - 130	11/09/22 15:36	11/13/22 00:19	1

#### **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/14/22 16:13	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			11/14/22 14:30	1

	Mothod: SW046 904ED NM Diocol Dan	go Organico (DBO) (CC)	v
ı	Method: SW846 8015B NM - Diesel Ran	ge Organics (DRO) (GC)	,

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 16:26	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 16:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117	70 - 130	11/09/22 15:38	11/11/22 16:26	1
o-Terphenyl	124	70 - 130	11/09/22 15:38	11/11/22 16:26	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4470		49.6		mg/Kg			11/12/22 02:30	10

Client Sample ID: BH-210 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

# REMOVED FROM

**ANALYSIS TABLE** 

Lab Sample ID: 890-3411-8

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Toluene	0.0775		0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Ethylbenzene	0.0695		0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
m-Xylene & p-Xylene	0.135		0.00399		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
o-Xylene	0.0758		0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Xylenes, Total	0.211		0.00399		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130				11/09/22 15:36	11/13/22 00:40	1

4-Bromofluorobenzene (Surr)	134 S1+	70 - 130	11/09/22 15:36	11/13/22 00:40	1
1,4-Difluorobenzene (Surr)	99	70 - 130	11/09/22 15:36	11/13/22 00:40	1

### **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.358		0.00399		mg/Kg			11/14/22 16:13	1

### Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2430	50.0	mg/Kg			11/14/22 14:30	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3411-1 SDG: Lea County NM

Client Sample ID: BH-210 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-3411-8

Lab Sample ID: 890-3411-9

**Matrix: Solid** 

Matrix: Solid

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	61.9		50.0		mg/Kg		11/09/22 15:38	11/11/22 16:48	1
Diesel Range Organics (Over C10-C28)	2130		50.0		mg/Kg		11/09/22 15:38	11/11/22 16:48	1
Oll Range Organics (Over C28-C36)	237		50.0		mg/Kg		11/09/22 15:38	11/11/22 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				11/09/22 15:38	11/11/22 16:48	1
o-Terphenyl	111		70 - 130				11/09/22 15:38	11/11/22 16:48	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RLMDL Unit D Prepared Analyzed Dil Fac Chloride 2270 25.0 mg/Kg 11/12/22 02:37

Client Sample ID: BH-211 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/09/22 15:36	11/13/22 01:00	1
1,4-Difluorobenzene (Surr)	115		70 - 130				11/09/22 15:36	11/13/22 01:00	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 16:13	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 14:30	1
- Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:09	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:09	1
C10-C28) OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				11/09/22 15:38	11/11/22 17:09	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3411-1

SDG: Lea County NM

Client Sample ID: BH-211 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Lab Sample ID: 890-3411-9

Matrix: Solid

Method: MCAWW 300.0 - Anions,	lon Chromato	graphy - Solu	ıble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2230		24.9		mg/Kg			11/12/22 02:44	5

Client Sample ID: BH-212 (10') Lab Sample ID: 890-3411-10 **Matrix: Solid** 

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
m-Xylene & p-Xylene	0.0209		0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
o-Xylene	0.0186		0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Xylenes, Total	0.0395		0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 01:21	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/09/22 15:36	11/13/22 01:21	1

Total BTEX	0.0395		0.00398		mg/Kg			11/14/22 16:13	1
Method: SW846 8015 NM - Diese	I Range Organic	s (DRO) (GC)	)						
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	228		50.0		mg/Kg			11/14/22 14:30	1
Method: SW846 8015B NM - Dies	el Range Organ	ics (DRO) (G	C)						
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0 L		50.0		mg/Kg		11/09/22 15:38	11/11/22 17:32	1

MDL Unit

Prepared

Analyzed

(GRO)-C6-C10							
Diesel Range Organics (Over	228		50.0	mg/Kg	11/09/22 15:38	11/11/22 17:32	1
C10-C28)							
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	11/09/22 15:38	11/11/22 17:32	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130		11/09/22 15:38	11/11/22 17:32	1
o-Ternhenyl	102		70 130		11/09/22 15:38	11/11/22 17:32	1

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - So	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2970		25.2		mg/Kg			11/12/22 02:51	5

**Eurofins Carlsbad** 

Dil Fac

11/14/2022

Job ID: 890-3411-1

SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: SW-75 (4-10') Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58 Sample Depth: 4 - 10

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3411-11

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				11/09/22 15:36	11/13/22 02:45	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/09/22 15:36	11/13/22 02:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00401 U 0.00401 mg/Kg 11/14/22 16:13

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <50.0 U 50.0 11/14/22 14:30 mg/Kg

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL MDI Dil Fac Unit D Prepared Analyzed <50.0 U Gasoline Range Organics 50.0 mg/Kg 11/09/22 15:38 11/11/22 17:54 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/09/22 15:38 11/11/22 17:54 C10-C28) 50.0 OII Range Organics (Over C28-C36) <50.0 U 11/09/22 15:38 11/11/22 17:54 mg/Kg Dil Fac Limits Prepared Surrogate %Recovery Qualifier Analyzed 70 - 130 11/09/22 15:38 1-Chlorooctane 92 11/11/22 17:54

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RLMDL Unit D Dil Fac Prepared Analyzed 100 Chloride 14500 F1 mg/Kg 11/12/22 02:58

70 - 130

Client Sample ID: SW-78 (4-10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58 Sample Depth: 4 - 10

o-Terphenyl

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-3411-12

11/11/22 17:54

11/09/22 15:38

**Matrix: Solid** 

Method: SW846 8021B - Volati	ile Organic Comp	ounds (GC	)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				11/09/22 15:36	11/13/22 03:05	1

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-78 (4-10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58 Sample Depth: 4 - 10 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3411-12

Matrix: Solid

olid

5

6

8

11

12

14

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	120		70 - 130				11/09/22 15:36	11/13/22 03:05	1
Method: TAL SOP Total BTEX - To	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/14/22 16:13	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 14:30	1
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:15	1
(GRO)-C6-C10	110.0		40.0				44/00/00 45:00	44 (44 (00 40 45	4
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:15	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	111		70 - 130				11/09/22 15:38	11/11/22 18:15	1
1-Chlorooctane									

RL

250

MDL Unit

mg/Kg

D

Prepared

Prepared

Client Sample ID: SW-79 (4-10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58 Sample Depth: 4 - 10

Analyte

Chloride

Analyte

Total TPH

REMOVED FROM ANALYSIS TABLE

Result Qualifier

Result Qualifier

<49.9 U

15800

Lab Sample ID: 890-3411-13

Analyzed

11/12/22 03:20

Matrix: Solid

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				11/09/22 15:36	11/13/22 03:26	1
1,4-Difluorobenzene (Surr)	114		70 - 130				11/09/22 15:36	11/13/22 03:26	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 16:13	1

**Eurofins Carlsbad** 

Dil Fac

Analyzed

11/14/22 14:30

RL

49.9

MDL Unit

mg/Kg

Client Sample ID: SW-79 (4-10')

Date Collected: 11/07/22 00:00

Client: Tetra Tech, Inc.

Job ID: 890-3411-1 SDG: Lea County NM

Project/Site: Kaiser SWD

**REMOVED FROM** 

**ANALYSIS TABLE** 

1120

Lab Sample ID: 890-3411-13

Matrix: Solid

11/12/22 03:27

Date Received: 11/07/22 14:58 Sample Depth: 4 - 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:37	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130				11/09/22 15:38	11/11/22 18:37	1
o-Terphenyl	116		70 - 130				11/09/22 15:38	11/11/22 18:37	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

**Client Sample ID: SW-80 (4.5-10')** Lab Sample ID: 890-3411-14 Date Collected: 11/07/22 00:00 **Matrix: Solid** 

24.8

mg/Kg

Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 03:47	1
1,4-Difluorobenzene (Surr)	107		70 - 130				11/09/22 15:36	11/13/22 03:47	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 16:13	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	263		50.0		mg/Kg			11/14/22 14:30	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 18:59	1
Diesel Range Organics (Over C10-C28)	263		50.0		mg/Kg		11/09/22 15:38	11/11/22 18:59	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				11/09/22 15:38	11/11/22 18:59	1

**Eurofins Carlsbad** 

11/14/2022

**Matrix: Solid** 

Lab Sample ID: 890-3411-14

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: SW-80 (4.5-10')** 

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	8690	101	mg/Kg			11/12/22 03:48	20		

**Client Sample ID: SW-81 (4.5-10')** Lab Sample ID: 890-3411-15

Date Collected: 11/07/22 00:00

Date Received: 11/07/22	14:
Sample Depth: 4.5 - 10	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 04:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 04:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 04:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/13/22 04:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 04:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/13/22 04:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/09/22 15:36	11/13/22 04:07	1
1,4-Difluorobenzene (Surr)	103		70 - 130				11/09/22 15:36	11/13/22 04:07	1

Method: TAL SOP Total BTEX - Tot	al BIEA Calculation						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401 U	0.00401	mg/Kg			11/14/22 16:13	1
_							

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)								
	Analyte	Result Qualifi	ier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	192	49.9	mg/Kg			11/14/22 14:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 19:21	1
Diesel Range Organics (Over C10-C28)	192		49.9		mg/Kg		11/09/22 15:38	11/11/22 19:21	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				11/09/22 15:38	11/11/22 19:21	1
o-Terphenyl	101		70 <sub>-</sub> 130				11/09/22 15:38	11/11/22 19:21	1

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - So	luble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8120		100		mg/Kg			11/12/22 03:55	20

Lab Sample ID: 890-3411-16

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: SW-82 (4.5-10')** 

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				11/09/22 15:36	11/13/22 04:28	1
1,4-Difluorobenzene (Surr)	111		70 - 130				11/09/22 15:36	11/13/22 04:28	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/14/22 16:13	1
Method: SW846 8015 NM - Diese Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	216		49.8		mg/Kg			11/14/22 14:30	1
Method: SW846 8015B NM - Die		,	• •						
Analyte		Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/09/22 15:38	11/11/22 19:43	1
Diesel Range Organics (Over C10-C28)	216		49.8		mg/Kg		11/09/22 15:38	11/11/22 19:43	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/09/22 15:38	11/11/22 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				11/09/22 15:38	11/11/22 19:43	1
o-Terphenyl -	95		70 - 130				11/09/22 15:38	11/11/22 19:43	1
Method: MCAWW 300.0 - Anions	s, Ion Chromato	ography - So	oluble						

Client Sample ID: SW-83 (4-10)

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Date Received: 11/0//22 14:00

Sample Depth: 4 - 10

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:49	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/09/22 15:36	11/13/22 04:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:49	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/09/22 15:36	11/13/22 04:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				11/09/22 15:36	11/13/22 04:49	

99.4

9100

mg/Kg

**Eurofins Carlsbad** 

11/12/22 04:02

Matrix: Solid

Lab Sample ID: 890-3411-17

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-83 (4-10)

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58 Sample Depth: 4 - 10 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3411-17

Matrix: Solid

\_\_\_

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)							
Surrogate	%Recovery	Qualifier	Limits	Prep	ared	Analyzed	Dil F
1,4-Difluorobenzene (Surr)	110		70 - 130	11/09/2	2 15:36 11/	/13/22 04:49	

Method: TAL SOP Total BTEX	- Total BTEX Calculation						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404 U	0.00404	mg/Kg			11/14/22 16:13	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<49.9 U	49.9	mg/Kg			11/14/22 09:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				11/10/22 08:48	11/11/22 18:00	1
o-Terphenyl	87		70 <sub>-</sub> 130				11/10/22 08:48	11/11/22 18:00	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	714	4.96	mg/Kg			11/12/22 04:09	1

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3411-1	BH-200 (10')	94	106	
890-3411-1 MS	BH-200 (10')	77	102	
890-3411-1 MSD	BH-200 (10')	95	96	
890-3411-2	BH-201 (10')	97	114	
890-3411-3	BH-204 (10')	99	116	
890-3411-4	BH-205 (10')	106	114	
890-3411-5	BH-206 (10')	102	116	
890-3411-6	BH-208 (10')	124	114	
890-3411-7	BH-209 (10')	111	115	
890-3411-8	BH-210 (10')	134 S1+	99	
890-3411-9	BH-211 (10')	123	115	
890-3411-10	BH-212 (10')	110	101	
890-3411-11	SW-75 (4-10')	104	100	
890-3411-12	SW-78 (4-10')	112	120	
890-3411-13	SW-79 (4-10')	112	114	
890-3411-14	SW-80 (4.5-10')	110	107	
890-3411-15	SW-81 (4.5-10')	114	103	
890-3411-16	SW-82 (4.5-10')	115	111	
890-3411-17	SW-83 (4-10)	108	110	
LCS 880-39140/1-A	Lab Control Sample	81	100	
LCSD 880-39140/2-A	Lab Control Sample Dup	77	104	
MB 880-39140/5-A	Method Blank	89	100	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21336-A-28-D MS	Matrix Spike	95	92	
880-21336-A-28-E MSD	Matrix Spike Duplicate	84	80	
890-3402-A-1-G MS	Matrix Spike	86	79	
890-3402-A-1-H MSD	Matrix Spike Duplicate	82	73	
890-3411-1	BH-200 (10')	97	104	
890-3411-2	BH-201 (10')	102	109	
890-3411-3	BH-204 (10')	113	118	
890-3411-4	BH-205 (10')	88	94	
890-3411-5	BH-206 (10')	103	109	
890-3411-6	BH-208 (10')	94	102	
890-3411-7	BH-209 (10')	117	124	
890-3411-8	BH-210 (10')	108	111	
890-3411-9	BH-211 (10')	120	129	
890-3411-10	BH-212 (10')	99	102	
890-3411-11	SW-75 (4-10')	92	98	
890-3411-12	SW-78 (4-10')	111	121	
890-3411-13	SW-79 (4-10')	110	116	

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid Prep Type: Total/NA

		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3411-14	SW-80 (4.5-10')	93	98	
890-3411-15	SW-81 (4.5-10')	95	101	
890-3411-16	SW-82 (4.5-10')	90	95	
890-3411-17	SW-83 (4-10)	88	87	
LCS 880-39141/2-A	Lab Control Sample	104	116	
LCS 880-39172/2-A	Lab Control Sample	94	97	
_CSD 880-39141/3-A	Lab Control Sample Dup	104	116	
_CSD 880-39172/3-A	Lab Control Sample Dup	107	109	
MB 880-39141/1-A	Method Blank	121	136 S1+	
MB 880-39172/1-A	Method Blank	119	134 S1+	

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39140

### **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

Analysis Batch: 39369

**Matrix: Solid** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Toluene	< 0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
o-Xylene	< 0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	1

	MB MB	į			
Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	70 - 130	11/09/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100	70 - 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid							Prep 1	Type: Total/NA
Analysis Batch: 39369							Prep	Batch: 39140
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
D	0.400	0.00750					70 400	

	•							
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09752		mg/Kg		98	70 - 130	
Toluene	0.100	0.09567		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1685		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.09351		mg/Kg		94	70 - 130	

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 81 1,4-Difluorobenzene (Surr) 100 70 - 130

Lab Sample ID: LCSD 880-39140/2-A

Matrix: Solid

Analysis Batch: 39369

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 39140

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09869		mg/Kg		99	70 - 130	1	35	
Toluene	0.100	0.09592		mg/Kg		96	70 - 130	0	35	
Ethylbenzene	0.100	0.09030		mg/Kg		90	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1711		mg/Kg		86	70 - 130	2	35	
o-Xylene	0.100	0.09589		mg/Kg		96	70 - 130	3	35	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3411-1 MS

**Matrix: Solid** 

Analysis Batch: 39369

	Client	Sample	ID: BH-20	0 (10')
--	--------	--------	-----------	---------

Prep Type: Total/NA

Prep Batch: 39140

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0996	0.09300		mg/Kg		93	70 - 130	
Toluene	<0.00200	U	0.0996	0.08826		mg/Kg		89	70 - 130	

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3411-1 MS

**Matrix: Solid** 

Analysis Batch: 39369

Client Sample ID: BH-200 (10')

Prep Type: Total/NA Prep Batch: 39140

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U 0.0996 0.07882 79 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00401 0.199 0.1462 mg/Kg 73 70 - 130 0.0996 o-Xylene <0.00200 U 0.08198 82 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	77	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-3411-1 MSD Client Sample ID: BH-200 (10')

**Matrix: Solid** 

Analysis Batch: 39369

Prep Type: Total/NA Prep Batch: 39140

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.08398		mg/Kg		84	70 - 130	10	35
Toluene	<0.00200	U	0.0998	0.08420		mg/Kg		84	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0998	0.08062		mg/Kg		81	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1625		mg/Kg		81	70 - 130	11	35
o-Xylene	<0.00200	U	0.0998	0.09115		mg/Kg		91	70 - 130	11	35

MSD MSD

Surrogate	%Recovery Qua	alifier Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39141/1-A Client Sample ID: Method Blank **Matrix: Solid** 

Analysis Batch: 39275

Prep Type: Total/NA Prep Batch: 39141

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte Gasoline Range Organics 50.0 11/09/22 15:38 11/11/22 09:13 <50.0 U mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 50.0 11/11/22 09:13 <50.0 U 11/09/22 15:38 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 11/09/22 15:38 11/11/22 09:13 mg/Kg

MB MB

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	11/09/22 15:3	8 11/11/22 09:13	1
o-Terphenyl	136	S1+	70 - 130	11/09/22 15:3	8 11/11/22 09:13	1

Lab Sample ID: LCS 880-39141/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 39275** Prep Batch: 39141

Spike LCS LCS %Rec Added Qualifier Analyte Result Unit %Rec Limits 1000 97 70 - 130 Gasoline Range Organics 971 0 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 884.0 mg/Kg 88 70 - 130

C10-C28)

Prep Batch: 39141

Prep Type: Total/NA

Prep Batch: 39141

Prep Type: Total/NA

Prep Batch: 39141

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-39141/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 39275** 

	LCS	LCS	
%	Recovery	Qualifier	Limits
	104		70 - 130
	116		70 - 130

Lab Sample ID: LCSD 880-39141/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Surrogate 1-Chlorooctane o-Terphenyl

Analysis Batch: 39275							Prep	Batch:	39141
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1108		mg/Kg		111	70 - 130	13	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	910.3		mg/Kg		91	70 - 130	3	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 104 70 - 130 70 - 130 o-Terphenyl 116

Lab Sample ID: 880-21336-A-28-D MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 39275** 

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	182		997	969.9		mg/Kg		79	70 - 130	
Diesel Range Organics (Over C10-C28)	1820	F1	997	2679		mg/Kg		86	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-21336-A-28-E MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 39275

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	182		999	1151		mg/Kg		97	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1820	F1	999	2326	F1	mg/Kg		51	70 - 130	14	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	80		70 - 130

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

MD MD

134 S1+

Lab Sample ID: MB 880-39172/1-A

**Matrix: Solid** Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
	МВ	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 130				11/10/22 08:48	11/11/22 09:30	

70 - 130

Lab Sample ID: LCS 880-39172/2-A

**Matrix: Solid** 

o-Terphenyl

Analysis Batch: 39269

**Client Sample ID: Lab Control Sample** 

11/11/22 09:30

11/10/22 08:48

Prep Type: Total/NA

Prep Batch: 39172

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 815.5 82 70 - 130 mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over 846.7 mg/Kg 85 70 - 130C10-C28)

LCS LCS

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 94 70 - 130 o-Terphenyl 97 70 - 130

Lab Sample ID: LCSD 880-39172/3-A

**Matrix: Solid** 

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier RPD Limit Unit D %Rec Limits Gasoline Range Organics 1000 1003 mg/Kg 100 70 - 130 21 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 950.2 mg/Kg 95 70 - 130 12 20 C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	107	70 - 130
o-Terphenyl	109	70 - 130

Lab Sample ID: 890-3402-A-1-G MS

**Matrix: Solid** 

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	997	1007		mg/Kg		95	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	997	861.7		mg/Kg		84	70 - 130	

Prep Batch: 39172

Prep Type: Total/NA

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-A-1-G MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 39269

	MS	MS	
	%Recovery	Qualifier	Limits
•	86		70 - 130
	79		70 - 130

Lab Sample ID: 890-3402-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Surrogate 1-Chlorooctane o-Terphenyl

Analysis Batch: 39269								Prep Batch: 391/2				
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	999	978.6		mg/Kg		92	70 - 130	3	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	999	796.8		mg/Kg		77	70 - 130	8	20	

MSD MSD Surrogate %Recovery Qualifier Limits 82 70 - 130 1-Chlorooctane 73 70 - 130 o-Terphenyl

MR MR

# Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39334

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/12/22 00:57	1

Lab Sample ID: LCS 880-39128/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39334

	Spike	LCS LCS				%Rec	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	
Chloride	250	268.3	ma/Ka		107	90 - 110	

Lab Sample ID: LCSD 880-39128/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39334

	SI	oike	LCSD	LCSD				%Rec		RPD
Analyte	Ad	ded	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride		250	268.7		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-3411-1 MS Client Sample ID: BH-200 (10')

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39334

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	2280	F1	1260	3520		ma/Ka		98	90 - 110		•

# QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3411-1 MSD Client Sample ID: BH-200 (10') **Matrix: Solid Prep Type: Soluble** Analysis Batch: 39334

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits RPD Limit Chloride 2280 F1 1260 3707 F1 mg/Kg 113 90 - 110

Lab Sample ID: 890-3411-11 MS Client Sample ID: SW-75 (4-10')

**Prep Type: Soluble** 

**Matrix: Solid** Analysis Batch: 39334

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits Chloride 14500 F1 5010 21010 F1 mg/Kg 130 90 - 110

Lab Sample ID: 890-3411-11 MSD Client Sample ID: SW-75 (4-10')

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39334 MSD MSD %Rec RPD Sample Sample Spike

Analyte Result Qualifier Added Result Qualifier Unit Limits **RPD** Limit Chloride 14500 F1 5010 20560 F1 121 90 - 110 20 mg/Kg

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **GC VOA**

Prep Batch: 39140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3411-1	BH-200 (10')	Total/NA	Solid	5035	
890-3411-2	BH-201 (10')	Total/NA	Solid	5035	
890-3411-3	BH-204 (10')	Total/NA	Solid	5035	
890-3411-4	BH-205 (10')	Total/NA	Solid	5035	
890-3411-5	BH-206 (10')	Total/NA	Solid	5035	
890-3411-6	BH-208 (10')	Total/NA	Solid	5035	
890-3411-7	BH-209 (10')	Total/NA	Solid	5035	
890-3411-8	BH-210 (10')	Total/NA	Solid	5035	
890-3411-9	BH-211 (10')	Total/NA	Solid	5035	
890-3411-10	BH-212 (10')	Total/NA	Solid	5035	
890-3411-11	SW-75 (4-10')	Total/NA	Solid	5035	
890-3411-12	SW-78 (4-10')	Total/NA	Solid	5035	
890-3411-13	SW-79 (4-10')	Total/NA	Solid	5035	
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	5035	
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	5035	
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	5035	
890-3411-17	SW-83 (4-10)	Total/NA	Solid	5035	
MB 880-39140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3411-1 MS	BH-200 (10')	Total/NA	Solid	5035	
890-3411-1 MSD	BH-200 (10')	Total/NA	Solid	5035	

Analysis Batch: 39369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-1	BH-200 (10')	Total/NA	Solid	8021B	39140
890-3411-2	BH-201 (10')	Total/NA	Solid	8021B	39140
890-3411-3	BH-204 (10')	Total/NA	Solid	8021B	39140
390-3411-4	BH-205 (10')	Total/NA	Solid	8021B	39140
390-3411-5	BH-206 (10')	Total/NA	Solid	8021B	39140
390-3411-6	BH-208 (10')	Total/NA	Solid	8021B	39140
890-3411-7	BH-209 (10')	Total/NA	Solid	8021B	39140
390-3411-8	BH-210 (10')	Total/NA	Solid	8021B	39140
390-3411-9	BH-211 (10')	Total/NA	Solid	8021B	39140
390-3411-10	BH-212 (10')	Total/NA	Solid	8021B	39140
390-3411-11	SW-75 (4-10')	Total/NA	Solid	8021B	39140
390-3411-12	SW-78 (4-10')	Total/NA	Solid	8021B	39140
390-3411-13	SW-79 (4-10')	Total/NA	Solid	8021B	39140
390-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8021B	39140
390-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8021B	39140
390-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8021B	39140
390-3411-17	SW-83 (4-10)	Total/NA	Solid	8021B	39140
MB 880-39140/5-A	Method Blank	Total/NA	Solid	8021B	39140
_CS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	8021B	39140
CSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39140
390-3411-1 MS	BH-200 (10')	Total/NA	Solid	8021B	39140
390-3411-1 MSD	BH-200 (10')	Total/NA	Solid	8021B	39140

Analysis Batch: 39551

_ *					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-1	BH-200 (10')	Total/NA	Solid	Total BTEX	

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **GC VOA (Continued)**

# **Analysis Batch: 39551 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-2	BH-201 (10')	Total/NA	Solid	Total BTEX	
890-3411-3	BH-204 (10')	Total/NA	Solid	Total BTEX	
890-3411-4	BH-205 (10')	Total/NA	Solid	Total BTEX	
890-3411-5	BH-206 (10')	Total/NA	Solid	Total BTEX	
890-3411-6	BH-208 (10')	Total/NA	Solid	Total BTEX	
890-3411-7	BH-209 (10')	Total/NA	Solid	Total BTEX	
890-3411-8	BH-210 (10')	Total/NA	Solid	Total BTEX	
890-3411-9	BH-211 (10')	Total/NA	Solid	Total BTEX	
890-3411-10	BH-212 (10')	Total/NA	Solid	Total BTEX	
890-3411-11	SW-75 (4-10')	Total/NA	Solid	Total BTEX	
890-3411-12	SW-78 (4-10')	Total/NA	Solid	Total BTEX	
890-3411-13	SW-79 (4-10')	Total/NA	Solid	Total BTEX	
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	Total BTEX	
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	Total BTEX	
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	Total BTEX	
890-3411-17	SW-83 (4-10)	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

## Prep Batch: 39141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-1	BH-200 (10')	Total/NA	Solid	8015NM Prep	
890-3411-2	BH-201 (10')	Total/NA	Solid	8015NM Prep	
890-3411-3	BH-204 (10')	Total/NA	Solid	8015NM Prep	
890-3411-4	BH-205 (10')	Total/NA	Solid	8015NM Prep	
890-3411-5	BH-206 (10')	Total/NA	Solid	8015NM Prep	
890-3411-6	BH-208 (10')	Total/NA	Solid	8015NM Prep	
890-3411-7	BH-209 (10')	Total/NA	Solid	8015NM Prep	
890-3411-8	BH-210 (10')	Total/NA	Solid	8015NM Prep	
890-3411-9	BH-211 (10')	Total/NA	Solid	8015NM Prep	
890-3411-10	BH-212 (10')	Total/NA	Solid	8015NM Prep	
890-3411-11	SW-75 (4-10')	Total/NA	Solid	8015NM Prep	
890-3411-12	SW-78 (4-10')	Total/NA	Solid	8015NM Prep	
890-3411-13	SW-79 (4-10')	Total/NA	Solid	8015NM Prep	
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8015NM Prep	
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8015NM Prep	
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8015NM Prep	
MB 880-39141/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39141/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39141/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21336-A-28-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21336-A-28-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

# Prep Batch: 39172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-17	SW-83 (4-10)	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Eurofins Carlsbad** 

Page 28 of 43

1

3

4

6

8

10

11

13

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

# GC Semi VOA

### Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-17	SW-83 (4-10)	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

#### Analysis Batch: 39275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-1	BH-200 (10')	Total/NA	Solid	8015B NM	39141
890-3411-2	BH-201 (10')	Total/NA	Solid	8015B NM	39141
890-3411-3	BH-204 (10')	Total/NA	Solid	8015B NM	39141
890-3411-4	BH-205 (10')	Total/NA	Solid	8015B NM	39141
890-3411-5	BH-206 (10')	Total/NA	Solid	8015B NM	39141
890-3411-6	BH-208 (10')	Total/NA	Solid	8015B NM	39141
890-3411-7	BH-209 (10')	Total/NA	Solid	8015B NM	39141
890-3411-8	BH-210 (10')	Total/NA	Solid	8015B NM	39141
890-3411-9	BH-211 (10')	Total/NA	Solid	8015B NM	39141
890-3411-10	BH-212 (10')	Total/NA	Solid	8015B NM	39141
890-3411-11	SW-75 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-12	SW-78 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-13	SW-79 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8015B NM	39141
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8015B NM	39141
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8015B NM	39141
MB 880-39141/1-A	Method Blank	Total/NA	Solid	8015B NM	39141
LCS 880-39141/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39141
LCSD 880-39141/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39141
880-21336-A-28-D MS	Matrix Spike	Total/NA	Solid	8015B NM	39141
880-21336-A-28-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39141

#### **Analysis Batch: 39406**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
390-3411-1	BH-200 (10')	Total/NA	Solid	8015 NM	
390-3411-2	BH-201 (10')	Total/NA	Solid	8015 NM	
390-3411-3	BH-204 (10')	Total/NA	Solid	8015 NM	
390-3411-4	BH-205 (10')	Total/NA	Solid	8015 NM	
390-3411-5	BH-206 (10')	Total/NA	Solid	8015 NM	
390-3411-6	BH-208 (10')	Total/NA	Solid	8015 NM	
390-3411-7	BH-209 (10')	Total/NA	Solid	8015 NM	
390-3411-8	BH-210 (10')	Total/NA	Solid	8015 NM	
390-3411-9	BH-211 (10')	Total/NA	Solid	8015 NM	
390-3411-10	BH-212 (10')	Total/NA	Solid	8015 NM	
390-3411-11	SW-75 (4-10')	Total/NA	Solid	8015 NM	
390-3411-12	SW-78 (4-10')	Total/NA	Solid	8015 NM	
390-3411-13	SW-79 (4-10')	Total/NA	Solid	8015 NM	
390-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8015 NM	
390-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8015 NM	
390-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8015 NM	
390-3411-17	SW-83 (4-10)	Total/NA	Solid	8015 NM	

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

# HPLC/IC

Leach Batch: 39128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3411-1	BH-200 (10')	Soluble	Solid	DI Leach	
890-3411-2	BH-201 (10')	Soluble	Solid	DI Leach	
890-3411-3	BH-204 (10')	Soluble	Solid	DI Leach	
890-3411-4	BH-205 (10')	Soluble	Solid	DI Leach	
890-3411-5	BH-206 (10')	Soluble	Solid	DI Leach	
890-3411-6	BH-208 (10')	Soluble	Solid	DI Leach	
890-3411-7	BH-209 (10')	Soluble	Solid	DI Leach	
890-3411-8	BH-210 (10')	Soluble	Solid	DI Leach	
890-3411-9	BH-211 (10')	Soluble	Solid	DI Leach	
890-3411-10	BH-212 (10')	Soluble	Solid	DI Leach	
890-3411-11	SW-75 (4-10')	Soluble	Solid	DI Leach	
890-3411-12	SW-78 (4-10')	Soluble	Solid	DI Leach	
890-3411-13	SW-79 (4-10')	Soluble	Solid	DI Leach	
890-3411-14	SW-80 (4.5-10')	Soluble	Solid	DI Leach	
890-3411-15	SW-81 (4.5-10')	Soluble	Solid	DI Leach	
890-3411-16	SW-82 (4.5-10')	Soluble	Solid	DI Leach	
890-3411-17	SW-83 (4-10)	Soluble	Solid	DI Leach	
MB 880-39128/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3411-1 MS	BH-200 (10')	Soluble	Solid	DI Leach	
890-3411-1 MSD	BH-200 (10')	Soluble	Solid	DI Leach	
890-3411-11 MS	SW-75 (4-10')	Soluble	Solid	DI Leach	
890-3411-11 MSD	SW-75 (4-10')	Soluble	Solid	DI Leach	

**Analysis Batch: 39334** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-1	BH-200 (10')	Soluble	Solid	300.0	39128
890-3411-2	BH-201 (10')	Soluble	Solid	300.0	39128
890-3411-3	BH-204 (10')	Soluble	Solid	300.0	39128
890-3411-4	BH-205 (10')	Soluble	Solid	300.0	39128
890-3411-5	BH-206 (10')	Soluble	Solid	300.0	39128
890-3411-6	BH-208 (10')	Soluble	Solid	300.0	39128
890-3411-7	BH-209 (10')	Soluble	Solid	300.0	39128
890-3411-8	BH-210 (10')	Soluble	Solid	300.0	39128
890-3411-9	BH-211 (10')	Soluble	Solid	300.0	39128
890-3411-10	BH-212 (10')	Soluble	Solid	300.0	39128
890-3411-11	SW-75 (4-10')	Soluble	Solid	300.0	39128
890-3411-12	SW-78 (4-10')	Soluble	Solid	300.0	39128
890-3411-13	SW-79 (4-10')	Soluble	Solid	300.0	39128
890-3411-14	SW-80 (4.5-10')	Soluble	Solid	300.0	39128
890-3411-15	SW-81 (4.5-10')	Soluble	Solid	300.0	39128
890-3411-16	SW-82 (4.5-10')	Soluble	Solid	300.0	39128
890-3411-17	SW-83 (4-10)	Soluble	Solid	300.0	39128
MB 880-39128/1-A	Method Blank	Soluble	Solid	300.0	39128
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	300.0	39128
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39128
890-3411-1 MS	BH-200 (10')	Soluble	Solid	300.0	39128
890-3411-1 MSD	BH-200 (10')	Soluble	Solid	300.0	39128
890-3411-11 MS	SW-75 (4-10')	Soluble	Solid	300.0	39128
890-3411-11 MSD	SW-75 (4-10')	Soluble	Solid	300.0	39128

Client: Tetra Tech, Inc. Job ID: 890-3411-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-200 (10')

Date Collected: 11/07/22 00:00

Lab Sample ID: 890-3411-1 Matrix: Solid Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 22:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 13:54	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 01:19	CH	EET MID

Client Sample ID: BH-201 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 22:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 14:16	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		10			39334	11/12/22 01:40	CH	EET MID

Client Sample ID: BH-204 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 22:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 14:37	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 01:47	CH	EET MID

Client Sample ID: BH-205 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 23:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID

**Eurofins Carlsbad** 

Lab Sample ID: 890-3411-2

Lab Sample ID: 890-3411-3

Lab Sample ID: 890-3411-4

Matrix: Solid

**Matrix: Solid** 

**Matrix: Solid** 

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-205 (10')

Date Received: 11/07/22 14:58

Lab Sample ID: 890-3411-4 Date Collected: 11/07/22 00:00

**Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8015 NM 39406 Analysis 11/14/22 14:30 SM EET MID Total/NA Prep 8015NM Prep 10.01 g 10 mL 39141 11/09/22 15:38 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 39275 11/11/22 14:59 SM EET MID Soluble 50 mL 39128 11/09/22 15:08 KS EET MID Leach DI Leach 4.99 g 300.0 39334 11/12/22 01:54 Soluble Analysis 5 СН **EET MID** 

Client Sample ID: BH-206 (10') Lab Sample ID: 890-3411-5

Date Collected: 11/07/22 00:00 **Matrix: Solid** 

Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 23:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 15:21	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 02:01	CH	EET MID

Client Sample ID: BH-208 (10') Lab Sample ID: 890-3411-6

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 23:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 15:43	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		10			39334	11/12/22 02:23	CH	EET MID

Client Sample ID: BH-209 (10') Lab Sample ID: 890-3411-7

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 00:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.00 g 1 uL	10 mL 1 uL	39141 39275	11/09/22 15:38 11/11/22 16:26	DM SM	EET MID EET MID

**Eurofins Carlsbad** 

11/14/2022

Page 32 of 43

**Matrix: Solid** 

**Matrix: Solid** 

Job ID: 890-3411-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Lab Sample ID: 890-3411-7

Matrix: Solid

Client Sample ID: BH-209 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Client: Tetra Tech, Inc.

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		10			39334	11/12/22 02:30	CH	EET MID

Client Sample ID: BH-210 (10')

Lab Sample ID: 890-3411-8

Date Collected: 11/07/22 00:00 Matrix: Solid

Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 00:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 16:48	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 02:37	CH	EET MID

Client Sample ID: BH-211 (10')

Lab Sample ID: 890-3411-9

Date Collected: 11/07/22 00:00 Matrix: Solid
Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 01:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 17:09	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 02:44	CH	EET MID

Client Sample ID: BH-212 (10') Lab Sample ID: 890-3411-10

Date Collected: 11/07/22 00:00 Matrix: Solid
Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 01:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 17:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 02:51	CH	EET MID

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

3

\_

6

Ω

9

12

Job ID: 890-3411-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-75 (4-10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Lab Sample ID: 890-3411-11

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 02:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 17:54	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 02:58	CH	EET MID

Client Sample ID: SW-78 (4-10') Lab Sample ID: 890-3411-12

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Matrix: Solid

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 03:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 18:15	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		50			39334	11/12/22 03:20	CH	EET MID

Client Sample ID: SW-79 (4-10') Lab Sample ID: 890-3411-13

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 03:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 18:37	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 03:27	CH	EET MID

Client Sample ID: SW-80 (4.5-10') Lab Sample ID: 890-3411-14

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 03:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

Job ID: 890-3411-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Lab Sample ID: 890-3411-14

Client Sample ID: SW-80 (4.5-10')
Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Client: Tetra Tech, Inc.

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 18:59	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 03:48	CH	EET MID

Lab Sample ID: 890-3411-15

Date Collected: 11/07/22 00:00

**Client Sample ID: SW-81 (4.5-10')** 

Date Received: 11/07/22 14:58

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 04:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 19:21	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 03:55	CH	EET MID

Client Sample ID: SW-82 (4.5-10')

Lab Sample ID: 890-3411-16

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 04:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 19:43	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 04:02	CH	EET MID

Client Sample ID: SW-83 (4-10)

Lab Sample ID: 890-3411-17

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 04:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 09:30	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g 1 uL	10 mL 1 uL	39172 39269	11/10/22 08:48 11/11/22 18:00	DM SM	EET MID EET MID

# Lab Chronicle

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-83 (4-10)

Lab Sample ID: 890-3411-17

Date Collected: 11/07/22 00:00 Matrix: Solid
Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		1			39334	11/12/22 04:09	CH	EET MID

#### **Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

1

3

Л

5

6

8

4.0

111

13

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ied by the governing authority. This list ma	av include analytes for
the agency does not of		,	ieu sy ale gerelling aanenly.	ay morado dilarytoo lor
the agency does not of Analysis Method		Matrix	Analyte	ay molado analytoo tor
0 ,	fer certification.	•	, , ,	

3

4

**5** 

10

11

13

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

1

3

4

5

7

9

10

ä

13

SW-83 (4-10)

890-3411-17

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3411-1 SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3411-1	BH-200 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-2	BH-201 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-3	BH-204 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-4	BH-205 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-5	BH-206 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-6	BH-208 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-7	BH-209 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-8	BH-210 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-9	BH-211 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-10	BH-212 (10')	Solid	11/07/22 00:00	11/07/22 14:58	10
890-3411-11	SW-75 (4-10')	Solid	11/07/22 00:00	11/07/22 14:58	4 - 10
890-3411-12	SW-78 (4-10')	Solid	11/07/22 00:00	11/07/22 14:58	4 - 10
890-3411-13	SW-79 (4-10')	Solid	11/07/22 00:00	11/07/22 14:58	4 - 10
890-3411-14	SW-80 (4.5-10')	Solid	11/07/22 00:00	11/07/22 14:58	4.5 - 10
890-3411-15	SW-81 (4.5-10')	Solid	11/07/22 00:00	11/07/22 14:58	4.5 - 10
890-3411-16	SW-82 (4.5-10')	Solid	11/07/22 00:00	11/07/22 14:58	4.5 - 10

Solid

11/07/22 00:00

11/07/22 14:58 4 - 10

5

\_

8

9

12

13

	Relinquished by:	2	Relinguished by:	(len)	Relinquished by:											LAB USE	LAB #		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:			,
	у: / Date: Time:	324- 00/- 1034 ASS	yy: Date: Time:	22/11/11	1	BH-212 (10)	BH-211 (10')	BH-210 (10')	BH-209 (10')	ВН-208 (10')	вн-206 (10')	BH-205 (10')	BH-204 (10°)	BH-201 (10')	BH-200 (10')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	n: Lea County, NM	Kaiser SWD	Permian Water Solutions		Tetra Tech. Inc.	
	Received by:		Received by:		Received by:	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager			
	Date:		Date:		Date	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL		MATRIX		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 682-4559 Fax (432) 682-3946	Midland, Texas 79705	SUIC HEAA AALDE
	: Time:		: Time:		Time:	×	×	×	×	×	×	×	×	×	×	HNO <sub>3</sub> ICE None		METHOD S		iver		-02230	ch.com	38	.559 .82-3946	9705	er Ste 100
2 1 '	10 10 C	300	Sample Temperature		AB USE ONLY	×	×	×	×	×	×	×	×	×	×	FILTEI BTEX TPH T TPH 8 PAH 8	RED (* 8021B X1005 015M ( 270C	Y/N) BTE (Ext to (GRO	EX 8260 0 C35) - DRO - 0	ORO - 1			890-3411 C				
7		Rush Chan	RUSH: Same Day	] [	REMARKS											TCLP I TCLP I TCLP I RCI GC/MS	Metals Volatile Semi V	Ag As s olatiles	Ba Cd C	r Pb Se			Chain of Custody				
Special Report Limits of TRKP Report		Rush Charges Authorized	24 Nr 46 Nr		STANDARD	×	×	×	×	×	×	×	×	×	×	PCB's NORM PLM (A Chlorid Chlorid Gener Anion/	Asbesto le de S al Wat	os) Sulfate ter Che	emistry (	see att	ached I	ist)					
1			/2 07													Hold											

ORIGINAL COPY

Kelinquished by:	No.	Relinquished by:	testo	Relinguished by											( LAB USE )	LAB#		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:		파
y; Vale, Inte.	But Sud III B	Date: Tin	72/1/11	1				SW-83 (4-10')	SW-82 (4.5-10')	SW-81 (4.5-10')	SW-80 (4.5-10')	SW-79 (4-10')	SW-78 (4-10')	SW-75 (4-10')		SAMPLE IDENTIFICATION				Permian Water Solutions - Dusty McInturff	n: Lea County, <b>NM</b>	Kaiser SWD	Permian Water Solutions		Tetra Tech, Inc.
Novalvou by.	Deceived hy:	Received by:		Neceived by:	Donahuad bu:			11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	11/7/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:		
Ţ.	Date	Date:		Caro	Date			×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub>	₹	MATRIX PR		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Midland, Texas 79705 Midland, Texas 79705 Tel (432) 682-4559
	Time:	Time:			Time:			×	×	×	×	×	×	×	ICE None	AIAIC	PRESERVATIVE		ver		02230	h.com	S	2-3946	705
					ŀ		-	-	$\vdash$			-	$\vdash$	-	FILTER										
-1	/	Samp	-	<u></u>	†			×	×	×	×	×	×	×	BTEX 8				3				≥	1	
15	)	Sample Temperature		AB USE	t	士		×	×	×	×	×	×	×	TPH 80	15M (	-		ORO -	MRO)			ANALYSIS		
,	_	erature	)	ONLY	ŀ	-									PAH 82 Total M		lg As I	Ba Cd Cr	Pb Se	Hg					
				111	2			F	F						TCLP W			Ba Cd C	r Pb Se	Hg			REQUEST (Circle o		
				×	REMARKS								上		TCLP S			5					EST le or		
Specia	Rush Charges Authorized	Noon. Salle Day		S	Š.	-	-	$\vdash$	$\vdash$	-	-	-	$\vdash$	+	RCI GC/MS	Vol. 8	260B	/ 624		-			S		
al Rep	Charg	ú	2	STANDARD	I													32 <b>70C</b> /62	5				pecif		
ort Li	es Au	ā	5	DAR	ŀ	+	$\vdash$	-	$\vdash$	$\vdash$	-	-	+	$\vdash$	PCB's NORM	30827	608					`	ifv Me		
mits o	inonz	4		0	I						L				PLM (A	-	s)						eth		
Y TR	D97	3	<u> </u>		ŀ	-	+	×	×	×	×	×	×	×	Chlorid Chlorid		ulfate	TDS					thod ?		
Special Report Limits or TRRP Report		4	48 h		ļ	二		丰			L	F	F		-			emistry (	see at	tached	list)		No.		
port			73 hr		ŀ	+	+	+	+	+	+	+	+	+	Anion/	ation	Balai	nce							
		=	7						L			L	I												
1					-									1	4										

Page 41 of 43

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3411-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 3411 List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3411-1 SDG Number: Lea County NM

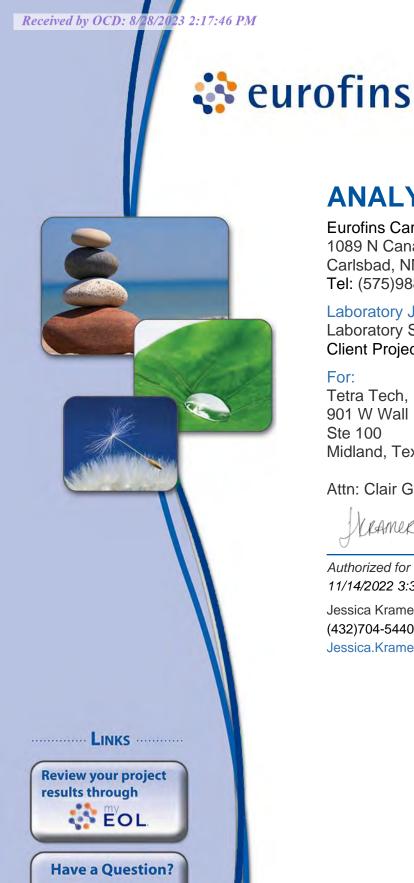
List Source: Eurofins Midland List Creation: 11/09/22 10:47 AM

List Number: 2

Login Number: 3411

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 2:28:53 PM

# **Environment Testing**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3412-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 11/14/2022 3:39:39 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3412-1

SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

2

3

4

6

8

10

13

# **Definitions/Glossary**

Job ID: 890-3412-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

**Qualifiers** 

**GC VOA** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier **Qualifier Description** 

\*1 LCS/LCSD RPD exceeds control limits.

S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

**EDL** Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

**PRES** Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

**TNTC** Too Numerous To Count

#### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-3412-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3412-1

#### Receipt

The sample was received on 11/7/2022 2:58 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 29.8°C

#### **Receipt Exceptions**

The following sample was received and analyzed from an unpreserved bulk soil jar: H-9 (5') (890-3412-1).

#### **GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39128 and analytical batch 880-39334 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

9

3

4

\_

1

9

10

12

13

Matrix: Solid

Lab Sample ID: 890-3412-1

Client: Tetra Tech, Inc. Job ID: 890-3412-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: H-9 (5')

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 05:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 05:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 05:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/09/22 15:36	11/13/22 05:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 05:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/09/22 15:36	11/13/22 05:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				11/09/22 15:36	11/13/22 05:09	1
1,4-Difluorobenzene (Surr)	111		70 - 130				11/09/22 15:36	11/13/22 05:09	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399		0.00399		mg/Kg			11/14/22 16:13	
Method: SW846 8015 NM - Diese Analyte		ics (DRO) ( Qualifier	GC) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9		mg/Kg		<u>.</u>	11/14/22 09:30	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:21	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:21	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	93		70 - 130				11/10/22 08:48	11/11/22 18:21	1
o-Terphenyl	92		70 - 130				11/10/22 08:48	11/11/22 18:21	1
•									
Method: MCAWW 300.0 - Anions									
Method: MCAWW 300.0 - Anions Analyte		Qualifier	oluble 	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/12/22 04:17	Dil Fac

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate R
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3411-A-1-D MS	Matrix Spike	77	102	
890-3411-A-1-E MSD	Matrix Spike Duplicate	95	96	
890-3412-1	H-9 (5')	112	111	
LCS 880-39140/1-A	Lab Control Sample	81	100	
LCSD 880-39140/2-A	Lab Control Sample Dup	77	104	
MB 880-39140/5-A	Method Blank	89	100	
Surrogate Legend				
BFB = 4-Bromofluorobenz	zene (Surr)			
DFBZ = 1,4-Difluorobenze	ene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3402-A-1-G MS	Matrix Spike	86	79	
890-3402-A-1-H MSD	Matrix Spike Duplicate	82	73	
890-3412-1	H-9 (5')	93	92	
LCS 880-39172/2-A	Lab Control Sample	94	97	
LCSD 880-39172/3-A	Lab Control Sample Dup	107	109	
MB 880-39172/1-A	Method Blank	119	134 S1+	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

**Eurofins Carlsbad** 

2

3

5

7

9

11

13

Client: Tetra Tech, Inc. Job ID: 890-3412-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

**Matrix: Solid** Analysis Batch: 39369 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39140

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	1

MB MB

Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	70 - 130	11/09/22 15:36	11/12/22 21:52	1
1.4-Difluorobenzene (Surr)	100	70 <sub>-</sub> 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39140

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09752	-	mg/Kg		98	70 - 130	
Toluene	0.100	0.09567		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1685		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.09351		mg/Kg		94	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	81		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-39140/2-A

Matrix: Solid

Analysis Batch: 39369

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 39140

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09869		mg/Kg		99	70 - 130	1	35	
Toluene	0.100	0.09592		mg/Kg		96	70 - 130	0	35	
Ethylbenzene	0.100	0.09030		mg/Kg		90	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1711		mg/Kg		86	70 - 130	2	35	
o-Xylene	0.100	0.09589		mg/Kg		96	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1.4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3411-A-1-D MS

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 39140

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0996	0.09300		mg/Kg		93	70 - 130	
Toluene	<0.00200	U	0.0996	0.08826		mg/Kg		89	70 - 130	

**Eurofins Carlsbad** 

11/14/2022

Job ID: 890-3412-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3411-A-1-D MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

Analysis Batch: 39369

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.0996	0.07882		mg/Kg		79	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1462		mg/Kg		73	70 - 130	
o-Xylene	<0.00200	U	0.0996	0.08198		mg/Kg		82	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	77	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-3411-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 39369

Prep Type: Total/NA Prep Batch: 39140

Prep Type: Total/NA

Prep Batch: 39140

Sample Sample Spike MSD MSD RPD Result Qualifier Added RPD Limit Analyte Result Qualifier %Rec Limits Unit Benzene <0.00200 U 0.0998 0.08398 mg/Kg 84 70 - 130 10 35 Toluene <0.00200 U 0.0998 0.08420 mg/Kg 84 70 - 130 5 35 Ethylbenzene <0.00200 U 0.0998 0.08062 81 70 - 130 2 35 mg/Kg 0.200 35 m-Xylene & p-Xylene <0.00401 U 0.1625 mg/Kg 81 70 - 130 11 <0.00200 U 0.0998 0.09115 70 - 130 o-Xylene mg/Kg 11

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A Client Sample ID: Method Blank **Matrix: Solid** 

Analysis Batch: 39269

	Prep Type: Total/NA
	Prep Batch: 39172
MB MB	

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte 50.0 11/11/22 09:30 <50.0 U 11/10/22 08:48 Gasoline Range Organics mg/Kg (GRO)-C6-C10 11/11/22 09:30 Diesel Range Organics (Over <50.0 U 50.0 11/10/22 08:48 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 11/10/22 08:48 11/11/22 09:30 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	11/10/22 08:48	11/11/22 09:30	1
o-Terphenyl	134	S1+	70 - 130	11/10/22 08:48	11/11/22 09:30	1

Lab Sample ID: LCS 880-39172/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** 

Prep Type: Total/NA Analysis Batch: 39269 Prep Batch: 39172

	<b>Spike</b>	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	815.5		mg/Kg		82	70 - 130		
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	846.7		mg/Kg		85	70 - 130		
C10-C28)									

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 2:28:53 PM

Job ID: 890-3412-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

LCS LCS

Lab Sample ID: LCS 880-39172/2-A

Limits

**Matrix: Solid** 

Analysis Batch: 39269

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 39172

Surrogate %Recovery Qualifier 1-Chlorooctane 94 70 - 130 o-Terphenyl 97 70 - 130

Lab Sample ID: LCSD 880-39172/3-A

**Matrix: Solid** 

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1003 \*1 100 70 - 13021 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 950.2 95 mg/Kg 70 - 13012 20 C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 890-3402-A-1-G MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 39269** 

Prep Type: Total/NA

Prep Batch: 39172

Sample Sample Spike MS MS Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics 55.1 997 1007 mg/Kg 95 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 861.7 mg/Kg 84 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 86 70 - 130 o-Terphenyl 79

Lab Sample ID: 890-3402-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 39269

Prep Type: Total/NA

Prep Batch: 39172

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	55.1	*1	999	978.6		mg/Kg		92	70 - 130	3	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<50.0	U	999	796.8		mg/Kg		77	70 - 130	8	20	
040,000)												

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	73		70 - 130

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client: Tetra Tech, Inc.

Job ID: 890-3412-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

Matrix: Solid

Analysis Batch: 39334

MB MB

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 11/12/22 00:57
 11

Lab Sample ID: LCS 880-39128/2-A

Matrix: Solid

Analysis Batch: 39334

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 268.3 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-39128/3-A

Matrix: Solid

Analysis Batch: 39334

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 268.7 mg/Kg 107 90 - 110

Lab Sample ID: 890-3411-A-1-B MS

Matrix: Solid

Analysis Batch: 39334

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits 1260 Chloride 2280 3520 90 - 110 mg/Kg

Lab Sample ID: 890-3411-A-1-C MSD

Matrix: Solid

**Analysis Batch: 39334** 

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 2280 F1 1260 3707 F1 Chloride mg/Kg 113 90 - 110 20

**Eurofins Carlsbad** 

\_

A

5

7

8

10

12

13

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

Project/Site: Kaiser SWD

SDG: Lea County NM

#### **GC VOA**

#### Prep Batch: 39140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Total/NA	Solid	5035	_
MB 880-39140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

# Analysis Batch: 39369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Total/NA	Solid	8021B	39140
MB 880-39140/5-A	Method Blank	Total/NA	Solid	8021B	39140
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	8021B	39140
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39140
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	39140
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39140

#### Analysis Batch: 39552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

# Prep Batch: 39172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

#### Analysis Batch: 39407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Total/NA	Solid	8015 NM	

# HPLC/IC

### Leach Batch: 39128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Soluble	Solid	DI Leach	
MB 880-39128/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Eurofins Carlsbad** 

Page 11 of 19

3

4

6

8

10

12

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **HPLC/IC** (Continued)

# Leach Batch: 39128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3411-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### **Analysis Batch: 39334**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3412-1	H-9 (5')	Soluble	Solid	300.0	39128
MB 880-39128/1-A	Method Blank	Soluble	Solid	300.0	39128
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	300.0	39128
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39128
890-3411-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	39128
890-3411-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39128

2

4

**O** 

0

10

13

# **Lab Chronicle**

Client: Tetra Tech, Inc. Job ID: 890-3412-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: H-9 (5')

Date Received: 11/07/22 14:58

Lab Sample ID: 890-3412-1 Date Collected: 11/07/22 12:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 05:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39552	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39407	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 18:21	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 04:17	CH	EET MID

#### **Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

Project/Site: Kaiser SWD

SDG: Lea County NM

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	t the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	• •		ed by the governing additionty. This list the	ay include analytes for v
the agency does not of Analysis Method	• •	Matrix	Analyte	ay include analytes for v
0 ,	fer certification.	•	, , ,	

3

4

O -

7

9

11

13

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

-

4

6

9

11

# Sample Summary

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3412-1 SDG: Lea County NM

\_\_\_\_

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3412-1	H-9 (5')	Solid	11/07/22 12:00	11/07/22 14:58	5'

3

4

6

8

9

4 4

12

IR

	Relinquished by:	Relinquipmed by:	renc	Relinquished by:				Ŧ	( ONLY )	LAB#		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4	Analysis Requ	
	Date: Tim	11/1/22 1458	12	Date: Time:				H-9 (5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record	
ORIGINAL COPY	Received by:	Received by:		Received by:				11/7/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager			
γ	Date:	Ca e		Date:				×	WATER SOIL HCL HNO <sub>3</sub>	₹	MATRIX PRESER		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Midand, Texas 79705 Tel (432) 662-4559 Fax (432) 682-3946	890	
	Time:	line:		Time:					None # CONT	ED (	Y/N)				30	<u>om</u>		5	890-3412 Chain of Custody	
(Circle) HAND DELIVERED	Tom-007	Sample Temperature		LAB USE ONLY				×		1005 15M ( 70C etals / etals	(Ext to GRO Ag As E	- DRO - (	ORO - I	Hg			ANALYSIS REQUEST		dy	
FEDEX UPS		Rush Charges Authorized		REMARKS:					TCLP Volume TCLP Set RCI GC/MS V GC/MS V PCB's 8	vol. 8	olatiles 3260B Vol. 8		5				r Specify			
Tracking #:	Special Report Limits or TRRP Report	onized	Day 24 hr 48 hr 72	õ				×	PLM (As Chloride Chloride General Anion/C	e S	Sulfate er Che	emistry (	see at	ached	list)		Method No.)		Page	
			2 hr						Hold										of .	

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3412-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 3412 List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Containers requiring zero headspace have no headspace or bubble is

Job Number: 890-3412-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Source: Eurotins Midland
List Creation: 11/09/22 10:47 AM

Login Number: 3412 List Number: 2

Creator: Rodriguez, Leticia

Question Answer Comment The cooler's custody seal, if present, is intact. N/A N/A Sample custody seals, if present, are intact. The cooler or samples do not appear to have been compromised or True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. Cooler Temperature is recorded. True COC is present. True COC is filled out in ink and legible. True COC is filled out with all pertinent information. True Is the Field Sampler's name present on COC? True There are no discrepancies between the containers received and the COC. True Samples are received within Holding Time (excluding tests with immediate True HTs) Sample containers have legible labels. True Containers are not broken or leaking. True Sample collection date/times are provided. True Appropriate sample containers are used. True Sample bottles are completely filled. True Sample Preservation Verified. N/A There is sufficient vol. for all requested analyses, incl. any requested True

N/A

1

2

3

Ē

7

9

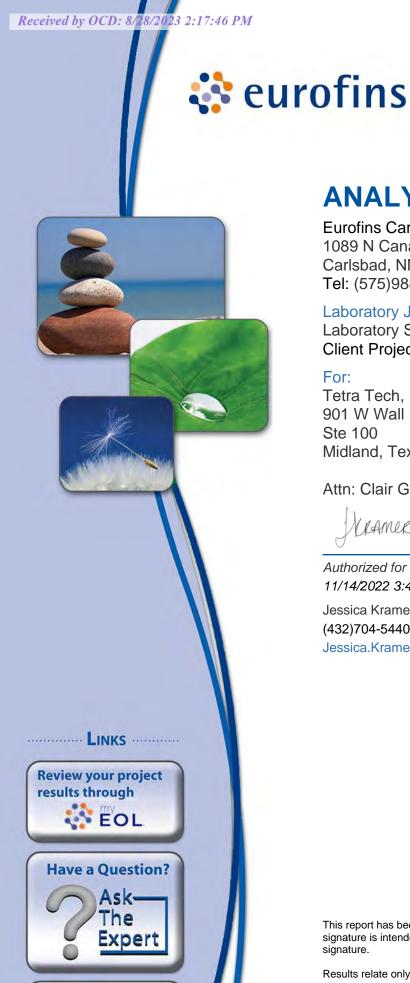
11

13

14

MS/MSDs

<6mm (1/4").



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 2:28:53 PM

# **Environment Testing**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3413-1

Laboratory Sample Delivery Group: 212C-MD-02230

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 11/14/2022 3:40:55 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3413-1 SDG: 212C-MD-02230

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Chacklists	18

2

3

4

6

8

10

40

13

## **Definitions/Glossary**

Job ID: 890-3413-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### **Qualifiers**

#### **GC VOA**

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

#### **GC Semi VOA**

Qualifier	Description
	Qualifier

\*1 LCS/LCSD RPD exceeds control limits.

S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

#### **HPLC/IC**

Qualifier **Qualifier Description** 

MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

### **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

**EDL** Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present PQL Practical Quantitation Limit

**PRES** Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

**TNTC** Too Numerous To Count

#### Case Narrative

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-3413-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3413-1

#### Receipt

The sample was received on 11/7/2022 2:58 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 29.8°C

#### **Receipt Exceptions**

The following sample was received and analyzed from an unpreserved bulk soil jar: H-8 (5') (890-3413-1).

#### **GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39128 and analytical batch 880-39334 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

2

3

4

5

7

10

12

13

Matrix: Solid

Lab Sample ID: 890-3413-1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: H-8 (5')

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:30	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 05:30	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 05:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 05:30	1
1,4-Difluorobenzene (Surr)	109		70 - 130				11/09/22 15:36	11/13/22 05:30	1
Method: TAL SOP Total BTEX - 1	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mathadi CW04C 004E NM Diaga	I Damma Orman	ine (DDO) (	00)		mg/Kg				
Method: SW846 8015 NM - Diese Analyte		Qualifier	GC) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 09:30	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/10/22 08:48	11/11/22 18:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 18:41	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
			70 - 130				11/10/22 08:48	11/11/22 18:41	
1-Chlorooctane	90								
1-Chlorooctane o-Terphenyl	90 87		70 - 130				11/10/22 08:48	11/11/22 18:41	
o-Terphenyl  Method: MCAWW 300.0 - Anions	87		70 - 130 <b>Dluble</b>						
o-Terphenyl	87	ography - So Qualifier	70 - 130	MDL	Unit mg/Kg	<u>D</u>	11/10/22 08:48 Prepared	11/11/22 18:41  Analyzed  11/12/22 04:24	Dil Fac

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
	BFB1	DFBZ1	
Client Sample ID	(70-130)	(70-130)	
Matrix Spike	77	102	
Matrix Spike Duplicate	95	96	
H-8 (5')	110	109	
Lab Control Sample	81	100	
Lab Control Sample Dup	77	104	
Method Blank	89	100	
zene (Surr)			
	Matrix Spike Matrix Spike Duplicate H-8 (5') Lab Control Sample Lab Control Sample Dup	Client Sample ID         (70-130)           Matrix Spike         77           Matrix Spike Duplicate         95           H-8 (5')         110           Lab Control Sample         81           Lab Control Sample Dup         77           Method Blank         89	Client Sample ID         (70-130)         (70-130)           Matrix Spike         77         102           Matrix Spike Duplicate         95         96           H-8 (5')         110         109           Lab Control Sample         81         100           Lab Control Sample Dup         77         104           Method Blank         89         100

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

covery (Acceptance Limits)				
	OTPH1	1CO1		
	(70-130)	(70-130)	Client Sample ID	Lab Sample ID
	79	86	Matrix Spike	890-3402-A-1-G MS
	73	82	Matrix Spike Duplicate	890-3402-A-1-H MSD
	87	90	H-8 (5')	890-3413-1
	97	94	Lab Control Sample	LCS 880-39172/2-A
	109	107	Lab Control Sample Dup	LCSD 880-39172/3-A
	134 S1+	119	Method Blank	MB 880-39172/1-A
	134 S1+	119	Method Blank	MB 880-39172/1-A Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

**Eurofins Carlsbad** 

2

4

5

8

9

1 1

4 4

Job ID: 890-3413-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

**Matrix: Solid** 

Analysis Batch: 39369

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39140

	MR	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Pro	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/09	9/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09	9/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Analysis Batch: 39369

Prep Type: Total/NA

Prep Batch: 39140

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09752		mg/Kg		98	70 - 130	
Toluene	0.100	0.09567		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.08894		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1685		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.09351		mg/Kg		94	70 - 130	

Spike

Added

0.100

0.100

0.100

0.200

0.100

LCSD LCSD

0.09869

0.09592

0.09030

0.1711

0.09589

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

LCS LCS

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	81	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-39140/2-A

**Matrix: Solid** 

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

**Analysis Batch: 39369** 

Client Sample ID: Lab Control Sample Dup

86

96

Prep Type: Total/NA Prep Batch: 39140

35

35

RPD %Rec %Rec Limits Limit 99 70 - 130 35 96 70 - 130 0 35 90 70 - 130 2 35

70 - 130

70 - 130

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 77 1,4-Difluorobenzene (Surr) 104 70 - 130

Lab Sample ID: 890-3411-A-1-D MS

**Matrix: Solid** 

Analysis Batch: 39369

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 39140

Sample Sample Spike MS MS %Rec Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits <0.00200 U 0.0996 93 Benzene 0.09300 mg/Kg 70 - 130 Toluene <0.00200 U 0.0996 0.08826 mg/Kg 89 70 - 130

Analysis Batch: 39369

**Matrix: Solid** 

## QC Sample Results

Job ID: 890-3413-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3411-A-1-D MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 39140

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D <0.00200 U 0.0996 0.07882 79 70 - 130 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00401 U 0.199 0.1462 mg/Kg 73 70 - 130 <0.00200 U 0.0996 0.08198 82 o-Xylene mg/Kg

MS MS Surrogate Qualifier %Recovery

Lab Sample ID: 890-3411-A-1-E MSD

70 - 130

Limits 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 70 - 130 102

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39140

RPD Limit

Analysis Batch: 39369 Sample Sample Spike MSD MSD Result Qualifier %Rec RPD Analyte Added Result Qualifier Limits Unit Benzene <0.00200 U 0.0998 0.08398 mg/Kg 84 70 - 130 10 35 Toluene <0.00200 0.0998 0.08420 mg/Kg 84 70 - 130 5 35 Ethylbenzene <0.00200 0.0998 0.08062 81 70 - 130 2 U mg/Kg m-Xylene & p-Xylene < 0.00401 U 0.200 0.1625 mg/Kg 81 70 - 130 11 0.0998 70 - 130 o-Xylene <0.00200 U 0.09115 mg/Kg 91 11

35 35

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 95 1,4-Difluorobenzene (Surr) 96 70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A Client Sample ID: Method Blank **Matrix: Solid** 

Analysis Batch: 39269

Analysis Batch: 39269

Prep Type: Total/NA Prep Batch: 39172

ı		IVID	IVID							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
l	(GRO)-C6-C10									
	Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
	C10-C28)									
	OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
ı										

MB MB %Recovery Dil Fac Qualifier Limits Prepared Analyzed Surrogate 1-Chlorooctane 119 70 - 130 11/10/22 08:48 11/11/22 09:30 134 S1+ 70 - 130 11/10/22 08:48 11/11/22 09:30 o-Terphenyl

Lab Sample ID: LCS 880-39172/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** 

Prep Type: Total/NA Prep Batch: 39172

-	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	815.5		mg/Kg		82	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	846.7		mg/Kg		85	70 - 130
C10-C28)							

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Client Sample ID: Matrix Spike

70 - 130

84

Prep Type: Total/NA

Prep Batch: 39172

Job ID: 890-3413-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-39172/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 39269

Prep Batch: 39172 LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 94 70 - 130 o-Terphenyl 97 70 - 130

Lab Sample ID: LCSD 880-39172/3-A

**Matrix: Solid** 

Analysis Batch: 39269

Prep Batch: 39172 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1003 \*1 100 70 - 13021 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 950.2 mg/Kg 95 70 - 13012 20 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 107 70 - 130 1-Chlorooctane 109 70 - 130 o-Terphenyl

Lab Sample ID: 890-3402-A-1-G MS

**Matrix: Solid** 

**Analysis Batch: 39269** 

Diesel Range Organics (Over

Prep Batch: 39172 Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics 55.1 997 1007 mg/Kg 95 70 - 130 (GRO)-C6-C10

861.7

mg/Kg

997

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 86 o-Terphenyl 79 70 - 130

<50.0 U

Lab Sample ID: 890-3402-A-1-H MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 39269

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 999 978.6 92 Gasoline Range Organics 55.1 mg/Kg 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 796.8 mg/Kg 77 70 - 130 20

C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 82 70 - 130 73 70 - 130 o-Terphenyl

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

<5.00 U

Job ID: 890-3413-1 SDG: 212C-MD-02230

Dil Fac

11/12/22 00:57

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

**Matrix: Solid** 

Analysis Batch: 39334

Analyte

Chloride

Client Sample ID: Method Blank **Prep Type: Soluble** 

MB MB Result Qualifier RL MDL Unit D Prepared Analyzed mg/Kg

Lab Sample ID: LCS 880-39128/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

5.00

Analysis Batch: 39334

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 268.3 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-39128/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39334

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 268.7 mg/Kg 107 90 - 110

Lab Sample ID: 890-3411-A-11-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 39334

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 14500 5010 21010 F1 130 90 - 110 mg/Kg

Lab Sample ID: 890-3411-A-11-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 39334

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 14500 F1 5010 20560 F1 Chloride mg/Kg 121 90 - 110 20

# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

### **GC VOA**

### Prep Batch: 39140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	5035	
MB 880-39140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 39369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8021B	39140
MB 880-39140/5-A	Method Blank	Total/NA	Solid	8021B	39140
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	8021B	39140
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39140
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	39140
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39140

#### Analysis Batch: 39553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

## Prep Batch: 39172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

#### Analysis Batch: 39408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 39128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Soluble	Solid	DI Leach	
MB 880-39128/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Eurofins Carlsbad** 

2

3

1

\_\_\_\_

7

Q

4 4

12

# **QC Association Summary**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-3413-1

SDG: 212C-MD-02230

# **HPLC/IC** (Continued)

## Leach Batch: 39128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3411-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### **Analysis Batch: 39334**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Soluble	Solid	300.0	39128
MB 880-39128/1-A	Method Blank	Soluble	Solid	300.0	39128
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	300.0	39128
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39128
890-3411-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	39128
890-3411-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39128

**Eurofins Carlsbad** 

2

3

4

6

g

10

4.0

13

## **Lab Chronicle**

Client: Tetra Tech, Inc. Job ID: 890-3413-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: H-8 (5')

Date Received: 11/07/22 14:58

Lab Sample ID: 890-3413-1 Date Collected: 11/07/22 12:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 05:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39553	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39408	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 18:41	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		1			39334	11/12/22 04:24	CH	EET MID

#### **Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority		ogram	Identification Number	Expiration Date	
Texas		ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w	
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v	
the agency does not of Analysis Method	fer certification .  Prep Method	Matrix	Analyte	ay morado anarytoo tor v	
9 ,		•	, , ,		

3

4

6

8

10

12

13

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

3

4

7

a

10

19

13

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3413-1

SDG: 212C-MD-02230

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3413-1	H-8 (5')	Solid	11/07/22 12:00	11/07/22 14:58	5'

	Relinquished by:	Drug - al	Relinquished by:	Relinquished by:								н-8 (5')	( LABUSE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	(county, state)	Project Name:	Client Name:		1	Analysis Reques	
	Date: Time:	00	Date: Time:	Date: Time:	П							5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions		Tetra Tech, Inc.	Analysis Request of Chain of Custody Record	
	Received by:		Received by:	Received by:								11/7/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager				
			0									×	WATE SOIL	R	MATRIX		Peyton Oliver		212C-N	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-4559	Widland, Texas 79705		
	Date: Time:		Date: Time:	Date:	-							×	HCL HNO <sub>3</sub> ICE None		PRESERVATIVE		Oliver		212C-MD-02230	atech.com	zales	(432) 682-4559 Eax (432) 682-3946	Cas 79705	890-3413 Ch	
													# CON											Chain of Custody	
(Circ	-1.0	W	Sam	5								×	BTEX 8			X 8260	В		1					stod	
(Circle) HAND DELIVERED	23	50	Sample Temperature	LAB USE ONLY	-	-		+		+	+	×	TPH TO			- DRO - (	ORO - I	MRO)			ANALYSIS REQUEST				
ND D	10	<b>30</b> (2)	mpera	SEC									PAH 82	_							SIS				
ELIVE	-00-		ture	Ž	-	-	-	+			+	+	-			Ba Cd Cr Ba Cd C					R				
RED	3_	_										L	TCLP V	-	-	50 00 0					EQUES				
FEDEX	S			N		1			$\Box$			F	TCLP S	emi V	olatile:	S					ST			1	
	pecia	rush (	HSUS	လူ လ	-	-	+	+	+-	-	+	+	RCI GC/MS	Vol. (	8260B	/ 624					S				
UPS	Reg	Charg	Sa	TAN				工				I	GC/MS	Semi.	Vol. 8	3270C/62	5				pecify				
Trac	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH: Same Day	STANDARD	H	-		-			-	+	PCB's	8082/	608										
Tracking #:	imits	uthor		õ	-	1	+	+				-	PLM (A	sbesto	os)						let!			] <sub>20</sub>	
	or Ti	ized	24 hr									×	Chloride	е			···				Method			Page	
	RR					-		-			-	+	Chlorid		Sulfate	TDS emistry (	COC 0 <sup>14</sup>	achad	liet\		No			<b>,</b>	
	Repo		48 hr			-	-			+	+	+	Anion/0				see all	acried	nst)		٢				
	ä		72 hr					工				I										1			
			=		-	+		+	$\vdash$	-	-	+										1		<u>م</u>	
					-	+		+	H	+	+	+	Hold		-										

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3413-1 SDG Number: 212C-MD-02230

Login Number: 3413 List Source: Eurofins Carlsbad List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3413-1

SDG Number: 212C-MD-02230

**List Source: Eurofins Midland** 

List Creation: 11/09/22 10:47 AM

Login Number: 3413 List Number: 2

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

# **Environment Testing**

# **ANALYTICAL REPORT**

**Eurofins Carlsbad** 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-3414-1

Laboratory Sample Delivery Group: 212C-MD-02230

Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Attn: Clair Gonzales

RAMER

Authorized for release by: 11/14/2022 3:40:57 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3414-1 SDG: 212C-MD-02230

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	16
Lab Chronicle	19
Certification Summary	21
Method Summary	22
Cample Callinary	23
Chain of Custody	24
Receipt Checklists	25

2

3

4

6

8

10

13

## **Definitions/Glossary**

Job ID: 890-3414-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### **Qualifiers**

#### **GC VOA**

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

**Qualifier Description** 

**Qualifier Description** 

#### **GC Semi VOA**

\*1 LCS/LCSD RPD exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

#### **HPLC/IC** Qualifier

Qualifier

F1 MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

## **Glossary**

CFU

Abbreviation These commonly used abbreviations may or may not be present in this report. ¤ Listed under the "D" column to designate that the result is reported on a dry weight basis %R Percent Recovery CFL Contains Free Liquid

Contains No Free Liquid **CNF** Duplicate Error Ratio (normalized absolute difference) DER

Colony Forming Unit

Dil Fac **Dilution Factor** 

Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL ML Minimum Level (Dioxin) MPN Most Probable Number MOI Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present **Practical Quantitation Limit PQL** 

**PRES** Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER** 

Reporting Limit or Requested Limit (Radiochemistry) RL

**RPD** Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

#### Case Narrative

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-3414-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3414-1

#### Receipt

The samples were received on 11/7/2022 2:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 29.8°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SW-75 (0-4') (890-3414-1), SW-78 (0-4') (890-3414-2), SW-79 (0-4') (890-3414-3) and SW-83 (0-4') (890-3414-4).

#### GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-39148 and analytical batch 880-39393 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39126 and analytical batch 880-39335 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

3

4

7

9

10

12

13

| | 4

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-75 (0-4')
Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58 Sample Depth: 0-4' REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3414-1

**Matrix: Solid** 

\_\_

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:51	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 05:51	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 05:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 05:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/09/22 15:36	11/13/22 05:51	1

4-Bromofluorobenzene (Surr) 118 70 - 130 11/09/22 15:36 11/13/22 05:51 1

1,4-Difluorobenzene (Surr) 114 70 - 130 11/09/22 15:36 11/13/22 05:51 1

Method: TAL SOP Total RTEX - Total RTEX Calculation

Method: TAL SOP Total BTEX - Total BTEX CalculationAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacTotal BTEX<0.00398</td>U0.00398mg/Kg11/14/22 16:131

 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

 Analyte
 Result TPH
 Qualifier
 RL MDL Unit Mg/Kg
 D Prepared Manalyzed Prepared Manalyzed Mg/Kg
 Dil Fac Mg/Kg

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDI Dil Fac Unit D Prepared Analyzed <49.9 U \*1 Gasoline Range Organics 49.9 mg/Kg 11/10/22 08:48 11/11/22 14:04 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 49.9 mg/Kg 11/10/22 08:48 11/11/22 14:04 C10-C28)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90	70 - 130	11/10/22 08:48	11/11/22 14:04	1
o-Terphenvl	96	70 - 130	11/10/22 08:48	11/11/22 14:04	1

49 9

mg/Kg

 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 2370
 25.1
 mg/Kg
 11/12/22 04:10
 5

Client Sample ID: SW-78 (0-4')
Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

OII Range Organics (Over C28-C36)

Sample Depth: 0-4'

REMOVED FROM ANALYSIS TABLE

<49.9 U

Lab Sample ID: 890-3414-2

11/11/22 14:04

11/10/22 08:48

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/09/22 16:01	11/14/22 13:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/09/22 16:01	11/14/22 13:48	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		11/09/22 16:01	11/14/22 13:48	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		11/09/22 16:01	11/14/22 13:48	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		11/09/22 16:01	11/14/22 13:48	1
Xylenes, Total	<0.00402	U F1	0.00402		mg/Kg		11/09/22 16:01	11/14/22 13:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				11/09/22 16:01	11/14/22 13:48	1

## Client Sample Results

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-78 (0-4')

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58 Sample Depth: 0-4' REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3414-2

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 1,4-Difluorobenzene (Surr)
 106
 70 - 130
 11/09/22 16:01
 11/14/22 13:48
 1

Method: TAL SOP Total BTEX - Total BTEX Calculation

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00402</td>
 U
 0.00402
 mg/Kg
 11/14/22 16:19
 1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total TPH
 161
 50.0
 mg/Kg
 11/14/22 09:30
 1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

**MDL** Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac <50.0 U \*1 mg/Kg Gasoline Range Organics 50.0 11/10/22 08:48 11/11/22 13:43 (GRO)-C6-C10 50.0 11/10/22 08:48 11/11/22 13:43 **Diesel Range Organics (Over** 54.3 mg/Kg C10-C28) **Oll Range Organics (Over** 107 50.0 mg/Kg 11/10/22 08:48 11/11/22 13:43 C28-C36)

Surrogate %Recovery Qualifier Limits

 Surrogate
 %Recovery 1-Chlorooctane
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Factoria

 1-Chlorooctane
 92
 70 - 130
 11/10/22 08:48
 11/11/22 13:43
 1

 o-Terphenyl
 94
 70 - 130
 11/10/22 08:48
 11/11/22 13:43
 1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result Chloride
 Qualifier
 RL 24.9
 MDL mg/Kg
 Unit mg/Kg
 D prepared mg/Kg
 Prepared Prepared mg/Kg
 Analyzed Dil Fac 11/12/22 04:15
 Dil Fac 11/12/22 04:15
 5

Client Sample ID: SW-79 (0-4')

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58

Sample Depth: 0-4'

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3414-3

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Benzene < 0.00199 0.00199 11/09/22 16:01 11/14/22 14:09 mg/Kg Toluene <0.00199 U 0.00199 mg/Kg 11/09/22 16:01 11/14/22 14:09 Ethylbenzene <0.00199 U 0.00199 11/09/22 16:01 11/14/22 14:09 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.00398 mg/Kg 11/09/22 16:01 11/14/22 14:09 o-Xylene <0.00199 U 0.00199 mg/Kg 11/09/22 16:01 11/14/22 14:09 <0.00398 U 0.00398 11/09/22 16:01 11/14/22 14:09 Xylenes, Total mg/Kg Qualifier Limits Dil Fac

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Factor

 4-Bromofluorobenzene (Surr)
 106
 70 - 130
 11/09/22 16:01
 11/14/22 14:09
 1

 1,4-Diffuorobenzene (Surr)
 100
 70 - 130
 11/09/22 16:01
 11/14/22 14:09
 1

**Method: TAL SOP Total BTEX - Total BTEX Calculation** 

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00398</td>
 U
 0.00398
 mg/Kg
 11/14/22 16:19
 1

**Eurofins Carlsbad** 

5

3

4

6

8

10

12

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3414-1 SDG: 212C-MD-02230

Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

Client Sample ID: SW-79 (0-4')

**REMOVED FROM** 

Lab Sample ID: 890-3414-3

Matrix: Solid

Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel I	Range Organ	ics (DRO) (G	iC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 09:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL MDL Unit Prepared Analyzed Dil Fac <49.9 U \*1 49.9 11/10/22 08:48 11/11/22 14:26 Gasoline Range Organics mg/Kg (GRO)-C6-C10 <49.9 U 49.9 mg/Kg 11/10/22 08:48 11/11/22 14:26 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) <49.9 U 49 9 mg/Kg 11/10/22 08:48 11/11/22 14:26 %Recovery Qualifier Dil Fac Surrogate Limits Prepared Analyzed 1-Chlorooctane 100 70 - 130 11/10/22 08:48 11/11/22 14:26 o-Terphenyl 107 70 - 130 11/10/22 08:48 11/11/22 14:26

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - S	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1520	F1	25.2		mg/Kg			11/12/22 04:20	5

Client Sample ID: SW-83 (0-4') Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

Sample Depth: 0-4'

REMOVED FROM
<b>ANALYSIS TABLE</b>

ANALYSIS TABLE

Lab Sample ID: 890-3414-4

**Matrix: Solid** 

Method: SW846 8021B - Volatile Organic Compounds (GC) Result Qualifier MDL Dil Fac Analyte RL Unit Prepared Analyzed <0.00199 0.00199 11/09/22 16:01 11/14/22 14:29 Benzene mg/Kg Toluene <0.00199 U 0.00199 mg/Kg 11/09/22 16:01 11/14/22 14:29 Ethylbenzene <0.00199 U 0.00199 11/14/22 14:29 mg/Kg 11/09/22 16:01 m-Xylene & p-Xylene <0.00398 U 0.00398 mg/Kg 11/09/22 16:01 11/14/22 14:29 o-Xylene <0.00199 U 0.00199 mg/Kg 11/09/22 16:01 11/14/22 14:29 Xylenes, Total <0.00398 U 0.00398 mg/Kg 11/09/22 16:01 11/14/22 14:29 %Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 99 70 - 130 11/09/22 16:01 11/14/22 14:29 1.4-Difluorobenzene (Surr) 100 70 - 130 11/09/22 16:01 11/14/22 14:29 **Method: TAL SOP Total BTEX - Total BTEX Calculation** Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00398 U 0.00398 11/14/22 16:19 mg/Kg Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <50.0 U 50.0 mg/Kg 11/14/22 09:30 Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <50.0 U \*1 Gasoline Range Organics 50.0 11/10/22 08:48 11/11/22 14:47 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 11/11/22 14:47 <50.0 U 50.0 11/10/22 08:48 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 11/10/22 08:48 11/11/22 14:47 ma/Ka

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: SW-83 (0-4')

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3414-4

Matrix: Solid

Sample Depth: 0-4'

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86	70 - 130	11/10/22 08:48	11/11/22 14:47	1
o-Terphenyl	88	70 - 130	11/10/22 08:48	11/11/22 14:47	1

Method: MCAWW 300.0 - Anions,	lon Chromato	ography - Sol	uble					
Analyte		Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chlorida	23/10		25.1	ma/	- (α		11/12/22 04:35	5

5

7

Ω

9

11

13

# **Surrogate Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-3411-A-1-D MS	Matrix Spike	77	102	
90-3411-A-1-E MSD	Matrix Spike Duplicate	95	96	
390-3414-1	SW-75 (0-4')	118	114	
390-3414-2	SW-78 (0-4')	97	106	
390-3414-2 MS	SW-78 (0-4')	111	97	
890-3414-2 MSD	SW-78 (0-4')	105	106	
390-3414-3	SW-79 (0-4')	106	100	
390-3414-4	SW-83 (0-4')	99	100	
.CS 880-39140/1-A	Lab Control Sample	81	100	
.CS 880-39148/1-A	Lab Control Sample	97	103	
.CSD 880-39140/2-A	Lab Control Sample Dup	77	104	
CSD 880-39148/2-A	Lab Control Sample Dup	105	110	
ИВ 880-39140/5-A	Method Blank	89	100	
MB 880-39148/5-A	Method Blank	81	106	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3402-A-1-G MS	Matrix Spike	86	79	
890-3402-A-1-H MSD	Matrix Spike Duplicate	82	73	
890-3414-1	SW-75 (0-4')	90	96	
390-3414-2	SW-78 (0-4')	92	94	
890-3414-3	SW-79 (0-4')	100	107	
390-3414-4	SW-83 (0-4')	86	88	
LCS 880-39172/2-A	Lab Control Sample	94	97	
LCSD 880-39172/3-A	Lab Control Sample Dup	107	109	
MB 880-39172/1-A	Method Blank	119	134 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Released to Imaging: 9/1/2023 2:28:53 PM

**Eurofins Carlsbad** 

2

5

9

11

12

Job ID: 890-3414-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

**Matrix: Solid** 

Analysis Batch: 39369

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39140

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/12/22 21:52	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/09/22 15:36	11/12/22 21:52	

MB MB

MD MD

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	70 - 130	11/09/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100	70 - 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

**Matrix: Solid** 

Analysis Batch: 39369

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 39140

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09752 mg/Kg 98 70 - 130 Toluene 0.100 0.09567 mg/Kg 96 70 - 130 Ethylbenzene 0.100 0.08894 mg/Kg 89 70 - 130 70 - 130 0.200 84 m-Xylene & p-Xylene 0.1685 mg/Kg 0.100 o-Xylene 0.09351 mg/Kg 70 - 130

LCS LCS

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	81	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-39140/2-A

**Matrix: Solid** 

Analysis Batch: 39369

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 39140

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.09869 mg/Kg 99 70 - 130 35 Toluene 0.100 0.09592 mg/Kg 96 70 - 130 0 35 Ethylbenzene 0.100 0.09030 mg/Kg 90 70 - 130 2 35 m-Xylene & p-Xylene 0.200 0.1711 mg/Kg 86 70 - 130 35 0.09589 o-Xylene 0.100 mg/Kg 96 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1 4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3411-A-1-D MS

**Matrix: Solid** 

Analysis Batch: 39369

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39140

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits <0.00200 U 0.0996 93 Benzene 0.09300 mg/Kg 70 - 130 Toluene <0.00200 U 0.0996 0.08826 mg/Kg 89 70 - 130

**Eurofins Carlsbad** 

**Prep Type: Total/NA** 

Prep Batch: 39140

## **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3414-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3411-A-1-D MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

Analysis Batch: 39369

San	ple Sample	Spike	MS	MS				%Rec
Analyte Re	ult Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene <0.00	200 U	0.0996	0.07882		mg/Kg		79	70 - 130
m-Xylene & p-Xylene <0.00	101 U	0.199	0.1462		mg/Kg		73	70 - 130
o-Xylene <0.00	200 U	0.0996	0.08198		mg/Kg		82	70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	77	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-3411-A-1-E MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Total/NA** 

**Matrix: Solid** 

Analysis Batch: 39369									Prep Batch:		39140
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0998	0.08398		mg/Kg		84	70 - 130	10	35
Toluene	<0.00200	U	0.0998	0.08420		mg/Kg		84	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.0998	0.08062		mg/Kg		81	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1625		mg/Kg		81	70 - 130	11	35
o-Xylene	<0.00200	U	0.0998	0.09115		mg/Kg		91	70 - 130	11	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Lab Sample ID: MB 880-39148/5-A

**Matrix: Solid** 

**Analysis Batch: 39393** 

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39148

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 16:01	11/14/22 13:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 16:01	11/14/22 13:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 16:01	11/14/22 13:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/09/22 16:01	11/14/22 13:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 16:01	11/14/22 13:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/09/22 16:01	11/14/22 13:20	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	11/09/22 16:01	11/14/22 13:20	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/09/22 16:01	11/14/22 13:20	1

Lab Sample ID: LCS 880-39148/1-A

Matrix: Solid

**Analysis Batch: 39393** 

Client Sample ID	: Lab Control Sample
	Prep Type: Total/NA

Prep Batch: 39148

•	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.09113		mg/Kg		91	70 - 130
Toluene	0.100	0.09738		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.09503		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1754		mg/Kg		88	70 - 130

Job ID: 890-3414-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-39148/1-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 39393 Prep Batch: 39148

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits D 0.08684 0.100 87 70 - 130 o-Xylene mg/Kg

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 97 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 103

Lab Sample ID: LCSD 880-39148/2-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 39393** Prep Batch: 39148

Spike LCSD LCSD RPD Analyte Added Result Qualifier Unit %Rec Limits Limit D Benzene 0.100 0.1053 mg/Kg 105 70 - 130 14 35 Toluene 0.100 0.1145 mg/Kg 115 70 - 130 16 35 Ethylbenzene 0.100 0.1151 mg/Kg 115 70 - 130 19 35 m-Xylene & p-Xylene 0.200 0.2129 mg/Kg 106 70 - 130 19 35 0.100 0.1033 103 70 - 130 35 o-Xylene mg/Kg 17

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 105 70 - 130 1,4-Difluorobenzene (Surr) 110 70 - 130

Lab Sample ID: 890-3414-2 MS Client Sample ID: SW-78 (0-4')

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 39393 Prep Batch: 39148

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.08043		mg/Kg		80	70 - 130	
Toluene	<0.00201	U	0.100	0.08943		mg/Kg		89	70 - 130	
Ethylbenzene	<0.00201	U F1	0.100	0.08382		mg/Kg		84	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1547		mg/Kg		77	70 - 130	
o-Xylene	<0.00201	U F1	0.100	0.07599		mg/Kg		75	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 111 70 - 130 1,4-Difluorobenzene (Surr) 97

Lab Sample ID: 890-3414-2 MSD Client Sample ID: SW-78 (0-4')

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 39393** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0990	0.09009		mg/Kg		91	70 - 130	11	35
Toluene	<0.00201	U	0.0990	0.08614		mg/Kg		87	70 - 130	4	35
Ethylbenzene	<0.00201	U F1	0.0990	0.06835	F1	mg/Kg		69	70 - 130	20	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1239	F1	mg/Kg		63	70 - 130	22	35
o-Xylene	< 0.00201	U F1	0.0990	0.06260	F1	mg/Kg		63	70 - 130	19	35

**Eurofins Carlsbad** 

Prep Batch: 39148

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3414-1 SDG: 212C-MD-02230

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3414-2 MSD

**Matrix: Solid** 

Analysis Batch: 39393

Client Sample ID: SW-78 (0-4')

Prep Type: Total/NA

Prep Batch: 39148

MSD MSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 105 70 - 130 1,4-Difluorobenzene (Surr) 106 70 - 130

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A

**Matrix: Solid** 

**Analysis Batch: 39269** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

	-	МВ	MB					-	
A	nalyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	asoline Range Organics GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1
	iesel Range Organics (Over 10-C28)	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1
0	Il Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	11/10/22 08:48	11/11/22 09:30	1
o-Terphenyl	134	S1+	70 - 130	11/10/22 08:48	11/11/22 09:30	1

Lab Sample ID: LCS 880-39172/2-A

**Matrix: Solid** 

**Analysis Batch: 39269** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39172

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	815.5		mg/Kg		82	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	846.7		mg/Kg		85	70 - 130
C10-C28)							

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	94	70 - 130
o-Terphenyl	97	70 - 130

Lab Sample ID: LCSD 880-39172/3-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

Analysis Batch: 39269

Released to Imaging: 9/1/2023 2:28:53 PM

Prep Type: Total/NA

Prep Batch: 39172

-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1003	*1	mg/Kg		100	70 - 130	21	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	950.2		mg/Kg		95	70 - 130	12	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	107	70 - 130
o-Terphenyl	109	70 - 130

Job ID: 890-3414-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-A-1-G MS

**Matrix: Solid** Analysis Batch: 39269 Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 39172

Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 55.1 \*1 997 1007 mg/Kg 95 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 997 861.7 84 70 - 130<50.0 U mg/Kg

C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 86 o-Terphenyl 79 70 - 130

Lab Sample ID: 890-3402-A-1-H MSD

**Matrix: Solid Analysis Batch: 39269** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

**Prep Type: Soluble** 

Spike MSD MSD %Rec RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit 999 3 Gasoline Range Organics 55.1 978.6 mg/Kg 92 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 796.8 mg/Kg 77 70 - 130 8 20 C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 82 70 - 130 73 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 39335** 

MB MB

Analyte Result Qualifier MDL Unit RL Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 11/12/22 02:56 mg/Kg

Lab Sample ID: LCS 880-39126/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 39335

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 266.1 106 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-39126/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

Matrix: Solid

Analysis Batch: 39335

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	258.9		mg/Kg	_	104	90 - 110	3	20

# **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3414-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

# Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3414-3 MS Client Sample ID: SW-79 (0-4') **Matrix: Solid Prep Type: Soluble** Analysis Batch: 39335

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 1520 F1 1260 2880 mg/Kg 109 90 - 110

Lab Sample ID: 890-3414-3 MSD Client Sample ID: SW-79 (0-4') **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 39335

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec 1260 Chloride 1520 F1 3027 F1 mg/Kg 120 90 - 110 5 20

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

# **GC VOA**

### Prep Batch: 39140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	5035	
MB 880-39140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

# Prep Batch: 39148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3414-2	SW-78 (0-4')	Total/NA	Solid	5035	
890-3414-3	SW-79 (0-4')	Total/NA	Solid	5035	
890-3414-4	SW-83 (0-4')	Total/NA	Solid	5035	
MB 880-39148/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39148/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39148/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3414-2 MS	SW-78 (0-4')	Total/NA	Solid	5035	
890-3414-2 MSD	SW-78 (0-4')	Total/NA	Solid	5035	

### Analysis Batch: 39369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	8021B	39140
MB 880-39140/5-A	Method Blank	Total/NA	Solid	8021B	39140
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	8021B	39140
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39140
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	39140
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39140

### Analysis Batch: 39393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-2	SW-78 (0-4')	Total/NA	Solid	8021B	39148
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8021B	39148
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8021B	39148
MB 880-39148/5-A	Method Blank	Total/NA	Solid	8021B	39148
LCS 880-39148/1-A	Lab Control Sample	Total/NA	Solid	8021B	39148
LCSD 880-39148/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39148
890-3414-2 MS	SW-78 (0-4')	Total/NA	Solid	8021B	39148
890-3414-2 MSD	SW-78 (0-4')	Total/NA	Solid	8021B	39148

### Analysis Batch: 39554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	Total BTEX	
890-3414-2	SW-78 (0-4')	Total/NA	Solid	Total BTEX	
890-3414-3	SW-79 (0-4')	Total/NA	Solid	Total BTEX	
890-3414-4	SW-83 (0-4')	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

### Prep Batch: 39172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	8015NM Prep	
890-3414-2	SW-78 (0-4')	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

Page 16 of 26

Released to Imaging: 9/1/2023 2:28:53 PM

2

3

4

6

8

10

\_\_\_

13

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

# GC Semi VOA (Continued)

# Prep Batch: 39172 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8015NM Prep	
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	8015B NM	39172
890-3414-2	SW-78 (0-4')	Total/NA	Solid	8015B NM	39172
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8015B NM	39172
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

### Analysis Batch: 39398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	8015 NM	
890-3414-2	SW-78 (0-4')	Total/NA	Solid	8015 NM	
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8015 NM	
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8015 NM	

### HPLC/IC

### Leach Batch: 39126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Soluble	Solid	DI Leach	_
890-3414-2	SW-78 (0-4')	Soluble	Solid	DI Leach	
890-3414-3	SW-79 (0-4')	Soluble	Solid	DI Leach	
890-3414-4	SW-83 (0-4')	Soluble	Solid	DI Leach	
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3414-3 MS	SW-79 (0-4')	Soluble	Solid	DI Leach	
890-3414-3 MSD	SW-79 (0-4')	Soluble	Solid	DI Leach	

### Analysis Batch: 39335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Soluble	Solid	300.0	39126
890-3414-2	SW-78 (0-4')	Soluble	Solid	300.0	39126
890-3414-3	SW-79 (0-4')	Soluble	Solid	300.0	39126
890-3414-4	SW-83 (0-4')	Soluble	Solid	300.0	39126
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126
890-3414-3 MS	SW-79 (0-4')	Soluble	Solid	300.0	39126

**Eurofins Carlsbad** 

5

7

10

12

13

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

# **HPLC/IC** (Continued)

**Analysis Batch: 39335 (Continued)** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-3 MSD	SW-79 (0-4')	Soluble	Solid	300.0	39126

3

А

8

10

\_\_\_\_

13

Job ID: 890-3414-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Lab Sample ID: 890-3414-1

ab Sample ID. 090-3414-1

Matrix: Solid

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58

Client Sample ID: SW-75 (0-4')

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 05:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39554	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39398	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 14:04	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39126	11/09/22 15:04	KS	EET MID
Soluble	Analysis	300.0		5	0 mL	1.0 mL	39335	11/12/22 04:10	CH	EET MID

Client Sample ID: SW-78 (0-4')

Lab Sample ID: 890-3414-2

Date Collected: 11/07/22 12:00 Matrix: Solid

Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	39148	11/09/22 16:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39393	11/14/22 13:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39554	11/14/22 16:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			39398	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 13:43	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39126	11/09/22 15:04	KS	EET MID
Soluble	Analysis	300.0		5	0 mL	1.0 mL	39335	11/12/22 04:15	CH	EET MID

Client Sample ID: SW-79 (0-4')

Lab Sample ID: 890-3414-3

Date Collected: 11/07/22 12:00
Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39148	11/09/22 16:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39393	11/14/22 14:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39554	11/14/22 16:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			39398	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 14:26	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	39126	11/09/22 15:04	KS	EET MID
Soluble	Analysis	300.0		5	0 mL	1.0 mL	39335	11/12/22 04:20	CH	EET MID

Client Sample ID: SW-83 (0-4')

Lab Sample ID: 890-3414-4

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39148	11/09/22 16:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39393	11/14/22 14:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39554	11/14/22 16:19	SM	EET MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

3

5

7

Q

10

13

**Matrix: Solid** 

# **Lab Chronicle**

Client: Tetra Tech, Inc. Job ID: 890-3414-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-83 (0-4')

Date Received: 11/07/22 14:58

Lab Sample ID: 890-3414-4 Date Collected: 11/07/22 12:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			39398	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 14:47	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39126	11/09/22 15:04	KS	EET MID
Soluble	Analysis	300.0		5	0 mL	1.0 mL	39335	11/12/22 04:35	CH	EET MID

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date	
exas		ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w	
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v	
the agency does not of Analysis Method	fer certification .  Prep Method	Matrix	Analyte	ay morado anarytoo tor v	
9 ,		•	, , ,		

3

4

6

8

10

12

13

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

C-MD-02230

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

5

6

8

9

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-3414-1

SDG: 212C-MD-02230

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3414-1	SW-75 (0-4')	Solid	11/07/22 12:00	11/07/22 14:58	0-4'
890-3414-2	SW-78 (0-4')	Solid	11/07/22 12:00	11/07/22 14:58	0-4'
890-3414-3	SW-79 (0-4')	Solid	11/07/22 12:00	11/07/22 14:58	0-4'
890-3414-4	SW-83 (0-4')	Solid	11/07/22 12:00	11/07/22 14:58	0-4'

ORIGINAL COPY

Analysis Request of Chain of Custody Record leceiving Laboratory voice to: roject Name: LAB USE LAB# 4 SW-83 (0-4') SW-79 (0-4") SW-78 (0-4") SW-75 (0-4") Eurofins Xenco Permian Water Solutions Permian Water Solutions - Dusty McInturff Lea County, NM Kaiser SWD Tetra Tech, Inc. SAMPLE IDENTIFICATION O me Received by: Project #: Site Manager Received by: Received by: 11/7/2022 11/7/2022 11/7/2022 11/7/2022 DATE SAMPLING Clair.Gonzales@tetratech.com TIME WATER Clair Gonzales MATRIX ×  $\times \times$ SOIL Peyton Oliver 212C-MD-02230 Midland, Texas 79705 Tel (432) 682-4559 Date: HCL PRESERVATIVE METHOD HNO: ICE Time: None # CONTAINERS FILTERED (Y/N) -000 000 BTEX 8021B BTEX 8260B LAB USE ONLY **ANALYSIS REQUEST** TPH TX1005 (Ext to C35) HAND DELIVERED × × × TPH 8015M (GRO - DRO - ORO - MRO) 00. PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg (Circle or Specify Method TCLP Metals Ag As Ba Cd Cr Pb Se Hg REMARKS: TCLP Volatiles TCLP Semi Volatiles FEDEX Rush Charges Authorized RUSH: Same Day 24 hr Special Report Limits or TRRP Report RCI STANDARD GC/MS Vol. 8260B / 624 UPS GC/MS Semi, Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos)  $\times \times \times$ Chloride Sulfate TDS 48 hr 72 hr General Water Chemistry (see attached list) Anion/Cation Balance 잌 Hold

# **Login Sample Receipt Checklist**

Job Number: 890-3414-1 Client: Tetra Tech, Inc. SDG Number: 212C-MD-02230

Login Number: 3414 List Source: Eurofins Carlsbad List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

**Eurofins Carlsbad** Page 25 of 26

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3414-1 SDG Number: 212C-MD-02230

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

Login Number: 3414 List Number: 2

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Euronnis Carisbau

2

2

Λ

5

\_

. .

12

13

14

<6mm (1/4").

**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Clair Gonzales Tetra Tech, Inc. 901 W Wall Ste 100 Midland, Texas 79701

Generated 12/27/2022 9:17:54 AM

# **JOB DESCRIPTION**

Kaiser SWD SDG NUMBER Lea County NM

# **JOB NUMBER**

890-3652-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



Released to Imaging: 9/1/2023 2:28:53 PM

# **Eurofins Carlsbad**

# **Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

# **Authorization**

Generated 12/27/2022 9:17:54 AM

Authorized for release by Jessica Kramer, Project Manager Jessica.Kramer@et.eurofinsus.com (432)704-5440

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3652-1 SDG: Lea County NM

# **Table of Contents**

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	11
QC Sample Results	12
QC Association Summary	18
Lab Chronicle	21
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Racaint Chacklists	29

2

3

4

6

8

9

11

13

# **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

\_\_

**Qualifiers** 

**GC VOA** 

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.
U Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

S1+ Surrogate recovery exceeds control limits, high biased.
U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery

CFL Contains Free Liquid

CFU Colony Forming Unit

CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Released to Imaging: 9/1/2023 2:28:53 PM

### **Case Narrative**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-3652-1

**Laboratory: Eurofins Carlsbad** 

Narrative

Job Narrative 890-3652-1

### Receipt

The samples were received on 12/14/2022 12:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.0°C

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: BH-210 (11') (890-3652-1), SW-75 (0-4') (890-3652-2), SW-75 (4-10') (890-3652-3), SW-76 (0-4.5') (890-3652-4), SW-79 (0-4') (890-3652-5) and SW-83 (0-4') (890-3652-6).

### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-42002 and analytical batch 880-42108 was outside the upper control limits.

Method 8015MOD\_NM: The method blank for preparation batch 880-42002 and analytical batch 880-42108 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-41942 and analytical batch 880-42078 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (890-3644-A-1-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

\_\_\_\_\_

3

\_

6

7

8

10

13

Client: Tetra Tech, Inc. Job ID: 890-3652-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-210 (11')

Date Collected: 12/14/22 12:00 Date Received: 12/14/22 12:37

Lab Sample ID: 890-3652-1

12/16/22 09:37

Prepared

D

12/18/22 19:01

Analyzed

Dil Fac

**Matrix: Solid** 

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Toluene	< 0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				12/22/22 12:14	12/27/22 02:15	1
1,4-Difluorobenzene (Surr)	102		70 - 130				12/22/22 12:14	12/27/22 02:15	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)						
Analyte		Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	- <del>************************************</del>		50.0		mg/Kg			12/19/22 15:23	1
: Method: SW846 8015B NM - Dies Analyte		nics (DRO) Qualifier	(GC)	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:01	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:01	1
C10-C28)									
		11	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:01	1
Oll Range Organics (Over C28-C36)	<50.0	O							
Oll Range Organics (Over C28-C36)  Surrogate	<50.0 %Recovery		Limits				Prepared	Analyzed	Dil Fac

5.00 Chloride 699 12/23/22 21:57 mg/Kg Client Sample ID: SW-75 (0-4') Lab Sample ID: 890-3652-2

RL

MDL Unit

70 - 130

80

Result Qualifier

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 12/14/22 12:00 Date Received: 12/14/22 12:37

o-Terphenyl

Analyte

Method: SW846 8021B - Volati	le Organic Comp	ounds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 02:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				12/22/22 12:14	12/27/22 02:36	1
1,4-Difluorobenzene (Surr)	103		70 - 130				12/22/22 12:14	12/27/22 02:36	1

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-75 (0-4')

Date Collected: 12/14/22 12:00 Date Received: 12/14/22 12:37 Lab Sample ID: 890-3652-2

Matrix: Solid

Method: TAL SOP Total BTEX - Tot	tal BTEX Calc	culation						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/K	(g		12/27/22 09:32	1
_								

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total TPH
 <50.0</td>
 U
 50.0
 mg/Kg
 12/19/22 15:23
 1

Total TPH <50.0 U 50.0 12/19/22 15:23 mg/Kg Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL MDL Unit Analyte D Prepared Dil Fac Analyzed <50.0 U 50.0 12/16/22 09:37 12/18/22 19:23 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.0 Diesel Range Organics (Over <50.0 U mg/Kg 12/16/22 09:37 12/18/22 19:23 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 12/16/22 09:37 12/18/22 19:23 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 12/16/22 09:37 1-Chlorooctane 110 70 - 130 12/18/22 19:23 o-Terphenyl 97 70 - 130 12/16/22 09:37 12/18/22 19:23

 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 1020
 5.04
 mg/Kg
 12/23/22 22:24
 1

Client Sample ID: SW-75 (4-10')

Date Collected: 12/14/22 12:00

Lab Sample ID: 890-3652-3

Matrix: Solid

Date Received: 12/14/22 12:37

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 02:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 02:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 02:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/22/22 12:14	12/27/22 02:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 02:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/22/22 12:14	12/27/22 02:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				12/22/22 12:14	12/27/22 02:56	1
	99		70 <sub>-</sub> 130				12/22/22 12:14	12/27/22 02:56	1
1,4-Difluorobenzene (Surr)  Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald	culation Qualifier	70 - 130 RL	MDL	Unit	D	Prepared	Analyzed	
Method: TAL SOP Total BTEX	- Total BTEX Cald					_			
Method: TAL SOP Total BTEX	- Total BTEX Cald	Qualifier		MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald Result <0.00399 esel Range Organ	Qualifier U	RL 0.00399	MDL		<u> </u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Cald Result <0.00399 esel Range Organ	<b>Qualifier</b> U	RL 0.00399			D_		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die	- Total BTEX Cald Result <0.00399 esel Range Organ	Qualifier U ics (DRO) ( Qualifier	RL 0.00399		mg/Kg		Prepared	Analyzed 12/27/22 09:32	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte	- Total BTEX Cald Result <0.00399 esel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U	RL 0.00399  GC) RL 49.9		mg/Kg		Prepared	Analyzed 12/27/22 09:32 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00399 esel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U	RL 0.00399  GC) RL 49.9	MDL	mg/Kg		Prepared	Analyzed 12/27/22 09:32 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH  Method: SW846 8015B NM - D	- Total BTEX Calc Result <0.00399 esel Range Organ Result <49.9	Qualifier U ics (DRO) (Qualifier U nics (DRO) Qualifier	RL 0.00399  GC)  RL 49.9	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 12/27/22 09:32  Analyzed 12/19/22 15:23	Dil Fac

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-3652-1 SDG: Lea County NM

Client Sample ID: SW-75 (4-10')

Date Collected: 12/14/22 12:00 Date Received: 12/14/22 12:37

Lab Sample ID: 890-3652-3

Matrix: Solid

Method: SW846 8015B NM	/I - Diesel Range Organics (DRO) (C	GC) (Continued)
Analyte	Popult Qualifier	DI

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/16/22 09:37	12/18/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				12/16/22 09:37	12/18/22 19:46	1
o-Terphenyl	94		70 - 130				12/16/22 09:37	12/18/22 19:46	1

Method: MCAWW 300.0 - Anions,	Ion Chromatography - So	luble					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1390	25.2	mg/Kg			12/23/22 22:32	5

**Client Sample ID: SW-76 (0-4.5')** 

Date Collected: 12/14/22 12:00 Date Received: 12/14/22 12:37

Lab Sample ID: 890-3652-4

**Matrix: Solid** 

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC	)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				12/22/22 12:14	12/27/22 04:00	1
1 / Diffuorobenzene (Surr)	03		70 130				12/22/22 12:14	12/27/22 04:00	1

<b>3</b>	, ,	4			· ···· <b>y</b> – · ··	
4-Bromofluorobenzene (Surr)	111		70 - 130	 12/22/22 12:14	12/27/22 04:00	1
1,4-Difluorobenzene (Surr)	93		70 - 130	12/22/22 12:14	12/27/22 04:00	1
Г., ., <u></u>						

Method: IAL SOP Total BTEX - Tot	al BIEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/27/22 09:32	1

Method: SW846 8015 NM - Diesel I	Range Organ	ics (DRO) (0	SC)						
Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	r	mg/Kg			12/19/22 15:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:12	
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:12	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				12/15/22 15:21	12/18/22 07:12	

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - So	luble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	931		5.05		mg/Kg			12/23/22 22:41	1

70 - 130

126

**Eurofins Carlsbad** 

12/15/22 15:21 12/18/22 07:12

o-Terphenyl

Client: Tetra Tech, Inc.

Job ID: 890-3652-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Client Sample ID: SW-79 (0-4') Lab Sample ID: 890-3652-5 Date Collected: 12/14/22 12:00 Matrix: Solid

Date Received: 12/14/22 12:37

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/22/22 12:14	12/27/22 04:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:20	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/22/22 12:14	12/27/22 04:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				12/22/22 12:14	12/27/22 04:20	1
1,4-Difluorobenzene (Surr)	102		70 - 130				12/22/22 12:14	12/27/22 04:20	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/27/22 09:32	1
Analyte Total TPH	<49.9	U	49.9		mg/Kg		Prepared	Analyzed	
								12/19/22 15:35	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					12/19/22 15:35	1
Method: SW846 8015B NM - Dies		nics (DRO)	(GC)	MDL	Unit	D	Prepared		·
Analyte Gasoline Range Organics		Qualifier	• •	MDL	Unit mg/Kg	<u>D</u>	Prepared 12/15/22 15:21	Analyzed 12/18/22 07:34	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U	RL _	MDL		<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result   <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	<u>D</u>	12/15/22 15:21	Analyzed 12/18/22 07:34	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result   <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	<u> </u>	12/15/22 15:21	Analyzed 12/18/22 07:34	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9   <49.9	Qualifier U U U	RL 49.9	MDL	mg/Kg	<u> </u>	12/15/22 15:21 12/15/22 15:21	Analyzed 12/18/22 07:34 12/18/22 07:34	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result  <49.9 <49.9	Qualifier U U U	RL 49.9 49.9 49.9	MDL	mg/Kg	<u>D</u>	12/15/22 15:21 12/15/22 15:21 12/15/22 15:21	Analyzed 12/18/22 07:34 12/18/22 07:34 12/18/22 07:34	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate	Result   <49.9   <49.9   <49.9   <49.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80.9   <80	Qualifier U U U	## RL 49.9 49.9 49.9 **Limits **Limits**	MDL	mg/Kg	<u>D</u>	12/15/22 15:21 12/15/22 15:21 12/15/22 15:21 Prepared	Analyzed 12/18/22 07:34 12/18/22 07:34 12/18/22 07:34 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9   <49.9   <49.9     <49.9     <49.9       <109     <122     <109   <122     <109   <122     <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109   <109	Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	MDL	mg/Kg	<u> </u>	12/15/22 15:21 12/15/22 15:21 12/15/22 15:21  Prepared 12/15/22 15:21	Analyzed 12/18/22 07:34 12/18/22 07:34 12/18/22 07:34  Analyzed 12/18/22 07:34	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	12/15/22 15:21 12/15/22 15:21 12/15/22 15:21  Prepared 12/15/22 15:21	Analyzed 12/18/22 07:34 12/18/22 07:34 12/18/22 07:34  Analyzed 12/18/22 07:34	Dil Face

Client Sample ID: SW-83 (0-4') Lab Sample ID: 890-3652-6

Date Collected: 12/14/22 12:00 **Matrix: Solid** Date Received: 12/14/22 12:37

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 04:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 04:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 04:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 04:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 04:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 04:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				12/22/22 12:14	12/27/22 04:41	1
1,4-Difluorobenzene (Surr)	102		70 - 130				12/22/22 12:14	12/27/22 04:41	1

# **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: SW-83 (0-4')

Date Collected: 12/14/22 12:00

Lab Sample ID: 890-3652-6

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/27/22 09:32	1
- Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/19/22 15:35	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:56	•
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:56	
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:56	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	113		70 - 130				12/15/22 15:21	12/18/22 07:56	
o-Terphenyl	125		70 - 130				12/15/22 15:21	12/18/22 07:56	
- Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	1070		5.03		mg/Kg			12/23/22 23:16	

2

3

5

9

11

13

# **Surrogate Summary**

Client: Tetra Tech, Inc. Job ID: 890-3652-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3652-1	BH-210 (11')	115	102	
890-3652-2	SW-75 (0-4')	116	103	
890-3652-3	SW-75 (4-10')	95	99	
890-3652-4	SW-76 (0-4.5')	111	93	
890-3652-5	SW-79 (0-4')	120	102	
890-3652-6	SW-83 (0-4')	128	102	
890-3662-A-1-H MS	Matrix Spike	114	101	
890-3662-A-1-I MSD	Matrix Spike Duplicate	99	94	
LCS 880-42514/1-A	Lab Control Sample	96	93	
LCSD 880-42514/2-A	Lab Control Sample Dup	98	93	
MB 880-42487/5-A	Method Blank	97	92	
MB 880-42514/5-A	Method Blank	107	97	

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Lin
		1CO1	OTPH1	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
0-3638-A-1-D MS	Matrix Spike	92	72	
0-3638-A-1-E MSD	Matrix Spike Duplicate	106	81	
0-3644-A-1-E MS	Matrix Spike	104	104	
0-3644-A-1-F MSD	Matrix Spike Duplicate	104	103	
0-3652-1	BH-210 (11')	86	80	
)-3652-2	SW-75 (0-4')	110	97	
)-3652-3	SW-75 (4-10')	103	94	
0-3652-4	SW-76 (0-4.5')	110	126	
-3652-5	SW-79 (0-4')	109	122	
-3652-6	SW-83 (0-4')	113	125	
S 880-41942/2-A	Lab Control Sample	109	118	
S 880-42002/2-A	Lab Control Sample	82	91	
SD 880-41942/3-A	Lab Control Sample Dup	108	118	
SD 880-42002/3-A	Lab Control Sample Dup	108	99	
3 880-41942/1-A	Method Blank	126	142 S1+	
880-42002/1-A	Method Blank	139 S1+	131 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3652-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42487/5-A

**Matrix: Solid** 

Analysis Batch: 42596

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42487

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 10:36	12/26/22 13:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 10:36	12/26/22 13:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 10:36	12/26/22 13:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/22/22 10:36	12/26/22 13:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 10:36	12/26/22 13:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/22/22 10:36	12/26/22 13:51	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	12/22/22 10:36	12/26/22 13:51	1
1,4-Difluorobenzene (Surr)	92	70 - 130	12/22/22 10:36	12/26/22 13:51	1

Lab Sample ID: MB 880-42514/5-A

**Matrix: Solid** 

Client Sample ID: Method Blank

12/26/22 23:30

Prep Type: Total/NA

Prep Batch: 42514

Analysis Batch: 42596

MR MR Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 12/22/22 12:14 12/26/22 23:30 Toluene <0.00200 U 0.00200 mg/Kg 12/22/22 12:14 12/26/22 23:30 Ethylbenzene <0.00200 U 0.00200 mg/Kg 12/22/22 12:14 12/26/22 23:30 <0.00400 U 0.00400 12/22/22 12:14 12/26/22 23:30 m-Xylene & p-Xylene mg/Kg <0.00200 U 0.00200 12/26/22 23:30 o-Xylene mg/Kg 12/22/22 12:14

MB MB

<0.00400 U

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	12/22/22 12:14	12/26/22 23:30	1
1,4-Difluorobenzene (Surr)	97		70 - 130	12/22/22 12:14	12/26/22 23:30	1

0.00400

mg/Kg

Lab Sample ID: LCS 880-42514/1-A

**Matrix: Solid** 

Xylenes, Total

Analysis Batch: 42596

**Client Sample ID: Lab Control Sample** 

12/22/22 12:14

Prep Type: Total/NA Prep Batch: 42514

١		Spike	LCS	LCS				%Rec	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	0.100	0.09444		mg/Kg		94	70 - 130	
	Toluene	0.100	0.09109		mg/Kg		91	70 - 130	
	Ethylbenzene	0.100	0.08635		mg/Kg		86	70 - 130	
İ	m-Xylene & p-Xylene	0.200	0.1924		mg/Kg		96	70 - 130	
	o-Xylene	0.100	0.09703		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1.4-Difluorobenzene (Surr)	93	70 - 130

Lab Sample ID: LCSD 880-42514/2-A

Matrix: Solid

**Analysis Batch: 42596** 

Client Sample ID: Lat	Contro	ol Samp	le Dup
	_		

Prep Type: Total/NA

Prep Batch: 42514

	Spike	LCSD LCSD				70 KeC		KPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09605	mg/Kg		96	70 - 130	2	35

LCCD LCCD

Cnika

# QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-3652-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-42514/2-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid** Prep Type: Total/NA Analysis Batch: 42596 Prep Batch: 42514

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.09288		mg/Kg		93	70 - 130	2	35
Ethylbenzene	0.100	0.08850		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1984		mg/Kg		99	70 - 130	3	35
o-Xylene	0.100	0.1003		mg/Kg		100	70 - 130	3	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-3662-A-1-H MS Client Sample ID: Matrix Spike

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 42596 Prep Batch: 42514

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.08976		mg/Kg		90	70 - 130	
Toluene	<0.00201	U F1	0.100	0.07517		mg/Kg		75	70 - 130	
Ethylbenzene	<0.00201	U F1	0.100	0.05923	F1	mg/Kg		59	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1329	F1	mg/Kg		66	70 - 130	
o-Xylene	<0.00201	U F1	0.100	0.06702	F1	mg/Kg		67	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (S	Surr) 114		70 - 130
1,4-Difluorobenzene (Sur	r) 101		70 - 130

Lab Sample ID: 890-3662-A-1-I MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 42596 Prep Batch: 42514

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0996	0.07551		mg/Kg		76	70 - 130	17	35
Toluene	<0.00201	U F1	0.0996	0.06302	F1	mg/Kg		63	70 - 130	18	35
Ethylbenzene	<0.00201	U F1	0.0996	0.04699	F1	mg/Kg		47	70 - 130	23	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1036	F1	mg/Kg		52	70 - 130	25	35
o-Xylene	<0.00201	U F1	0.0996	0.05231	F1	mg/Kg		53	70 - 130	25	35

	MOD II	100	
Surrogate	%Recovery G	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

MSD MSD

### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-41942/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 42078 Prep Batch: 41942 мв мв

Result Qualifier MDL Unit Prepared <50.0 U 50.0 mg/Kg 12/15/22 15:21 12/17/22 22:54 Gasoline Range Organics (GRO)-C6-C10

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3652-1 SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-41942/1-A **Matrix: Solid** 

Lab Sample ID: LCS 880-41942/2-A

**Matrix: Solid** 

**Analysis Batch: 42078** 

**Analysis Batch: 42078** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 41942

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		12/15/22 15:21	12/17/22 22:54	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/22 15:21	12/17/22 22:54	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130		12/15/22 15:21	12/17/22 22:54	1
o-Terphenyl	142	S1+	70 - 130	1	12/15/22 15:21	12/17/22 22:54	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 41942

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 848.4 mg/Kg 85 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1024 102 70 - 130 mg/Kg C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: LCSD 880-41942/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 42078** 

Prep Type: Total/NA

Prep Batch: 41942

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	 1000	831.8		mg/Kg		83	70 - 130	2	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1011		mg/Kg		101	70 - 130	1	20	
C10-C28)										

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 890-3644-A-1-E MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 42078** 

Prep Type: Total/NA

Prep Batch: 41942

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	954.0		mg/Kg		93	70 - 130
Diesel Range Organics (Over	<50.0	U	999	1159		mg/Kg		114	70 - 130

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	104		70 - 130

Client: Tetra Tech, Inc. Job ID: 890-3652-1 Project/Site: Kaiser SWD SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3644-A-1-F MSD

**Matrix: Solid** 

**Analysis Batch: 42078** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 41942

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	997	1038		mg/Kg		102	70 - 130	8	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	997	1144		mg/Kg		113	70 - 130	1	20
C10-C28)											

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: MB 880-42002/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 42108** 

Prep Type: Total/NA Prep Batch: 42002

мв мв MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac 50.0 12/16/22 09:37 12/18/22 09:55 Gasoline Range Organics <50.0 U mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 12/16/22 09:37 12/18/22 09:55 OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 12/16/22 09:37 12/18/22 09:55

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130	12/16/22 09:37	12/18/22 09:55	1
o-Terphenyl	131	S1+	70 - 130	12/16/22 09:37	12/18/22 09:55	1

Lab Sample ID: LCS 880-42002/2-A

**Matrix: Solid** 

**Analysis Batch: 42108** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 42002

Spike LCS LCS %Rec Analyte Added Result Qualifier %Rec Unit Limits Gasoline Range Organics 1000 843.1 mg/Kg 84 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 745.4 mg/Kg 75 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-42002/3-A

**Matrix: Solid** 

Analysis Batch: 42108

Client San	iple ID: Lal	<b>Control</b>	Sample	Dup
------------	--------------	----------------	--------	-----

Prep Type: Total/NA Prep Batch: 42002

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	871.7		mg/Kg		87	70 - 130	3	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	818.2		mg/Kg		82	70 - 130	9	20	
C10-C28)										

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3652-1

SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-42002/3-A **Matrix: Solid** 

Lab Sample ID: 890-3638-A-1-E MSD

Analysis Batch: 42108

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 42002

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 108 70 - 130 o-Terphenyl 99 70 - 130

Lab Sample ID: 890-3638-A-1-D MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 42108** 

Prep Type: Total/NA

Prep Batch: 42002

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <50.0 U 999 774 5 74 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 999 908.6 <50.0 U mg/Kg 91 70 - 130C10-C28)

> MS MS

%Recovery Surrogate Qualifier Limits 92 70 - 130 1-Chlorooctane 72 70 - 130 o-Terphenyl

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 42002

MSD MSD RPD Sample Sample Spike Analyte Result Qualifier hahhA Result Qualifier Unit I imits RPD Limit D %Rec Gasoline Range Organics <50.0 U 997 885.1 mg/Kg 86 70 - 130 13 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 1027 mg/Kg 103 70 - 130 12 20 C10-C28)

**Matrix: Solid** 

**Analysis Batch: 42108** 

MSD MSD %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 106 70 - 130 o-Terphenyl 81

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41931/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 42334** 

MDL Unit Dil Fac Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 12/23/22 21:31

Lab Sample ID: LCS 880-41931/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** Analysis Batch: 42334

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit Limits Chloride 250 268.3 mg/Kg 107 90 - 110

MB MB

# **QC Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

699

Lab Sample ID: LCSD 880-41931/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Soluble

LCCD LCCD

Analysis Batch: 42334

	<b>Бріке</b>	LCSD	LCSD			%Rec		KPD
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	RPD	Limit
Chloride	250	264.7		mg/Kg	106	90 - 110	1	20

Lab Sample ID: 890-3652-1 MS

Client Sample ID: BH-210 (11')

Matrix: Solid

Prep Type: Soluble

Matrix: Solid
Analysis Batch: 42334

250

Chiles

Sample Sample Spike MS MS %Rec
Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

Lab Sample ID: 890-3652-1 MSD Client Sample ID: BH-210 (11')

Matrix: Solid Prep Type: Soluble

928.1

mg/Kg

92

90 - 110

Analysis Batch: 42334

Chloride

MSD MSD %Rec RPD Sample Sample Spike Result Qualifier Analyte Added Result Qualifier Unit Limits **RPD** Limit Chloride 699 250 961.0 105 90 - 110 20 mg/Kg

2

-

5

6

10

4.0

13

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

# **GC VOA**

### Prep Batch: 42487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-42487/5-A	Method Blank	Total/NA	Solid	5035	

### Prep Batch: 42514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Total/NA	Solid	5035	
890-3652-2	SW-75 (0-4')	Total/NA	Solid	5035	
890-3652-3	SW-75 (4-10')	Total/NA	Solid	5035	
890-3652-4	SW-76 (0-4.5')	Total/NA	Solid	5035	
890-3652-5	SW-79 (0-4')	Total/NA	Solid	5035	
890-3652-6	SW-83 (0-4')	Total/NA	Solid	5035	
MB 880-42514/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42514/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42514/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3662-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
890-3662-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### **Analysis Batch: 42596**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Total/NA	Solid	8021B	42514
890-3652-2	SW-75 (0-4')	Total/NA	Solid	8021B	42514
890-3652-3	SW-75 (4-10')	Total/NA	Solid	8021B	42514
890-3652-4	SW-76 (0-4.5')	Total/NA	Solid	8021B	42514
890-3652-5	SW-79 (0-4')	Total/NA	Solid	8021B	42514
890-3652-6	SW-83 (0-4')	Total/NA	Solid	8021B	42514
MB 880-42487/5-A	Method Blank	Total/NA	Solid	8021B	42487
MB 880-42514/5-A	Method Blank	Total/NA	Solid	8021B	42514
LCS 880-42514/1-A	Lab Control Sample	Total/NA	Solid	8021B	42514
LCSD 880-42514/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42514
890-3662-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	42514
890-3662-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	42514

# Analysis Batch: 42651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Total/NA	Solid	Total BTEX	<u> </u>
890-3652-2	SW-75 (0-4')	Total/NA	Solid	Total BTEX	
890-3652-3	SW-75 (4-10')	Total/NA	Solid	Total BTEX	
890-3652-4	SW-76 (0-4.5')	Total/NA	Solid	Total BTEX	
890-3652-5	SW-79 (0-4')	Total/NA	Solid	Total BTEX	
890-3652-6	SW-83 (0-4')	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

### Prep Batch: 41942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-4	SW-76 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-3652-5	SW-79 (0-4')	Total/NA	Solid	8015NM Prep	
890-3652-6	SW-83 (0-4')	Total/NA	Solid	8015NM Prep	
MB 880-41942/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41942/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41942/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3644-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

**Eurofins Carlsbad** 

2

5

4

6

Ω

9

11

12

Client: Tetra Tech, Inc. Job ID: 890-3652-1 Project/Site: Kaiser SWD SDG: Lea County NM

# GC Semi VOA (Continued)

### Prep Batch: 41942 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3644-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Prep Batch: 42002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Total/NA	Solid	8015NM Prep	
890-3652-2	SW-75 (0-4')	Total/NA	Solid	8015NM Prep	
890-3652-3	SW-75 (4-10')	Total/NA	Solid	8015NM Prep	
MB 880-42002/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-42002/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-42002/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3638-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3638-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### **Analysis Batch: 42078**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-4	SW-76 (0-4.5')	Total/NA	Solid	8015B NM	41942
890-3652-5	SW-79 (0-4')	Total/NA	Solid	8015B NM	41942
890-3652-6	SW-83 (0-4')	Total/NA	Solid	8015B NM	41942
MB 880-41942/1-A	Method Blank	Total/NA	Solid	8015B NM	41942
LCS 880-41942/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41942
LCSD 880-41942/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41942
890-3644-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	41942
890-3644-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	41942

### **Analysis Batch: 42108**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Total/NA	Solid	8015B NM	42002
890-3652-2	SW-75 (0-4')	Total/NA	Solid	8015B NM	42002
890-3652-3	SW-75 (4-10')	Total/NA	Solid	8015B NM	42002
MB 880-42002/1-A	Method Blank	Total/NA	Solid	8015B NM	42002
LCS 880-42002/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	42002
LCSD 880-42002/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	42002
890-3638-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	42002
890-3638-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	42002

### **Analysis Batch: 42208**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Total/NA	Solid	8015 NM	
890-3652-2	SW-75 (0-4')	Total/NA	Solid	8015 NM	
890-3652-3	SW-75 (4-10')	Total/NA	Solid	8015 NM	
890-3652-4	SW-76 (0-4.5')	Total/NA	Solid	8015 NM	
890-3652-5	SW-79 (0-4')	Total/NA	Solid	8015 NM	
890-3652-6	SW-83 (0-4')	Total/NA	Solid	8015 NM	

### **HPLC/IC**

### Leach Batch: 41931

Lab Sample ID 890-3652-1	Client Sample ID  BH-210 (11')	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
890-3652-2	SW-75 (0-4')	Soluble	Solid	DI Leach	
890-3652-3	SW-75 (4-10')	Soluble	Solid	DI Leach	

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-3652-1

SDG: Lea County NM

# **HPLC/IC** (Continued)

# Leach Batch: 41931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-4	SW-76 (0-4.5')	Soluble	Solid	DI Leach	
890-3652-5	SW-79 (0-4')	Soluble	Solid	DI Leach	
890-3652-6	SW-83 (0-4')	Soluble	Solid	DI Leach	
MB 880-41931/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41931/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41931/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3652-1 MS	BH-210 (11')	Soluble	Solid	DI Leach	
890-3652-1 MSD	BH-210 (11')	Soluble	Solid	DI Leach	

# Analysis Batch: 42334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Soluble	Solid	300.0	41931
890-3652-2	SW-75 (0-4')	Soluble	Solid	300.0	41931
890-3652-3	SW-75 (4-10')	Soluble	Solid	300.0	41931
890-3652-4	SW-76 (0-4.5')	Soluble	Solid	300.0	41931
890-3652-5	SW-79 (0-4')	Soluble	Solid	300.0	41931
890-3652-6	SW-83 (0-4')	Soluble	Solid	300.0	41931
MB 880-41931/1-A	Method Blank	Soluble	Solid	300.0	41931
LCS 880-41931/2-A	Lab Control Sample	Soluble	Solid	300.0	41931
LCSD 880-41931/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41931
890-3652-1 MS	BH-210 (11')	Soluble	Solid	300.0	41931
890-3652-1 MSD	BH-210 (11')	Soluble	Solid	300.0	41931

**Eurofins Carlsbad** 

2

3

5

Q

9

1 4

12

13

Job ID: 890-3652-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-210 (11') Lab Sample ID: 890-3652-1 Date Collected: 12/14/22 12:00 Matrix: Solid Date Received: 12/14/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 02:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 19:01	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 21:57	CH	EET MID

Client Sample ID: SW-75 (0-4') Lab Sample ID: 890-3652-2 Date Collected: 12/14/22 12:00 Matrix: Solid

Date Received: 12/14/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 02:36	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 19:23	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 22:24	CH	EET MID

Client Sample ID: SW-75 (4-10') Lab Sample ID: 890-3652-3 Date Collected: 12/14/22 12:00 **Matrix: Solid** 

Date Received: 12/14/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 02:56	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:23	SM	EET MIC
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 19:46	SM	EET MIC
Soluble	Leach	DI Leach			4.97 g	50 mL	41931	12/15/22 14:24	KS	EET MIC
Soluble	Analysis	300.0		5	50 mL	50 mL	42334	12/23/22 22:32	CH	EET MID

**Client Sample ID: SW-76 (0-4.5')** Lab Sample ID: 890-3652-4 Date Collected: 12/14/22 12:00 **Matrix: Solid** 

Date Received: 12/14/22 12:37

Г	D-4-b	D-4-b		Dil	11411	Fi	D-4-h	D		
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 04:00	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID

**Eurofins Carlsbad** 

Page 21 of 30

Job ID: 890-3652-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-3652-4

Matrix: Solid

Client Sample ID: SW-76 (0-4.5')
Date Collected: 12/14/22 12:00

Date Received: 12/14/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41942	12/15/22 15:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42078	12/18/22 07:12	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 22:41	CH	EET MID

Client Sample ID: SW-79 (0-4')

Date Collected: 12/14/22 12:00

Lab Sample ID: 890-3652-5

Matrix: Solid

Date Collected: 12/14/22 12:00 Date Received: 12/14/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 04:20	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41942	12/15/22 15:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42078	12/18/22 07:34	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 22:50	CH	EET MID

Client Sample ID: SW-83 (0-4')

Date Collected: 12/14/22 12:00

Lab Sample ID: 890-3652-6

Matrix: Solid

Date Received: 12/14/22 12:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 04:41	AJ	EET MIC
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41942	12/15/22 15:21	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42078	12/18/22 07:56	SM	EET MIC
Soluble	Leach	DI Leach			4.97 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 23:16	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

2

4

5

7

9

11

13

# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	ELAP	T104704400-22-25	06-30-23
The following analytes	are included in this report by	it the laboratory is not cortifi	ed by the governing authority. This list ma	av include analytes for
the agency does not of	• •	it the laboratory is not certifi	ed by the governing authority. This list his	ay include arialytes for
,	• •	Matrix	Analyte	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

3

4

\_

7

9

11

14

# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

**Eurofins Carlsbad** 

\_

5

7

\_

10

4.0

13

Ш

# **Sample Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-3652-1	BH-210 (11')	Solid	12/14/22 12:00	12/14/22 12:37
890-3652-2	SW-75 (0-4')	Solid	12/14/22 12:00	12/14/22 12:37
890-3652-3	SW-75 (4-10')	Solid	12/14/22 12:00	12/14/22 12:37
890-3652-4	SW-76 (0-4.5')	Solid	12/14/22 12:00	12/14/22 12:37
890-3652-5	SW-79 (0-4')	Solid	12/14/22 12:00	12/14/22 12:37
890-3652-6	SW-83 (0-4')	Solid	12/14/22 12:00	12/14/22 12:37

,

3

4

6

8

9

11

12

	Relinquished by:	1	Relinquished by:	M	Relinquished by:										( LAB USE	LAB #		Comments:	Receiving Laboratory:	invoice to:	Project Location: state)	Project Name:	Cilent Name:	Image: Control of the control of the
	y:		8	m//m	N.				SVV-83 (0-4)	SW-79 (0-4")	SW-76 (0-4.5')	SW-75 (4-10')	SW-75 (0-4")	BH-210 (11')		SAMPLE ID			Eurofins Xenco	Permian Water Solutions -	1: (county, Lea County, NM		Permian Water Solutions	Tetra
	Date: Time:		Date: Time:	12/14/22	Date: Time:											SAMPLE IDENTIFICATION				Solutions - Dusty McInturff			Solutions	Tetra Tech, Inc.
	Received by:		Received by:	Lavore	Received by:				12/14/2022	12/14/2022	12/14/2022	12/14/2022	12/14/2022	12/14/2022	DATE	YEAR: 2020	SAMPLING		Sampler Signamic.		Project #:		Site Manager:	
	Date:		Daye	STAN STAN	Date:				>	< ×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub>	₹	MATRIX		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 662-4559 Fax (432) 682-3846
	Time:		Time:	12/14/20	Time: ,123				>	< ×	×	×	×	×	ICE None # CONT	AINE	PRESERVATIVE SO		er		)2230	h.com		890-
			S		7				,	<  ×	×	×	×	×	FILTER BTEX 8			Y 82606						3652 Chain of
Circle) H	~	0	Sample Temperature	LAB USE	A					\ \ \ \				×	TPH TX	1005	(Ext to	C35)		MRO)		_		n of Cu
000000000000000000000000000000000000000	Ú	N	mperatu	SE ONLY	n			1			1	-	1		PAH 82	70C		a Cd Cr					<u>(C</u>	Custody
HAND DELIVERED			3	Ţ					#	+	+	丰	丰			etals	Ag As I	Ba Cd Cr					Circle	
FEDEX				>	REMARKS					1	#	#	丰		TCLP S								ANALYSIS	
	pecial	lush C	RUSH: Same Day	0	S:					1	士			上	GC/MS									-
UPS Tr	Repor	harges	Same	STANDARD						$\pm$	$\pm$		$\pm$	$\pm$	PCB's			270C/62	5				< ₽	
Tracking #:	Limits	Rush Charges Authorized			9			$\dashv$	+	+	+		+	+	NORM PLM (A:	sbesto	08)						QUEST	
77	or TRF	rized	24 hr			-			-	× >	×	×	×	×	Chloride		ulfate	TDS					d No	
	Special Report Limits or TRRP Report		48 hr			F			7	1	+	T	F	F	General Anion/C			mistry (s	see att	ached l	ist)		ت	
	on.		72 hr							#	#	+	-	-										
			_				1		+	+	+	+	+	+				V						
													T		Hold									10000

Phone. 575-988-3199 Fax: 575-988-3199

Carlsbad, NM 88220

1089 N Canal St

**Eurofins Carlsbad** 

13 14

# **Chain of Custody Record**

💸 eurofins

Environment Testing

Project Name Kaiser SWD State, Zip: TX, 79701 SW-79 (0-4") (890-3652-5) BH-210 (11') (890-3652-1) Empty Kit Relinquished by Deliverable Requested I, II III IV, Other (specify) Possible Hazard Identification Note Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC. SW-83 (0-4') (890-3652-6) SW-76 (0-4 5') (890-3652-4) SW-75 (4-10') (890-3652-3) SW-75 (0-4') (890-3652-2) Sample Identification - Client ID (Lab ID) **Eurofins Environment Testing South Centr** 432-704-5440(Tel) Shipping/Receiving Aidland 211 W Florida Ave. Client Information elinquished by: elinquished by: ient Contact: Custody Seals Intact. inquished by Yes 8 F (Sub Contract Lab) Custody Seal 8 Project #: 88001259 Primary Deliverable Rank 2 PO#: Due Date Requested Phone Sampler SSOW# TAT Requested (days): Date/Time Sample Date 12/14/22 12/14/22 12/14/22 12/14/22 12/14/22 2/14/22 Date Mountain 12 00 Mountain 12 00 Mountain Mountain 12 00 Mountain 12 00 Mountain 12 00 12 00 G=grab) (C=comp, Sample Preservation Code: Type BT=Tissue, A#A Company Company Matrix Solid Solid Solid Solid Solid Solid E-Mail Kramer, Jessica Lab PM Jessica Kramer@et.eurofinsus com Ime: Accreditations Required (See note):
NELAP - Texas Perform MS/MSD (Yes or No) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Special Instructions/QC Requirements Cooler Temperature(s) °C and Other Remarks Received by 8021B/5035FP\_Calc BTEX × × × × × × Return To Client × × × × × × Total\_BTEX\_GCV × 8015MOD\_Calc × × × × × × × × × × × 8015MOD\_NM/8015NM\_S\_Prep Full TPH Analysis Requested × × 300\_ORGFM\_28D/DI\_LEACH Chloride × × × × Disposal By Lab New Mexico Carrier Tracking No(s): State of Origin: Method of Shipment: Date/Ime Date/Time Archive For A STATE OF 20-7 24 4 Total Number of containers B NaOH
C Zn Acetate
D Nitric Acid
E NaHSO4
F MeOH
G Amchlor
H Ascorbic Acid
I Ice
J- DI Water
K EDTA
L EDA Page Page 1 of 1 COC No<sup>-</sup> 890-1064 1 A-HCL Preservation Codes 390-3652-1 Special Instructions/Note: M Hexane
N None
N None
O AsNaO2
P-Na2O4S
Q-Na2SO3
R Na2SO3
R Na2SO3
S-H2SO4
T TSP Dodecahydrate
U-Acetone
V MCAA
W pH 4-5
Y Tizma
Z other (specify) Company Company

Ver: 06/08/2021

**Eurofins Carlsbad** 

1089 N Canal St

13

# Chain of Custody Record

MARK:
KANY:

💸 eurofins

**Environment Testing** 

State Zip. TX, 79701 Kaiser SWD SW-79 (0-4') (890-3652-5) Note. Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the aboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central. LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central. LLC SW-83 (0-4') (890-3652-6) SW-76 (0-4 5') (890-3652-4) SW-75 (4-10') (890-3652-3) SW-75 (0-4') (890-3652-2) BH-210 (11') (890-3652-1) Sample Identification - Client ID (Lab ID) Midland Carlsbad, NM 88220 Phone. 575-988-3199 Fax: 575-988-3199 Deliverable Requested | II, III, IV Other (specify) 132-704-5440(Tel) 1211 W Florida Ave mpty Kit Relinquished by ossible Hazard Identification elinquished by roject Name: linquished by: Custody Seals Intact. linquished by: lient Information (Sub Contract Lab) urofins Environment Testing South Centre confirmed hipping/Receiving Custody Seal No Project #: 88001259 Date/Time Primary Deliverable Rank ₩ \* PO# Due Date Requested 12/20/2022 Phone: Sampler TAT Requested (days): Sample Date 12/14/22 12/14/22 12/14/22 12/14/22 12/14/22 2/14/22 Date Mountain 12 00 Mountain 12 00 Mountain 12 00 Mountain 12 00 Mountain 12 00 Mountain Sample 1200 (C=comp, G=grab) Sample Type Preservation Code: Company Company Company Matrix Solid Solid Solid Solid Solid Solid Lab PM Jessica Kramer@et.eurofinsus.com E-Mail Kramer, Jessica Field Filtered Sample (Yes or No) NELAP - Texas Accreditations Required (See note): Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Cooler Temperature(s) °C and Other Remarks Received by 8021B/6035FP\_Calc BTEX × × × × × × × × × × × × Total\_BTEX\_GCV × × 8015MOD Cald × × × × × × × × × × 8016MOD\_NM/8015NM\_S\_Prep Full TPH Analysis Requested × × × × × 300\_ORGFM\_28D/DI\_LEACH Chloride × State of Origin: New Mexico Carrier Tracking No(s) Method of Shipment Date/Time Date/Time Date/Time 4 Total Number of containers A HCL
B NaOH
C Zn Acetate
D-Nitric Acid
E NaHSOA
F NaCHOH
G Amchor
H Ascorbic Acid
I Ice
J DI Water
K EDTA
L EDA COC No: 890-1064 1 Preservation Codes 890-3652-1 Page 1 of 1 age Special Instructions/Note: M Hexane
N-None
O AsNao2
P Na2O4S
Q Na2SO3
R Na2SC33
R Na2SC33
R Na2SC04
T TSP Dodecahydrate
U Acetone
V MCAA
W pH 4-5
Y Tizma
Z - other (specify) Ver 06/08/202 Company Company Company Months

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3652-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 3652 List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

4

2

3

4

6

8

4.0

13

Login Number: 3652

# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3652-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Source: Eurofins Midland

List Number: 2 List Creation: 12/15/22 11:29 AM Creator: Teel, Brianna

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	True	

2

3

4

7

9

11

12

14

<6mm (1/4").

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 258299

**CONDITIONS** 

Operator:	OGRID:
Permian Water Solutions, LLC	373626
PO Box 2106	Action Number:
Midland, TX 79702	258299
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/1/2023