<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 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	nPAC0531137785
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible Party PERMIAN WATER SOLUTIONS, LLC			OGRID 37	3626			
Contact Name JENNI USHER			Contact Telephone 512-820-8772				
Contact email JENNI@PERMIANWS.COM			Incident # (assigned by OCD) nCH1834760902, nOY1823336566,				
Contact mail	ing address	PO BOX 2106,	MIDLAND, TX 7	79702			nOY1821950108, nCH1821239639, nOY1803834027, nOY1730058924.
Location of Release Source    Location of Release Source   NCV 1803834027, NCV 1730038924, NKL1632848695, nJXK1616127644, NKJ1512041707, nTO1502927174, NCV 1730038924, NCV 1							
Site Name k	KAISER ST.	ATE SWD #009			Site Type SALT WATER DISPOSAL		
Date Release						licable) 30-025	
Unit Letter	Section	Township	Range		Coun	ty	
F	13	21S	34E		LEA		
Nature and Volume of Release  Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)  Crude Oil Volume Released (bbls) UNKNOWN - 0 Volume Recovered (bbls)							
X Produced	Water	Volume Release				Volume Rec	overed (bbls) 9 BBLS
	Is the concentration of dissolved chloride produced water >10,000 mg/l?				Yes T	No	
Condensa	Condensate Volume Released (bbls)				Volume Recovered (bbls)		
☐ Natural Gas Volume Released (Mcf)				Volume Recovered (Mcf)			
Other (describe) Volume/Weight Released (provide units)			Volume/We	ight Recovered (provide units)			
Cause of Release							
C-141 FILED TO ADDRESS MULTIPLE HISTORICAL INCIDENTS AT THIS WELL.							

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Page 2 Oil Conservation Division

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Incident ID nPAC0531137785

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Was this a major 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?  AT LEAST ONE OF THE HISTORICAL INCIDENTS REPORTED WAS GREATER THAN 25 BBLS, WHICH SIGNIFIES A MAJOR RELEASE.
X Yes □ No	SPILL SEARCH SHOWS LESS THAN 25 BBLS, BUT IT'S TIED TO MULTIPLE INCIDENTS.
If YES, was immediate no PLEASE SEE PREVIO	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? US C-141'S.
<i></i>	Initial Response
ine responsible j	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
	ease has been stopped.
<u> </u>	as been secured to protect human health and the environment.
	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
	d above have not been undertaken, explain why:
has begun, please attach	AC the responsible party may commence remediation immediately after discovery of a release. If remediation 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 environ 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 gate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In if a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: JENNI	USHER Title: REGULATORY ANALYST
Signature: <i>Jenní U</i>	Date: 9/14/2021
email: JENNI@PERMI	ANWS.COM Telephone: 512-820-8772
OCD Only	
Received by:	Date:

		Page	3 oj	f 14	4
ID	»DAC05211	27705			l

Incident ID	nPAC0531137785
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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?	☐ 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 wells.  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		

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.

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)	nPAC0531137785	

Incident ID	nPAC0531137785
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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:	

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Incident ID	nPAC0531137785
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# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	e 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>		
Deferral Requests Only: 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 predeconstruction.	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.	
	e 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	Approval Denied Deferral Approved	
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.

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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.

A scaled site and samp	pling diagram as described in 19.	15.29.11 NMAC
Photographs of the re must be notified 2 days pr		photos of the liner integrity if applicable (Note: appropriate OCD District office
■ Laboratory analyses o	of final sampling (Note: appropria	ate ODC District office must be notified 2 days prior to final sampling)
✓ Description of remedi	ation activities	
and regulations all operator may endanger public health should their operations hav- human health or the environ compliance with any other restore, reclaim, and re-veg	es are required to report and/or file in or the environment. The accepta e failed to adequately investigate inment. In addition, OCD accepta federal, state, or local laws and/or tetate the impacted surface area to	complete to the best of my knowledge and understand that pursuant to OCD rules e 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, ance of a C-141 report does not relieve the operator of responsibility for regulations. The responsible party acknowledges they must substantially to the conditions that existed prior to the release or their final land use in to the OCD when reclamation and re-vegetation are complete.
Printed Name: Dusty McInt	urff	Title: Project Manager
Signature:	Treff	Date: 5/5/23
email: dmcinturff@durfrane	.com	Telephone: (432) 634-7865
OCD Only		
Received by: Shelly Well	S	Date: <u>8/30/2023</u>
remediate contamination th	CD does not relieve the responsible nat poses a threat to groundwater, so my 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

# 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.

# NEW MEXICO OIL CONSERVATION DIVISION

Woul	Date:	2/17/2022
Adrienne Sandoval		
Director		

PERMIAN WATER SOLUTIONS, LLC

Josh Brooks President ate: 1-28-2

# **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	Production Tank
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	Production Tank
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**.

# Phase I

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-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**.

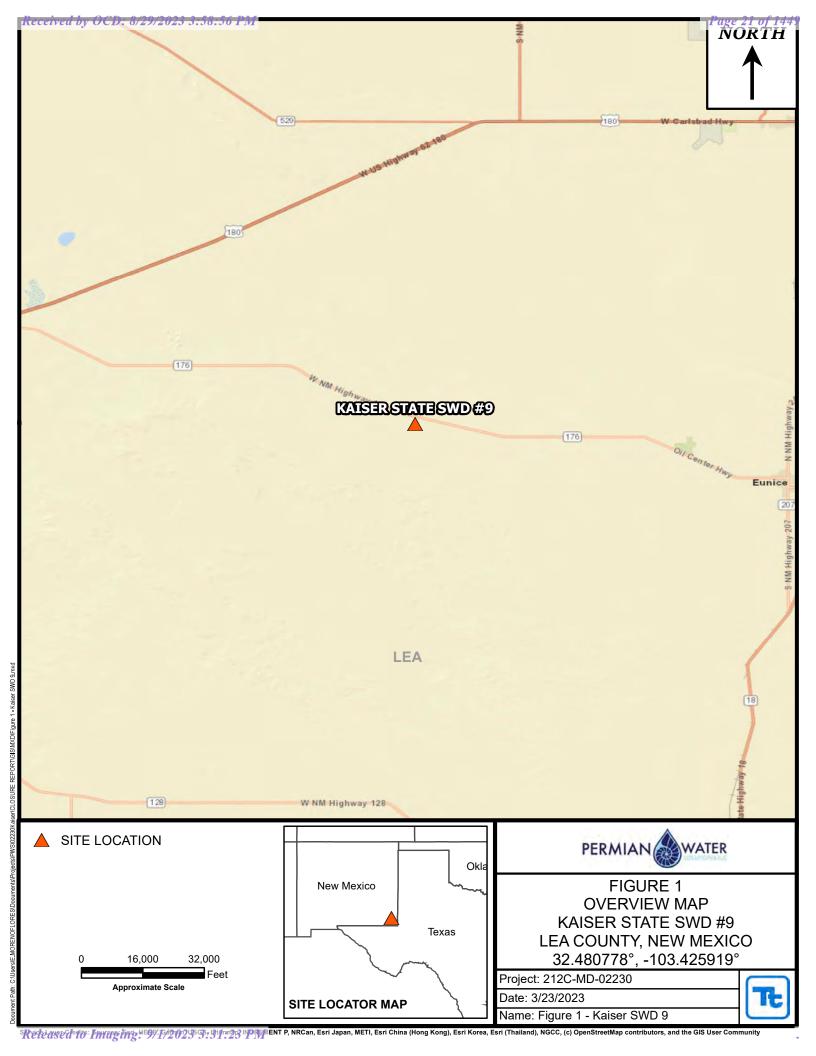
If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

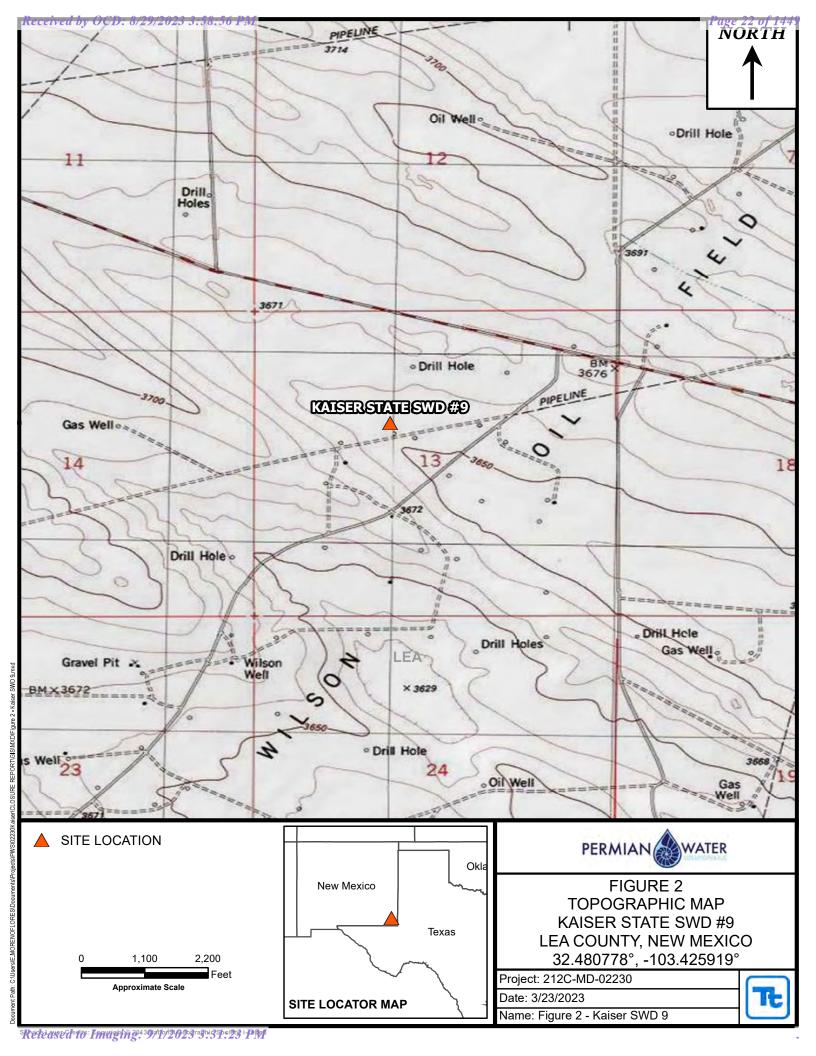
Respectfully submitted, TETRA TECH

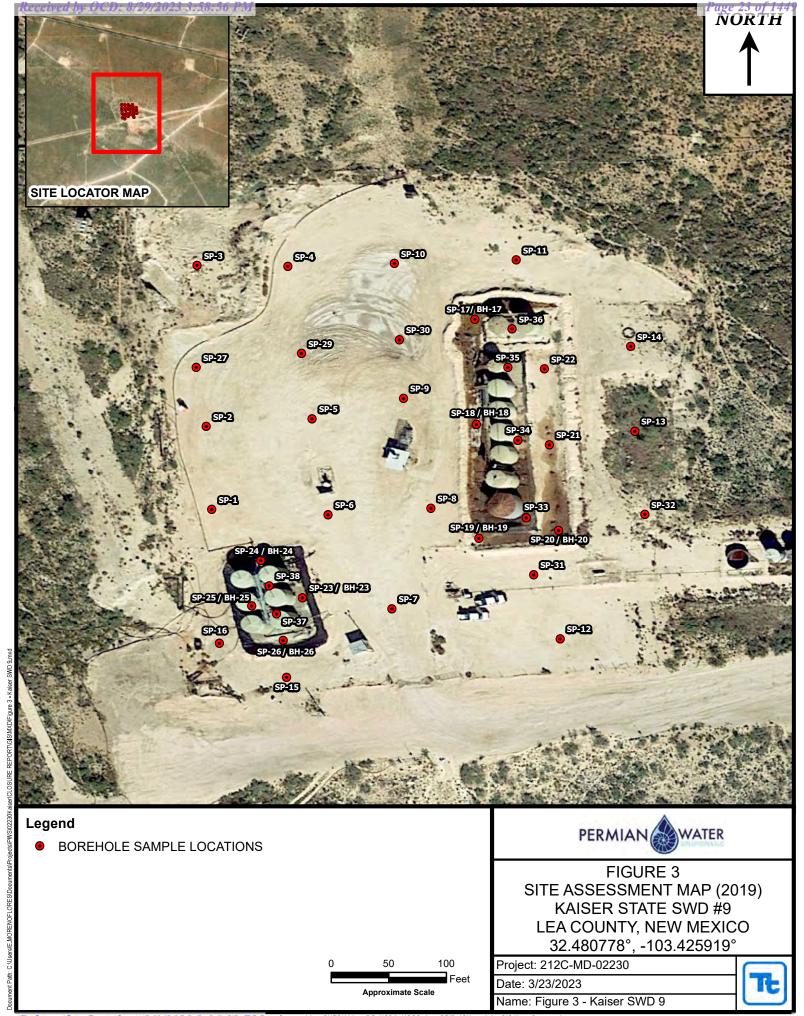
Ezequiel MorenoFlores, Geologist Brittany Long, Project Manager Clair Gonzales, P.G, Senior Project Manager

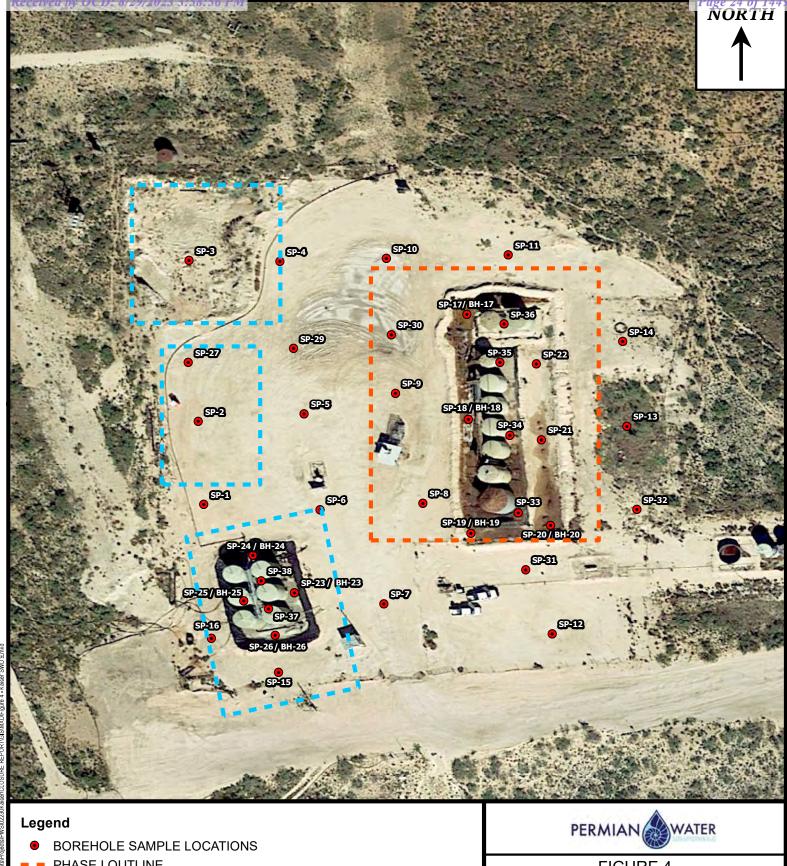


**Figures** 









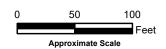
- PHASE I OUTLINE
- PHASE II OUTLINE

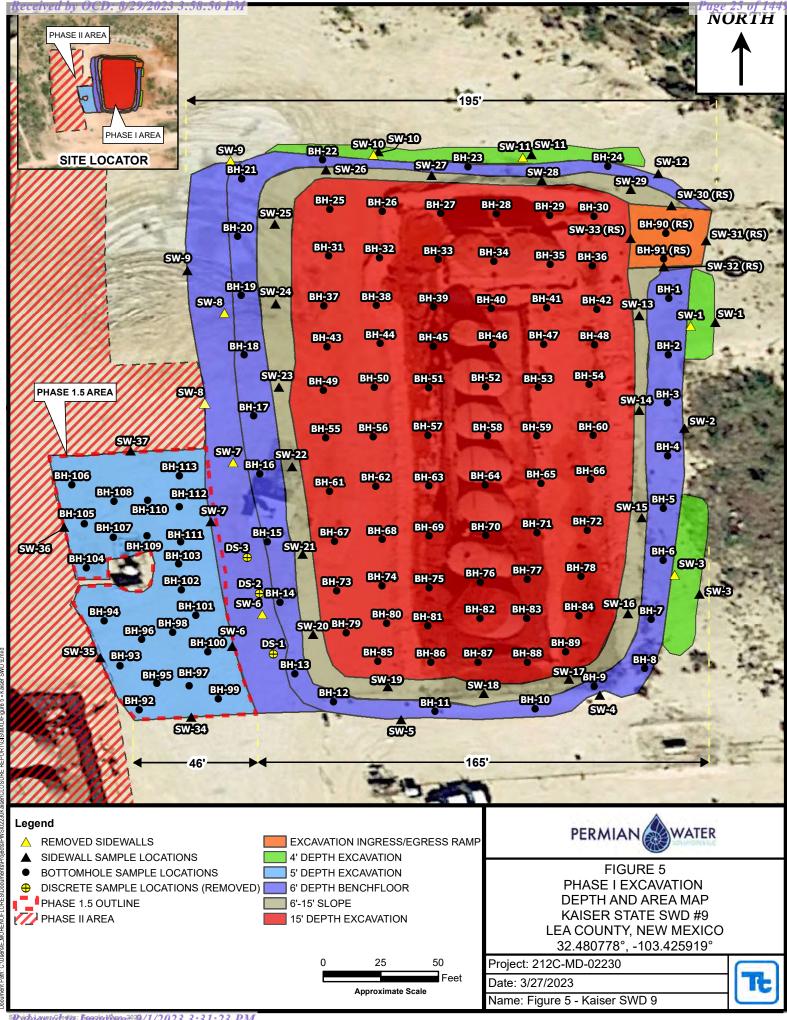
FIGURE 4 PROPOSED PHASE I AND PHASE II KAISER STATE SWD #9 LEA COUNTY, NEW MEXICO 32.480778°, -103.425919°

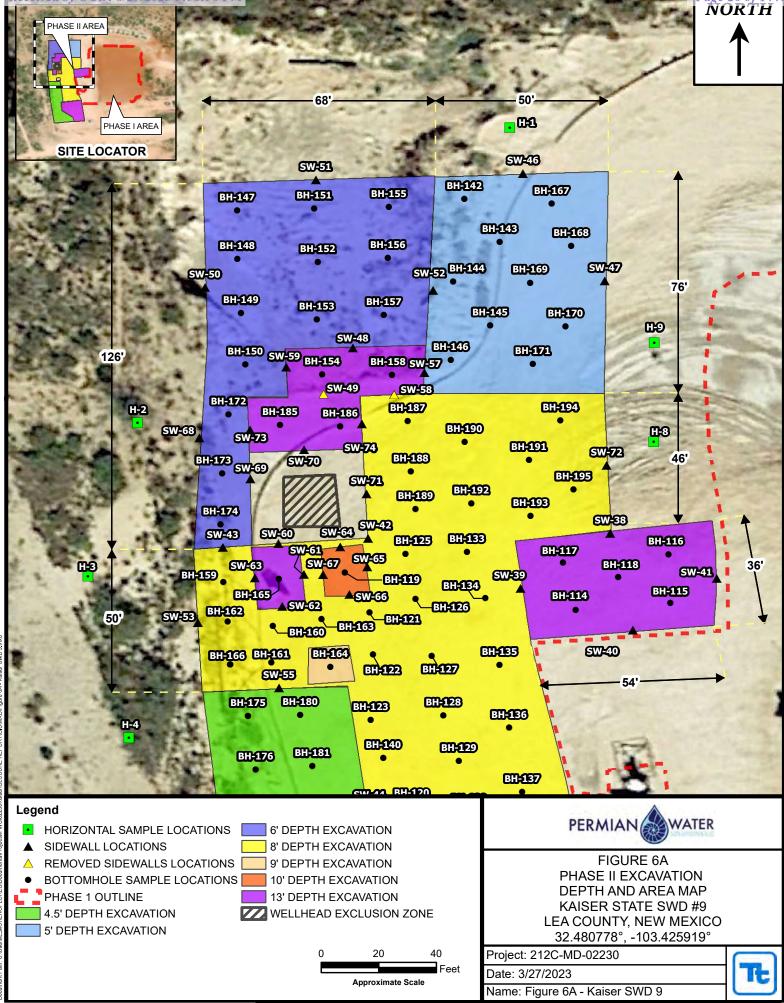
Project: 212C-MD-02230

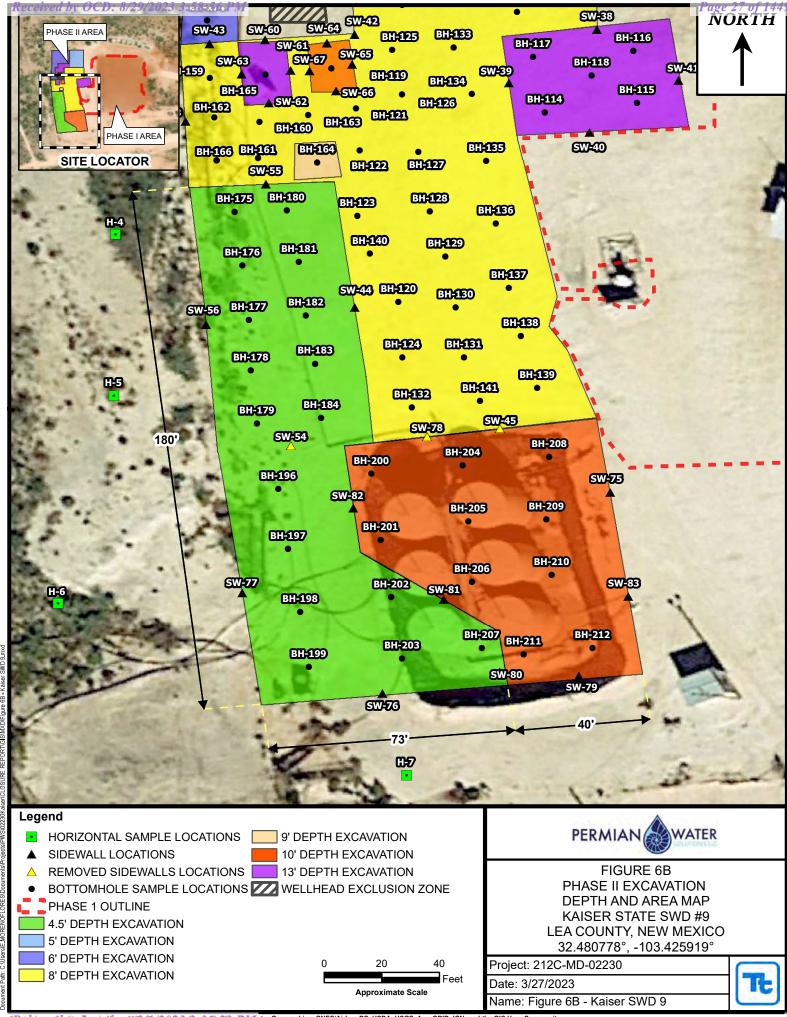
Date: 3/23/2023

Name: Figure 4 - Kaiser SWD 9











# **Tables**

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

0	Ormalia Bat	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-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-2	10/27/2021	6	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	235
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-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-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-6	10/27/2021	6	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	534
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-8	10/27/2021	6	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,990
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-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-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-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-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-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-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-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-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-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-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-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-21	10/27/2021	6	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	169
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-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-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-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-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-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-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-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-31	10/27/2021	15	Х	-	<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	Х	-	<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	X	-	<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	Х	-	<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	X	-	<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	Х	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	Х	-	<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	Х	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	Х	-	<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 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-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	$\perp$	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	$\perp$	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	I	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	I	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	$\perp$	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	I	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	I	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>

0	CD	<b>Permitting</b>

- 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:

0 -	-4-	-4	D .	4 - 3	
Co	nτa	CI	De	etai	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				
Caust	Source	Matchai	Unk.	Released	Recovered	Lost	Cints	
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: 8/29/2023 3:58:56 PM tate of New Mexico
Oil Conservation Division

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

	Page 33 of 1449
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 backfr must be notified 2 days prior to liner inspection)	ill or photos of the liner integrity if applicable (Note: appropriate OCD District office
■ Laboratory analyses of final sampling (Note: appr	ropriate 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/omay endanger public health or the environment. The acshould their operations have failed to adequately invest human health or the environment. In addition, OCD accompliance with any other federal, state, or local laws a restore, reclaim, and re-vegetate the impacted surface a	rand complete to the best of my knowledge and understand that pursuant to OCD rules or file certain release notifications and perform corrective actions for releases which ecceptance of a C-141 report by the OCD does not relieve the operator of liability ligate and remediate contamination that pose a threat to groundwater, surface water, ecceptance of a C-141 report does not relieve the operator of responsibility for land/or regulations. The responsible party acknowledges they must substantially rea to the conditions that existed prior to the release or their final land use in lition to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager  Date:
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the response remediate contamination that poses a threat to groundward party of compliance with any other federal, state, or local	onsible party of liability should their operations have failed to adequately investigate and ater, surface water, human health, or the environment nor does not relieve the responsible cal laws and/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:
_	

Released to Imaging: 9/1/2023 3:31:23 PM

Form C-141

Revised August 8, 2011

pTO1502927423

<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	ation	and Co	rrective A	ction					
						<b>OPERA</b>	ΓOR		Initia	al Report			
		yote Water					y Burton Op			ger for NM			
		Illinois STI	E 950 N	Iidland TX		Telephone No. 432-448-4917							
Facility Nan	ne				1	Facility Type Production Water							
Surface Own	ner Pyote	Water Sy	stems <b>,</b> L	LC Mineral O	wner	Pyote API No. 30-025-02538							
						OF REI							
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/W	Vest Line	County			
Е	13		34	10 ft	N/S	5				LEA COUNTY			
1		25	~ -	titude_32.4808	55153	34D $5$ figitud	e103.42	<del>5630</del> 76	55566				
				NAT	URE	OF RELI	EASE						
		ols product	tion wa	ter		Volume of			Volume F				
Source of Rel							our of Occurrence	$ce_{1/14}$	1Pate and	Hour of Discovery 1/14/15			
Was Immedia	ate Notice (		Yes [	No Not Rec	quired	If YES, To Whom?  Jerry Burton NM OM							
By Whom?						Date and H							
Was a Watero	course Read	ched?	Yes 🖸	No No		If YES, Vo	lume Impacting	the Wate	ercourse.				
If a Watercou	If a Watercourse was Impacted, Describe Fully.*												
none													
Describe Cau	se of Probl	em and Reme	dial Action	n Taken.*	when fl	hev are inst	ructed to do on	ı each lo	oad It is n	osted as well, at the sign in			
ticket area a		me sumps	/ He lane	a to suck it out	WHEH H	ncy are moi	rucica to ao on	r caem re	<i>744.</i> 11 15 p	cotca ao wen, at the orgin in			
ticket area t	1100												
Describe Are	a Affected	and Cleanup A	Action Tak	cen * The clean D	in area	or							
										tion is done. Load lines 3&4			
			· ·				•			the snow we have had since			
than. Has n	ot been di	ry enough to	work on	those lines. DU	IE TO N	MOTHER NA	ATURE we have	e had a	company	go out several times to do thi			
										uant to NMOCD rules and			
										eases which may endanger			
										eve the operator of liability , surface water, human health			
or the enviror	nment. In a	addition, NMC	OCD accep							ompliance with any other			
federal, state,	or local lav	ws and/or regu	ılations.				OH CON	CEDI	A TION	DIVIGION			
	, D	,					OIL CON	<u>SER v</u>	AHON	<u>DIVISION</u>			
Signature:	/emytri	the_					The Contract of the Contract o		00-				
Printed Name	Jerry E	Burton			A	Approved by	Environmental S	Specialist					
Title: Open	rations $\lambda$	Aanager fo	or NM		A	Approval Dat	e <del>: 1/29/15</del>	I	Expiration 1	Date: 3/29/15			
E-mail Addre	.s. audra	a@pyotew	atersyst	ems.com		Conditions of	Approval·			_			
					`	Conditions of	Approvai.			Attached			
Date: 1~23~				432~448~49	17	Site sam	ples required	l. Delir	niate	1RP-3512			
Attach Addit	tional She	ets If Necess	ary				ediate as per						
						guides.	1			294873			
						•	inal C-141 b	v 3		nTO1502927174			
						1		, -					

Received by OCD: 8/29/2023 3:58:56 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 be	ckfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
must be notified 2 days prior to liner inspection)	exim of photos of the finer 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)
	ppropriate one bistrict office must be notified 2 days prior to final sampling,
Description of remediation activities	
and regulations all operators are required to report a may endanger public health or the environment. The should their operations have failed to adequately invhuman 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 notice.  Printed Name: Dusty McInturff	true 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 the acceptance of a C-141 report by the OCD does not relieve the operator of liability prestigate 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 acceptance of a C-141 report does not relieve the operator of responsibility for a sand/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
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
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. Santa Fe. NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

pKJ1512042374 nKJ1512041707

· · · · · · · · · · · · · · · · · · ·	arc, ivivi 67.	Co. 240 Fin		-12			
Release Notifica	tion and C	orrective Ac	ction				
OPE	RATOR	x	ex Initial Rep	ort Final Report			
Name of Company PYOTE WATER SYSTEMS, LLC	Contact	Jerry Burto	n NM Operat	ions Manager			
Address 400 W. Illinois Ste 900	Telephon	e No. 432.448	3.4917 or 432.	.448.5323(Audra)			
Facility Name Kaiser SWD				ter DIDPOSAL			
Surface Owner Pyote Water Systems, LLC Mineral Owner	er Pyote Water Sy	stems, LLC	API No.	30-025-02538			
LOCA	TION OF RELI	FACE					
	orth/South Line	Feet from the	East/West Line	County Lea COUNTY			
F 13 21 34 125 ft			E/W				
	<u> </u>						
Latitude	Longitud	е	_				
·	URE OF RELE						
Type of Release; production water Source of Release		f Release 100BBLS  Hour of Occurrence		Recovered 100 BBLS Hour of Discovery			
Vac truck (unknown due to no camera's) hit load line 3	4/24/2015		4/24/15				
Was Immediate Notice Given X Yes No Not Required	If YES, T	Whom? Jerry Bi	ırton				
By Whom? <i>Unknown driver (575)-390-3836</i>	Date and l	Date and HOUR; 4/24/2015 2:35 am					
Was a Watercourse Reached?	If YES, V	If YES, Volume Impacting the Watercourse.					
☐ Yes *** No***		DECEIVED					
If a Watercourse was Impacted, Describe Fully.*		RECEIVED					
	B	y OCD Distr	ict 1 at 11:10	o am, Apr 30, 2015			
Describe Cause of Problem and Remedial Action Taken.* unkno							
at 2:35 am (575)390-3836 in the morning, upon his arrival he notic been hit. He did not see this happen at the Kaiser	ed a large amoui	it of water on the <sub>i</sub>	pad at the location	n, than noticed line 3 was had			
over me are and not see mis impress as the assuser							
Describe Area Affected and Cleanup Action Taken.*			0.000.00000				
Area affected was the pad only at the location. Jerry and his pumpe		damages themsel	ves, remedial wor	k done by L&J services			
(backhoe) 2 vac trucks one from Big Buck Services and one from B	I Services						
I hereby certify that the information given above is true and complete	to the best of my	knowledge and u	oderstand that nurs	suant to NMOCD rules and			
regulations all operators are required to report and/or file certain release	ase notifications a	nd perform correct	tive actions for rela	eases which may endanger			
public health or the environment. The acceptance of a C-141 report be should their operations have failed to adequately investigate and reme							
or the environment. In addition, NMOCD acceptance of a C-141 repo							
federal, state, or local laws and/or regulations		Īs.	<u></u>				
Signature:		OIL.CO	NSERVATION D	IVISION			
Printed Same: Jerry Burton	<u> </u>		Ve 0 5	lit Jorz			
Title: NM Operations Manager for Pyote Water systems, LLC	Approved by	Environmental Sp	pecialist:				
	Approval Da	te: 04/30/2015	Expiration	Date: 07/30/2015			
jerny@pyotewatersystems.com or audra@pyotewatersystems.com E-mail Address:	Conditions -	f Approval:		19 MONTH			
4-26-2015	Conditions of Site samples re		and remediate	Attached 294873			
Date: 4/26/15 Phone:432.448.4917 as per MNOCD guides. Geotag photographs of							
Attach Additional Sheets If Necessary	remediation r	equired.					

Respired by 10CD: 8/29/2023 3:58:56 PM ate 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	
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 surfact accordance with 19.15.29.13 NMAC including notification.	rue 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 a 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
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	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: 8/29/2023 3:58:56 PM

Name of Company Pyote Water Systems, LLC

<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 58 of 1449

Final Report

**Release Notification and Corrective Action** 

**OPERATOR** 

Contact Jerry Burton

Address 400 W Illinois Ste 900 MIDLAND TX 79701	Telephone No. 432-448-4917								
Facility Name Kaiser Swd	Facility Type production	Water							
Surface Owner STATE Mineral Owner	STATE	API No.	30-025-02538						
LOCATION OF RELEASE									
		ast/West Line	County						
Unit Letter Section Township Range Feet from the North  F 13 21s 24c 34E	South Line   Feet from the   E	ast/ West Line	LEA COUNTY						
34E									
Latitude 32.4808578- Longitude 103.4256592 nad 83									
NATURE OF RELEASE									
Type of Release lightning struck load tanks while driver was unloading	Volume of Release 1050 BBLS								
Source of Release production water	Date and Hour of Occurrence 5-	17-16 Date and I	Hour of Discovery 4 PM						
Was Immediate Notice Given? Yes ☐ No ☐ Not Required	If YES, To Whom?	IDTON via talanh	ana bu drivar						
By Whom? UNKNOWN DRIVER	Date and Hour 5/17/16 4PM	IRTON via teleph	lone by driver						
Was a Watercourse Reached?	If YES, Volume Impacting the	Watercourse							
Yes No	1050 BLS	.,							
If a Watercourse was Impacted, Describe Fully.*	1								
fire melted parts of the liner,water got under the liner									
ine melled parts of the inter, water got under the liner									
Describe Cause of Problem and Remedial Action Taken.*									
lightining hit load tanks and hurned 6 500 hhl tanks loss t	han 2 bbla braachad cantai	nmont callo	d vac truck out to ompty						
lightining hit load tanks and burned 6 500 bbl tanks less t containment after the fire dept put out the fire.	nan 2 bbis breeched contar	IIIIleiii. Callei	a vac truck out to empty						
Describe Area Affected and Cleanup Action Taken.*									
load side containment have clean up crew cleaning up a	nd disposing of old tanks ar	nd cat walk to	o sundown						
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and									
regulations all operators are required to report and/or file certain release	notifications and perform corrective	e actions for rele	ases which may endanger						
public health or the environment. The acceptance of a C-141 report by the									
should their operations have failed to adequately investigate and remedia or the environment. In addition, NMOCD acceptance of a C-141 report of									
federal, state, or local laws and/or regulations.	loes not refleve the operator of resp	onsibility for co	omphance with any other						
, , , , , , , , , , , , , , , , , , , ,	OIL CONSE	RVATION	DIVISION						
Signature: Jerry Burton	<u> </u>		<del></del>						
Signature: JETTY DUTTON		ialist Jam	Elleyer						
Printed Name: Jerry Burton	Approved by Environmental Spec	ialist:							
	·								
Title: NM Operations Mar	Approval Data: 06/09/2016	Evaluation 1	08/09/2016						
Title: NM Operations Mgr	Approval Date: 06/09/2016	Expiration I	08/09/2016 Date:						
E-mail Address: jerry@pyotewatersystems.com	Conditions of Approval:	•	Date:						
E-mail Address: jerry@pyotewatersystems.com	Approval Date:	•	08/09/2016  Attached   1RP 4305						

Received by 10CD: 8/29/2023 3:58:56 PM tate 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	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	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 invo- 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 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 e 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:  Project Manager
Signature: Da Middle	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

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.

		75	C.Rel	ease Notific	_	e, NM 8/3		ction				
		RE	Heri	cuse Housing	outio,	OPERA'			Initi	al Report	П	Final Report
Name of Company: Cambrian Management, LTD.						Contact: Mike Anthony						
							No. 432-631-43	98				
Facility Na	me: Kaiser	SWD #9			7	Facility Typ						
Surface Ow	mer: State			Mineral C	)wner:	State		I	PI No	o. 30-025-0	2538	
				LOC	TIO	N OF RE	FASE	•				
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West	Line	County		
F	13	21S	34E	1980	Tiorus				West Lea			
	1		L	atitude 32,4808		Longitud	le103.425659	2_				
Tune of Dele	aca. Produc	and Water		IVAI	UKE		Release: Unknow	vn V	alume l	Recovered:	0	
Type of Rele Source of Re							Iour of Occurrent			Hour of Dis		v:
004100 01 10												
Was Immedi	ate Notice		Yes [	No Not R	equired	If YES, To	Whom?					
By Whom?					4	Date and I	lour:					
Was a Water	course Rea		] Yes ⊠	No		If YES, V	olume Impacting	the Waterco	urse.			
Due to a light leaked result Describe Are	ntning strike ring in the re	elease of an un	nknown qu Action Tal	d was transferred antity of fluid. Th	ne frac t	anks have bee	n removed from	the location.				
				taken in preparati				oura un osc	my oc	in and con	inuca ,	South
regulations a public health should their or the environ	or the envious longerations lon	are required in the required i	to report a e acceptan adequately OCD accep	e is true and comp nd/or file certain a ce of a C-141 report investigate and a particular of a C-141	release rort by the remedian	notifications a ne NMOCD mate contaminat	nd perform correct arked as "Final Ricon that pose a the	ctive actions report" does reat to groun	for rel not rel d wate	eases which ieve the ope r, surface w	may e rator o ater, hu	endanger of liability uman health
							OIL CON	SERVA	<b>TION</b>	DIVISIO	ON	
		antho	y			Approved by	Environmental S	Specialist:	Krust	<del>en</del> dyrch		
Printed Nam	e: Mike An	thony										
Title: Field	Operations !	Superintenden	nt			Approval Da	te: 11/23/20	16 Exp	iration	Date: 01	/23/2	2017
E-mail Addr	ess: mantho	ony@cambria	nmgmt.com	n		Conditions o	f Approval:			Attached		
Date: 11/15/	16	Phon	e: 432-631	-4398		Please se	e attached D	irective		1RF	452	5
		ets If Neces			-							348695
			U C F									348917

Received by 10CD: 8/29/2023 3:58:56 PM State of New Mexico
Page 6 Oil Conservation Division

	Page 61 of 1449
Incident ID	nKL1632848695
District RP	1RP-4525
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	
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	
may endanger public health or the environment. The should their operations have failed to adequately involved their operations have failed to adequately involved the should their operations. 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: Dusty McInturff	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 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  Date:  Date:
Signature: De Sur Suff	
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:

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	Z Initia	al Report		Final Report
Name of Company Cambrian Management, Ltd.							ke Anthony		V Initia	а кероп		rmai Report
		2, Midland, T				Telephone No. (432)631-4398						
							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/West Line   County						
F	13	218	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	N/A	o Whom?					
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	rcourse.			
If a Watercon	ırse was Im	pacted, Descr				RECEIVED						
ir a watered	arbe was am	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.*			Dy Olivia	ru ut	7.17	<i>piii,</i> 00	· · · · · ·	, 2011
The cause	or the re	lease is uni	aeter mir	ned and is curre	eriuy ur	idei iiives	sugation. 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 red 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 i contamina	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
Denne Jones					OIL CONSERVATION DIVISION							
Printed Name: Todd Roberson (as agent of Cambrian Mgmt.)					Approved by Environmental Specialist:							
Title: Owne			-3-11			Approval D	ate: 10/27/2	017	Expiration	Date:		
		trinityoilfiel	dservice	es.com			of Approval:					
						1240130140	ched directiv	ve		Attached	2	
Date: 10/23/2017 Phone: (575) 631-3129 See attached directive Attach Additional Sheets If Necessary												

1RP-4855

Received by OCD: 8/29/2023 3:58:56 PM State of New Mexico
Page 6 Oil Conservation Division

	Page 63 of 1449
Incident ID	nOY1730058924
District RP	1RP-4855
Facility ID	
Application ID	= 1

## Closure

Closure Report Attachment Checklist: Each of t	the following items must be included in the closure report.
A scaled site and sampling diagram as described	d in 19.15.29.11 NMAC
Dhata manha of the compdicted site prior to bee	kfill or photos of the liner integrity if applicable (Note: appropriate OCD District office
must be notified 2 days prior to liner inspection)	kini of photos of the finer integrity if applicable (Note, appropriate OCD District office
	it ODC District off a section of 2 days prior to final compling)
Laboratory analyses of final sampling (Note: ap	opropriate 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 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	rue and complete to the best of my knowledge and understand that pursuant to OCD rules 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: 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 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:

<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.

1220 5. 5t. 11411	cis Di., Saint	a i c, ivivi 07505		Sa	nta Fe	, NM 87	505							
Release Notification and Corrective Action														
							PERATOR						Final Report	
						Contact Mike Anthony								
		2, Midland, T	X 79702					(432)631-43			_			
Facility Nar	ne Kaiser	State SWD				racility 13	pe Sa	alt Water D	isposai					
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/	orth/South Line Feet from the Eas			East/V	West Line County				
F	13	21S	34E									Lea		
Latitude 32.48008578 Lo						ngitude_	-103.	4256592	NAD	83				
	NATURE OF RELEASE													
Type of Rele	ase Produc	ed Water				Volume of		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 🗸	No Not Re	equired	If YES, 7 N/A	o Who	om?						
By Whom?				,	1	Date and	Hour							
Was a Water	N/A course Read	ched?				N/A If YES, Volume Impacting the Watercourse.								
			Yes 🔽	] No		N/A RECEIVED								
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	<b>k</b>								_		- 0040
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*			Ву	Olivia	Yu a	it 9:	34	am, F	eb 0	<b>7, 2018</b>
			acuum t	ruck was utilize	ed to re	cover fre	e-sta	nding liqui	d. The	seal	was	repaired	during	g initial
response	activities.													
Describe Are	a Affected	and Cleanup	Action Tal	æn.*										
				ry and second										
				ed approximat										
		se on 10/18 _O guidelin		ee 1RP-4855)	. Reme	ediation o	the	mpacted a	area wi	III be d	cond	ucted in	accor	dance with
INIVIOCE	and Minor	LO guidelli ii	55.											
I hereby certi	ify that the	information gi	ven above	e is true and comp	lete to th	ne best of m	y knov	wledge and u	understa	nd that	purs	uant to NM	OCD r	ules and
				nd/or file certain r										
				ce of a C-141 repo										
or the enviro	should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.														
					OIL CONSERVATION DIVISION									
Signature: Jones											7			
Printed Name: Denise Jones				Approved by Environmental Specialist:										
Title: Regul	atory Ana	al <u>y</u> st				Approval D	ate:	2/7/2018	3	Expira	tion I	Date:		1
E-mail Addre	ess: djones	s@cambria	nmgmt.c	om		Conditions	of App	oroval:				Attached	ı 🚽	
Date: 2/	4/18	. 1631		: (432) 620-91	81	see attached directive								
* Attach Addi	tional She	ets If Necess	ary		F	1RP-49	60	]				_		
						40	55	I InOY	1803	8340	27			

pOY1803834550

Received by OCD: 8/29/2023 3:58:56 PM tate of New Mexico
Page 6 Oil Conservation Division

	Page 65 of 1449
Incident ID	nOY1803834027
District RP	1RP-4960
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 describ	ed in 19.15.29.11 NMAC
Photographs of the remediated site prior to ba 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	
should their operations have failed to adequately inchuman health or the environment. In addition, OCI compliance with any other federal, state, or local largestore, reclaim, and re-vegetate the impacted surfacecordance with 19.15.29.13 NMAC including noting Printed Name:  Dusty McInturff	ne acceptance of a C-141 report by the OCD does not relieve the operator of liability exestigate and remediate contamination that pose a threat to groundwater, surface water, D 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 ce 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:  Project Manager
Signature: Study	Date: 3 ( ) ( S
email:dmcinturff@dufrane.com	Telephone:(432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the r remediate contamination that poses a threat to groun party of compliance with any other federal, state, o	responsible party of liability should their operations have failed to adequately investigate and andwater, surface water, human health, or the environment nor does not relieve the responsibility of laws and/or regulations.
Closure Approved by:	Date:
Drinted Names	Title:

Form C-141

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 <u>District III</u> 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

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.

	Release Notification and Corrective Action												
						<b>OPERA</b>	ΓOR		☐ Initia	al Report		Final Report	
		ambrian Mar		, Ltd.		Contact Mike Anthony							
Address PO Facility Nat		Midland TX	79702			Telephone No . 432-631-4398  Facility Type SWD							
racility Nai	ne Kaiser	State SWD				racility Typ	be SWD						
Surface Ow	mer State			Mineral (	)wner	State			API No	. 30-025-	02538		
Sarrace 3 W	ner state					ON OF RE	LEACE		1111110	50 025	<u></u>		
Unit Letter	Section	Township	Range	Feet from the		h/South Line	Feet from the	East/	West Line	County	County		
F	13	21S	34E			orth/South Line   Feet from the   East/west Line   County   Lea							
			 	le 32.480857	78 <sub>1</sub>	Longitude -1	03.4256592	NAD	83				
	NATURE OF RELEASE												
Type of Rele	ase Produc	ed Water		1771	CIVI		Release 150 bbl	ls	Volume I	Recovered	150 bb	ls	
Source of Re	lease Well	head				Date and F 06/20/2018	Hour of Occurrent	ce		Hour of Dis			
Was Immedi	ate Notice (	Given?				If YES, To			06/20/201	18 10:00A	.IVI		
			Yes X	No Not Re	quired	·							
By Whom? Was a Water	D	-1 10				Date and H		41 337-4					
was a water	course Read		Yes X	No		If YES, Volume Impacting the Watercourse.							
If a Watercon	ırse was Im	pacted, Descr	ibe Fully.	*		•							
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*									
Nipple on we	ellhead brok	ke off – nipple	was repla	ıced									
imppro on		is on imppro	, as repre										
Describe Are	a Affected	and Cleanup A	Action Tal	ken.*									
All water wa	s contained			water was picked	up. T	his was on top	of a previous spil	ll that w	as already r	eported and	is in th	e process to	
be remediate	d.												
I hereby certi	ify that the	information g	iven above	e is true and comp	lete to	the best of my	knowledge and u	ındersta	nd that purs	suant to NM	OCD r	ules and	
				nd/or file certain in the certain in									
should their	operations h	nave failed to	adequately	y investigate and r	emedia	ate contaminati	ion that pose a thi	reat to g	round water	r, surface w	ater, hu	man health	
		nddition, NMC ws and/or regi		otance of a C-141	report	does not reliev	e the operator of	respons	ibility for c	ompliance v	with any	y other	
rederal, state	, or local la	ws and/or regi	ilations.				OIL CON	SERV	ATION	DIVISIO	ON		
Signature:													
					Approved by Environmental Specialist:								
Printed Name: Denise Jones													
Title: Regul	latory Analy	yst				Approval Da	7/31/2018	8	Expiration	Date:			
E-mail Addre	ess: djones	@cambrianm	gmt.com			Conditions of	f Approval:		_	Attached	. m/	r	
Date: 06/21/	2018	Phone:				See at	tached direc	ctive		Attached	· <u>LV</u>		
Date. 00/21/	2010	i none.				1RP-5139	9	рСН	 1821239	9860			
Released to In	naging: 9/	/1/2023 3:3	1:23 PM			nCH1821		٠٠٠					

Received by 10CD: 8/29/2023 3:58:56 PM tate of New Mexico
Page 6 Oil Conservation Division

# Closure

Closure Report Attachment Checklist: Each of t	the following items must be included in the closure report.
A scaled site and sampling diagram as described	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 invehuman 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 ication to the OCD when reclamation and re-vegetation are complete.  Title: Project Manager
Signature: 25 Mety	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 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:

Received by OCD: 8/29/2023 3:58:56 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

**Release Notification and Corrective Action** 

		<b>OPERA</b>	TOR	X Ini	tial Report			
Name of Company Cambrian Management, Ltd		Contact Andy Rickard						
Address PO Box 272, Midland, TX 79702		Telephone No. 432-620-9181						
Facility Name Kaiser State SWD		Facility Type SWD						
Surface Owner State Mine	ral Owner S	State		API N	lo. 30-025-02538			
LO	OCATIO	OF RE	LEASE					
Unit Letter Section Township Range Feet from 13 21S 34E 1980	the North/ North	South Line	Feet from the 1980	East/West Line West	County Lea			
Latitude 32.4809	38 N Lo			NAD83				
Type of Release Produced Water	MATURE		Release 200 Bb	ls Volume	Recovered 200 Bbls			
Source of Release Valve		Date and F 08/06/2013	lour of Occurrences	e Date an	d Hour of Discovery 018 10:00AM			
Was Immediate Notice Given?  X Yes □ No □ No	ot Required	If YES, To Christina I						
By Whom? Denise Jones			lour 08/06/2018					
Was a Watercourse Reached?		If YES, Vo	olume Impacting	the Watercourse.				
If a Watercourse was Impacted, Describe Fully.*			<b>EIVED</b> Iivia Yu at	t 1:48 pm,	Aug 07, 2018			
Describe Area Affected and Cleanup Action Taken.*  Only the area inside the berm which is lined with plastic was	s affected. Al	II water was v	acuumed up.					
I hereby certify that the information given above is true and regulations all operators are required to report and/or file cerpublic health or the environment. The acceptance of a C-14 should their operations have failed to adequately investigate or the environment. In addition, NMOCD acceptance of a C federal, state, or local laws and/or regulations.	tain release n I report by th and remediat	otifications a e NMOCD m e contaminat	nd perform correct arked as "Final R on that pose a the	ctive actions for re deport" does not re reat to ground was	eleases which may endanger elieve the operator of liability ter, surface water, human health			
			OIL CON	SERVATION	N DIVISION			
Signature: Ones				(n	<b>A</b>			
Printed Name: Denise Jones	1	Approved by	Environmental S	Specialist:	V			
Title: Regulatory Analyst		Approval Da	8/7/2018	Expiratio	n Date:			
E-mail Address: djones@cambrianmgmt.com		Conditions o	f Approval:		Attached [			
Date: 08/06/2018 Phone: 422.67	10 0101	1) Please inspect liner in question. Provide						
Date: 08/06/2018 Phone: 432-62 Attach Additional Sheets If Necessary		NMOCD with a concise report of the						
		•		on the liner has	1RP-5149			
nOY1821950108 pOY1821950272 pleased to Imaging: 9/1/2023 3:31:23 PM	]  2	2) At least o	•	ain liquids. st demonstrate				
	Įt	ne entire f	acility is lined.					

Received by 10CD: 8/29/2023 3:58:56 PM State of New Mexico
Page 6 Oil Conservation Division

	Page 69 of 1449
Incident ID	nOY1821950108
District RP	1RP-5149
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: 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 are may endanger public health or the environment. The should their operations have failed to adequately involved 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 a 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, a 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:  Dat
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 ard 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 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.

						OPERA	TOR		X Initi	al Report	☐ Final Rep	
Name of Co	ompany C	ambrian Ma	nagemen	t. Ltd			. Mike Anthony	,	A IIIII	ai Keport	гнагкер	
		, Midland, T				Telephone No. 432-631-4398						
		State SWD				Facility Typ						
Surface Ow	ner State			Mineral	Owner	State			API No	. 30-025-0	2538	
				LOC	ATIO	N OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/V	Vest Line	County		
F	13	21S	34E	1980	North	1	1980	West		Lea		
			Latin	tude 32.480938	8 N_ L	ongitude10	03.425227	NAD83				
				NA	TURE	OF REL	EASE					
Type of Rele							Release 500 Bb			Recovered 5		
Source of Re	elease Unlo	oad Tanks					Hour of Occurren	ce		Hour of Disc		
Was Immedi	ate Notice	Given?				1f YES, To	3 10:00AM Whom?		08/17/20	18 11:00 AM	/I	
			Yes [	No 🗌 Not Re	equired		and other OCD n	nember o	n location			
By Whom?							lour 12:00 PM (					
Was a Water	course Rea		Yes X	. No		If YES, Vo	olume Impacting	the Wate	ercourse.			
YC 201		npacted, Desci		1 200								
Describe Are	ea Affected	and Cleanup	Action Ta	ken.*								
The release vup.	was comple	tely contained	l within a	lined pit. All was	ter was i	recovered. The	e pit liner and tan	ks will b	e washed a	after all water	r has been picked	
regulations a public health should their or the enviro	or the envious operations on the envious operations on the envious operations of the envious of the envious operations of	s are required to ironment. The have failed to	to report a e acceptar adequatel OCD acce	re is true and com and/or file certain ace of a C-141 rep y investigate and ptance of a C-14	release port by t remedia	notifications a he NMOCD m te contaminat	nd perform corre tarked as "Final Fion that pose a the tree the operator of	ctive acti deport" d reat to gr responsi	ions for rel loes not rel round wate ibility for c	eases which ieve the oper r, surface wa compliance w	may endanger rator of liability ter, human health rith any other	
-		^					OIL CON	SERV	ATION	DIVISIO	<u>N</u>	
Signature:	Denie	u In	D						192	1		
Printed Nam	e: Denise l	Jones				Approved by	Environmental S	pecialist	::	<u> </u>		
Title: Regula	atory Analy	st				Approval Da	8/21/201	8	Expiration	Date:		
E-mail Addr	ess: djones	@cambrianmg	gmt.com			Conditions o	f Approval:			A4411		
	3/17/2018			Phone:432-620-9	181		iner in question	n. Prov	vide	Attached	Ш	
		ets If Neces		HOHE. 432-020-9	101		ith a concise r					
				2226040		·	with affirmati			1RP-	5163	
	233365	1 1		3336912		and will co	ntinue to cont	ain liqu	uids.		3100	
	and the second second	eased to Imaging: 9/1/2023 3:31:23 PM				2) Dated photo documentation of liner.						

Received by 10CD: 8/29/2023 3:58:56 PM State of New Mexico
Page 6 Oil Conservation Division

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

# Closure

Closure Report Attachment Checklist: Fach 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 bar 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	
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 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 exestigate 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 the water and/or regulations. The responsible party acknowledges they must substantially the 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:
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
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	1
Application ID	pCH1834761047

# **Release Notification**

# Responsible Party

Responsible Party Permian Water Solutions, LLC				OGRID	OGRID 373626	
Contact Name Dale Glosson				Contact	Contact Telephone 432-894-3636	
Contact email dale@permianws.com				Incident	# NCH1834760902 KAISER STATE SWD	
Contact mailing address PO Box 2106, Midland, TX 79702					@ 30-025-02538	
Latitude 32.	480938			Longitude	-103.425227	
Site Name Kaiser State SWD					Salt Water Disposal	
Date Release Discovered 11/2/18				Print of the Control	oplicable) 30-025-02538	
Unit Letter	Section	Township	Range	Cou	nty	
F	13	218	34E	Lea	ea	
	Materia	l(s) Released (Select	all that apply and atta	ch calculations or specific	justification for the volumes provided below)	
Crude Oil		Volume Released (bbls) 20			Volume Recovered (bbls) 16	
Produced Water		Volume Released (bbls)			Volume Recovered (bbls)	
		Is the concentration of dissolved chloride in the produced water >10,000 mg/l?			Yes No	
Condensate		Volume Released (bbls)			Volume Recovered (bbls)	
Natural Gas		Volume Released (Mcf)			Volume Recovered (Mcf)	
Other (describe)		Volume/Weight Released (provide units)			Volume/Weight Recovered (provide units)	
Cause of Rele						

Received by OCD: 8/29/2023 3:58:56 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?	If YES, for what reason(s) does the responsible party consider this a major release?
Yes No	
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	is 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.
has begun, please attach	AC the responsible party may commence remediation immediately after discovery of a release. If remediation 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 nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have atteand 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
Printed Name:	) · · · · · · · · · · · · · · · · · · ·
Signature 4	Date: 10 15 18
email:	Telephone: 432.894.3636
OCD Only DEC	EIVED
NECL	
Received by . By CH	ernandez at 4:56 pm, Dec 13, 2018

Received by OCD: 8/29/2023 3:58:56 PM State of New Mexico
Page 6 Oil Conservation Division

	Page /4 of 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.

Clasura Panart Attachment Checklist: Fach 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)	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	
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email: dmcinturff@dufrane.com	Telephone: (432) 634-7865
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the reservemediate 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

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

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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

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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

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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 Ockland Avanua N.E. Svita 100 | Albuquerque N.M. 8711

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

505.419.2687 | <u>Cory.Smith@state.nm.us</u>

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

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clair.gonzales@tetratech.com

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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

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**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 <a href="mailto:cory.smith@emnrd.nm.gov">cory.smith@emnrd.nm.gov</a>. 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="mainto:slo.state.nm.us">fcrosby@slo.state.nm.us</a>; Mann, Ryan < <a href="mainto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>; Dusty McInturff < <a href="mainto:slo.state.nm.us">dmcInturff@dufrane.com</a>; 'Jenni Usher' < <a href="mainto:slo.state.nm.us">jenni@permianws.com</a>; Josh Brooks <a href="mainto:slo.state.nm.us">slo.state.nm.us</a>; 'Jenni Usher' < <a href="mainto:slo.state.nm.us">jenni@permianws.com</a>; Josh Brooks

<josh@permianws.com>

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

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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

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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

image001.jpg image002.png

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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

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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

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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' <<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> <<u>dmcinturff@dufrane.com</u>>; Gonzales, Clair <<u>Clair.Gonzales@tetratech.com</u>>; Josh Brooks <<u>josh@permianws.com</u>>

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.

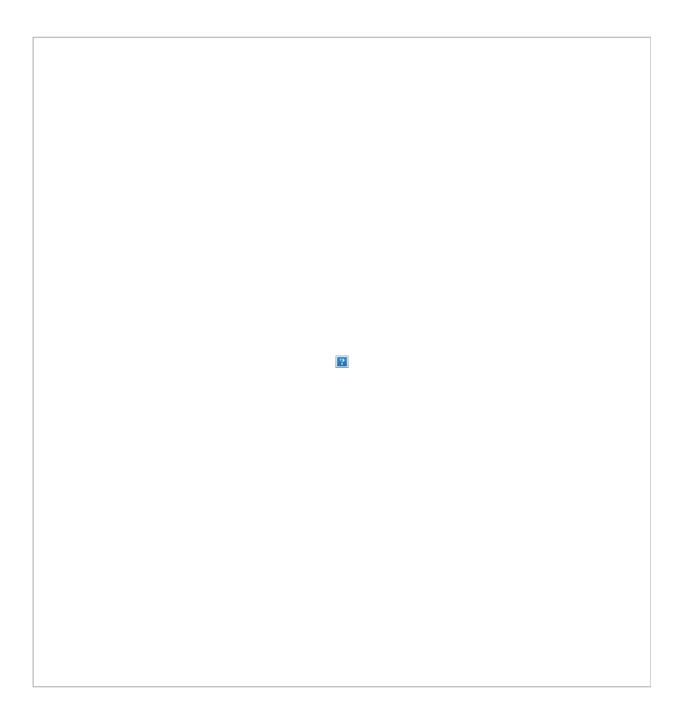
Faith, Dusty and I were on the call today and discussed these samples. I still need to summarize the meeting minutes, but we wanted to get these results circulated for everyone's review to try to avoid any hold-ups in the field for Dusty.

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

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
  - 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\*
       8TEX 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.
- 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.\*\*\*



		SI	TE INFORM	ATION				
		Report T	ype: Revis	ed Worl	k Plan			
General Site Info	ormation:							
Site:		Kaiser State	SWD					
Company:		Permian Wat	ter Solutions					
Section, Townsh	hip and Range	Unit F	Sec. 13	T 21S	R 34E			
Lease Number:		API No. 30-02	25-02538					
County:		Lea						
GPS:			32.48086			-103.42566		
Surface Owner:		State						
Directions:		HWY 176 for a	pproximately 0.25	miles, turn s	outh onto leas	d) in rural Lea County, travel west on e road and continue for 0.25 miles to be location on 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	ater	Produced		Produced Water		
Source of Contan	mination:	Vac Truck 20 bbls		Truck hit lo	oad line	Lightning Strike		
	Fluid Released:			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	ater		Water & Oil	Produced Water		
	Source of Contamination:			Unkown		Seal on Pump		
Fluid Released:		Unknown		50 bbls		20 bbls		
Fluids Recovered	7:	0 bbls		0 bbls wat		10 bbls		
Release Data:		1RP-5139		1RP-5149		1RP-5163		
Date Released:		6/20/2018		8/6/2018		8/17/2018		
Type Release:		Produced Wa	ater	Produced Water		Produced Water		
Source of Contan	nination:	Wellhead		Valve		Unload Tanks		
Fluid Released: Fluids Recovered	١.	150 bbls 150 bbls		200 bbls 200 bbls		500 bbls 500 bbls		
	l.	18P-5273		200 0018		Sldd bbls		
Release Data:								
Date Released:		11/2/2018 Oil						
Type Release: Source of Contan	mination:	Tank Overflow						
Fluid Released:	ппаноп.	20 bbls	vv					
Fluids Recovered:		16 bbls						
Official Commun								
Name:	James Corbitt				Clair Gonzale	28		
Company:	Permian Water So	lutions			Tetra Tech			
Address:	415 W. Wall St.				901 West Wa	all Street		
, 1441 000.	Suite 320				Suite 100	J. 011001		
City								
City:	Midland, TX 79701				Midland, Tex			
Phone number:	(432) 305-4124				(432) 687-81	10		
Fax:								
Email:	james@permian	ws.com			Clair.Gonza	les@tetratech.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

Re: Revised Work Plan for the Permian Water Solutions, LLC., Kaiser State SWD, Unit 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.

etra Tech



- 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 vards 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.

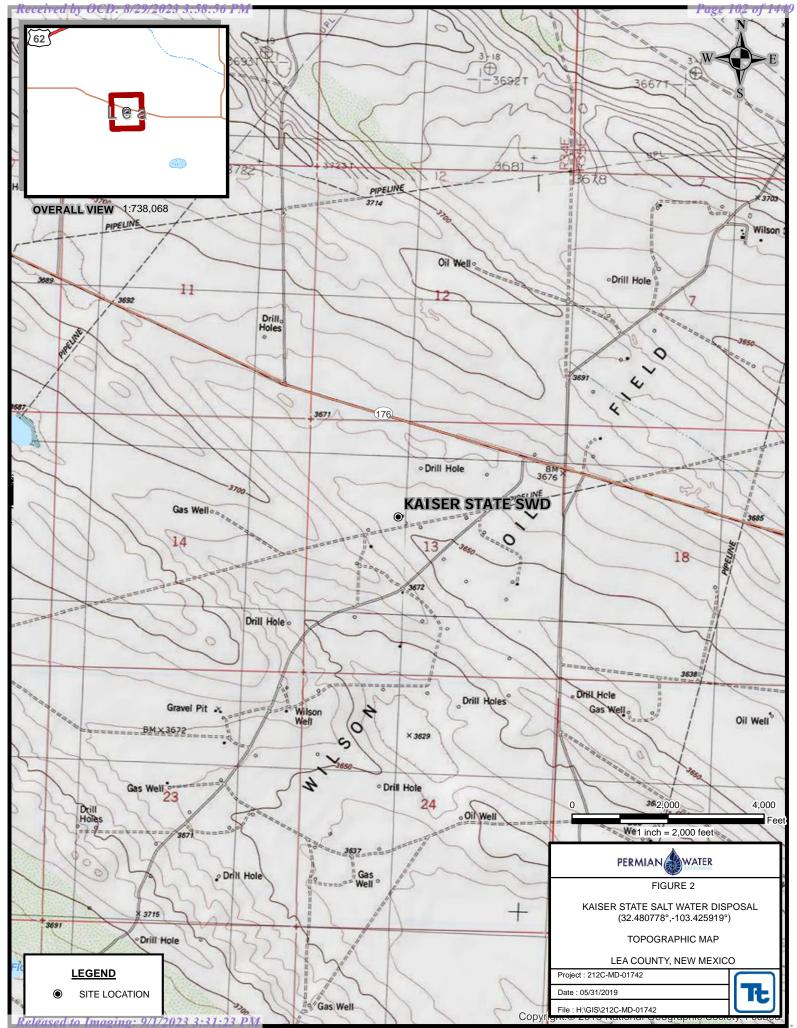
Respectfully submitted, TETRA TECH

Clair Gonzales, P.G.,

Project Manager

Figures





PERMIAN

Approximate Scale in Feet

**Tables** 

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	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-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	Х		-	-	-	-	-	-	-	-	-	656
	"	14-15	Х		-		-	-	-	-	-	-	-	496
	"	19-20	Χ		-		-	-	-	-	-	-	-	576
	"	24-25	Χ		-	-	-	-	-	-	-	-	-	320
	"	29-30	Χ		-	-	-	-	-	-	-	-	-	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	Χ		58.6	638	128	825	<0.050	0.068	0.193	1.63	1.89	4,960
	"	4-5	Χ		<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	Χ		-	-	-	-	-	-	-	-	-	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	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.0150	<0.300	1,170
	"	4-5	Χ		•	·	-		-	-	-	•	-	928
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	624
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	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
					<10.0	609	145	754	< 0.050	< 0.050	< 0.050	< 0.0150	< 0.300	288
	"	24-25	Х		<10.0	009	143	754	40.000	<b>40.000</b>	٧٥.٥٥٥	<b>~0.0100</b>	<0.300	
	"	24-25 29-30	X		-	-	-	-	-	-	-	-	-	64.0

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	Х		<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	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-12	5/8/2019	0-1	X	Kemoved	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,040
	"	2-3	Х		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
	"	4-5	Х		-	-	-	-	-	-	-	-	-	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	Х	·	<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	Х		-	-	-	-	-	-	-	-	-	1,960
	"	24-25	Χ		-		-	-	-	-	-	-	-	688
	"	29-30	Χ		-	-	-	-	-	-	-	-	-	208
	"	34-35	Х		-	-	-	-	-	-	-	-	-	80.0
SP-15	5/8/2019	0-1	Х	1	<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		- 1	-	-	-	-	-	-	-	-	176
SP-16	5/8/2019	0-1	Х	1	<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	Х		-	-	-	-	-	-	-	-	-	1,330
	"	9-10	Χ		-		-	-	-	-	-	-	-	1,170
	"	14-15	Χ		-	-	-	-	-	-	-	-	-	288
	"	19-20	Х		-	-	-	-	-	-	-	-	-	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	"	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	Х		<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	Χ		<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

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)			GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP-18	5/7/2019	0-1	In-Situ X	Removed	1,950	8,290	1,320	11,560	0.883	20.6	9.44	60.9	91.8	9,730
Inside Berm	"	2-3	X		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	Χ		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	5,540
	"	9-10	Χ		<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	Χ		<50.0	<50.0	<50.0	<50.0	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	4,720
	"	24-25	Χ		<49.8	<49.8	<49.8	<49.8	<0.000986	<0.000986	<0.000986	0.00348	0.00348	2,630
	"	29-30	Х		<49.7	<49.7	<49.7	<49.7	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,250
	"	34-35	Χ		<50.0	<50.0	<50.0	<50.0	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	1,120
	"	39-40	Χ		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	772
	"	44-45	Х		<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	Χ		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	X		97.5	2,900	253	3,250	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	9,700
	"	4-5	Χ		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	Χ		<49.9	<49.9	<49.9	<49.9	<0.000990	<0.000990	<0.000990	<0.000990	<0.000990	10,300
	"	14-15	X		<49.8	<49.8	<49.8	<49.8	<0.000990	<0.000990	<0.000990	<0.000990	<0.000990	9,650
	"	19-20	Χ		<49.8	<49.8	<49.8	<49.8	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	11,500
	"	24-25	Χ		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	811
	"	29-30	Χ		<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	Χ		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	Х		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	Χ		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
	"	29-30	Х		<50.0	72.7	<50.0	72.7	<0.00101	<0.00101	<0.00101	0.0404	0.0404	208

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-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	Χ		<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	Χ		<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		-	-	-	-	-	-	ı	-	-	720
		4-4.5	Χ		<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	X		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	Χ		2,760	9,000	1,170	12,930	14.2	112	50.7	150	327	2,760
BH-23	10/22/2019	0-1	Х		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	Χ		1,050	4,150	338	5,540	0.394	0.374	0.232	1.02	2.02	55.9
	"	6-7	Χ		74.5	742	76.9	893	0.0108	0.307	0.400	1.02	1.73	39.2
	"	9-10	Х		<49.9	<49.9	<49.9	<49.9	0.00949	0.0698	0.138	0.392	0.609	359
	=	14-15	Х		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	Χ		<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	Х		561	4,810	411	5,780	0.00859	0.8070	1.32	5.05	7.19	598
	=	2-3	Χ		1,160	4,830	405	6,400	0.380	7.47	5.41	14.2	27.5	722
	=	4-5	Х		92.8	827	119	1,040	0.0189	0.335	0.266	0.986	1.61	297
		6-7	Х		<49.8	220	67	287	<0.000994	0.00366	0.00411	0.0128	0.0206	4,460
		9-10	Χ		<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	Х		<50.2	227	<50.2	227	<0.00100	<0.00100	0.0109	0.0388	0.0497	581
	-	24-25	Х		<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	X		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	Х		<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	Χ		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	Х		<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	Х		<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
1	"	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
	"	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	Χ		-	-	-	-	-	-	-	-	-	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
oumpie 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
	"	4-5	Χ		-	-	-	-	-	-	-	-	-	1,490
	"	6-7	Χ		-	-	-	-	-	-	-	-	-	682
	"	9-10	Χ		-	-	-	-	-	-	-	-	-	704
	"	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
	"	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
	"	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
	"	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
	"	29-30	Х		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	741
	"	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	Χ		<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	Χ		<49.7	<49.7	<49.7	<49.7	<0.000994	<0.000994	< 0.000994	< 0.000994	<0.000994	3,340
	"	9-10	Χ		<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	Χ		<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	Χ		<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	Х		<50.0	109	50.1	159	<0.00100	<0.00100	<0.00100	0.0184	0.0184	7,410
	"	9-10	Χ		<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	Χ		886	4,130	382	5,400	0.283	0.436	0.258	6.62	7.60	3,040
(Inside Berm)	"	2-3	Χ		1,170	3,230	301	4,700	0.642	21.20	7.33	21.5	50.7	3,200
	"	4-5	Χ		1,730	4,130	397	6,260	0.209	9.64	36.8	131	178	4,810
	"	6-7	Х		<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	Χ		<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	Χ		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	343
	"	24-25	Χ		<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	Χ		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	162
		ı						ı						

# **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



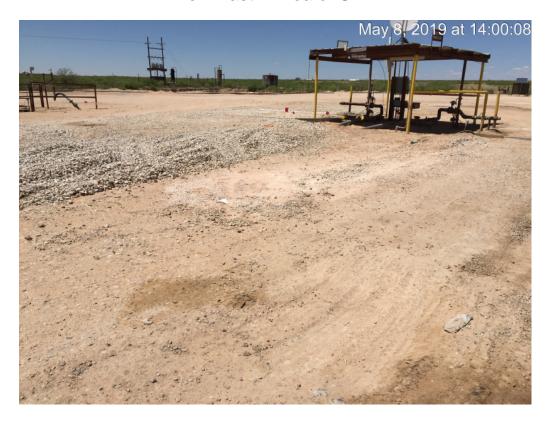
View East - Area of SP-6







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







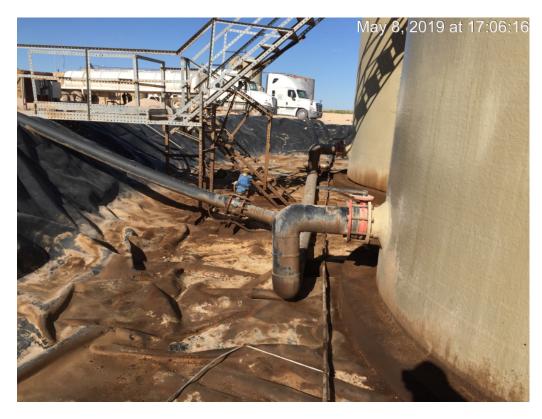
View North – Area of SP-21



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







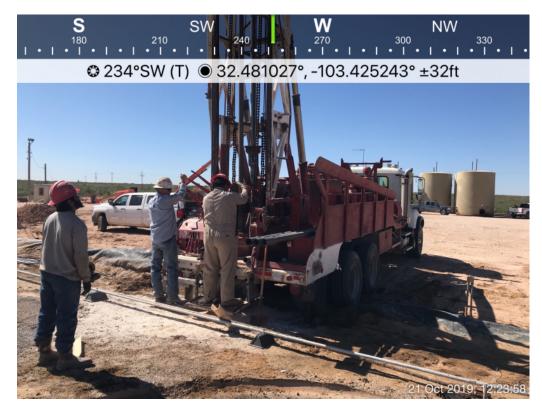
View Southeast – Area of BH-20



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



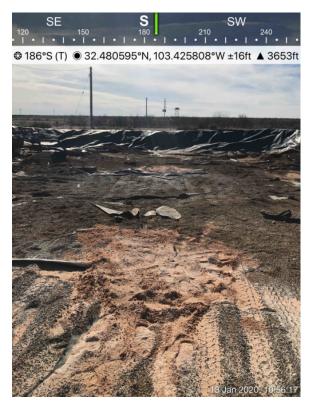




View Southeast – Area of BH-36



**TETRATEC** 



View South - Areas SP-37 and SP-38



View North – Areas of SP-37 and SP-38

Appendix A

Released to Imaging: 9/1/2023 3:31:23 PM

Form C-141

Revised August 8, 2011

pTO1502927423

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

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											
						<b>OPERA</b> T	ΓOR	🔀 Initia	al Report 🔲 Final Report			
Name of Co	mpany P	yote Water	System	ıs, LLC			·	erations Mana	ger for NM			
		Illinois STI	2 950 N	Iidland TX		Telephone N		32~448~4917				
Facility Nar	ne				1	acility Typ	e Production	n water				
Surface Ow	ner Pyote	Water Sy	stems <b>,</b> L	LC Mineral O	wner		Pyote	API No	. 30~025~02538			
						OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/West Line	County			
Б	13		34	10 ft	N/S				LEA COUNTY			
<b>I</b> '		25	• •	titude 32.4808	55153	425agitud	le -103.425	6630765566				
				NAT	URE (	OF RELI	EASE					
Type of Rele	ase 20 bk	ols product	tion wa	ter		Volume of						
Source of Re Was Immedia	leaseVac t	ruck					lour of Occurrenc	$e_{1/14/1}$ Pate and	Hour of Discovery 1/14/15			
was immedia	ate Notice (		Yes [	No Not Rec	quired	If YES, To	wnom?	Jerry Burton N	M OM			
By Whom?						Date and H						
Was a Water	course Read	ched?	Yes 🖸	No		If YES, Vo	olume Impacting t	he Watercourse.				
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	*								
none		,	J									
Describe Cau Vac truck	se of Probl	em and Reme the sumps~	dial Actio / he faile	n Taken.* ed to suck it out v	when th	ney are inst	ructed to do on	each load. It is p	osted as well, at the sign in			
ticket area		•				•		•	, 0			
Describe Are	a Affected	and Cleanup A	Action Tal	cen.* The clean υ	ıp area	or			tion is done. Load lines 3&4			
							-		n the snow we have had since			
than. Has n	iot been ai	ry enougn to	work or	those lines. DU	ETON	AOTHER NA	ATURE we have	e nad a company	go out several times to do this			
									suant to NMOCD rules and			
									eases which may endanger			
									eve the operator of liability surface water, human health			
or the environ	nment. In a	ddition, NMC	CD accep						ompliance with any other			
federal, state,	or local la	ws and/or regu	ılations.				OH COM	CEDVATION	DIVICION			
	· D	,					OIL CONS	SERVATION	DIVISION			
Signature:	least wi	the_				Approved by Environmental Specialist:						
Printed Name												
Title: Open	rations N	Manager fo	r NM		A	Approval Dat	re <del>: 1/29/15</del>	Expiration 1	Date: 3/29/15			
E mail Add	audra	a@pyotew	atersvst	ems.com		Conditions -1	Annroval.					
		· OF JOSE W			- $ $	Conditions of	Approvai:		Attached			
Date: 1~23~				: 432~448~49	Site samples required. Delinic			. Deliniate	liniate 1RP-3512			
Attach Addi	tional She	ets If Necess	ary				ediate as per					
						guides.	F 32		294873			
						0	inal C-141 by	7 <b>3</b>	nTO1502927174			
						Judillit I	a. (-141 D)	, ,				

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
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1220 S. St. Francis Dr., Santa Fo. 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. Santa Fe. NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

pKJ1512042374 nKJ1512041707

Santa	Fe, NM 875	505							
Release Notificat	ion and C	orrective A	ction						
	RATOR		oox Initial Rep	ort     Final Report					
Name of Company PYOTE WATER SYSTEMS, LLC	Contact			ions Manager					
Address 400 W. Illinois Ste 900	Telephon	e No. 432.44	8.4917 or 432.	.448.5323(Audra)					
Facility Name Kaiser SWD				ter DIDPOSAL					
		<u> </u>							
Surface Owner Pyote Water Systems, LLC Mineral Owner	r Pyote Water Sy	stems, LLC	API No.	30-025-02538					
	FION OF RELI orth/South Line	Feet from the	East/West Line	County Lea COUNTY					
F 13 21 34 125 ft	Musoum Eme	1 cet nom ale	E/W	County Dea Cooker					
Latitude	Longitud	e	_						
	RE OF RELEA	ASE							
Type of Release; production water	<del></del>	Release 100BBL		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 Date and Hour of Discovery 4/24/15 2:35 am								
Was Immediate Notice Given X Yes No Not Required		If YES, To Whom? Jerry Burton							
By Whom? Unknown driver (575)-390-3836	Date and I	HOUR; 4/24/201:	5 2:35 am	is 175					
Was a Watercourse Reached?	If YES, V	olume Impacting	the Watercourse.						
☐ Yes *** No***		CENTE.							
If a Watercourse was Impacted, Describe Fully.*	· · · · · · · · · · · · · · · · · · ·	RECEIVE	<b>U</b>						
,	В	y OCD Disti	rict 1 at 11:10	0 am, Apr 30, 2015					
Describe Cause of Problem and Remedial Action Taken.* unkno at 2:35 am (575)390-3836 in the morning, upon his arrival he notice been hit. He did not see this happen at the Kaiser									
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 Big		damages themse	ives, remedial wor	k done by L&J services					
I hereby certify that the information given above is true and complete 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 should their operations have failed to adequately investigate and remed or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	se notifications a y the NMOCD m diate contaminat	nd perform correct parked as "Final Riction that pose a thr	ctive actions for rel- leport" does not rel- eat to ground water	eases which may endanger ieve the operator of liability r, surface water, human health					
		OIL CC	DNSERVATION D	IVISION					
Signature: Printed Same: Jerry Burton	Approved by	Environmental S	necialist: Kel	libra					
Attle: NM Operations Manager for Pyote Water systems, LLC	Approved by Environmental Specialist:  Approval Date: 04/30/2015 Expiration Date: 04/30/2015			Date: 07/30/2015					
jerry@pvotewatersystems.com or audra@pvotewatersystems.com E-mail Address:	Conditions o	f Approval:		Attached 294873					
4-26-2015 Date: 4/26/15 Phone:432.448.4917		equired. Delineat		1RP 3621					
Attach Additional Sheets If Necessary	remediation re	D guides. Geotag	photographs of	<u> </u>					

#### Received by OCD: 8/29/2023 3:58:56 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 140 of 1449

#### **Release Notification and Corrective Action**

						<b>OPERA</b>	ГOR		Initia	ıl Report		Final Report		
Name of Co	mpany F	yote Wate	r Syster	ms,LLC	(	Contact Je	rry Burton							
Address 4		ois Ste 900 N	/IDLAND	TX 79701	-	Telephone 1								
Facility Nar	ne Kai	ser Swd			]	Facility Typ	e production	on Wate	r					
Surface Ow	ner STA	TE		Mineral O	wner	STATE			API No.	. 30-02	5-025	38		
				LOCA	TION	OF REI	LEASE							
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/We	est Line	County				
F	13	21s	24s 34E							LEA CO	TMUC	Υ		
				titude_32.4808	578-	_ Longitud	le_ 103.42565	92 nad	83					
				NAT	URE	OF REL	EASE							
Type of Relea			tanks whi	le driver was unloa	ıding		Release 1050 BE		Volume R		1050			
Source of Re		luction water				Date and Hour of Occurrence 5-17-16 Date and Hour of Discovery 4 PM  If YES, To Whom?								
Was Immedia	ate Notice C		Yes [	No Not Re	quired	II YES, IC		BURTON	via teleph	none by drive	er			
By Whom?	UNKNOWN	I DRIVER				Date and Hour 5/17/16 4PM								
Was a Watero		ched?	/				olume Impacting t		course.					
		×	Yes	] No		1050 BL	S							
If a Watercou	rse was Im	pacted, Descri	be Fully.	*										
fire melte	d narte of	f the liner w	ater ao	t under the line	۵r									
ille melle	u parts o	i uie iiiei,v	rater go	t under the line	Ci									
Describe Cau	se of Proble	em and Reme	dial Action	n Taken.*										
						0.1.1								
lightining h containme				500 bbl tanks l t the fire	less th	an 2 bbls	breeched con	itainmei	nt. called	d vac trud	ck out	t to empty		
		·												
Describe Are	a Affected	and Cleanup A	Action Tak	cen.*										
load side	containm	ent have cl	ean up	crew cleaning	up an	d disposir	g of old tanks	and ca	t walk to	o sundow	vn			
			•	J	•	•	3							
T1 1	C d . d	· C	1	1 1		1	1 1 1 1	1	Lat.		OCD	1 1		
				e is true and completed is true and complete is true and complete is true in record in the contract of the complete is true and complet										
				ce of a C-141 repo										
				investigate and re										
		ddition, NMC ws and/or regu		otance of a C-141 i	report do	oes not reliev	e the operator of	responsib	ility for co	ompliance v	vith any	y other		
rederar, state,	or local lav	ws and/or regu	iations.				OIL CON	SEDW/	TION	DIVISIO	)NI			
	70	Pur Lasa					OIL CON	<u>SLICY F</u>	TION	DIVISIO	<u>)11</u>			
Signature:	Jerry	Burton							Jami	Pl				
Printed Name	: Jerry E	Burton			1	Approved by Environmental Special			Jamo	- wye				
Title: NM (	Operation	ns Mar				Approval Date: 06/09/2016			Expiration Date: 08/09/2016					
		-				••		1 22	1					
E-mail Addre	ess: jerry	@pyotewa	ersyste	ms.com		Conditions of	f Approval: les only. Delineat	te and ren	nediate	Attached				
Date: 5-18-	2016		Phone:	4324484917		er NMOCD g		to and ICI	iouiate	1RP 4305				

\* Attach Additional Sheets If Necessary

nJXK1616127644 pJXK1616127747

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

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. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505 Release Notification and Corrective Action **OPERATOR** ☐ Initial Report Final Report Name of Company: Cambrian Management, LTD. Contact: Mike Anthony Telephone No. 432-631-4398 Address: 415 W. Wall St. Suite 900 Facility Name: Kaiser SWD #9 Facility Type: SWD Mineral Owner: State API No. 30-025-02538 Surface Owner: State LOCATION OF RELEASE Unit Letter Section Feet from the North/South Line Feet from the East/West Line County Township Range **21S** 34E 1980 North 1980 West Lea Latitude 32.4808578 Longitude -103.4256592 NATURE OF RELEASE Volume of Release: Unknown Volume Recovered: 0 Type of Release: Produced Water Date and Hour of Occurrence: Source of Release: Frac tanks Date and Hour of Discovery: Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ No ☒ Not Required By Whom? Date and Hour: Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. ☐ Yes ☒ No If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* Due to a lightning strike on the tank battery fluid was transferred into temporary frac tanks to continue operations during reconstruction. The frac tanks leaked resulting in the release of an unknown quantity of fluid. The frac tanks have been removed from the location. Describe Area Affected and Cleanup Action Taken.\* The frac tanks were set on the north side of the affected battery. The fluid from the leak flowed south around the battery berm and continued southsouthwest into the pasture. Soil samples will be taken in preparation for a remediation work plan. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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. OIL CONSERVATION DIVISION Mile anthon Signature: trusten Lynch Approved by Environmental Specialist: Printed Name: Mike Anthony Approval Date: 11/23/2016 Expiration Date: 01/23/2017 Title: Field Operations Superintendent Conditions of Approval: E-mail Address: manthony@cambrianmgmt.com Attached Please see attached Directive 1RP 4525 Date: 11/15/16 Phone: 432-631-4398 \* Attach Additional Sheets If Necessary nKL1632848695

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	Z Initia	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 Ite	Unkno	own				Unknown				017, 12:35 PI			
Was Immedi	ate Notice (		Yes 🗸	No □ Not Re	quired	N/A	o Whom?						
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	rcourse.				
If a Watercon	ırse was Im	pacted, Descr					RECEIVE	ED					
Tr tr Withered	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	ru ut	7.17	<i>piii,</i> 00	· · · · · ·	, 2011	
The cause	or the re	lease is uni	aeter mir	ned and is curre	eriuy ur	idei iiives	sugation. 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 red 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 i contamina	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 CONSERVATION DIVISION							
Signature: Printed Nam			3	Analyst of Cambrian Mg	ımt.)	Approved b	y Environmental S	Specialist:	0	1			
Title: Owne			-3-11		Approval Date: 10/27/2017 Expiration Date:								
		trinityoilfiel	dservice	es.com	Conditions of Approval:								
Date: 10/23						1240130140	ched directiv	ve		Attached	2		
		ets If Necess		: (575) 631-312	29 Coo attached allocate								

1RP-4855

<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

pOY1803834550

Form C-141 Revised April 3, 2017

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

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

				Sa	illa I C	, INI	VI 0/3	05							
			Rele	ease Notific	atior	an	nd Co	rre	ctive A	ction	l				
						OP	ERA	ΓOR			<b>√</b> I	nitia	l Report		Final Report
		ambrian Man					act Mik								
Address P. Facility Nan		2, Midland, T	X 79702	2					32)631-43 It Water D						
		State SVVD						C Sai	it vvaler D	isposai	,				
Surface Ow	ner State			Mineral O	wner S	State					API	No	. 30-025-0	)2538	
				LOCA	OIT	N O	F REI	LEA	SE						
Unit Letter	Section	Township	Range	Feet from the	North/	South	n Line	Feet	from the	East/V	West Li	ne	County		
F	13	21S	34E										Lea		
		•	Latitud	le 32.4800857	8 L	ongit	tude -	103.4	256592	NAD	83				
						_	RELI	-							
Type of Relea	ase Produc	ed Water		11711	CILL	Vo	lume of						lecovered		
Source of Re	leace	ed water				20 bbls   10 bbls     Date and Hour of Occurrence   Date and Hour of Discovery									
Source of Re	Seal o	on pump				Unknown 1/31/2018, 10:00 AM									
Was Immedia	ate Notice (		equired	If YES, To Whom?											
By Whom?	N/A					te and F	lour								
Was a Water	course Read				lf'	YES, Vo	olume	Impacting	the Wate	ercours	e.				
			Yes 🗸			N	I/A	DE	CEIV	ED					
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	*					CEIV						
Describe Cau	se of Probl	em and Reme	dial Actio	n Taken.*				By	Olivia	Yu a	t 9:	34	am, F	eb 0	7, 2018
The seal of	n a pump	failed. A v	acuum t	ruck was utilize	ed to re	ecov	er free	-stan	ding liqui	d. The	seal	was	repaired	durin	g initial
response a	activities.														
Describe Are	a Affected	and Cleanup	Action Tal	cen.*											
				ry and seconda											
				ed approximat											
		se on 10/18 ∟O guidelin		ee 1RP-4855)	. Reme	ediai	lion of	ine in	прастеа а	area wi	iii be c	ono	iuctea in	accor	ance with
111110000		zo galao													
				e is true and comp											
				nd/or file certain re ce of a C-141 repo											
should their o	perations h	nave failed to	adequately	investigate and r	emediat	e con	itaminati	ion tha	it pose a thi	reat to gi	round v	vater	, surface w	ater, hu	man health
				otance of a C-141	report d	port does not relieve the operator of responsibility							ompliance	with an	y other
	federal, state, or local laws and/or regulations.								IL CON	SERV	ATIO	NC	DIVISION	<u>NC</u>	
Signature:								13	4_						
	Printed Name: Denise Jones								onmental S	Specialis	it:	U			
Printed Name	e: Denise	Jones			-								$\forall$ —		
Title: Regul	atory Ana	al <u>y</u> st	_	Appr	oval Da	te: Z	/7/2018		Expira	tion	Date:		/		
E-mail Addre	ess: djones	s@cambria		Cond	ditions o	f Appr	oval:				Attached	ı √			
Date: 2/	14/18			: (432) 620-91	81	see	e atta	che	d direct	ive					
* Attach Addi	tional She	ets If Necess	sary			1RF	P-496	0	-OV	12029	00.40	07			
									In IV		× <td></td> <td></td> <td></td> <td></td>				

District I
1625 N. French Dr., Hobbs, NM 88240
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#### 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.

			Rele	ease Notific	catio	n and Co	orrective A	Action				
						<b>OPERA</b>	ΓOR		☐ Initi	al Report	Final R	epor
Name of Co	ompany Ca	ambrian Mar	nagement	, Ltd.		Contact Mi	ke Anthony					
		Midland TX	X 79702				No . 432-631-4	1398				
Facility Na	ne Kaiser	State SWD				Facility Typ	e SWD					
Surface Ow	ner State			Mineral (	Owner	State			API No	o. 30-025-02	2538	
				LOCA	ATIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		h/South Line	Feet from the	East/W	est Line	County		
F	13	21S	34E							Lea		
			Latitue	1e 32.48085	78 т	angituda -1	03.4256592	2 NADO	22			
			Lautuc					NADo				
				NAT	<b>FURE</b>	C OF RELI		T				
Type of Rele							Release 150 bb			Recovered 1		
Source of Re	lease Well	head				06/20/2018	Iour of Occurren	ice		Hour of Disc 18 10:00AN		
Was Immedi	ate Notice (	Given?				If YES, To			00/20/20	10.0071		
			Yes X	No  Not Re	equired							
By Whom?						Date and H						
Was a Water	course Read	_	1 v v	NI-		If YES, Vo	olume Impacting	the Water	rcourse.			
			] Yes X	No								
If a Watercon	arse was Im	pacted, Descr	ribe Fully.	*								
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*								
N:1	.111 1 1 1	cc:1-	1-	1								
Nippie on we	ennead brok	te off – nipple	was repia	icea								
		and Cleanup										
All water wa be remediate		to the caliche	pad. All	water was picked	l up. Th	nis was on top	of a previous spi	ill that wa	s already i	reported and i	s in the process	to
be remediate	a.											
T1 1 · ·	C. 4 . 4	:C:	:1	- :- 4 1	-1-7 - 1	41-1-4-6	1	1 '	141. 4	4 3B 50	)CD 1 1	
				e is true and comp nd/or file certain								
				ce of a C-141 rep								
should their	operations h	nave failed to	adequately	investigate and	remedia	ite contaminati	on that pose a th	reat to gro	ound wate	r, surface wat	er, human healt	.h
or the enviro	nment. In a	nddition, NMC	OCD accep	otance of a C-141	report	does not reliev	e the operator of	f responsil	bility for c	ompliance w	ith any other	
rederal, state	, or local la	ws and/or regi	uialions.				OIL CON	ICEDI	ATION	DIVICIO	N	
							OIL CON	NOEK V.	ATION	DIVISIO	<u>1N</u>	
Signature:									PA	L		
Drintad Ma.	o. Domi I	onag				Approved by	Environmental S	Specialist:	UU	· ·		
Printed Name	e: Denise J	ones										
Title: Regul	atory Analy	yst				Approval Dat	7/31/201	<mark>8</mark>   <sub>E</sub>	Expiration	Date:		
E mail A d.t	aga disas	@aarahri'	amt as:			Conditions	f Ammarial:				/	
E-mail Addre	ess: <u>ajones</u>	@cambrianm	gint.com			Conditions of		otiv (C	1	Attached	U/	
Date: 06/21/	2018	Phone:	<u>:</u> _			See att	tached dire	clive	<u></u>	<u></u>		
						1RP-5139	9	pCH1	82123	9860		
eleased to In	naging: 9	/1/2023 3:3	1:23 PM			nCH1821		p 2711				
	0 0 7											

Form C-141 Revised April 3, 2017

Received by OCD: 8/29/2023 3:58:56 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** 

		<b>OPERA</b>	TOR	X Ini	tial Report
Name of Company Cambrian Management, Ltd		Contact Andy Rickard			
Address PO Box 272, Midland, TX 79702		Telephone No. 432-620-9181			
Facility Name Kaiser State SWD		Facility Type SWD			
Surface Owner State Mine	ral Owner S	State		API N	lo. 30-025-02538
LO	OCATIO	OF RE	LEASE		
Unit Letter Section Township Range Feet from 13 21S 34E 1980	the North/ North	South Line	Feet from the 1980	East/West Line West	County Lea
Latitude 32.4809	38 N Lo			NAD83	
Type of Release Produced Water	MATURE		Release 200 Bb	ls Volume	Recovered 200 Bbls
Source of Release Valve		Date and F 08/06/2013	lour of Occurrences	e Date an	d Hour of Discovery 018 10:00AM
Was Immediate Notice Given?  X Yes □ No □ No	ot Required	If YES, To Christina I			
By Whom? Denise Jones			lour 08/06/2018		
Was a Watercourse Reached?		If YES, Vo	olume Impacting	the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		RECEIVED  By Olivia Yu at 1:48 pm, Aug 07, 2018			
Describe Area Affected and Cleanup Action Taken.*  Only the area inside the berm which is lined with plastic was	s affected. Al	II water was v	acuumed up.		
I hereby certify that the information given above is true and regulations all operators are required to report and/or file cerpublic health or the environment. The acceptance of a C-14 should their operations have failed to adequately investigate or the environment. In addition, NMOCD acceptance of a C federal, state, or local laws and/or regulations.	tain release n I report by th and remediat	otifications a e NMOCD m e contaminat	nd perform correct arked as "Final R on that pose a the	ctive actions for re deport" does not re reat to ground was	eleases which may endanger elieve the operator of liability ter, surface water, human health
			OIL CON	SERVATION	N DIVISION
Signature: Ones				(n	<b>A</b>
Printed Name: Denise Jones	Approved by Environmental Specialist:				
Title: Regulatory Analyst		Approval Da	8/7/2018	Expiratio	n Date:
E-mail Address: djones@cambrianmgmt.com		Conditions o	f Approval:		Attached
Date: 08/06/2018 Phone: 422.67	10 0101	-	•	question. Provi	ide
Date: 08/06/2018 Phone: 432-62 Attach Additional Sheets If Necessary		h a concise re	•		
		•		on the liner has	1RP-5149
nOY1821950108 pOY1821950272 pleased to Imaging: 9/1/2023 3:31:23 PM	]  2	2) At least o	•	ain liquids. st demonstrate	
	ne entire f	acility 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

**Release Notification and Corrective Action** 

						<b>OPERA</b>	TOR		X Initia	al Report
					Contact Mr. Mike Anthony					
			Telephone No. 432-631-4398							
Facility Name Kaiser State SWD			Facility Type SWD							
Surface Owner State Mineral Owner S			Itata			ADI No	. 30-025-02538			
Surface Ow	nei State				Sec. 17				AFINO	. 30-023-02338
TI-te I after	I Gastian	Tana at ta	Danes			OF RE		I Cant	Wast I is	Ct-
Unit Letter Section Township Range Feet from the North/North			South Line	Feet from the 1980	West	West Line	County Lea			
			Latit	ude 32.480938		ngitude10		NAD83	3	
Type of Rele	ease Produc	ed Water		IVAI	UNL		Release 500 Bb	ls	Volume I	Recovered 500 Bbls
Source of Re							Iour of Occurrence			Hour of Discovery
						Service and the service and th	3 10:00AM			18 11:00 AM
Was Immedi	ate Notice		Yes 🗌	No ☐ Not Re	quired	If YES, To Olivia Yu	Whom? and other OCD m	nember	on location	
By Whom?	Mike Antho	ny				Date and I	Hour 12:00 PM (	08/17/20	018	
Was a Water	course Rea	South Control of the	Yes X	No		If YES, Vo	olume Impacting	the Wat	tercourse.	
Describe Car A valve did i needed.	use of Probl not close co		dial Actio	on Taken.* ran oved into a co	mpletely	Ву		at 10		eing repaired or replaced as
		and Cleanup tely contained			er was re	covered. The	e pit liner and tan	ks will	be washed a	after all water has been picked
regulations a public health should their or the enviro	all operators or the envi operations lonment. In a	are required fronment. The nave failed to	to report a e acceptan adequately OCD acce	nd/or file certain i ce of a C-141 repo y investigate and i	release no ort by the remediate	otifications a NMOCD m contaminat	nd perform correct parked as "Final R ion that pose a thr	ctive ac Report" reat to g	tions for rel does not rel ground wate	suant to NMOCD rules and eases which may endanger ieve the operator of liability r, surface water, human health ompliance with any other
_		_				OIL CONSERVATION DIVISION				
Signature: James		Approved by Environmental Specialist:			1					
Printed Name: Denise Jones					<b>-</b>					
			Approval Da	8/21/2018	8	Expiration	Date:			
E-mail Address: djones@cambrianmgmt.com			Conditions o	f Approval:			Attached			
Date: 08	3/17/2018		Ī	Phone:432-620-91	01		iner in questic			1 Machea [
*Attach Additional Sheets If Necessary  nOY1823336566  pOY1823336912			nspection and will co	ith a concise re with affirmation ntinue to cont hoto documen	on the	e liner has uids.	1RP-5163			

District I
1625 N. French Dr., Hobbs, NM 88240
District II
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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			tions, LLC	OGRII	373626
Contact Name Dale Glosson				Contac	t Telephone 432-894-3636
Contact email dale@permianws.com				Incider	nt # NCH1834760902 KAISER STATE SWD
Contact mai	ling address	PO Box 2106,	Midland, TX 79	702	@ 30-025-02538
Latitude 32.	480938			on of Release  Longitud decimal degrees to 5 d	de103.425227
Site Name I	Taisar Stata	CWD	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	Market Control			into it	oe Salt Water Disposal
Date Release	Discovered	1 11/2/18		API# (if	[applicable] 30-025-02538
Unit Letter	Section	Township	Range	C	ounty
F	13	218	34E	Lea	
Ma 1 a	Materia		all that apply and atta	nd Volume o	ific justification for the volumes provided below)
Crude Oi		Volume Releas			Volume Recovered (bbls) 16
Produced	Water	Volume Releas			Volume Recovered (bbls)
Is the concentration of dissolved chloride produced water >10,000 mg/l?		chloride in the	☐ Yes ☐ No		
_ Condensa	ondensate Volume Released (bbls)				Volume Recovered (bbls)
Natural G	Natural Gas Volume Released (Mcf)				Volume Recovered (Mcf)
Other (describe) Volume/Weight Released (provide units)		de units)	Volume/Weight Recovered (provide units)		
Cause of Rele	ease Oil ski	im tank overflow	; all fluids conta	nined within conta	ninment berm

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Page 2 Oil Conservation Division

Incident ID NCH1834760902

District RP 1RP-5273

Facility ID

Application ID pCH1834761047

	Application ID portion in order
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	is 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.
has begun, please attach	AC the responsible party may commence remediation immediately after discovery of a release. If remediation 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 environmental failed to adequately investigated	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 and 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:  Telephone:  432.88443636
OCD Only RECI	EIVED ernandez at 4:56 pm, Dec 13, 2018

<b>Received by OCD: 8/29/20</b>	3:58:56 PM
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Incident ID		
District RP		
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.

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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: 8/29/2023 3:58:56 PM Form C-141 State of New Mexico Page 5 Oil Conservation Division

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Incident ID	
District RP	
Facility ID	
Application ID	

## **Remediation Plan**

D. I. d. Di. Ci. Lii. d. E. I. C. I. C. I. C. I. C. I.	
Remediation Plan Checklist: Each of the following items must be	pe 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 ting)</li> </ul>	12(C)(4) NMAC
<u>Deferral Requests Only</u> : Each of the following items must be co	nfirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around p deconstruction.	production equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human healt	h, the environment, or groundwater.
rules and regulations all operators are required to report and/or file	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	f Approval
Signature:	<u>Date:</u>

Appendix B

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

	20 Sc	outh	;	34 East			20 Sc	outh	3	5 East			20 S	South	3	6 East	
6	5	4 125	3	2	1	6 <b>5</b> 6	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 <b>28</b>	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	<mark>82</mark> 35	36	31	<b>3</b> 2	33	34	35	36	31	32	33	34	35	36
								89					170			122	
									_								
	21 Sc	outh	<u> </u> ;	33 East			21 Sc		3	4 East				South	3	122 5 East	<u> </u>
6	<b>21 S</b> c	outh	3	33 East 2 79	1	6	<b>21 S</b> c	outh	<b>3</b>	4 East	1	6		South 4	3		1
6	_	outh 4		2 <b>79</b> 107	1	6	_	outh			1	6	21 S	-		5 East	1
6	_	<b>Outh</b> 4		2 <b>79</b>	1 12	6	_	outh 4 95			1 12	6	21 S	-		5 East	1 12
6	5	4	3	2 <b>79</b> 107	1 12	6	5	outh 4 95	10	2	12	6	<b>21 S</b> 5	4	3	<b>5 East</b>	1 12
6 7	5	4	3	2 <b>79</b> 107	12 13	6 7 18	5	outh 4 95	3	2	1	6 7 18	<b>21</b> 5	4	3	<b>5 East</b>	1 12 13
6 7 18	5 8	9	10	2 <b>79 107</b> 11 <b>150</b>		7	5 8 <b>120</b>	outh 4 95	10	11	12	7	<b>21 S</b> 5	9	3	5 East 2 11	
	5 8	9	10	2 <b>79 107</b> 11 <b>150</b>		7	5 8 <b>120</b>	9 16 105	10	11	12	7	<b>21 S</b> 5	9	3	5 East 2 11	
	5 8 17	9 16	3 10 15	2 <b>79 107</b> 11 <b>150</b>	13	7	5 8 <b>120</b> 17	9 16 105	3 10 15	11 14	1 12 13 100	7 18	21 S 5 8	9 16	10 15	5 East 2 11 14	13
19	5 8 17	9 16	3 10 15	2 <b>79 107</b> 11 <b>150</b>	13	7	5 8 <b>120</b> 17	9 16 105 21	10 15 22	11 14	1 12 13 100	7 18	21 S 5 8	9 16	10 15	5 East 2 11 14	13
6 7 18 19	5 8 17 20	9 16 21	<ul><li>10</li><li>15</li><li>22</li></ul>	2 79 107 11 150 14	13	7 18	5 8 <b>120</b> 17 20	9 16 105 21 128	10 15 22	11 14 23	1 12 13 100 24	7 18	21 S 5 8 17 20	9 16 21	3 10 15 22	5 East 2 11 14 23	13

	22 Sc	uth	33		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13 <b>391</b>
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

	22 Sc	uth	34		
6	5	4	3	2	1
7	8	9	10	11 30	12 <b>50</b>
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

	22 Sc	outh	35	East	
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

- 88 New Mexico State Engineers Well Reports
- 105 USGS Well Reports

- 90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
- **90** Geology and Groundwater Resources of Eddy County, NM (Report 3)
- NMOCD Groundwater Data
- **121** 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,

closed)

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

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

		POD Sub-		Q	Q (	Q					Depth	Depth	Water
POD Number	Code	basin	County	64	16	4 Sec	Tws	Rng	Х	Υ	•		Column
CP 00089	0	СР	LE		2 1	1 13	21S	34E	647840	3594615 🌍	235		
CP 00092 POD1		СР	LE	1	3 1	1 25	21S	34E	647479	3591694* 🎒	196		
<u>CP 00489</u>		СР	LE			04	21S	34E	643274	3597749* 🌍	125	95	30
<u>CP 00498</u>		СР	LE		2 4	4 08	21S	34E	642287	3595932*	145	120	25
CP 00571 POD1		СР	LE	3	1 4	1 28	21S	34E	643499	3591063 🎒	170	135	35
CP 00583		СР	LE		3	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	1 06	21S	34E	639838	3598306*	118	112	6
CP 00791		СР	LE	4	2 4	1 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	1 28	21S	34E	643447	3591434 🎒	210	140	70
CP 01068 POD1		СР	LE	4	1 4	1 28	21S	34E	643609	3591005 🎒	180	140	40
CP 01069 POD1		СР	LE	2	1 4	1 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	1 16	21S	34E	643196	3594698 🎒	180	110	70
<u>CP 01671 POD1</u>		СР	LE	2	4 1	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 Resources** 

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

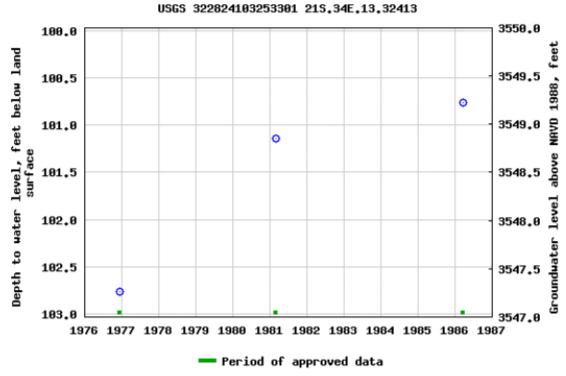
Save file of selected sites to local disk for future upload

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

Available data for this site	Groundwater: I	Field measurements		GO					
Lea County, New Mexico									
Hydrologic Unit Code 13070007									
Latitude 32°28'24", Longit	ude 103°25'	33" NAD27							
Land-surface elevation 3,65	50 feet above	e NAVD88							
The depth of the well is 335	feet below	land surface.							
This well is completed in the	e Chinle Fori	mation (231CHN	L) lo	cal 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

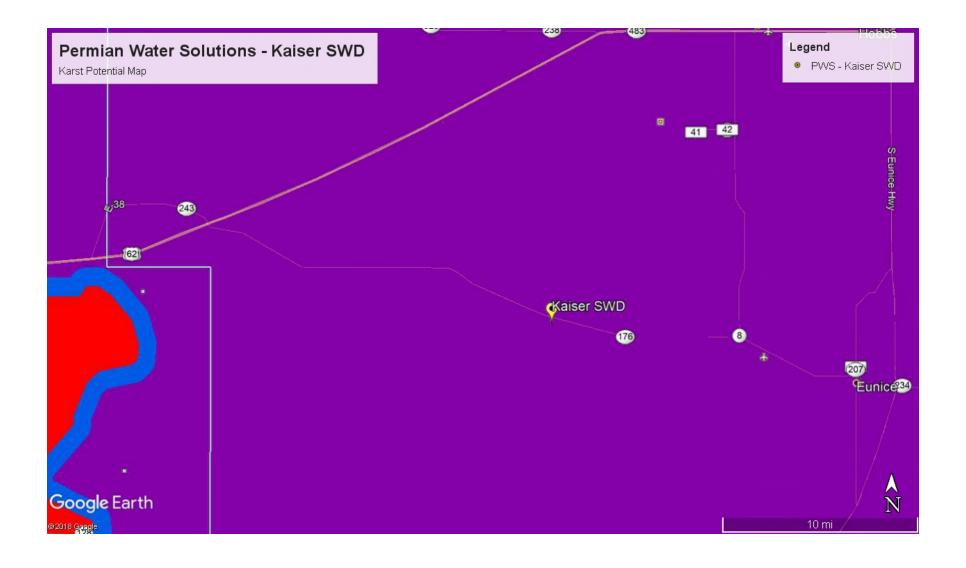
URL: https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?

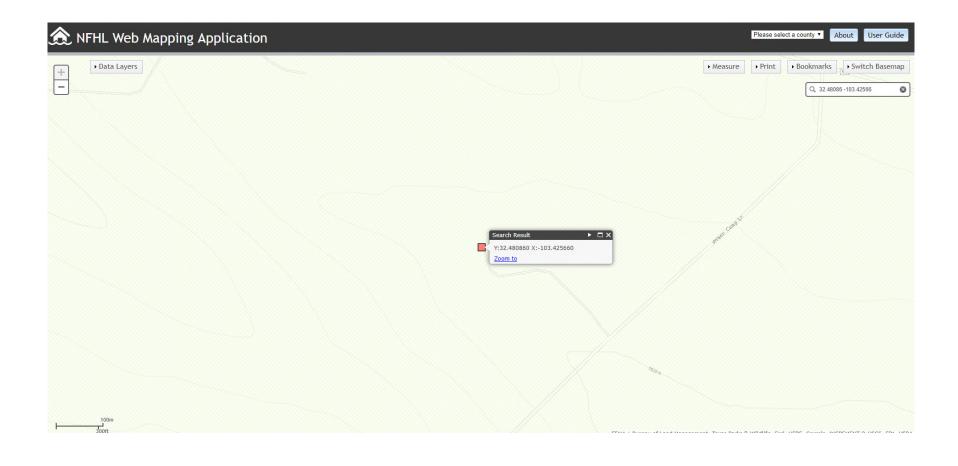
Page Contact Information: New Mexico Water Data Maintainer

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:	led: 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	787	-					
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								
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	-					
4-4.5	Light brown sand and caliche	No odor	312						

Client:	Permian Water Solutions									
Site Name	Kaiser SWD									
Sample ID:	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	<i>575</i>	-
29-30	Light tan sand	No Stain or odor	679	240
34-35	Light tan sand	No Stain or odor	596	200

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
	<u>I</u>			

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
<u> </u>	l			

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

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-10			
GPS	32.481350° -103.425486°			
Project #:	212C-MD-01742			
Total Depth Date Installed:	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

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			
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
<u> </u>				

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	<i>355</i>	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			
	J. 100			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	No Stain or odor	308	-

Client:	Permian Water Solutions			
Site Name	Kaiser SWD			
Sample ID:	SP-14			
GPS	32.481152° -103.424928°			
Project #:	212C-MD-01742			
Total Depth	35'			
Date Installed:	5/8/2019			
DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
0-1	Dark brown sand	No Stain or odor	895	-
2-3	Dark brown sand	No Stain or odor	667	-
4-5	Red sand	No Stain or odor	1,060	-
6-7	Red sand	No Stain or odor	898	440
9-10	Red sand	No Stain or odor	516	480
14-15	Red sand	No Stain or odor	1,120	560
19-20	Light tan sand with limestone and chert	No Stain or odor	1,510	1,400
24-25	Light tan sand with limestone and chert	No Stain or odor	1,020	-
29-30	Red sand	No Stain or odor	424	400
34-35	Red sand	No Stain or odor	315	120

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

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Client:	Permian Water Solutions			
Site Name	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	-
			·	

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	
t	•				

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			
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	Site Name				
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	Sample ID:				
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					
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	Project #:				
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	Total Depth				
0-1Dark sand and calicheHeavy odor1660-2-3Dark sand and calicheHeavy odor1,270-4-4.5Dark sand and calicheModerate odor1,3001200	Date Installed:				
0-1Dark sand and calicheHeavy odor1660-2-3Dark sand and calicheHeavy odor1,270-4-4.5Dark sand and calicheModerate odor1,3001200					
2-3Dark sand and calicheHeavy odor1,270-4-4.5Dark sand and calicheModerate odor1,3001200	DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)
4-4.5 Dark sand and caliche Moderate odor 1,300 1200	0-1	Dark sand and caliche	Heavy odor	1660	-
	2-3	Dark sand and caliche	Heavy odor	1,270	-
5-5.5 Light sand and caliche Moderate odor 1,400 1280	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'										
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								
	1000000								
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								
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	400							
34-35	Silty sand	No Stain or odor	385	200					
-									

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						

Site Name	Client:	Permian Water Solutions									
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	Site Name	Kaiser SWD									
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	Sample ID:										
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		32.480607° -103.425155°									
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	Project #:										
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	Total Depth										
0-1Dark brown sandNo Stain or odor355-2-3Dark brown sandNo Stain or odor200200	Date Installed:	5/8/2019									
0-1Dark brown sandNo Stain or odor355-2-3Dark brown sandNo Stain or odor200200											
2-3 Dark brown sand No Stain or odor 200 200	DEPTH (Ft)	Lithology/Sample Description	NOTES	Salinity (ppm)	Chloride (ppm)						
	0-1	Dark brown sand	No Stain or odor	355	-						
4-5 Dark brown sand No Stain or odor 212 160	2-3	Dark brown sand	No Stain or odor	200	200						
	4-5	Dark brown sand	No Stain or odor	212	160						

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	<i>755</i>	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)
10	Black/brown sand Black/brown sand Red sand and silt  Red sand and silt  Fine dry brown sand Dense layer of caliche  Caliche with pebbels  Tan Sand with caliche Dense layer of caliche  White fine caliche  Brown sand  Fine red sand  Red Sand	840 700 500		50		Comments: T.D 30'	(PPI-1)	

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

yy Odor \* L.O. = Low Odor

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

Location: Lea Co, NM

**Field Testing Results** 

# **Borehole ID: BH-18**



Driller: Scarborough Drilling

Method: Air Rotary

Project Name: Kaiser St SWD Date: Monday, October 21, 2019 **Project No.**: 212C-MD-01742 Sampler: Conner Moehring

**Coordinates**: 32.480967 -103.425290 Elevation :

Depth (ft.)	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.) \	ΝL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
5	Black and brown sand / gravel  Black gravel  tan and black gravel and sand			50				
10	Dense layer of caliche tan caliche			60				
15	Caliche layer	1,200		65				
25	Red brown sand  Dense layer of calchie  Red brown sand	1,800		75				
30	Red brown sand	1,800				Comments: T.D 50'		
35	Red brown sand	1,000						
40	Red brown sand	800		<b>=</b>				
45	Red brown sand  Red brown sand	480						

<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 : 32.480704 -103.425281

Elevation :

Date: Tuesday, October 22, 2019

Sampler : Conner Moehring

**Driller**: Scarborough Drilling

Depth (ft.) WI	Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.) V	VL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
°ŦГ	Black brown sand with gravel			<sup>50</sup> <b>T</b>				
10	Black brown sand with gravel			55				
10	tan sand with calcihe			60				
#	Dense layer of caliche			#1				
15	Caliche with tan sand			65				
	Tan caliche with sand	>2000		70				
25	Red dry sand			75				
30	Red dry sand Dense layer of caliche	242		‡ ‡	(	Comments: T.D 40'		
35	Red fine sand	142		$  \pm  $				
45	Red fine sand	313						
50				韭し				

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

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

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

Location: Lea Co, NM



Borehole ID: BH-20 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 : 32.480704 -103.425094
 Driller : Scarborough Drilling

Elevation: Method: Air Rotary

Depth (ft.) WI	. Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
5	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			50				
20	Tan sand and gravel	940		70				
25	Red fine sand Dense layer of caliche	240		75				
35 40 40 45 50	Red sand fine	200				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. : 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.** : <u>212C-MD-01742</u>

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)
5	Black brown gravel  Tan black gravel and sand  Tan sand dry  brown tan sand  Brown tan sand			50				
10	Tan caliche with gravel  Tan caliche with gravel  Red sand with gravel	242 480		70				
30 40 45 50	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.)	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		50		Comments: T.D 25'		

<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**: 32.480445 -103.425753

Elevation :

Date: Tuesday, October 22, 2019

Sampler: Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) W	'L Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
°┰┌	Black and brown sand			<sup>50</sup> <b>T</b>				
士!	Black and brown sand			土				
<u>.</u> +				55				
³Ŧ	Black sand and gravel			33 <b>T</b>				
#1	Tan sand			#1				
10	Tan sand			60				
10	Tan sand with calcihe			65				
20	Tan sand with caliche	800		70				
	Soft caliche	800		#				
25	Soft cancile			#1				
25	Red sand	699		75				
#1				#1				
30				#1				
#1	Red sand	500		士		Comments: T.D 35'		
#1				士				
35	Red sand	480		土				
				土				
<u> </u>				王				
40				Ŧ				
#1				#				
40 45 50				#				
#				#				
#1				#				
50	1							

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

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

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

# TETRA TECH

# Borehole ID: BH-33

Soil Drilling Log with Field Testing Results

Project Name : Kaiser St SWD Date : Tuesday

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

Location : Lea Co, NM

**Coordinates**: 32.480752 -103.425214

Elevation :

Date: Tuesday, October 22, 2019

Sampler : Conner Moehring

Driller: Scarborough Drilling

Depth (ft.) W	/L Soil Description	Chloride Field Test (ppm)	PID	Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
° <b>T</b> [	Black gravel with sand			50 🕇				
#1	Black gravel and sand			#1				
#1	Judok Brater and saina			#1				
5	Brown sand with clay			55				
ŦI				干				
#1				#1				
10	Dry brown sand			60				
+1				+1				
10								
15	Dry red sand	400		65				
<u></u> ±1								
+				+				
20	Red sand with gravel	280		70				
#1				#1				
				<u></u>				
25				75 📥				
#1				#1				
30 -				土				
Ŧ				- 干		Comments: T.D 20'		
#1				#1				
35				土				
<b>+</b>				+1				
<b></b>				<b> </b>   <b> </b>				
40				#1				
+1				+1				
40 45 50				#				
土!								
				干				
<sub>50</sub> ± L				土し				

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

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

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

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

# TETRA TECH

# Borehole ID: BH-34

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.) V	VL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
°┰┌	Black and brown sand			<sup>50</sup> <b>T</b>				
土	Black and brown gravel and sand			士				
<u> </u>				+				
* 🕇	Dry brown sand and clay			55 —				
#1	Dry brown sand			#1				
10	Dry red sand			60				
10	Dry red sand			65				
	Dense layer of caliche	1,600		70				
25	Caliche cobbles			75				
30	Dry red sand			#	(	Comments: T.D 40'		
35 —	Dry red sand	540		#				
45	Dry red sand	400		#				
45				#1				
#1				#1				
<u>+</u>				<u>+</u>				
50				<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-35

Soil Drilling Log with Field Testing Results

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

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

Sampler : Conner Moehring

 Coordinates :
 32.481099 -103.425226
 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)
。工厂	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				
10	Dense layer of calciche			70				
25	Red sand			75				
30	Red sand			<b>‡</b>		Comments: T.D 50'		
35 -	Red sand with caliche pebbles			‡ ‡				
45	Very dense kayer of calcihe			T T				
45	Very dense kayer of calciche			#				
50	Red Sand			主				

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

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

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

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

# 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

 Location :
 Lea Co, NM

 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.

Comm		

**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

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 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
  - 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 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. \*\*
- easplan 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
  - 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



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 #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:

Si

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.\*\*
- \*\*\*\* Flan 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
  - 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 #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.
  - 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 #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
  - 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.
- 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)

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
  - 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

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Phase 1 Remediation Area

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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
  - 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:

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Site outline

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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 S'.
- 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 #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 <u>8                                  </u>	
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
  - 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

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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)

	,	,	1 8 37	
Faith Crosby	505/827-5849	fcrosb	y@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.si	mith@state.nm.us	NM Oil Conservation Division
Dusty McInturff	617/584-2889	dmcin	turff@dufrane.com	Dufrane Construction
Jenni Usher	512/820-8772	jenni@	permianws.com	Permian Water Solutions
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**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
  - 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

\*\*\*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
  - 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.
- 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 #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)

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Faith Crosby	505/827-5849	fcrosb	y@slo.state.nm.us	NM State Land Office
Cory Smith	505/419-2687	cory.sr	mith@state.nm.us	NM Oil Conservation Division
Dusty McInturff	617/584-2889	dmcint	turff@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
  - 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 C1\*
    - STEKNO
- Backfill non-blended soils and place a clay membrane/bentonite mat at minimum S'.
- 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 #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
Jeilin Osher	312/020-0772	Jenni(a, permian vis.com	1 chillian water solutions
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:

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:

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 #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
  - 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.
- 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 #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
T 'TT 1			
Jenni Usher	512/820-8772	jenni@permianws.com	Permian Water Solutions
Jenni Usher Clair Gonzales	512/820-87/2 432/687-8123	<u>Clair.gonzales@tetratech.com</u>	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
  - 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, 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.
- 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

## **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.
  - 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

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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 #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

<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:

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Site outline

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Phase 1 Remediation Area

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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 #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 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 #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

\*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:

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:

- 511

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\*
    - STEKND
- 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 #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)

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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.
  - 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:

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Site outline

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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 ti\*
- 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.

#### Man Kev:

- - 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.
  - 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

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 #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)

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
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:

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:

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 #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.
  - 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 \*\*\*



### 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)

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:

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 #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:

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\*
- 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 #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)

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.
  - 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 #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 <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, 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)

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.
  - 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 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 #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:

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 #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)

(1 tallet) priorite interioris, tillus representations			
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:

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 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:

SI

Site outline

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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 #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, 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.\*\*
- \*\*\*\*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:

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.
- 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 #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)

505/827-5849	fcrosby@slo.state.nm.us	NM State Land Office
432/687-8123	Clair.gonzales@tetratech.com	Tetra Tech
575/392-8736	rmann@slo.state.nm.us	NM State Land Office
512/820-8772	jenni@permianws.com	Permian Water Solutions LLC
617/584-2889	dmcinturff@dufrane.com	Dufrane Construction
505/419-2687	Cory.smith@state.nm.us	NM Oil Conservation Division
	432/687-8123 575/392-8736 512/820-8772 617/584-2889	432/687-8123         Clair.gonzales@tetratech.com           575/392-8736         rmann@slo.state.nm.us           512/820-8772         jenni@permianws.com           617/584-2889         dmcinturff@dufrane.com

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:

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 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 #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.
  - 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 S'.
- 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 #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.

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**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.
  - 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 #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 <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, 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.
  - 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 #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:

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Site outline

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Phase 1 Remediation Area

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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 #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
  - 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:

- 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, excavate to 6'.
  - b) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg CI\*
  - STEKND
- 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 #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.;
  - 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:

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 #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:

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 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 #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:

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.

- - 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.
  - 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

 $\bigstar$ 

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.

- - 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:

SI

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\*
    - 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.

<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
  - 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 haven't been able to start excavation on the small pit yet because it's still pretty nasty. 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.

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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:

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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 #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

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 #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



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\*
       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

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<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 o

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 \*\*\*





# 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

MEAMER

Authorized for release by: 9/13/2021 9:28:06 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

..... Links .....

results through

**Review your project** 

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 3:31:23 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.

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Client: Tetra Tech, Inc.

Project/Site: PWS-Kaiser

Laboratory Job ID: 880-5572-1 SDG: New Mexico

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## **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.

Project/Site: PWS-Kaiser

Job ID: 880-5572-1

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.

#### HPLC/IC

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.

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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** 

Method: 8021B - Volatile Orga Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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	
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	
Method: 8015B NM - Diesel Ra	ange Organi	ics (DRO)	(GC)						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	
(GRO)-C6-C10									
Diesel Range Organics (Over	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	
C10-C28)			4.00		,		00/00/04 40 04	00/04/04 00 00	
Oll Range Organics (Over C28-C36)	<4.66		4.66		mg/L		09/03/21 16:21	09/04/21 23:09	
Total TPH	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	109		70 - 130				09/03/21 16:21	09/04/21 23:09	
o-Terphenyl	115		70 - 130				09/03/21 16:21	09/04/21 23:09	
Method: 300.0 - Anions, Ion C	hromatogra	vha							
Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	3570		25.0		mg/L			08/31/21 16:14	5
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
			-	_	-	-			

# **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

		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

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 Analysis Batch: 7266**  **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/L			09/01/21 21:40	1
Toluene	<0.00200	U	0.00200		mg/L			09/01/21 21:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			09/01/21 21:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			09/01/21 21:40	1
o-Xylene	<0.00200	U	0.00200		mg/L			09/01/21 21:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			09/01/21 21:40	1
Total BTEX	<0.00400	U	0.00400		mg/L			09/01/21 21:40	1

	MB	MB					
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

Lab Sample ID: LCS 880-7266/61 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7266** 

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 mg/L 0.100 0.1071 107 70 - 130 m-Xylene & p-Xylene 0.200 0.2108 mg/L 105 70 - 130 70 - 130 0.100 0.1044 104 o-Xylene mg/L

LCS LCS Limits Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 108 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 115

Lab Sample ID: LCSD 880-7266/62 Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 7266** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1139		mg/L		114	70 - 130	15	20
Toluene	0.100	0.1090		mg/L		109	70 - 130	9	20
Ethylbenzene	0.100	0.1173		mg/L		117	70 - 130	9	20
m-Xylene & p-Xylene	0.200	0.2317		mg/L		116	70 - 130	9	20
o-Xylene	0.100	0.1146		mg/L		115	70 - 130	9	20

	LCSD LCSD	
Surrogate	%Recovery Qualifier	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

Analysis Daton. 7200	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

Client Sample ID: MW-1

**Client Sample ID: Method Blank** 

Prep Type: Total/NA Prep Batch: 7274

Prep Type: Total/NA

SDG: New Mexico

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-5572-1 MS

**Matrix: Water** 

**Analysis Batch: 7266** 

Client Sample ID: MW-1 Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Toluene	<0.00200	U	0.100	0.1117		mg/L		111	70 - 130	
Ethylbenzene	<0.00200	U	0.100	0.1142		mg/L		114	70 - 130	
m-Xylene & p-Xylene	<0.00400	U	0.200	0.2283		mg/L		114	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1115		mg/L		112	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 113 1,4-Difluorobenzene (Surr) 121 70 - 130

Lab Sample ID: 880-5572-1 MSD

**Matrix: Water** 

**Analysis Batch: 7266** 

Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00200	U	0.100	0.1118		mg/L		112	70 - 130	1	25
<0.00200	U	0.100	0.1097		mg/L		109	70 - 130	2	25
<0.00200	U	0.100	0.1121		mg/L		112	70 - 130	2	25
<0.00400	U	0.200	0.2246		mg/L		112	70 - 130	2	25
<0.00200	U	0.100	0.1104		mg/L		110	70 - 130	1	25
	Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00400	Sample Sample Result Qualifier <0.00200 U <0.00200 U <0.00200 U <0.00400 U <0.00200 U	Result Qualifier   Added	Result         Qualifier         Added         Result           <0.00200	Result         Qualifier         Added         Result         Qualifier           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           <0.00200

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 119 1,4-Difluorobenzene (Surr) 121 70 - 130

Lab Sample ID: MB 880-7274/5-A

**Matrix: Water** 

**Analysis Batch: 7266** 

	MB	MB							
Analyte	Result	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)									
OII 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	09/03/21 16:21	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** 

**Client Sample ID: Lab Control Sample Prep Type: Total/NA** 

Prep Batch: 7525

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 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 Qua	lifier Limits
1-Chlorooctane	127	70 - 130
o-Terphenyl	126	70 - 130

Lab Sample ID: LCSD 880-7525/3-A

**Matrix: Water** 

**Analysis Batch: 7537** 

<b>Client Sample</b>	ID: Lab	Control	Sample	Dup
Onem Gampie	ID. Lub	001111101	Oumpic	Dup

Prep Type: Total/NA Prep Batch: 7525

%Rec. RPD Spike LCSD LCSD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 93.8 92.23 98 75 - 125 20 mg/L (GRO)-C6-C10 Diesel Range Organics (Over 93.8 104.2 mg/L 111 75 - 125 20 C10-C28)

LCSD LCSD Limits Surrogate %Recovery Qualifier 1-Chlorooctane 112 70 - 130 70 - 130 o-Terphenyl 109

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

	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	

Prep Batch: 7525

Prep Type: Total/NA

Client: Tetra Tech, Inc. Job ID: 880-5572-1 Project/Site: PWS-Kaiser 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 **Prep Type: Total/NA** 

**Matrix: Water Analysis Batch: 7537** 

MS MS %Recovery Qualifier Surrogate Limits 1-Chlorooctane 99 70 - 130 o-Terphenyl 102 70 - 130

Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 890-1210-J-1-B MSD

**Matrix: Water** 

Analysis Batch: 7537

Analysis Batch: 7537									Prep	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	<4.53	U	91.5	99.28		mg/L		109	75 - 125	10	20

C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	111		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7318/3 **Client Sample ID: Method Blank** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 7318** 

MB MB **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac Chloride 0.500 <0.500 U mg/L 08/31/21 15:24

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** 

Pacult Qualifier Added Pacult Qualifier Unit D 9/ Pacult insite
yte Result Qualifier Added Result Qualifier Unit D %Rec Limits

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		nit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0	mo	a/L	<del></del> _		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	A	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 **Client Sample ID: MW-1** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 7774** 

	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Total Dissolved Solids	9590	H	 9590		mg/L		 	0	10

# **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 Bat
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**

<b>Lab Sample ID</b> 880-5572-1	Client Sample ID MW-1	Prep Type Total/NA	Matrix Water	Method 300.0	Prep Batch
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

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# **Accreditation/Certification Summary**

Client: Tetra Tech, Inc.

Project/Site: PWS-Kaiser

Job ID: 880-5572-1

SDG: New Mexico

## **Laboratory: Eurofins Xenco, Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority		ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-20-21	06-30-22
The following analyte the agency does not	•	ort, but the laboratory is i	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
8015B NM	8015NM Ag Prep	Water	Total TPH	
0010011111	Water			

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# **Method Summary**

Client: Tetra Tech, Inc. Project/Site: PWS-Kaiser Job ID: 880-5572-1 SDG: New Mexico

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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 Aq Prep	Microextraction	SW846	XEN MID

4

Protocol References:

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.

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**Laboratory References:** 

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

SM = "Standard Methods For The Examination Of Water And Wastewater"

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# **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

City State ZIP-

79701

City State ZIP

State of Project:

UST/PST PRP Brownfields

RRC 🗌

Superfund 🗌

Work Order Comments

www.xenco.com

Reporting Level II | Level III | PST/UST | TRRP |

Level IV

Project Manager Company Name

Bill to (if different)

Company Name

13 14

# Chain of 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) 91

Xenco

Environment Testing

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		nd the control oreviously negotiated	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 enforced unless previously negotiated.	the client if suc	es incurred by rofins Xenco, b	or expens	ny responsibility for any losses ge of \$5 for each sample subm	and shall not assume a ach project and a char	arge of \$85.00 will be applied to e	of Eurofins Xenco. A minimum ch
		and conditions	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions	filiates and sub	ns Xenco, its at	ny to Eurofi	hase order from client compar	onstitutes a valid purc	t and relinquishment of samples	Notice: Signature of this documer
) /7471	Hg 1631/2451/7470/7471	Ag TI U	8RCKA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	3e Cd Cr	o As Ba E	CRA SI	ICLP/SPLP6010 8R		Mergi(s) to be analyze	circle metriod(s) and metal(s) to be analyzed
U V Zn	Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn U V Zn	Mn Mo Ni K	a Cr Co Cu Fe Pb Mg	e B Cd Ca	As Ba Be	Al Sb	0,	8RCR,	200.8 / 6020:	Fotal 200.7 / 6010
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Sample Comments				Ch	TP. BT	ot #	Depth	Date Time	Matrix	Sample Identification
NaOH+Ascorbic Acid SAPC	NaOH-			10	HO		╟	Corrected Temperature		rotal containers.
Zn Acetate+NaOH Zn	Zn Ace			v	- A		n C	i emperature Reading		Total Containous
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> NasO <sub>3</sub>	Nd <sub>2</sub> S <sub>2</sub>			-10	90			mporature Boadi	2	Sample Custody Seals
Nis C O Nis C				d.	2/		t din	Correction Factor	Yes No (NA) C	Cooler Custody Seals.
NiARIC	No Hoo			<b>e</b> .	5		8-JT	Thermometer ID	(Yes No IT	Samples Received Intact:
	H,PO, HP			<u> </u>	M	eters	Ice.	Yes No Wet Ice	Temp Blank.	SAMPLE RECEIPT
	H <sub>2</sub> S0 <sub>4</sub> H <sub>2</sub>				)_		ute lab, if received by 4:30pm	-		PO#
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#### **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	

<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

MRAMER

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

lotal Access

**Have a Question?** 



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Released to Imaging: 9/1/2023 3:31:23 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.

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-1501-1 SDG: Lea County NM

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#### **Definitions/Glossary**

Job ID: 890-1501-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

#### **Qualifiers**

**GC VOA** Qualifier

F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits

**Qualifier Description** 

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.

GC Semi VOA

Qualifier **Qualifier Description** 

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** 

MCL

TFO

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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE) LOD LOQ Limit of Quantitation (DoD/DOE)

Minimum Detectable Activity (Radiochemistry) MDA

EPA recommended "Maximum Contaminant Level"

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) RL RPD

Relative Percent Difference, a measure of the relative difference between two points Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

Eurofins Xenco, Carlsbad

#### **Case Narrative**

Job ID: 890-1501-1 Client: Tetra Tech, Inc. 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.

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	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130				11/01/21 10:32	11/01/21 22:08	1
1,4-Difluorobenzene (Surr)	200	S1+	70 - 130				11/01/21 10:32	11/01/21 22:08	1
Method: Total BTEX - Total BTEX	X 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	1
Method: 8015 NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T. L. I TDU							<del></del>		
Total TPH	<49.9	U	49.9		mg/Kg		<u>.</u>	11/03/21 08:46	
Total TPH  Method: 8015B NM - Diesel Ran			49.9		mg/Kg				
- -	ge Organics (D		49.9 <b>RL</b>	MDL			Prepared		Dil Fac
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC) Qualifier		MDL		<u>D</u>		11/03/21 08:46	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC)  Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	11/03/21 08:46  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>	Prepared 11/01/21 14:48	11/03/21 08:46  Analyzed  11/02/21 22:52	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>	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	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 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</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 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 11/01/21 14:48 11/01/21 14:48 11/01/21 14:48 Prepared	Analyzed 11/02/21 22:52 11/02/21 22:52 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  104  109	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  11/01/21 14:48  11/01/21 14:48  11/01/21 14:48  Prepared  11/01/21 14:48	11/03/21 08:46  Analyzed  11/02/21 22:52  11/02/21 22:52  Analyzed  11/02/21 22:52	1 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  104  109  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  11/01/21 14:48  11/01/21 14:48  11/01/21 14:48  Prepared  11/01/21 14:48	11/03/21 08:46  Analyzed  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	Organics (DR	O) (GC)							
Analyte	•	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 Rand	ge Organics (D	RO) (GC)							
•	• • •	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• • •	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/01/21 14:48	Analyzed 11/02/21 23:14	Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over	Result	Qualifier		MDL		<u>D</u>	<u>·</u>		
Analyte Gasoline Range Organics (GRO)-C6-C10	Result   <250	Qualifier U	250	MDL	mg/Kg	<u> </u>	11/01/21 14:48	11/02/21 23:14	5
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <250 1290	Qualifier U	250 250	MDL	mg/Kg	<u>D</u>	11/01/21 14:48	11/02/21 23:14	5
(GRO)-C6-C10  Diesel Range Organics (Over C10-C28)	Result  <250 1290 <250	Qualifier U	250 250 250	MDL	mg/Kg	<u> </u>	11/01/21 14:48 11/01/21 14:48 11/01/21 14:48	11/02/21 23:14 11/02/21 23:14 11/02/21 23:14	5 5 5

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7010		100		mg/Kg			11/07/21 02:39	20

Client Sample ID: DS-3 (2)

Date Collected: 10/25/21 00:00

Lab Sample ID: 890-1501-3

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 2

Total TPH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 10:32	11/01/21 23:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				11/01/21 10:32	11/01/21 23:03	1
1,4-Difluorobenzene (Surr)	75		70 - 130				11/01/21 10:32	11/01/21 23:03	1
- Method: Total BTEX - Total B1	ΓEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/03/21 12:38	1
- Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
	'	Qualifier	RL		Unit			Analyzed	Dil Fac

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11/03/21 08:46

250

mg/Kg

1980

2

2

4

7

9

12

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							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

4

6

8

10

11

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

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Released to Imaging: 9/1/2023 3:31:23 PM

## **QC Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1501-1 SDG: Lea County NM Project/Site: Kaiser SWD

# 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

Lab Sample ID: LCS 880-11059/1-A

Matrix: Solid

Analysis Batch: 11027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11059

	<b>Spike</b>	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09493		mg/Kg		95	70 - 130	
Toluene	0.100	0.09238		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.08996		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1834		mg/Kg		92	70 - 130	
o-Xylene	0.100	0.09109		mg/Kg		91	70 - 130	

LCS LCS

Surrogate	%Recovery Qual	lifier Limits
4-Bromofluorobenzene (Surr)	91	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-11059/2-A

Matrix: Solid

Analysis Batch: 11027

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 11059

	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	

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Prep Batch: 11059

70 - 130

51

Prep Batch: 11158

## 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) (Continued)

Lab Sample ID: 880-7749-A-1-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 11027** 

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U F2 F1	0.101	0.06604	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.202	0.1311	F1	mg/Kg		65	70 - 130	
o-Xylene	<0.00202	U F2 F1	0.101	0.06867	F1	mg/Kg		68	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	86	70 - 130
1,4-Difluorobenzene (Surr)	71	70 <sub>-</sub> 130

Lab Sample ID: 880-7749-A-1-E MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

**Matrix: Solid** 

Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene

o-Xylene

**Analysis Batch: 1102** 

027									Prep	Batch:	11059
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	<0.00202	U F2 F1	0.0996	0.05940	F2 F1	mg/Kg		59	70 - 130	52	35
	<0.00202	U F2 F1	0.0996	0.04594	F2 F1	mg/Kg		46	70 - 130	153	35
	<0.00202	U F2 F1	0.0996	0.03657	F2 F1	mg/Kg		37	70 - 130	57	35
	<0.00403	U F2 F1	0.199	0.07219	F2 F1	mg/Kg		36	70 - 130	58	35

0.04080 F2 F1

mg/Kg

MSD MSD

<0.00202 U F2 F1

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 Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

0.0996

**Analysis Batch: 11193** 

	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	Pre	pared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	11/01/.	/21 14:48	11/02/21 20:41	1
o-Terphenyl	114		70 - 130	11/01/.	/21 14:48	11/02/21 20:41	1

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-11158/2-A Matrix: Solid

Analysis Batch: 11193							Prep I	Batch: 11158
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	999.0		mg/Kg		100	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	991.9		mg/Kg		99	70 - 130	
C10-C28)								

Eurofins Xenco, Carlsbad

Prep Type: Total/NA

Prep Batch: 11158

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 11158

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)

Lab Sample ID: LCS 880-11158/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 11193** 

	LCS LCS	
Surrogate	%Recovery Quali	fier Limits
1-Chlorooctane	101	70 - 130
o-Terphenyl	104	70 130

Lab Sample ID: LCSD 880-11158/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 11193							Pre	Batch:	11158
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	897.3		mg/Kg		90	70 - 130	11	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1021		mg/Kg		102	70 - 130	3	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 90 70 - 130 1-Chlorooctane o-Terphenyl 95 70 - 130

Lab Sample ID: 890-1495-A-1-H MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

Analysis Batch: 11193									Prep	Batch: 11158
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	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 Surrogate %Recovery Qualifier 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 Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 11193

	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	1000	1156		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	1	20
C10-C28)											

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	115		70 - 130

Client Sample ID: Method Blank

# QC Sample Results

Job ID: 890-1501-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11233/1-A

**Matrix: Solid** 

**Analysis Batch: 11381** 

**Prep Type: Soluble** 

Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/07/21 01:48

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 Chloride 250 229.5 mg/Kg 92 90 - 110

мв мв

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 **Matrix: Solid Prep Type: Soluble** 

**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 Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**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	

# **QC Association Summary**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1501-1

SDG: Lea County NM

## GC Semi VOA

## Analysis Batch: 11344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	8015 NM	
890-1501-2	DS-2 (3)	Total/NA	Solid	8015 NM	
890-1501-3	DS-3 (2)	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	-1501-1 DS-1 (2)		Solid	DI Leach	
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	

Eurofins Xenco, Carlsbad

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Job ID: 890-1501-1

SDG: Lea County NM

Client Sample ID: DS-1 (2)

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Lab Sample ID: 890-1501-1

**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			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

Lab Sample ID: 890-1501-2

Client Sample ID: DS-2 (3) Date Collected: 10/25/21 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 5035 Total/NA Prep 5.01 g 5 mL 11059 11/01/21 10:32 MR XEN MID 8021B Total/NA 5 mL 11/01/21 22:36 XEN MID Analysis 1 5 mL 11027 MR Total/NA Total BTEX 11/03/21 12:38 XEN MID Analysis 1 11149 A.I Total/NA Analysis 8015 NM 11344 11/03/21 08:46 XEN MID Total/NA 8015NM Prep XEN MID Prep 10.01 g 11158 11/01/21 14:48 DM 10 mL Total/NA Analysis 8015B NM 5 11193 11/02/21 23:14 AJ XEN MID Soluble СН XEN MID Leach DI Leach 5 g 50 mL 11233 11/02/21 12:00 Soluble Analysis 300.0 20 11381 11/07/21 02:39 CH XEN MID

Lab Sample ID: 890-1501-3 Client Sample ID: DS-3 (2) 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			5.02 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 23:03	MR	XEN MIC
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 23:37	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		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

**Matrix: Solid** 

# **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	Expiration Date 06-30-22	
Texas	NE	ELAP	T104704400-21-22		
The following analytes	are included in this report, but	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.	,	, g	ly molade analytes for th	
the agency does not of Analysis Method	fer certification.  Prep Method	Matrix	Analyte	y moduce analytee for the	
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# **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
3015NM Prep	Microextraction	SW846	XEN MID
OI 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

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# 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	Depth
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

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	Relinquished by:	Relinquished by:	Relinquished by						( LABUSE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
	Date: Time:	=	Date: Time: 12:44			DS-3 (2')	DS-2 (3')	DS-1 (2')		SAMPLE IDENTIFICATION			יץ: 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:			10/25/2021	10/25/2021	10/25/2021	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
	Date: Time:	Date: Time:				×			WATER SOIL HCL HNO <sub>3</sub> ICE None	<u> </u>	MATRIX PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	917W Wall Sirest, 36 100 Midland,Texas 79705 Tel (432) 662-4559 Fax (432) 682-3546
Circle) HAND DELIVERED	2.4	Sampl	1745 LABUSE R			×			# CONT. FILTERE BTEX 80 TPH TX TPH 80 PAH 82 Total Me TCLP Me	D (Y 021B 1005 15M ( 70C tals A	BTE (Ext to GRO	DRO - (	ORO - Pb Se	Hg			ANALYSIS REQUEST	890-1501 Chain of Custody
Special Report Limits or TRRP Report  D FEDEX UPS Tracking#:	Rush Charges Authorized	RUSH: Same Day 24 hr 48 hr 7/	REMARKS:  X STANDARD			>	× ×	× ×	TCLP Se RCI GC/MS S GC/MS S PCB'S 8 NORM PLM (As	/ol. 8 Semi. 082 / besto	Vol. 8 608 s)	TDS		ached I	ist)		JEST	
		72 hr				1	lacksquare		Hold									

1089 N Canal St

**Eurofins Xenco, Carlsbad** 

Chain of Custody Record

eurofins |

**Environment Testing** 

State Zip TX 79701 DS-1 (2) (890-1501-1) DS-2 (3) (890-1501-2) 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 peliverable Requested 1 II III IV Other (specify) mpty Kit Relinquished by 211 W Florida Ave linquished by nquished by nquished 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 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

List Source: Eurofins Xenco, Carlsbad

Login Number: 1501 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	

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# **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

List Number: 2 Creator: Kramer, Jessica

Login Number: 1501

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	

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<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

SCRAMER

Authorized for release by: 1/4/2022 2:38:20 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

.....LINKS

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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.

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Client: Tetra Tech, Inc.

Laboratory Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

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## Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 890-1770-1

Project/Site: Kaiser SWD

SDG: Lea County New Mexico

**Qualifiers** 

GC VOA Qualifier

S1-

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

**Qualifier Description** 

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 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.

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

QC Quality Control

RER Relative Error Ratio

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: 890-1770-1

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.

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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

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 BTEX	( 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
Analyte Total TPH	<b>Result</b> <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	D	Prepared	Analyzed 01/03/22 14:33	Dil Fac
	<49.9	U	49.9		mg/Kg		<u> </u>		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	<49.9	U F1	49.9		mg/Kg		12/29/21 15:34	12/31/21 21:44	1
Diesel Range Organics (Over	<49.9	U F1	49.9		mg/Kg		12/29/21 15:34	12/31/21 21:44	1
C10-C28)			49.9		5 5				
	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 21:44	1
C10-C28)	<49.9						12/29/21 15:34  Prepared	12/31/21 21:44  Analyzed	
C10-C28) OII Range Organics (Over C28-C36)			49.9						Dil Fac
C10-C28) OII Range Organics (Over C28-C36)  Surrogate	%Recovery		49.9				Prepared	Analyzed	Dil Fac
C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	%Recovery 98 113	Qualifier	49.9  Limits  70 - 130				Prepared 12/29/21 15:34	Analyzed 12/31/21 21:44	Dil Fac
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 98 113 omatography -	Qualifier	49.9  Limits  70 - 130	MDL	mg/Kg	D	Prepared 12/29/21 15:34	Analyzed 12/31/21 21:44	Dil Fac

**Client Sample ID: SW-3** Lab Sample ID: 890-1770-2

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)		S1+	70 - 130				12/29/21 14:29	12/30/21 20:50	1

Eurofins Xenco, Carlsbad

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1770-1

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

Method: 8021B - Volatile	Organic Com	pounds (GC)	(Continued)
Mothod: OUL ID Volutile	organio com	pourius (CC)	(Goillinaca)

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	D	Prepared	Analyzed	Dil Fac
Total BTFX	<0.00399	0.00399	ma/Ka			01/04/22 15:22	1

Mothod: 8015 NM - D	iceal Range Organics	(DRO) (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	

Mothod: 004ED	NM - Diesel Ran	as Orasnico	
Method: out ob	NIVI - Diesei Kan	ue Organics	IDKUI IGGI

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 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
Oll Range Organics (Over C28-C36)	<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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	12/29/21 15:34	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

Analyte	Result	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

Date Collected: 12/23/21 00:00 Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

## 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		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 <sub>-</sub> 130				12/29/21 14:29	12/30/21 21:10	1

Method:	Total	RTFX	- Total	RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		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

**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 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	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:06	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:06	1
C10-C28)									
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	omatography -	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 Matrix: Solid

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 BTEX	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
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			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	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:27	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				12/29/21 15:34	12/31/21 23:27	1
o-Terphenyl	108		70 - 130				12/29/21 15:34	12/31/21 23:27	1

Job ID: 890-1770-1

SDG: Lea County New Mexico

Lab Sample ID: 890-1770-4 Matrix: Solid

**Client Sample ID: SW-7** Date Collected: 12/23/21 00:00

Date Received: 12/28/21 10:30 Sample Depth: 0 - 4

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Dil Fac Analyte RL MDL Unit D Prepared Analyzed 50.0 01/03/22 17:39 Chloride 2400 mg/Kg

Client Sample ID: SW-8 Lab Sample ID: 890-1770-5 **Matrix: Solid** 

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	<0.00201	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 B1	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	11	0.00402		mg/Kg			01/04/22 15:22	

Γ										
Met	hod: 8015 NM - Diesel Rang		O) (GC) Qualifier	RL	MDL	Unit	D	Droporod	Analyzed	Dil Fac
Anai	yte	Result	Quaimer	KL	MIDE	Unit		Prepared	Analyzeu	DII Fac
Total	TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1
Met	hod: 8015B NM - Diesel Rar	nge Organics (D	RO) (GC)							
Anal	yte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasc	line Range Organics		П	50.0		ma/Ka		12/29/21 15:34	12/31/21 23:48	1

(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	Ш	50.0	mg/Kg	12/29/21 15:34	12/31/21 23:48	1
C10-C28)	<b>\30.0</b>	U	30.0	mg/Ng	12/29/21 13.54	12/31/21 23.40	'
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

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9820		50.0		mg/Kg			12/31/21 10:48	10

70 - 130

116

Eurofins Xenco, Carlsbad

12/31/21 23:48

12/29/21 15:34

o-Terphenyl

Matrix: Solid

Lab Sample ID: 890-1770-6

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	-
Toluene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	•
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	,
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	•
Analyte Total TPH	Result <50.0			MDL	mg/Kg	D	Prepared	Analyzed 01/04/22 15:21	Dil Fa
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	00.0		00.0		99			0.70 = 10.= 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		12/29/21 15:34	01/01/22 00:09	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	11	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1
Oil Range Organics (Over 626-636)	<b>\50.0</b>	U	50.0		ilig/Kg		12/29/21 15.54	01/01/22 00:09	
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	:
-									
Method: 300.0 - Anions, Ion Chro	0 . ,								
Method: 300.0 - Anions, Ion Chro	0 . ,	Soluble Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed	Dil Fac

**Client Sample ID: SW-10** 

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	<0.00201	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

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1770-7

Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1770-1 SDG: Lea County New Mexico

Lab Sample ID: 890-1770-7

Matrix: Solid

Sample Depth: 0 - 4

**Client Sample ID: SW-10** 

Date Collected: 12/23/21 00:00

Date Received: 12/28/21 10:30

Method: 8021B - Volatile Organ	nic Compounds	(GC)	(Continued)	
mothed collis	no compoundo	<b>, – – ,</b>	( <b>-</b>	

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**

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402 U	0.00402	ma/Ka			01/04/22 15:22	1

# Method: 8015 NM - Diesel Range Organics (DRO) (GC)

moundar de la line Biodor italiga a	rgumos (Dito) (OO)						
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 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		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	Prepare	ed	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

# Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	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

#### 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		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 BTEX - Total BTEX Calculation**

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

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**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	<49.9	U	49.9		mg/Kg		12/29/21 15:34	01/01/22 00:50	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		12/29/21 15:34	01/01/22 00:50	1
C10-C28)									
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
					mg/Kg			12/31/21 11:14	

# **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	
ab 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	
390-1770-1	SW-1	122	79	
390-1770-2	SW-3	131 S1+	104	
390-1770-3	SW-6	124	104	
390-1770-4	SW-7	128	90	
390-1770-5	SW-8	129	89	
390-1770-6	SW-9	126	75	
390-1770-7	SW-10	167 S1+	123	
390-1770-8	SW-11	156 S1+	89	
CS 880-15736/1-A	Lab Control Sample	144 S1+	110	
CS 880-15812/1-A	Lab Control Sample	121	0 S1-	
CSD 880-15736/2-A	Lab Control Sample Dup	109	99	
CSD 880-15812/2-A	Lab Control Sample Dup	143 S1+	117	
/IB 880-15736/5-A	Method Blank	103	105	
10 000 1070070 71	Method Blank	90	87	

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)	
90-1770-1	SW-1	98	113	
90-1770-1 MS	SW-1	86	87	
90-1770-1 MSD	SW-1	87	88	
90-1770-2	SW-3	101	116	
90-1770-3	SW-6	90	101	
90-1770-4	SW-7	93	108	
90-1770-5	SW-8	100	116	
90-1770-6	SW-9	92	108	
90-1770-7	SW-10	97	113	
90-1770-8	SW-11	95	109	
.CS 880-15746/2-A	Lab Control Sample	112	108	
.CSD 880-15746/3-A	Lab Control Sample Dup	100	96	
/IB 880-15746/1-A	Method Blank	108	132 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

**Matrix: Solid** Analysis Batch: 15788 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15736

	IVID	IVID							
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 14:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/29/21 14:29	12/30/21 14:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 14:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/29/21 14:29	12/30/21 14:42	1

мв мв

MD MD

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 Client Sample ID: Lab Control Sample Matrix: Solid

**Analysis Batch: 15788** 

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

<b>Client San</b>	iple ID: La	ab Contro	I Sample	Dup
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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 Spik	е
Prep Type: Total/N	Α

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	

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# QC Sample Results

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)

Lab Sample ID: 880-9746-A-1-C MSD

**Matrix: Solid** 

**Matrix: Solid** 

**Analysis Batch: 15788** 

**Analysis Batch: 15788** 

Lab Sample ID: 880-9746-A-1-B MS 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 0.202 0.1407 mg/Kg 70 70 - 130 0.101 0.07366 o-Xylene <0.00200 U mg/Kg 73 70 - 130

MS MS

Surrogate	%Recovery Qu	alifier	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

RPD

Sample Sample Spike MSD MSD %Rec. Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 0.100 0.05242 F1 Benzene <0.00200 UF1 mg/Kg 52 70 - 130 35 Toluene 0.100 0.06213 F1 62 35 <0.00200 UF1 mg/Kg 70 - 130 6 Ethylbenzene <0.00200 U 0.100 0.07132 mg/Kg 71 70 - 130 0 35 <0.00399 UF1 0.200 0.1372 F1 70 - 130 35 m-Xylene & p-Xylene mg/Kg 3 0.100 <0.00200 U 0.07030 70 70 - 130 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery Qualifi	er 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

ı		MR	MB							
	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

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	

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1770-1 SDG: Lea County New Mexico

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-15812/1-A

Matrix: Solid

Analysis Batch: 15844

Spike

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15812

Rec.

 Analyte
 Added on National Control of the control of the

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 121
 70 - 130

 1,4-Difluorobenzene (Surr)
 0
 \$1 70 - 130

Lab Sample ID: LCSD 880-15812/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 15844 Prep Batch: 15812

Spike LCSD LCSD RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit D 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 m-Xylene & p-Xylene 0.200 0.1660 mg/Kg 83 70 - 130 35 0.100 0.08149 81 70 - 130 35 o-Xylene mg/Kg

 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

MS MS Sample Sample Spike %Rec. Result Qualifier Result Qualifier Added Analyte Unit D %Rec Limits Benzene <0.00202 UF1 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 UF1 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 UF1 0.0994 0.06885 F1 mg/Kg 69 70 - 130

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 127
 70 - 130

 1,4-Difluorobenzene (Surr)
 111
 70 - 130

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

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Prep Batch: 15812

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-6-H MSD

**Matrix: Solid** 

Analysis Batch: 15844

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Prep Batch: 15812

MSD MSD

Surrogate	%Recovery Q	ualitier	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

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	12/29/21 15:34	12/31/21 20:42	1
o-Terphenyl	132	S1+	70 - 130	12/29/21 15:34	12/31/21 20:42	1

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-Terphenyl	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
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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)									

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	96		70 - 130

Job ID: 890-1770-1 Client: Tetra Tech, Inc. 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 Client Sample ID: SW-1 Matrix: Solid Prep Type: Total/NA Analysis Batch: 15825 Prep Batch: 15746

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U F1	996	484.2	F1	mg/Kg		46	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U F1	996	456.9	F1	mg/Kg		46	70 - 130	
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 Client Sample ID: SW-1 Prep Type: Total/NA

**Matrix: Solid** 

C10-C28)

**Analysis Batch: 15825** 

Prep Batch: 15746 Spike MSD MSD %Rec. RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <49.9 U F1 999 47 70 - 130 2 Gasoline Range Organics 495.1 F1 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 UF1 999 467.3 F1 mg/Kg 47 70 - 130 2 20

MSD MSD Qualifier Surrogate %Recovery 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 Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15821

MB MB Analyte Result Qualifier MDL Unit Dil Fac RL Prepared Analyzed Chloride <5.00 5.00 12/31/21 07:03 mg/Kg

Lab Sample ID: LCS 880-15755/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15821

Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit D %Rec Chloride 250 249.8 100 90 - 110 mg/Kg

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 Unit D %Rec Limits RPD Limit Chloride 250 253.3 101 90 - 110 mg/Kg 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 Spike MS MS %Rec. Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits 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
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	274		2500	2966		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 880-9747-A-3-D MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15821

MS MS %Rec. Spike 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 **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15821

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	<5.04	U	252	259.9		mg/Kg		101	90 - 110	1	20

Lab Sample ID: MB 880-15803/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15920

мв мв

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			01/03/22 16:56	1

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.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	245.5		ma/Ka		98	90 - 110		_

Lab Sample ID: LCSD 880-15803/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15920

	Spike	LCSD L	.CSD			%Rec.		RPD	
Analyte	Added	Result Q	Qualifier Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	239.6	mg/Kg		96	90 - 110	2	20	

Lab Sample ID: 890-1770-1 MS Client Sample ID: SW-1 **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 15920** 

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Analysis Baton. 10020										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	287	F1	250	527.7		mg/Kg		97	90 - 110	

# **QC Sample Results**

Job ID: 890-1770-1 Client: Tetra Tech, Inc. 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	

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# **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	

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# **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

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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	Type	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** Lab Sample ID: 890-1770-2 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	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 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 20:50	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	12/31/21 22:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	15803	12/30/21 12:27	CA	XEN MID
Soluble	Analysis	300.0		1			15920	01/03/22 18:07	CH	XEN MID

**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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		Lab
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	
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** Lab Sample ID: 890-1770-4 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			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

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**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1770-1 Project/Site: Kaiser SWD SDG: Lea County New Mexico

**Client Sample ID: SW-7** 

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	Type	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 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 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

Lab Sample ID: 890-1770-7 Client Sample ID: SW-10

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 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

Lab Sample ID: 890-1770-4

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

1/4/2022

Date Received: 12/28/21 10:30

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 Date Collected: 12/23/21 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			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 **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			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

# **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	Pre	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	LAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	t the laboratory is not certifi	ed by the governing authority. This list ma	y include analytes for y
the agency does not of	' '	t the laberatory to het eertin	od by the governing additionty. The not me	ly include unarytes for t
the agency does not of Analysis Method	' '	Matrix	Analyte	y molude analytes for t
9 ,	fer certification.	•	, , ,	

# **Method Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1770-1 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

Released to Imaging: 9/1/2023 3:31:23 PM

# Sample Summary

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1770-1 SDG: Lea County New Mexico

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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

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ORIGINAL COPY

ᆏ	Tetra Tech, Inc.	88	890-1770 Chain of Custody			
Client Name:	Permian Water Solutions	Site Manager:	Clair Gonzales	ANALYSIS REQUEST		
Project Name:	Kaiser SWD				or specify method No.)	
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02230		st)	
invoice to:					ed lis	
	Dusty McInturff - Permian Water Solutions			Hg	ache	
Receiving Laboratory:	Eurofins Xenco	Sampler Signature:	Ezequiel Moreno	DRO - Pb Se		
Comments:				DRO - ( a Cd Cr Ba Cd C	TDS mistry (s	
		SAMPLING	MATRIX PRESERVATIVE METHOD	BTE (Ext to GRO-	Vol. 8 608 ss) ulfate er Che	
LAB#	SAMPLE IDENTIFICATION	YEAR: 2020	R	RED (`8021B X1005 015M 270C fetals / Wetals Volatile	8082 Asbesti de Sal Wat	
( DAB USE )		DATE	WATE SOIL HCL HNO <sub>3</sub> ICE None	TPH T TPH 8 PAH 8 Total M TCLP I TCLP S	PCB's NORM PLM (A Chlorid Chlorid	Hold
	SW-1 (0-4')	12/23/2021	×		×	T
	SW-3 (0-4")	12/23/2021	×		×	
	SW-6 (0-4')	12/23/2021	×	×	×	
	SW-7 (0-4')	12/23/2021	×	×	×	
	SW-8-(0-4')	12/23/2021	×	×	×	Г
	SW-9 (0-4')	12/23/2021	×		×	T
	SW-10 (0-4')	12/23/2021	×	×	×	T
	SW-11 (0-4')	12/23/2021	×	×	×	
Relingershed by:	Date: Time:	Received by:	Date: Time:	LAB USE REMARKS:	STANDARD	
Relinquished by:	Date: Time:	Received by:	Date: Time:	Sample Temperature	RUSH: Same Day 24 hr 48 hr 72 hr	
Delination by		Received by:	Date: Time:		Rush Charges Authorized	
Relinquisned by:	Date: Time:	veceived by:		П	Special Report Limits or TRRP Report	
			1	(Circle) HAND DELIVERED FEDEX UPS	EDEX UPS Tracking#:	

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# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-1770-1

SDG Number: Lea County New Mexico

ODG Namber. Lea Gounty New Mexico

Login Number: 1770 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	

Euronnis Aerico, Carisbau

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# **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

Login Number: 1770 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	

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<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

MEAMER

Authorized for release by: 11/10/2021 1:19:33 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

-----LINKS

results through

**Review your project** 

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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.

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-1502-1 SDG: 212C-MD-02230

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# **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### **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** 

#### **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.

# **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.

# **Glossary**

RER

RPD

RL

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

Relative Percent Difference, a measure of the relative difference between two points

Eurofins Xenco, Carlsbad

Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

# **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

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#### **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.

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#### 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.

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#### **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.

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Lab Sample ID: 890-1502-1

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

Released to Imaging: 9/1/2023 3:31:23 PM

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Lab Sample ID: 890-1502-2

# **Client Sample Results**

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 Organic	Compounds	(GC)	(Continued)
MICHIOU. UUZ ID	· voiatile Organic	Compounds		(Continueu)

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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

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

ı		
ı	Method: 8015 NM - Diesel Range Organics (DRO)	(CC)
ı	Method. 0013 NM - Diesel Kange Organics (DKO)	(00)

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 - Diese	I Range Organics (D	RO) (GC)
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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	Dil 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

Method: 300	).0 - Anions,	Ion Chroma	tography - 🤄	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) Lab Sample ID: 890-1502-3

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B -	Volatile Organ	ic Compounds	s (GC)
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Wethou. 002 ID - Volatile Orga	inc compounds	(00)							
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

Method: Tot	al RTFY -	Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399		ma/Ka			11/08/21 17:11	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
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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

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Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-3 (6) Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-3

Date Received: 10/29/21 12:45

Matrix: Solid

Job ID: 890-1502-1

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 11:44	11/03/21 13:03	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:03	,
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	
o-Terphenyl	117		70 - 130				11/02/21 11:44	11/03/21 13:03	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.7		4.97		mg/Kg			11/06/21 06:17	1

Lab Sample ID: 890-1502-4 Client Sample ID: BH-4 (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	<0.00200	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	Calculation								
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
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 11:44	11/03/21 13:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:23	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				11/02/21 11:44	11/03/21 13:23	1
o-Terphenyl	125		70 - 130				11/02/21 11:44	11/03/21 13:23	1

Eurofins Xenco, Carlsbad

11/10/2021

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-4 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Lab Sample ID: 890-1502-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - 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)

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: 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	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 02:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 02:09	1
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	1
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 BT	EX 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	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.5		49.8		mg/Kg			11/05/21 13:50	1
Method: 8015B NM - Diesel Range Analyte	•	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	RL 49.8	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/02/21 11:44	Analyzed 11/03/21 13:43	Dil Fac
Analyte Gasoline Range Organics	Result	Qualifier		MDL		<u>D</u>	<u>·</u>		Dil Fac

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o Temberul 117 70 130 11/02/21 11:44 11/	1-Chloroocta	ane 104		70 - 130	11/02/21 11:44	11/03/21 13:43	1
0-Telphenyi 117 70 - 150 1110221 11.44 1110	o-Terphenyl	111	•	70 - 130	11/02/21 11:44	11/03/21 13:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	123		4.97		mg/Kg			11/07/21 05:30	1

Lab Sample ID: 890-1502-6

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

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Released to Imaging: 9/1/2023 3:31:23 PM

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Lab Sample ID: 890-1502-7

Matrix: Solid

Lab Sample ID: 890-1502-7

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 Organic Con	noounds (GC)	(Continued)
motifical collision of gains con	ipodiido (OO)	( Continuou,

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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400 U	0.00400	ma/Ka			11/08/21 17:11	1

Mothod: 8015 NM	Diosal Range	Organice	(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 Oro	anice (	DRO)	(GC)
Methou. ou 136	MINI - DIESEI	Range Org	jailius (	DRU)	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 C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 14:23	1
Oll 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	Analyzea	DII Fac
1-Chlorooctane	103		70 - 130	11/02/21 11:44	11/03/21 14:23	1
o-Terphenyl	115		70 - 130	11/02/21 11:44	11/03/21 14:23	1

# $\label{eq:method:method:method:method:one} \textbf{Method: 300.0 - Anions, lon Chromatography - Soluble}$

Analyte	Result	Qualifier	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

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)

Wethou. 002 ID - Volatile Orga	ine compounds (	(00)							
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
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130				11/01/21 11:05	11/03/21 03:10	

Method:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/08/21 17:11	1

Analyte	•	Result	Qualifier	RL	MDL	Unit	į	D	Prepared	Analyzed	Dil Fac
Total TPH		<50.0	U	50.0		mg/Kg				11/05/21 13:50	1

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Lab Sample ID: 890-1502-8

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-8 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

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		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)									
OII 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 - 130				11/02/21 11:44	11/03/21 14:43	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1990		24.9		mg/Kg			11/07/21 06:07	5

Lab Sample ID: 890-1502-9 Client Sample ID: BH-9 (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	<0.00200	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	Calculation								
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
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 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				11/02/21 11:44	11/03/21 15:03	1
o-Terphenyl	122		70 <sub>-</sub> 130				11/02/21 11:44	11/03/21 15:03	1

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

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

Sample Depth: 6

Method: 300.0 - Anions, Ion Chron	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

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

Sample Depth: 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 03:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 03:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130				11/01/21 11:05	11/03/21 03:51	1
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	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			49.9	MIDL	mg/Kg			11/05/21 13:50	1
iotal II II	149.9	O	49.9		mg/itg			11/03/21 13:30	'
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 11:44	11/03/21 15:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:23	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 15:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/02/21 11:44	11/03/21 15:23	1
o-Terphenyl	118		70 - 130				11/02/21 11:44	11/03/21 15:23	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte		Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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

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Lab Sample ID: 890-1502-12

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**Matrix: Solid** 

Lab Sample ID: 890-1502-12

11/02/21 11:44 11/03/21 16:22

Lab Sample ID: 890-1502-13

**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-12 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B - Volatile Organic Compou	nds (GC) (Continued)
Welliou. 002 ID - Volatile Organic Compou	iluə (OO) (Oolillilu <del>c</del> u)

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	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			11/08/21 17:11	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 - Diesel Range Organics (DRO) (GC)

An	alyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ga	soline Range Organics	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
(GI	RO)-C6-C10									
Die	esel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
C1	0-C28)									
OII	Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
Su	rrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
1-Chlorooctane	104	70 - 130
o-Terphenyl	112	70 - 130

o-Terphenyl	112	70 - 130	11/02/21 11:44	11/03/21 16:22	1
Method: 300.0 - Anions, Ion Chromatogra	phy - 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)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B -	Volatile Organic	c Compounds (GC)

wethou. 602 1B - Volatile Orga	nic Compounds (	(66)							
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 05:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 11:05	11/03/21 05:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				11/01/21 11:05	11/03/21 05:54	1
1,4-Difluorobenzene (Surr)	96		70 - 130				11/01/21 11:05	11/03/21 05:54	1
- T,4-Dillaolobelizelle (Sall)	90		70 - 730				11/01/21 11.00	11/03/21 03.34	

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

	Method: 8015 NM -	- Diesel Range	Organics	(DRO)	(GC)
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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

Eurofins Xenco, Carlsbad

11/10/2021

Matrix: Solid

Lab Sample ID: 890-1502-13

# **Client Sample Results**

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	omatography -	Soluble							
						_		A II	D:: F
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-14 (6) Lab Sample ID: 890-1502-14

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

Diesel Range Organics (Over

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

Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Ra	ange 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 F	Range 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		11/02/21 11:44	11/03/21 17:22	1

MDL Unit

mg/Kg

Prepared

11/02/21 11:44

Analyzed

11/03/21 17:22

Result Qualifier

<50.0 U

C10-C28) Oll 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-Terphenvl	123		70 - 130		11/02/21 11:44	11/03/21 17:22	1

50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	4220	F1	25.0		mg/Kg			11/07/21 07:13	5

Lab Sample ID: 890-1502-16

# **Client Sample Results**

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

	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	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:05	11/03/21 06:55	1
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	1
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 Fa
4-Bromofluorobenzene (Surr)	110		70 - 130				11/01/21 11:05	11/03/21 06:55	-
1,4-Difluorobenzene (Surr)	82		70 - 130				11/01/21 11:05	11/03/21 06:55	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	-
Analyte	Result	Qualifier	RL	MDL	Unit	D			
T. I. I. T. D. I.							Prepared	Analyzed	
Total TPH	<49.8	U	49.8		mg/Kg	=	Frepareu	11/05/21 13:50	
Total TPH  Method: 8015B NM - Diesel Rang							Frepareu		
- <sup></sup> -	ge Organics (D			MDL	mg/Kg		Prepared		
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC) Qualifier	49.8		mg/Kg			11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC) Qualifier	49.8		mg/Kg		Prepared	11/05/21 13:50  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <49.8	RO) (GC) Qualifier U	49.8  RL 49.8		mg/Kg  Unit mg/Kg		Prepared 11/02/21 11:44	11/05/21 13:50  Analyzed  11/03/21 17:42	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	49.8  RL 49.8  49.8		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 17:42  11/03/21 17:42	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	49.8 RL 49.8 49.8 49.8		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 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
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 <49.8 <49.8 <49.8	RO) (GC) Qualifier U	49.8  RL 49.8  49.8  49.8  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 17:42 11/03/21 17:42 11/03/21 17:42 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 <49.8 <49.8 <49.8	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		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
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  <49.8  <49.8  <49.8   **Recovery  100  113  omatography -	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		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** 

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Client Sample ID: BH-17 (6)

Date Collected: 10/27/21 00:00

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

Matrix: Solid

Date Received: 10/29/21 12:45 Sample Depth: 6

Method: 8021B - Volatile Or	ganic Compounds	(GC)	(Continued)	)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98	70 - 130	11/01/21 11:05	11/03/21 07:16	1

ı						
	Method:	Total	RTFY	- Total	RTFY	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

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

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 11:44	11/03/21 18:03	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/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		mg/Kg		11/02/21 11:44	11/03/21 18:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Preparea	Analyzea	DII Fac
1-Chlorooctane	102		70 - 130	1	11/02/21 11:44	11/03/21 18:03	1
o-Terphenyl	113		70 - 130	1	11/02/21 11:44	11/03/21 18:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	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)

Wethou. 002 ID - Volatile Orga	inc compounds	(00)							
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
` '									

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

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 Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/05/21 13:50	1

Lab Sample ID: 890-1502-18

Lab Sample ID: 890-1502-19

**Matrix: Solid** 

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	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
C10-C28)									
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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390		24.9		mg/Kg			11/07/21 08:05	5

Client Sample ID: BH-19 (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 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
OII 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
o-Terphenyl	115		70 <sub>-</sub> 130				11/02/21 11:44	11/03/21 18:42	1

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-19 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-19

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	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

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 6

Analyte

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)			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

Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Ra	nge 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 R	tange Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 19:03	1

MDL Unit

Prepared

Analyzed

Result Qualifier

o-Terphenyl	10	S1-	70 - 130		11/02/21 11:44	11/03/21 19:03	1
1-Chlorooctane	9	S1-	70 - 130		11/02/21 11:44	11/03/21 19:03	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg	11/02/21 11:44	11/03/21 19:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg	11/02/21 11:44	11/03/21 19:03	1
(GRO)-C6-C10							

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	449		4.95		mg/Kg			11/07/21 08:20	1

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Dil Fac

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	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 Face  1  1  1  Dil Face

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

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Lab Sample ID: 890-1502-22

**Matrix: Solid** 

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Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-22

Lab Sample ID: 890-1502-23

Matrix: Solid

Client Sample ID: BH-22 (6)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 6

Method: 8021B	<ul> <li>Volatile Organic</li> </ul>	Compounds	(GC) (Continued)

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	RTFX	- Total	RTFX	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
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 (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

Surroyate	Mecovery Qualifier	Lillius	riepaieu	Allalyzeu	חוום
1-Chlorooctane	103	70 - 130	11/02/21 14:45	11/03/21 12:32	
o-Terphenyl	117	70 - 130	11/02/21 14:45	11/03/21 12:32	
_					

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

Mothod: 9021D	Volatile Organie	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 12:05	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

Mathad:	Total	RTFY -	Total R	TEY C	alculation

Analyte	Result	Qualifier	RL	MDL	Unit	I	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00401	U	0.00401		ma/Ka				11/09/21 10:40	1

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

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Lab Sample ID: 890-1502-23

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

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 12:53	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 12:53	1
C10-C28)									
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	omatography -	Soluble							
	Popult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quanno			•	_		, y = 0 a.	

Client Sample ID: BH-24 (6) Lab Sample ID: 890-1502-24 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 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
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	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		11/02/21 14:45	11/03/21 13:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 13:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				11/02/21 14:45	11/03/21 13:14	1
o-Terphenyl	123		70 <sub>-</sub> 130				11/02/21 14:45	11/03/21 13:14	1

Job ID: 890-1502-1

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-Chloroctane 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

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230 Lab Sample ID: 890-1502-24

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 (Digentification (Dig	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	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-27

11/10/2021

Job ID: 890-1502-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-27 (15) Lab Sample ID: 890-1502-27

Date Collected: 10/27/21 00:00 Matrix: Solid Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic	Compounds (G	C) (	Continued)
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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: To	tal RTFY -	Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	ma/Ka			11/09/21 10:40	1

Mothod: 2015 NM - Diocol	Pango Organice (DPO) (CC)

Analyte		Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 U	J	49.8	r	ma/Ka			11/05/21 13:50	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	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 14:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 14:18	1
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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105	70 - 130	11/02/21 14:45	11/03/21 14:18	1
o-Terphenyl	120	70 - 130	11/02/21 14:45	11/03/21 14:18	1

Method: 300.0	) - Anions, Io	n Chromatograp	hy - 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

Method: 8021B -	Volatile	Organia	Compounds	(CC)
i wietiiou, ouz ib •	voiatile	Oruanic v	Julibualias	1001

iic compounds (	(GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
121		70 - 130				11/01/21 12:05	11/02/21 20:38	1
104		70 - 130				11/01/21 12:05	11/02/21 20:38	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 RTF	X - 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
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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

Lab Sample ID: 890-1502-28

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)									
OII 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
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		11/02/21 14:45	11/03/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 15:00	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				11/02/21 14:45	11/03/21 15:00	1
o-Terphenyl	128		70 - 130				11/02/21 14:45	11/03/21 15:00	1

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 Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		4.97		mg/Kg			11/07/21 10:33	1

Lab Sample ID: 890-1502-30 Client Sample ID: BH-30 (15) **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	<0.00201	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

Iotal 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	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1
_ 		<b>-</b> 0. (00)							
Method: 8015B NM - Diesel Ra	ange Organics (Di	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
(GRO)-C6-C10									

C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	11/02/21 14:45	11/03/21 15:21	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130		11/02/21 14:45	11/03/21 15:21	1
o-Terphenvl	136	S1+	70 - 130		11/02/21 14:45	11/03/21 15:21	1

49.9

mg/Kg

11/02/21 14:45

11/03/21 15:21

<49.9 U

Method: 300.0 - Anions, Ion Chromat	ography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		5.00		mg/Kg			11/07/21 10:56	1

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Diesel Range Organics (Over

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	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	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
_	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fac
Analyte		Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH	Result <49.9  ge Organics (Dige Result )	Qualifier U RO) (GC) Qualifier		MDL	mg/Kg	D	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			11/05/21 13:50	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9  ge Organics (Dige Result )	Qualifier U  RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	11/05/21 13:50  Analyzed	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over		Qualifier U  RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg  Unit mg/Kg		Prepared 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 16:03	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		Prepared 11/02/21 14:45 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 16:03  11/03/21 16:03	1 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	Qualifier 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 14:45 11/02/21 14:45	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 16:03	Dil Fac  1  1  Dil Fac  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	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 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 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) 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 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45  Prepared 11/02/21 14:45	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  1  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  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 14:45 11/02/21 14:45 11/02/21 14:45  Prepared 11/02/21 14:45	Analyzed 11/03/21 16:03 11/03/21 16:03 11/03/21 16:03 Analyzed 11/03/21 16:03	1 1 1 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	

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Lab Sample ID: 890-1502-32

Matrix: Solid

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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 Or	ganic Compounds	(GC) (Continued)
Michigal COLID Volume Of	gaine compounds	(GG) (GG) (GG)

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

Method:	Total	RTFX	- Total	RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Р	repared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg				11/09/21 10:40	1

l .		
Mothod: 904E NM Dia	sel Range Organics (DRO) (GC)	١
INICITIOU. OUTS ININI - DIC	sei Kange Organics (DKO) (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 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 <sub>l</sub>	ohy - Soluble

Analyte	Result Qualifier	RL	MDL I	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

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

Michiga. 002 1D - Volunic Orga	ine compounds	(30)							
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 23:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/02/21 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				11/01/21 12:05	11/02/21 23:48	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/01/21 12:05	11/02/21 23:48	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	į	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9		mg/Kg				11/05/21 13:50	1

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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

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	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	1
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	1
C10-C28)	<49.9		49.9		m a/l/ a		11/02/21 14:45	11/03/21 16:46	
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	1
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

Lab Sample ID: 890-1502-34 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
Mothod: 2015 NM Diocol Pango	Organics (DB)	O) (GC)							
•	•	, ,	RL	MDL	Unit	D	Prepared	Analvzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fac
Analyte Total TPH	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (Di	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u> </u>	<u> </u>	11/05/21 13:50	1
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>	Prepared	11/05/21 13:50 Analyzed	1 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	11/05/21 13:50 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	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 14:45 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 17:07  11/03/21 17:07	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	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 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 17:07	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	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	<u> </u>	Prepared 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared	Analyzed 11/03/21 17:07 11/03/21 17:07 11/03/21 17:07 Analyzed	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)	Result	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 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/03/21 17:07 11/03/21 17:07 11/03/21 17:07	Dil Fac

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Matrix: Solid

Released to Imaging: 9/1/2023 3:31:23 PM

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 Chromatography - 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 Fa
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	
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	
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/03/21 00:29	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	127		70 - 130				11/01/21 12:05	11/03/21 00:29	
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:05	11/03/21 00:29	
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
_		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 Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U				<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			11/05/21 13:50	
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	50.0		mg/Kg		Prepared	11/05/21 13:50  Analyzed	
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)		Qualifier U  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 17:28	
Analyte Total TPH	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 11/02/21 14:45 11/02/21 14:45	11/05/21 13:50  Analyzed 11/03/21 17:28 11/03/21 17:28	
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 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	Analyzed 11/03/21 17:28 11/03/21 17:28 11/03/21 17:28	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   <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 11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared	Analyzed 11/03/21 17:28 11/03/21 17:28 11/03/21 17:28 Analyzed	Dil Fa
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 S1+	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 17:28  11/03/21 17:28  11/03/21 17:28  Analyzed  11/03/21 17:28	Dil Fa

11/07/21 11:33

5.05

mg/Kg

333 F1

Chloride

Lab Sample ID: 890-1502-36

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	X 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
Analyte Total TPH		Qualifier	RL 49.8	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/05/21 13:50	Dil Fac
				MDL		— –	Prepared		DII Fac
					5 5				
Method: 8015B NM - Diesel Rang									'
memeral out out in Dissol Rung	ge Organics (D	RO) (GC)							'
Analyte		RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/02/21 14:45	Analyzed 11/03/21 17:49	·
Analyte Gasoline Range Organics (GRO)-C6-C10	Result	Qualifier U		MDL		<u>D</u>			Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result   <49.8	Qualifier U	49.8	MDL	mg/Kg	<u>D</u>	11/02/21 14:45	11/03/21 17:49	Dil Fac
	Result   <49.8	Qualifier U	49.8	MDL	mg/Kg	<u>D</u>	11/02/21 14:45	11/03/21 17:49	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	Qualifier U U U	49.8	MDL	mg/Kg	<u>D</u>	11/02/21 14:45	11/03/21 17:49 11/03/21 17:49	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 U U	49.8 49.8 49.8	MDL	mg/Kg	<u> </u>	11/02/21 14:45 11/02/21 14:45 11/02/21 14:45	11/03/21 17:49 11/03/21 17:49 11/03/21 17:49	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 U U	49.8 49.8 49.8 <b>Limits</b>	MDL	mg/Kg	<u>D</u>	11/02/21 14:45 11/02/21 14:45 11/02/21 14:45 Prepared	11/03/21 17:49 11/03/21 17:49 11/03/21 17:49 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	Result	Qualifier  U  U  Qualifier	49.8 49.8 49.8  Limits 70 - 130	MDL	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	11/03/21 17:49 11/03/21 17:49 11/03/21 17:49 Analyzed 11/03/21 17:49	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	49.8 49.8 49.8  Limits 70 - 130		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	11/03/21 17:49 11/03/21 17:49 11/03/21 17:49 Analyzed 11/03/21 17:49	Dil Fac

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	

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: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 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 Compound	s (GC) (Continued)
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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	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg	 	_	11/09/21 10:40	1

Method: 8015 NM -	Diesel Rand	ne 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

Mothod: 004ED	NM - Diesel Ran	as Orasnico	
Method: outob	NIVI - Diesei Kan	ue Organics	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 14:45	11/03/21 18:11	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane	95	70 - 130	
o-Terphenyl	112	70 - 130	

o-Terphenyl	112	70 - 130	11/02/21 14:45	11/03/21 18:11	1
Method: 300.0 - Anions, Ion Chromat	ography - Soluble				

Allalyte	Result	Qualifier	KL	WIDE OTHE	U	Frepareu	Allalyzeu	DII Fac
Chloride	4260		24.8	mg/Kg			11/07/21 12:02	5

Client Sample ID: BH-38 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

mountain colline and an area		(/							
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	1	mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Ethylbenzene	<0.00200	U	0.00200	1	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	1	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 - 130				11/01/21 12:05	11/03/21 01:30	1

Mothod:	Total RT	Y - Total I	RTEY Ca	lculation

Analyte	Result	Qualifier	RL	MDL	Unit	ı	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)
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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

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-38

11/02/21 14:45 11/03/21 18:32

Lab Sample ID: 890-1502-39

Matrix: Solid

Client Sample ID: BH-38 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

_ Method: 8015B NM - Diesel Rang	vo Organico (D	PO) (CC)							
Analyte		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

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2030	24.9	mg/Kg			11/07/21 12:25	5

70 - 130

Client Sample ID: BH-39 (15)

Date Collected: 10/27/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

o-Terphenyl

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)	117		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 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)							
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	Dil Fac
Analyte	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9  ge Organics (Di	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		
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			11/05/21 13:50	1
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		Prepared	11/05/21 13:50 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		Prepared 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 18:53	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		Prepared 11/02/21 14:45 11/02/21 14:45	11/05/21 13:50  Analyzed  11/03/21 18:53  11/03/21 18:53	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	49.9  RL 49.9  49.9  49.9		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 18:53 11/03/21 18:53 11/03/21 18:53	1 Dil Fac

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-39 (15)

Lab Sample ID: 890-1502-39 Matrix: Solid

Date Received: 10/29/21 12:45 Sample Depth: 15

Date Collected: 10/27/21 00:00

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3300		25.0		mg/Kg			11/07/21 12:32	5

Client Sample ID: BH-40 (15) Lab Sample ID: 890-1502-40

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	<0.00200	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	· · · · · · · · ·
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
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	•	O) (GC) Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			49.8	MIDL	mg/Kg		Frepareu	11/05/21 13:50	1
Total IFTI	<b>~43.0</b>	U	49.0		mg/kg			11/03/21 13:30	'
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 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
	110		70 - 130				11/02/21 14:45	11/03/21 19:15	1
o-Terphenyl									
o-Terphenyl Method: 300.0 - Anions, Ion Chro		Soluble							
	omatography -	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Released to Imaging: 9/1/2023 3:31:23 PM

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 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	Organica (DD)	0) (CC)							
Welliou. 60 13 NW - Diesel Kange	Organics (DK)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result   <49.9		<b>RL</b> 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	
	<49.9	U		MDL		<u>D</u>	Prepared		
Total TPH	<49.9 ge Organics (D	U				<u>D</u>	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<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	<49.9  ge Organics (Di	COO (GC) Qualifier U	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>&lt;49.9 ge Organics (D)     Result     &lt;49.9</pre>	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 (Display="2">Result <49.9	RO) (GC) Qualifier U	49.9  RL 49.9  49.9		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 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 (Display="2">Result <49.9 <49.9	Qualifier 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	Qualifier 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	CO) (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 <80.9 %Recovery 96 95 omatography -	CO) (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 11:27 11/03/21 11:27 11/03/21 11:27 Analyzed 11/03/21 11:27	·

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	

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Lab Sample ID: 890-1502-42

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Client Sample ID: BH-42 (15)

Date Collected: 10/27/21 00:00

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Lab Sample ID: 890-1502-42

Matrix: Solid

Date Received: 10/29/21 12:45 Sample Depth: 15

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
--------------------------------------------	------------------

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	

#### 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

П				
ı	Method: 8015 NM	Diocal Rand	no Organice	(DRO) (GC)

Analyte	Result Qualifi	ier 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 16:07	11/03/21 12:32	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surroyate	Mecovery Qualifier	Lillia	riepaieu	Allalyzeu	DII Fac
1-Chlorooctane	101	70 - 130	11/02/21 16:07	11/03/21 12:32	1
o-Terphenyl	105	70 - 130	11/02/21 16:07	11/03/21 12:32	1
_					

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Quali		MDL Unit	D	Prepared	Analyzed	Dil Fac
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

Method: 8021B - Volatile Organic Co	mnolinas ((=(.)

		()							
Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	r	mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Toluene	<0.00198	U	0.00198	r	mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Ethylbenzene	<0.00198	U	0.00198	r	mg/Kg		11/01/21 12:11	11/04/21 03:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	r	mg/Kg		11/01/21 12:11	11/04/21 03:14	1
o-Xylene	<0.00198	U	0.00198	r	mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Xylenes, Total	<0.00396	U	0.00396	r	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: Tot	al RTFY -	Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00396	U	0.00396		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

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Lab Sample ID: 890-1502-43

Lab Sample ID: 890-1502-43

Lab Sample ID: 890-1502-44

Matrix: Solid

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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-44 (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 12:11	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	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	<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		11/02/21 16:07	11/03/21 13:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 13:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				11/02/21 16:07	11/03/21 13:14	1

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Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-44

Client Sample ID: BH-44 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

21 00:00 M	atrix: Solid	
21 12:45		

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride4655.00mg/Kg11/07/21 13:091

Client Sample ID: BH-45 (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	<0.00200	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	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	
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	
1,4-Difluorobenzene (Surr)	203	S1+	70 - 130				11/01/21 12:11	11/04/21 04:08	
Method: Total BTEX - Total BTE	( 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	Organics (DR		0.0000		mg/rtg			11/03/21 10.40	
Method: 8015 NM - Diesel Range Analyte	Result	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
: Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		Dil Fa
Method: 8015 NM - Diesel Range Analyte	Result <49.8  ge Organics (Di	O) (GC) Qualifier U	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Method: 8015 NM - Diesel Range Analyte Total TPH	Result <49.8  ge Organics (D	Qualifier U RO) (GC) Qualifier	RL		Unit	<u>D</u>	Prepared	Analyzed 11/05/21 13:50 Analyzed	
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Result <49.8  ge Organics (Di	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg			Analyzed 11/05/21 13:50	Dil Fa
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.8  ge Organics (D	Qualifier U  RO) (GC) Qualifier U	RL		Unit mg/Kg Unit		Prepared	Analyzed 11/05/21 13:50 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	Result <49.8  ge Organics (Di Result <49.8	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.8 ————————————————————————————————————		Unit mg/Kg  Unit mg/Kg		Prepared 11/02/21 16:07	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:36	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)	Result   <49.8	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.8  RL 49.8  49.8		Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/02/21 16:07	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:36 11/03/21 13:36	
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   <49.8	Qualifier U  RO) (GC) Qualifier U  U  U  U	RL 49.8  RL 49.8  49.8  49.8		Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/02/21 16:07 11/02/21 16:07	Analyzed 11/05/21 13:50  Analyzed 11/03/21 13:36 11/03/21 13:36	_ Dil Fa

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Analyzed

11/08/21 04:30

RL

4.95

MDL Unit

mg/Kg

D

Prepared

Result Qualifier

284 F1

Dil Fac

Analyte

Chloride

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
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			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	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 13:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 13:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/02/21 16:07	11/03/21 13:57	1
o-Terphenyl	107		70 - 130				11/02/21 16:07	11/03/21 13:57	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method. 300.0 - Amons, fon Chire	omatograpity -								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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	1

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Lab Sample ID: 890-1502-47

Released to Imaging: 9/1/2023 3:31:23 PM

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Lab Sample ID: 890-1502-47

Lab Sample ID: 890-1502-48

**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-47 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
Method. 002 1D - Volatile Organic Compounds	(OO) (Oolillillided)

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

Method: 8015 NM	l - Diesel Range O	Prognics (DRO) (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	Range Oro	anice (	DRO)	(GC)
Methou. ou 136	MINI - DIESEI	Range Org	jailius (	DRU)	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 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
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
. <del></del>	· <del></del>						<del></del>		

Surroyate	Mecovery Qualifier	Lililis	гтерат	eu Allalyzeu	DII Fac
1-Chlorooctane	98	70 - 130	11/02/21	16:07 11/03/21 14:18	1
o-Terphenyl	102	70 - 130	11/02/21	16:07 11/03/21 14:18	1
_					

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Q	Qualifier	RL	MDL	Unit	ı	D	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

Mothod: 9021D	Volatile Organie	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

motification could be seen as a seen		()							
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 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		ma/Ka			11/09/21 10:40	1

	Method: 8015 NM -	- Diesel Range	Organics	(DRO)	(GC)
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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

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

Lab Sample ID: 890-1502-48

Lab Sample ID: 890-1502-49

Matrix: Solid

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

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 16:07	11/03/21 14:39	1
Diesel Range Organics (Over C10-C28)	75.2		50.0		mg/Kg		11/02/21 16:07	11/03/21 14:39	1
OII 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	111		70 - 130				11/02/21 16:07	11/03/21 14:39	1
o-Terphenyl	111		70 <sub>-</sub> 130				11/02/21 16:07	11/03/21 14:39	1

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3050		24.9		mg/Kg			11/08/21 05:08	5

Client Sample ID: BH-49 (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 12:11	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)							
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	<b>RL</b>	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	
Analyte	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9  ge Organics (D	Qualifier U				<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	_		11/05/21 13:50	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 Result	Qualifier U  RO) (GC) Qualifier U	49.9		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	Result <49.9  ge Organics (D  Result <49.9	Qualifier 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 15:00	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	_	Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed 11/03/21 15:00 11/03/21 15:00	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	Qualifier 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 15:00 11/03/21 15:00 11/03/21 15:00	Dil Fac  Dil Fac  1  Dil Fac  1  1  Dil Fac  1

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Lab Sample ID: 890-1502-49

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 Chromatography - 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)

Date Collected: 10/27/21 00:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.0214		0.00198		mg/Kg		11/01/21 12:11	11/04/21 06:24	1
Toluene	0.0176		0.00198		mg/Kg		11/01/21 12:11	11/04/21 06:24	1
Ethylbenzene	0.00625		0.00198		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				Prepared	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	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.103		0.00396		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	<49.9	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 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
o-Terphenyl	119		70 - 130				11/02/21 16:07	11/03/21 15:21	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1330		4.99		mg/Kg			11/08/21 05:39	

Lab Sample ID: 890-1502-51

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)	112		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	( 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	•	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 16:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 16:03	1
o-Terphenyl	106		70 - 130				11/02/21 16:07	11/03/21 16:03	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
method. 000.0 - Amons, for one	Jillatog. upily								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	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

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Lab Sample ID: 890-1502-52

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11/10/2021

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-52 (15) Lab Sample ID: 890-1502-52 Date Collected: 10/27/21 00:00

Matrix: Solid

Sample Depth: 15

Date Received: 10/29/21 12:45

Method: 8021B - Volatile Or	ganic Compo	ounds (GC)	(Continued)
motifical coals Tolatile Ci	gaine comp.	Julius (55)	( Continuou,

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: Tot	al BTEX - Tota	al BTEX Ca	alculation
mounou. Tot	u. D. L		aiouiutioii

Analyte	Result	Qualifier	RL	MDL	Unit	כ	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 Quali	tier 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 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	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:24	1
Oll 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

Surroyate	Mecovery	Qualifier	Lilling		rrepareu	Allalyzeu	DII Fac
1-Chlorooctane	101		70 - 130	-	11/02/21 16:07	11/03/21 16:24	1
o-Terphenyl	103		70 - 130		11/02/21 16:07	11/03/21 16:24	1
_							

Method: 300.0 - Anions, Ion Chromatography - Soluble

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 - Volatile Organic Co	mnolinas ((=(.)

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)			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

Method: Tot	al RTFY -	Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	I	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403		ma/Ka				11/09/21 10:40	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	I	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9		mg/Kg				11/05/21 13:50	1

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Lab Sample ID: 890-1502-53

Lab Sample ID: 890-1502-53

Client: Tetra Tech, Inc. Job ID: 890-1502-1 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	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:46	1
(GRO)-C6-C10									
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) Lab Sample ID: 890-1502-54 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 12:11	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 (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 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

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

Lab Sample ID: 890-1502-54

Matrix: Solid

Method: 300.0 - Anions, Ion Chrom	atography -	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

**Method: Total BTEX - Total BTEX Calculation** 

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 12:11	11/04/21 09:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 09:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:11	11/04/21 09:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:11	11/04/21 09:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:11	11/04/21 09:54	1
1,4-Difluorobenzene (Surr)	191	S1+	70 - 130				11/01/21 12:11	11/04/21 09:54	1

Total BTEX	<0.00398	U	0.00398		mg/Kg			11/09/21 10:40	1
– Method: 8015 NM - Diesel Range O	rganics (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 Range	Organics (D	RO) (GC)							

MDL Unit

Prepared

Analyzed

Result Qualifier

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 17:28	1
<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 17:28	1
<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 17:28	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
99		70 - 130				11/02/21 16:07	11/03/21 17:28	1
99		70 - 130				11/02/21 16:07	11/03/21 17:28	1
	<50.0 <50.0 <50.0 <b>%Recovery</b> 99		<50.0 U 50.0 <50.0 U 50.0 <50.0 U 50.0 <50.0 U 50.0 $%Recovery 99 Qualifier Limits 70 - 130$	<50.0 U 50.0  <50.0 U 50.0  <50.0 U 50.0  <50.0 U 50.0   **Recovery Qualifier Limits 70 - 130	<50.0	<50.0	<50.0	<50.0

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4680	F1	24.9		mg/Kg			11/08/21 06:17	5

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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	X 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
Analyte Total TPH		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH									
-	<49.8	U	49.8		mg/Kg			11/05/21 13:50	1
- -			49.8		mg/Kg				
Method: 8015B NM - Diesel Ran	ge Organics (D		49.8 RL	MDL			Prepared		
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	RO) (GC) Qualifier		MDL		D	Prepared 11/02/21 16:07	11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>		11/05/21 13:50 Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.8	RO) (GC) Qualifier U	RL 49.8	MDL	Unit mg/Kg	<u>D</u>	11/02/21 16:07	11/05/21 13:50  Analyzed  11/03/21 17:49	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.8	RO) (GC) Qualifier U	RL 49.8	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 16:07 11/02/21 16:07	11/05/21 13:50  Analyzed 11/03/21 17:49 11/03/21 17:49	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 <49.8 <49.8	RO) (GC) Qualifier U	RL 49.8 49.8 49.8	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07	Analyzed 11/03/21 17:49 11/03/21 17:49 11/03/21 17:49	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 <49.8 <49.8 <49.8	RO) (GC) Qualifier U	## ## ## ## ## ## ## ## ## ## ## ## ##	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared	Analyzed 11/03/21 17:49 11/03/21 17:49 11/03/21 17:49 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 <49.8 <49.8 <49.8	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>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed 11/03/21 17:49 11/03/21 17:49  11/03/21 17:49  Analyzed 11/03/21 17:49	1
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  <49.8  <49.8  <49.8   **Recovery  106  113  omatography -	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>	11/02/21 16:07 11/02/21 16:07 11/02/21 16:07 Prepared 11/02/21 16:07	11/05/21 13:50  Analyzed 11/03/21 17:49 11/03/21 17:49  11/03/21 17:49  Analyzed 11/03/21 17:49	Dil Fac

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

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Lab Sample ID: 890-1502-57

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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 -	Volatile Ord	anic Com	nounds (	GC) (	(Continued)	
Method. 002 1D	Volatile Oit	Janiic Com	poullus (	$\circ\circ$	(Continueu)	

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

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	<0.00403	U	0.00403	mg/Kg			11/09/21 10:40	1

Mothod: 8015 NM -	Diosal Panga	Organice	(DRO) (GC)

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 - Diesel	Range Ord	anics i	(DRO)	(GC)
Mictiliou. 00 10D	ITIN - DICSCI	italige Oig	Julii Co	(DIXO)	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		11/02/21 16:07	11/03/21 18:11	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
C10-C28) OII 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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/02/21 16:07	11/03/21 18:11	1
o-Terphenyl	102		70 - 130	11/02/21 16:07	11/03/21 18:11	1
_						

Method: 300	.0 - Anions, Ion	Chromatograph	y - 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	Volatile Organie	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

motrical collis	o oompoundo (	()							
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)			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: Tot	al 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	I	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9		mg/Kg				11/05/21 13:50	1

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Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-58

Client Sample ID: BH-58 (15) Date Collected: 10/27/21 00:00 Matrix: Solid Date Received: 10/29/21 12:45

Sample Depth: 15

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		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
Chloride	4190		25.1		mg/Kg			11/08/21 07:11	5

Client Sample ID: BH-59 (15) Lab Sample ID: 890-1502-59 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		11/04/21 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	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 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
o-Terphenyl	110		70 - 130				11/02/21 16:07	11/03/21 18:53	1

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-59 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-59

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	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) Lab Sample ID: 890-1502-60 **Matrix: Solid** 

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 15

Analyte

(GRO)-C6-C10

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 01:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/04/21 11:11	11/05/21 01:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/04/21 11:11	11/05/21 01:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/04/21 11:11	11/05/21 01:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	13	S1-	70 - 130				11/04/21 11:11	11/05/21 01:51	1
1,4-Difluorobenzene (Surr)	230	S1+	70 - 130				11/04/21 11:11	11/05/21 01:51	1

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	<49.8	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	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 19:15	1

MDL Unit

Prepared

Analyzed

Result Qualifier

Diesel Range Organics (Over C10-C28)	<49.8 U	49.8	mg/Kg	11/02/21 16:07	11/03/21 19:15	1
Oll Range Organics (Over C28-C36)	<49.8 U	49.8	mg/Kg	11/02/21 16:07	11/03/21 19:15	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	88	70 - 130		11/02/21 16:07	11/03/21 19:15	1
o-Terphenvl	87	70 - 130		11/02/21 16:07	11/03/21 19:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	1150		4.95		mg/Kg			11/08/21 07:26	1

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	1
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 Fac
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 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
Analyte	Result	Qualifier	RL	MDL	Unit	D	Duamanad		
<u> </u>				IVIDE	Oilit	ט	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	- INDL	mg/Kg	_ =	Prepared	11/05/21 13:50	
Total TPH - - Method: 8015B NM - Diesel Ranç									
- <sup></sup> -	ge Organics (D			MDL	mg/Kg	<u>D</u>	Prepared		1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)	49.9		mg/Kg	=		11/05/21 13:50	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D Result <49.9	RO) (GC) Qualifier	49.9		mg/Kg	=	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 UF1F2 UF1F2	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/03/21 10:38	11/05/21 13:50  Analyzed  11/03/21 21:06	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 UF1 F2 UF1 F2	49.9  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 11/03/21 10:38	11/05/21 13:50  Analyzed  11/03/21 21:06  11/03/21 21:06	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 <49.9	RO) (GC) Qualifier UF1 F2 UF1 F2	49.9  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 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  1  1  Dil Fac  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 <49.9 <49.9 <49.9 %Recovery	Qualifier UF1F2 UF1F2 UGUALIFIER	49.9  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 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
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 **Recovery**  50  34	RO) (GC) Qualifier U F1 F2 U F1 F2 U Qualifier S1- S1-	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg	=	Prepared 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
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 50 34  omatography -	RO) (GC) Qualifier U F1 F2 U F1 F2 U Qualifier S1- S1-	49.9  RL 49.9  49.9  49.9  Limits 70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg	=	Prepared 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  Dil Fac  1  Dil Fac  1  Dil Fac  1  Dil Fac

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

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Lab Sample ID: 890-1502-62

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Lab Sample ID: 890-1502-62

Lab Sample ID: 890-1502-63

**Matrix: Solid** 

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	Organic Con	npounds (GC	(Continued)
	g	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, (

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

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	<0.00403	U	0.00403		mg/Kg			11/09/21 10:40	1

Method: 8015 NM	l - Diesel Range O	Prognics (DRO) (GC)

Analyte	Result Qualifi	ier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			11/05/21 13:50	1

11 (I COATED NO.		•	(DDO)	
Method: 8015B NN	⊢- Diesel Range	Organics	(DKO) (	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	11/03/21 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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	DII Fac
1-Chlorooctane	93		70 - 130	11/03/21 10:38	11/03/21 22:16	1
o-Terphenyl	90		70 - 130	11/03/21 10:38	11/03/21 22:16	1

# Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte		alifier RL	MDL Unit	D	Prepared	Analyzed	Dil 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

Method: 8021B - Volatile Organic Co	mnolinas ((=(.)

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

Method: Tot	al RTFY -	Total RTFY	Calculation

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

	Method: 8015 NM - Diesel	Range Organics (DRO	) (GC)
ı	Michiga. 00 to 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

**Matrix: Solid** 

Lab Sample ID: 890-1502-63

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									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 22:39	1
C10-C28)									
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) Lab Sample ID: 890-1502-64

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	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 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

Lab Sample ID: 890-1502-64

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

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

Method: 300.0 - Anions, Ion Chrom	natography -	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)

Date Collected: 10/27/21 00:00

Lab Sample ID: 890-1502-65

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	<0.00198	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	1
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 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	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		11/03/21 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
OII 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 Chr	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride		F1	4.99		mg/Kg			11/08/21 08:58	1

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 —	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	

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Lab Sample ID: 890-1502-67

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Lab Sample ID: 890-1502-67

Lab Sample ID: 890-1502-68

**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-67 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Vol	atile Organic Cor	npounds (GC	(Continued)
momous coasts to	atilo organio coi		, ( <b>-</b>

Surrogate	%Recovery Qua	alifier 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 BTEX	<0.00397	U	0.00397		mg/Kg			11/09/21 10:40	1

Math	nod: 8015 NM	Discol Do	nas Orasni	ica (DDO)	(CC)
weu	IUU. OU I Ə INIVI	- Diesei Ra	nue Organi	ICS (DRU)	1001

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 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		11/03/21 10:38	11/04/21 00:02	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 00:02	1
C10-C28)									
OII 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
1-Chlorooctane	102		70 - 130				11/03/21 10:38	11/04/21 00:02	1

1-Chlorooctane	102	70 - 13
o-Terphenyl	110	70 - 13

o-Terphenyl	110	70 - 130	11/03/21 10:38	11/04/21 00:02	1	
Method: 300.0 - Anions, Ion Chromatograp	hv - 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 - Volatile 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 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

### **Method: Total BTEX - Total BTEX 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
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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

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-68 (15)

Lab Sample ID: 890-1502-68

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Matrix: Solid

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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			25.2		mg/Kg			11/08/21 09:36	5

Lab Sample ID: 890-1502-69 Client Sample ID: BH-69 (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 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	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		11/03/21 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
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 00:44	,
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 <sub>-</sub> 130				11/03/21 10:38	11/04/21 00:44	1

Lab Sample ID: 890-1502-69

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Client Sample ID: BH-69 (15)

Date Collected: 10/28/21 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	632		4.99		mg/Kg			11/08/21 09:44	1

Client Sample ID: BH-70 (15)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-70

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 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 Sample Results**

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 BTE	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
Analyte Total TPH		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TDLI									
10(d) 1FF1 -	<49.9	U	49.9		mg/Kg			11/05/21 13:50	
- -			49.9		mg/Kg			11/05/21 13:50	
: Method: 8015B NM - Diesel Ran	ge Organics (D		49.9 RL	MDL			Prepared	11/05/21 13:50  Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		D	Prepared 11/03/21 10:38		1
- -	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Randanalyte 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>	11/03/21 10:38	Analyzed 11/04/21 01:48	Dil Fac
Method: 8015B NM - Diesel Randanalyte 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	Dil Fac
Method: 8015B NM - Diesel Ran 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>	11/03/21 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 Face 1 1 1 Dil Face
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	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>	11/03/21 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
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	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery 99 107	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>	11/03/21 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
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	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)			70 - 130				11/01/21 12:13	11/03/21 11:00	1

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Lab Sample ID: 890-1502-72

Matrix: Solid

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Lab Sample ID: 890-1502-72

Lab Sample ID: 890-1502-73

**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-72 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic Con	noounds (GC)	(Continued)
motifical collision of gains con	ipodiido (OO)	( Continuou,

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	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	ma/Ka			11/09/21 10:40	1

Method: 8015 NM -	Diesel Rand	ne Organics	(DRO) (GC)

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 - 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		11/03/21 10:38	11/04/21 02:09	1
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		reparea	Analyzea	DII
1-Chlorooctane	115		70 - 130	11/0	03/21 10:38	11/04/21 02:09	
o-Terphenyl	128		70 - 130	11/0	03/21 10:38	11/04/21 02:09	

 $\label{eq:method:method:method:method:one} \textbf{Method: 300.0 - Anions, lon Chromatography - Soluble}$ 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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

Mothod: 9021D	Volatile Organie	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

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	RTFX	- Total	RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403		ma/Ka				11/09/21 10:40	1

	Method: 8015 NM -	- Diesel Range	Organics	(DRO)	(GC)
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Analyte		Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Total TPH		58.5		49.9		mg/Kg				11/05/21 13:50	1

Eurofins Xenco, Carlsbad

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 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

Lab Sample ID: 890-1502-73

Matrix: Solid

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 02:31	1
(GRO)-C6-C10									
Diesel Range Organics (Over	58.5		49.9		mg/Kg		11/03/21 10:38	11/04/21 02:31	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:31	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
Chloride	2790	-	24.8		mg/Kg			11/08/21 10:30	5

Lab Sample ID: 890-1502-74 Client Sample ID: BH-74 (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 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	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 10:38	11/04/21 02:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:52	1
Oll 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 <sub>-</sub> 130				11/03/21 10:38	11/04/21 02:52	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: BH-74 (15) Lab Sample ID: 890-1502-74 Date Collected: 10/28/21 00:00

Matrix: Solid

Sample Depth: 15

Date Received: 10/29/21 12:45

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	2620		25.2		mg/Kg			11/08/21 10:37	5

Client Sample ID: BH-75 (15) Lab Sample ID: 890-1502-75 Date Collected: 10/28/21 00:00

**Matrix: Solid** 

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 12:02	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 12:02	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 12:02	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:13	11/03/21 12:02	
1,4-Difluorobenzene (Surr)	79		70 - 130				11/01/21 12:13	11/03/21 12:02	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/09/21 10:40	
Mothod: 904E NM Discal Dance	Organics (DD)	O) (CC)							
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
_		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fa
Analyte Total TPH		Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH  . Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U				<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			11/05/21 13:50	
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	11/05/21 13:50 Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	Result <50.0  ge Organics (Di 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	Dil Fa
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	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	11/05/21 13:50  Analyzed  11/04/21 03:14  11/04/21 03:14	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)	Result   <50.0	Qualifier U  RO) (GC) Qualifier 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 11/03/21 10:38	Analyzed 11/04/21 03:14 11/04/21 03:14	Dil Fa

Analyzed

11/08/21 10:45

RL

4.98

MDL Unit

mg/Kg

D

Prepared

Result Qualifier

982 F1

Dil Fac

Analyte

Chloride

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

	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 12:22	
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	1
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	1
Method: Total BTEX - Total BTEX	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	Racult								
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
Total TPH	<49.8		49.8	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	
	<49.8	U		MDL		D			
Total TPH  Method: 8015B NM - Diesel Rang Analyte	<49.8  ge Organics (D	RO) (GC) Qualifier	49.8	MDL	mg/Kg	D	Prepared	11/05/21 13:50  Analyzed	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang	<49.8 ge Organics (D	RO) (GC) Qualifier	49.8		mg/Kg			11/05/21 13:50	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.8  ge Organics (D	RO) (GC) Qualifier	49.8		mg/Kg		Prepared	11/05/21 13:50  Analyzed	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	<49.8  ge Organics (Di Result <49.8	RO) (GC) Qualifier U	49.8 RL 49.8		mg/Kg  Unit mg/Kg		Prepared 11/03/21 10:38	11/05/21 13:50  Analyzed  11/04/21 03:36	Dil Fa
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		Prepared 11/03/21 10:38 11/03/21 10:38	11/05/21 13:50  Analyzed  11/04/21 03:36  11/04/21 03:36	Dil Fa
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	CONTROL (GC) Qualifier U U U	49.8 RL 49.8 49.8 49.8		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/03/21 10:38 11/03/21 10:38	Analyzed 11/04/21 03:36 11/04/21 03:36	Dil Fa
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	<49.8 ge Organics (D) Result <49.8 <49.8 <49.8 %Recovery	CONTROL (GC) Qualifier U U U	49.8  RL 49.8  49.8  49.8  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 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
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	<49.8 ge Organics (D) Result <49.8 <49.8 <49.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.8 <80.	CODE CODE CODE CODE CODE CODE CODE CODE	49.8  49.8  49.8  49.8  49.8  Limits  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 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 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 <8e>%Recovery <93 <96 omatography -	CODE CODE CODE CODE CODE CODE CODE CODE	49.8  49.8  49.8  49.8  49.8  Limits  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg		Prepared 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 Fac

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	

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Lab Sample ID: 890-1502-77

Matrix: Solid

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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.

Job ID: 890-1502-1

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 Organic Compound	s (GC) (Continued)
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Surrogate	%Recovery Qu	ualifier Lim	nits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71	70 -	. 130	11/01/21 12:13	11/03/21 12:42	1

Mothod	<b>Total BTEX</b>	Total B	TEV Ca	loulation
wetnoa:	TOTAL BIEN	Total 🗖		liculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg		_	11/09/21 10:40	1

Method: 8015 NM -	Diesal Range	Organice	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/05/21 13:50	1

Method: 8015B	NM - Diesel	Range Oro	anice (	DRO)	(GC)
Method. ou 136	MINI - DIESEI	Range Org	jailius (	DRU)	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 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

1-Uniorooctane	99	70 - 130
o-Terphenyl	105	70 - 130

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1430		24.9		mg/Kg			11/08/21 12:34	5

Client Sample ID: BH-78 (15)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

Mothod: 9021D	Volatile Organie	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
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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

Eurofins Xenco, Carlsbad

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

-h Comple ID: 000 4500 70

Client Sample ID: BH-78 (15)

Lab Sample ID: 890-1502-78

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Matrix: Solid

Sample Depth: 15

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 04:18	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				11/03/21 10:38	11/04/21 04:18	
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	1

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

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	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		11/03/21 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
o-Terphenyl	103		70 - 130				11/03/21 10:38	11/04/21 04:40	1

Lab Sample ID: 890-1502-79

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

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 Chromatography - 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)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-80

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	<0.00198	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	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 13:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 13:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				11/01/21 12:13	11/03/21 13:44	1
1,4-Difluorobenzene (Surr)	106		70 - 130				11/01/21 12:13	11/03/21 13:44	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			11/09/21 10:40	1
Analyte Total TPH		Qualifier U	49.8 —	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 11/05/21 13:50	Dil Fac
Method: 8015B NM - Diesel Rang									
Analyte		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 05:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 05:01	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 05:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				11/03/21 10:38	11/04/21 05:01	1
o-Terphenyl	122		70 - 130				11/03/21 10:38	11/04/21 05:01	1
Method: 300.0 - Anions, Ion Chro	•								
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Chloride	609		5.01		mg/Kg			11/08/21 11:54	1

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)	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			1114	_			
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9	MDL	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  Result	RO) (GC) Qualifier		MDL	mg/Kg	D	Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang	<49.9	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>c &lt;49.9 ge Organics (D) Result </pre>	U RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg	=	Prepared 11/03/21 11:37	11/05/21 13:50  Analyzed  11/04/21 11:05	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 11/03/21 11:37 11/03/21 11:37	11/05/21 13:50  Analyzed  11/04/21 11:05  11/04/21 11:05	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 11/03/21 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
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 11/03/21 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
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 91 101	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 11/03/21 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
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 91 101 comatography -	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 11/03/21 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  1  Dil Fac  1  1  Dil Fac  1  Dil Fac  1  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	1

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-82

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Job ID: 890-1502-1

Client Sample ID: BH-82 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Lab Sample ID: 890-1502-82

Lab Sample ID: 890-1502-83

**Matrix: Solid** 

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate		Qualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	83	70 - 130	11/01/21 12:16	11/03/21 18:15	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 (DRO) (GC)

Analyte	•	•	Result	Qualifier	RL	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		11/03/21 11:37	11/04/21 12:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 12:11	1
Oll 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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89	70 - 130	11/03/21 11:3	7 11/04/21 12:11	1
o-Terphenyl	102	70 - 130	11/03/21 11:3	7 11/04/21 12:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil 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: 9021D	Volatile Organie	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 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

	1,4-Dilluoroberizerie (Surr)	90	70 - 130	11/01/21 12.10	11/03/21 10.3
1	<del>-</del>				
	Method: Total BTEX - Total BTEX Calc	ulation			

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)

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

Lab Sample ID: 890-1502-84

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-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 (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:32	1
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)

Date Collected: 10/28/21 00:00

Date Received: 10/29/21 12:45

Released to Imaging: 9/1/2023 3:31:23 PM

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	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 11:37	11/04/21 12:55	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:55	1
C10-C28)									
OII 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
o-Terphenyl	105		70 - 130				11/03/21 11:37	11/04/21 12:55	1

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Client Sample ID: BH-84 (15)

Date Collected: 10/28/21 00:00

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Lab Sample ID: 890-1502-84

Matrix: Solid

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	710		4.99		mg/Kg			11/08/21 12:25	1

Client Sample ID: BH-85 (15) Lab Sample ID: 890-1502-85

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	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	
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	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/03/21 19:17	
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:16	11/03/21 19:17	1
Method: Total BTEX - Total BTEX	K 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	•	O) (GC) Qualifier	RL	MDI	Unit	D	Prepared	Anglyzad	Dil Fac
Analyte Total TPH	<del></del>		49.8	MIDL			Prepared	Analyzed	DII Fac
	<b>\49.0</b>	U	49.0		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	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:16	1
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
Surroyate			70 - 130				11/03/21 11:37	11/04/21 13:16	1
1-Chlorooctane	93								
	93 106		70 - 130				11/03/21 11:37	11/04/21 13:16	1
1-Chlorooctane	106	Soluble	70 - 130				11/03/21 11:37	11/04/21 13:16	1
1-Chlorooctane o-Terphenyl	106 omatography -	Soluble Qualifier	70 - 130 RL	MDL	Unit	<u>D</u>	11/03/21 11:37 Prepared	11/04/21 13:16  Analyzed	Dil Fac

Lab Sample ID: 890-1502-86

# **Client Sample Results**

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	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	115		70 - 130				11/01/21 12:16	11/03/21 19:37	-
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:16	11/03/21 19:37	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	
						_			
Analyte Total TDH		Qualifier	RL	MDL	Unit ma/Ka	D	Prepared	Analyzed	
Total TPH	<50.0	U	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/08/21 15:54	
Total TPH  Method: 8015B NM - Diesel Rang	<50.0	U (GC)	50.0		mg/Kg		<u> </u>	11/08/21 15:54	
Total TPH  Method: 8015B NM - Diesel Rang Analyte	<50.0  ge Organics (D  Result	RO) (GC) Qualifier	50.0		mg/Kg	<u>D</u>	Prepared	11/08/21 15:54 Analyzed	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang	<50.0	RO) (GC) Qualifier	50.0		mg/Kg		<u> </u>	11/08/21 15:54	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	CODE (GC) Qualifier U	50.0		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	<50.0  ge Organics (D)  Result  <50.0	RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 13:38	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 11/03/21 11:37 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 13:38  11/04/21 13:38	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 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 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 (D  Result  <50.0  <50.0  <80.0  %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 11/03/21 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
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 <8ecovery 93 110	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 11/03/21 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
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 <8ecovery 93 110 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 11/03/21 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	

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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 - Volatile Or	ganic Compounds	(GC) (Continued)
Michigal COLID Volume Of	gaine compounds	(GG) (GG) (GG)

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	RTFX	- Total	RTFX	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) (GC)
----------------------------------------------------

Analyte	Result Quali	fier 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 - Diese	I Range Organics (D	RO) (GC)
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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	<49.8	11	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:59	1
Diesel Range Organics (Over C10-C28)	<b>\49.0</b>	U	49.6		mg/Kg		11/03/21 11.37	11/04/21 13:39	ı
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	701 CCOVETY	Quanner	Lillits	rrepareu	Allalyzeu
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 Qu	ıalifier RL	MDL U	Jnit D	Prepared	Analyzed	Dil Fac
Chloride	1500	5.00	m	ng/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	Volatile Organie	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

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

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)
ı	Michiga. 00 to 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			11/08/21 15:54	1

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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	=0.0		=0.0				44/00/04 44 07	44/04/04 44 00	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 14:20	1
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	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
					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 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 12:16	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	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	<49.9	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	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

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

Prepared

11/03/21 11:37

Analyzed

11/04/21 15:03

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

(GRO)-C6-C10

Diesel Range Organics (Over

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

Iotal BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Rang	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			11/08/21 15:54	1
Method: 8015B NM - Diesel Rar	nge Organics (D	RO) (GC)							
Analyte		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 15:03	1

C10-C28) 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

49.9

mg/Kg

<49.9 U

Method: 300.0 - Anions, Ion Chromatography - 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	
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	•
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	•
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 22:48	
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	•
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 22:48	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/03/21 22:48	
1,4-Difluorobenzene (Surr)	111		70 - 130				11/01/21 12:16	11/03/21 22:48	1
- Method: Total BTEX - Total BTEX	X 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	-
Analyte Total TPH	<b>Result</b> <49.9	Qualifier U	49.9	MDL	mg/Kg	D	Prepared	Analyzed 11/08/21 15:54	Dil Fa
Total TPH				WIDE		=	- герагеи		Dil Fat
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	•
							44/00/04 44 07		
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46	,
5 5 ·	<49.9 <49.9		49.9 49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46 11/04/21 15:46	
C10-C28)		U							Dil Fac
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9				11/03/21 11:37	11/04/21 15:46	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<49.9 <b>%Recovery</b>	U	49.9 <i>Limits</i>				11/03/21 11:37  Prepared	11/04/21 15:46  Analyzed	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<49.9  **Recovery 92 107	U <b>Qualifier</b>	49.9 <i>Limits</i> 70 - 130				11/03/21 11:37  Prepared  11/03/21 11:37	11/04/21 15:46  Analyzed  11/04/21 15:46	
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<49.9  **Recovery 92 107  omatography -	U <b>Qualifier</b>	49.9 <i>Limits</i> 70 - 130	MDL	mg/Kg	<u>D</u>	11/03/21 11:37  Prepared  11/03/21 11:37	11/04/21 15:46  Analyzed  11/04/21 15:46	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 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 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		

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD 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 Sample Depth: 0 - 6

**REMOVED FROM ANALYSIS TABLE** 

Lab Sample ID: 890-1502-92

11/03/21 11:37 11/04/21 16:07

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

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)										
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac			
Total TPH	224	49.9	ma/Ka			11/08/21 15:54				

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 16:07	1
Diesel Range Organics (Over C10-C28)	331		49.9		mg/Kg		11/03/21 11:37	11/04/21 16:07	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				11/03/21 11:37	11/04/21 16:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	1430	25.1	mg/Ko			11/07/21 02:54	5

70 - 130

Client Sample ID: SW-2 (0-6) Lab Sample ID: 890-1502-93 **Matrix: Solid** 

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

106

Sample Depth: 0 - 6

o-Terphenyl

Method: 8021B - Volatile Organic Compounds (GC)			
	Mothod: 9021D	Volatile Organie	Compounde (CC)

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 <sub>-</sub> 130				11/01/21 12:16	11/03/21 23:29	1

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

Mathadi 2045 NM Discal Danes Organica (DDO) (CC)
Method: 8015 NM - Diesel Range Organics (DRO) (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	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1

SDG: 212C-MD-02230

Client Sample ID: SW-2 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

Lab Sample ID: 890-1502-93

Matrix: Solid

Method: 8015B NM - Diesel Rang	, ,	, , ,				_			
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 16:29	1
(GRO)-C6-C10									
Diesel Range Organics (Over	74.3		49.9		mg/Kg		11/03/21 11:37	11/04/21 16:29	1
C10-C28)									
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							
		O 110	RL	MDL	Unit	D	Dropored	Analyzed	Dil Fac
Analyte	Result	Qualifier	KL	MIDE	UIIIL	U	Prepared	Allalyzeu	DII Fac

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** 

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
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 (Di	RO) (GC)							
	•	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	•	Qualifier	RL	MDL	Unit mg/Kg	D	Prepared 11/03/21 11:37	Analyzed 11/04/21 16:51	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10		Qualifier U	49.9	MDL	mg/Kg	<u> </u>	11/03/21 11:37	11/04/21 16:51	1
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	49.9	MDL	mg/Kg	<u>D</u>	11/03/21 11:37	11/04/21 16:51 11/04/21 16:51	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9   <49.9   <49.9	Qualifier U U U	49.9 49.9 49.9	MDL	mg/Kg	<u> </u>	11/03/21 11:37 11/03/21 11:37 11/03/21 11:37	11/04/21 16:51 11/04/21 16:51 11/04/21 16:51	1 1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

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

	١.

Method: 300.0 - Anions, Ion Chromatography - Soluble											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	1250		4.95		mg/Kg			11/07/21 03:24	1		

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

Result Qualifier

Sample Depth: 0 - 6

Analyte

T-4-I DTEV

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/04/21 00:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/04/21 00:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/04/21 00:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130				11/01/21 12:16	11/04/21 00:10	1
1,4-Difluorobenzene (Surr)	105		70 - 130				11/01/21 12:16	11/04/21 00:10	1

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	U	50.0		mg/Kg			11/08/21 15:54	1
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasolina Panga Organics		П	50.0		ma/Ka		11/03/21 11:37	11/04/21 17:14	

MDL Unit

Prepared

Analyzed

o-Terphenyl	107		70 - 130		11/03/21 11:37	11/04/21 17:14	1
1-Chlorooctane	90		70 - 130		11/03/21 11:37	11/04/21 17:14	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	11/03/21 11:37	11/04/21 17:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	11/03/21 11:37	11/04/21 17:14	1
(GRO)-C6-C10				99			

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1060		4.99		mg/Kg			11/07/21 03:46	1

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	
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	•
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:16	11/04/21 00:30	
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	•
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:16	11/04/21 00:30	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	129		70 - 130				11/01/21 12:16	11/04/21 00:30	
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:16	11/04/21 00:30	
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			11/09/21 10:40	
Method: 8015 NM - Diesel Range			DI	MDI	Unit	ь	Dronored	Analyzad	Dil Eo
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result   <49.8	Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/08/21 15:54	
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.8	Qualifier U RO) (GC)	49.8		mg/Kg			11/08/21 15:54	,
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte	Result <49.8  ge Organics (Dige Result )	Qualifier U RO) (GC) Qualifier	49.8		mg/Kg	<u>D</u>	Prepared	11/08/21 15:54 Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.8	Qualifier U RO) (GC) Qualifier	49.8		mg/Kg			11/08/21 15:54	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.8  ge Organics (Dige Result )	Qualifier U  RO) (GC) Qualifier U	49.8		mg/Kg		Prepared	11/08/21 15:54 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.8  ge Organics (Di Result <49.8	Qualifier U  RO) (GC) Qualifier U	49.8 RL 49.8		mg/Kg  Unit mg/Kg		Prepared 11/03/21 11:37	11/08/21 15:54  Analyzed  11/04/21 17:35	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.8	Qualifier U  RO) (GC) Qualifier U  U	49.8  RL 49.8  49.8		mg/Kg  Unit mg/Kg  mg/Kg		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	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   <49.8	Qualifier U  RO) (GC) Qualifier U  U	49.8 RL 49.8 49.8 49.8		mg/Kg  Unit mg/Kg  mg/Kg		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	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   <49.8	Qualifier U  RO) (GC) Qualifier U  U	49.8 49.8 49.8 49.8 Limits		mg/Kg  Unit mg/Kg  mg/Kg		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 Fa
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   <49.8	Qualifier 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		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
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   <49.8	Qualifier 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		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

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

Ameliate	Desuit	Qualifier	RL	MDL	Unit		Duamanad	Amalumad	Dil Fac
Analyte	Result	Qualifier	KL	MIDL	Unit	D	Prepared	Analyzed	Dii 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	1

## **Client Sample Results**

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

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
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 Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH : : Mothod: 8015B NM - Diesel Ran	988	RO) (GC)	49.9		mg/Kg			11/08/21 15:54	1
Total TPH Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	RO) (GC) Qualifier	49.9 <b>RL</b>	MDL		D	Prepared	11/08/21 15:54  Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier		MDL		<u>D</u>	Prepared 11/03/21 11:37		Dil Fac
Method: 8015B NM - Diesel Ran	ge Organics (D	Qualifier	RL	MDL	Unit	<u>D</u>	<del></del>	Analyzed	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <49.9	Qualifier U	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	11/03/21 11:37	Analyzed 11/04/21 17:56	1
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	Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/03/21 11:37	Analyzed 11/04/21 17:56 11/04/21 17:56	1
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	Qualifier U	RL 49.9 49.9 49.9	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 17:56 11/04/21 17:56 11/04/21 17:56	Dil Fac

49.8

MDL Unit

mg/Kg

Client Sample ID: SW-7 (0-6)

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Sample Depth: 0 - 6

Analyte

Chloride

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

7870

Lab Sample ID: 890-1502-98

Analyzed

11/07/21 04:01

Prepared

**Matrix: Solid** 

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	-
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/04/21 01:11	
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/04/21 01:11	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/04/21 01:11	
1,4-Difluorobenzene (Surr)	96		70 - 130				11/01/21 12:16	11/04/21 01:11	
Method: Total BTEX - Total B1	EX 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	-
Method: 8015 NM - Diesel Rar	ige Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	86.9		49.9		mg/Kg			11/08/21 15:54	

## **Client Sample Results**

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 Sample Depth: 0 - 6

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-1502-98

Matrix: Solid

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 C10-C28)	86.9		49.9		mg/Kg		11/03/21 11:37	11/04/21 18:17	1
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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

50.0

mg/Kg

11/07/21 04:08 Lab Sample ID: 890-1502-99

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45 Sample Depth: 0 - 6

Client Sample ID: SW-8 (0-6)

Chloride

**REMOVED FROM ANALYSIS TABLE** 

6430

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 01:31	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	
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	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/04/21 01:31	
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
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	651		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	49.9		mg/Kg		11/03/21 11:37	11/04/21 18:39	1
Diesel Range Organics (Over C10-C28)	651		49.9		mg/Kg		11/03/21 11:37	11/04/21 18:39	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 18:39	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	91		70 - 130				11/03/21 11:37	11/04/21 18:39	
o-Terphenyl	104		70 - 130				11/03/21 11:37	11/04/21 18:39	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 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

Lab Sample ID: 890-1502-99

**REMOVED FROM ANALYSIS TABLE** 

**REMOVED FROM** 

**ANALYSIS TABLE** 

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

Lab Sample ID: 890-1502-100

**Matrix: Solid** 

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Client Sample ID: SW-9 (0-6)

Sample Depth: 0 - 6

Surrogate

o-Terphenyl

Analyte

Chloride

1-Chlorooctane

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	
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:16	11/04/21 01:52	
Method: Total BTEX - Total BTEX Analyte Total BTEX	Result	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fa
Analyte Total BTEX	Result < 0.00399	U	RL 0.00399	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/09/21 10:40	Dil Fa
Analyte	Result <0.00399  Organics (DR	U		MDL MDL	mg/Kg	D	Prepared Prepared		Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Range	Result <0.00399  Organics (DR	U O) (GC) Qualifier	0.00399		mg/Kg	=		11/09/21 10:40	
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte	Result   <0.00399	O) (GC) Qualifier	0.00399		mg/Kg Unit	=		11/09/21 10:40  Analyzed	
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH	Result <0.00399  Organics (DR) Result <49.8  Ge Organics (D	O) (GC) Qualifier	0.00399		mg/Kg  Unit mg/Kg	=		11/09/21 10:40  Analyzed	,
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range	Result <0.00399  Organics (DR) Result <49.8  Ge Organics (D	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00399  RL 49.8	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	11/09/21 10:40  Analyzed  11/08/21 15:54	Dil Fa
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Result <0.00399  Organics (DR) Result <49.8  Ge Organics (D) Result	O) (GC) Qualifier U  RO) (GC) Qualifier U	0.00399  RL 49.8	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	11/09/21 10:40  Analyzed  11/08/21 15:54  Analyzed	Dil Fa

Limits

70 - 130

70 - 130

RL

24.8

MDL Unit

mg/Kg

%Recovery Qualifier

94

112

2870

Result Qualifier

Eurofins Xenco, Carlsbad

Analyzed

11/04/21 19:01

11/04/21 19:01

Analyzed

11/07/21 04:23

Prepared

11/03/21 11:37

11/03/21 11:37

Prepared

D

Dil Fac

Dil Fac

Method: 300.0 - Anions, Ion Chromatography - Soluble

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD 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 Sample Depth: 0 - 6

**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)			70 - 130				11/01/21 12:18	11/04/21 05:28	1
1,4-Difluorobenzene (Surr)	92		70 - 130				11/01/21 12:18	11/04/21 05:28	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			11/09/21 10:40	

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier MDL Unit Dil Fac RLPrepared Analyzed Total TPH <49.9 U 49.9 mg/Kg 11/08/21 15:54

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 *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 11:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 11:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 11:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/03/21 13:15	11/04/21 11:05	1
o-Terphenyl	100		70 - 130				11/03/21 13:15	11/04/21 11:05	1

Method: 300.0 - Anions, Ion Chrom	natography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4090	25.2	mg/Kg			11/07/21 04:30	5

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 Sample Results**

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

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 (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: 8015E	NM - Diesel	<b>Range Organics</b>	(DRO) (GC)
monioa. ou ion	THE DIGGOI	itunge organios	(5110) (50)

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

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 Chromatography - 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

Date Received: 10/29/21 12:45

Sample Depth: 10

Method: 8021B -	. Volatila	Organic (	Compounds	(GC)

Michiga. 002 1D - Volunic 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 12:18	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

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		ma/Ka			11/09/21 10:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
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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

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11/08/21 09:36 1 Lab Sample ID: 890-1502-103

**Matrix: Solid** 

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) Lab Sample ID: 890-1502-104 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	<0.00201	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

Lab Sample ID: 890-1502-104

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

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

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	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 06:50	
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:50	
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:50	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				11/01/21 12:18	11/04/21 06:50	
1,4-Difluorobenzene (Surr)	108		70 - 130				11/01/21 12:18	11/04/21 06:50	
Method: Total BTEX - Total BTEX	( Calculation								
			ъ.	MDI	Unit	_	Duamanad	Analyzad	Dil Fa
Analyte	Result	Qualifier	RL	MDL	UIIIL	D	Prepared	Analyzed	Dilla
Total BTEX	<0.00398	U	0.00398	MIDL	mg/Kg			11/09/21 10:40	
Analyte Total BTEX  Method: 8015 NM - Diesel Range Analyte	<0.00398 Organics (DR Result	U	0.00398		mg/Kg	<u>D</u>	Prepared	11/09/21 10:40 Analyzed	
Total BTEX  Method: 8015 NM - Diesel Range	<0.00398 Organics (DR	U (GC)	0.00398		mg/Kg		<u> </u>	11/09/21 10:40	Dil Fa
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH	<0.00398 Organics (DR Result 56.3	O) (GC) Qualifier	0.00398		mg/Kg		<u> </u>	11/09/21 10:40 Analyzed	Dil Fa
Total BTEX  Method: 8015 NM - Diesel Range Analyte	<0.00398 Organics (DR Result 56.3 ge Organics (D	O) (GC) Qualifier	0.00398	MDL	mg/Kg		<u> </u>	11/09/21 10:40 Analyzed	Dil Fa
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics	<0.00398 Organics (DR Result 56.3 ge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	0.00398  RL 49.8	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	11/09/21 10:40  Analyzed  11/08/21 15:54	Dil Fa
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	<0.00398  Organics (DR Result 56.3  ge Organics (D Result	O) (GC) Qualifier  RO) (GC) Qualifier	0.00398  RL 49.8	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	11/09/21 10:40  Analyzed  11/08/21 15:54  Analyzed	Dil Fa
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)	<0.00398 Organics (DR Result 56.3 ge Organics (D Result <49.8	U O) (GC) Qualifier RO) (GC) Qualifier U *1	0.00398  RL 49.8  RL 49.8	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  Prepared  11/03/21 13:15	Analyzed  Analyzed  11/08/21 15:54  Analyzed  11/04/21 13:16	Dil Fa
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)	<0.00398 Organics (DR Result 56.3 ge Organics (D Result <49.8 56.3	U O) (GC) Qualifier RO) (GC) Qualifier U *1	0.00398  RL 49.8  RL 49.8  49.8	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  Prepared  11/03/21 13:15  11/03/21 13:15	Analyzed 11/09/21 10:40  Analyzed 11/08/21 15:54  Analyzed 11/04/21 13:16 11/04/21 13:16	Dil Fa
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH  Method: 8015B NM - Diesel Range	<0.00398 Organics (DR Result 56.3 ge Organics (D Result <49.8 56.3 <49.8	U O) (GC) Qualifier RO) (GC) Qualifier U *1	0.00398  RL 49.8  RL 49.8  49.8  49.8	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  11/03/21 13:15  11/03/21 13:15	Analyzed 11/09/21 10:40  Analyzed 11/08/21 15:54  Analyzed 11/04/21 13:16 11/04/21 13:16	Dil Fa

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Analyzed

11/08/21 10:07

RL

5.00

MDL Unit

mg/Kg

D

Prepared

Result Qualifier

185

Dil Fac

Analyte

Chloride

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 BTE	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
		O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/08/21 15:54	
Total TPH	<50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Total TPH  Method: 8015B NM - Diesel Ran	<50.0	Qualifier U				<u>D</u>	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg			11/08/21 15:54	1 Dil Fac
Total TPH	<50.0 ge Organics (D	Qualifier U  RO) (GC) Qualifier U *1	50.0		mg/Kg		Prepared	11/08/21 15:54 Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  ge Organics (Di  Result  <50.0	Qualifier U  RO) (GC) Qualifier U *1	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 11/03/21 13:15	11/08/21 15:54  Analyzed  11/04/21 13:38	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	Qualifier U  RO) (GC) Qualifier U *1 U	50.0  RL  50.0  50.0		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 13:38  11/04/21 13:38	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	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 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15	Analyzed 11/04/21 13:38 11/04/21 13:38	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	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 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15 Prepared	Analyzed 11/04/21 13:38 11/04/21 13:38 11/04/21 13:38 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 <50.0 <70.0 *Recovery 102 100	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 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15  Prepared 11/03/21 13:15	11/08/21 15:54  Analyzed 11/04/21 13:38  11/04/21 13:38  Analyzed  11/04/21 13:38	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 102 100 omatography -	Qualifier U  RO) (GC) Qualifier U *1  U  Qualifier	50.0  RL 50.0  50.0  50.0  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	11/08/21 15:54  Analyzed 11/04/21 13:38  11/04/21 13:38  Analyzed  11/04/21 13:38	Dil Fac  1  Dil Fac  1  Dil Fac  1  Dil Fac  1  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

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Lab Sample ID: 890-1502-107

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**Matrix: Solid** 

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)
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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	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/09/21 10:40	1

Method: 8015 NM -	Diesal Range	Organice	(DRO) (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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U *1	49.8	mg/Kg	9 –	11/03/21 13:15	11/04/21 13:59	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg	3	11/03/21 13:15	11/04/21 13:59	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg	9	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

1-Chlorooctane	106	70 - 130	
o-Terphenyl	105	70 - 130	

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	 D	Prepared	Analyzed	Dil Fac

1170 4.96 11/08/21 10:49 Chloride mg/Kg 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

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

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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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

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

Lab Sample ID: 890-1502-109

Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-18 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

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	826		4.98		mg/Kg			11/08/21 11:10	1		

Lab Sample ID: 890-1502-110 Client Sample ID: SW-19 (15) Matrix: Solid

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 Fa
Benzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 08:32	
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 08:32	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:18	11/04/21 08:32	
1,4-Difluorobenzene (Surr)	83		70 - 130				11/01/21 12:18	11/04/21 08:32	:
Method: Total BTEX - Total BTEX	X 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	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/08/21 15:54	
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>	11/08/21 15:54	
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 *1	49.9		mg/Kg		Prepared	11/08/21 15:54  Analyzed	Dil Fa
Analyte Total TPH  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  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 15:03	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 *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 15:03  11/04/21 15:03	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 *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	11/08/21 15:54  Analyzed  11/04/21 15:03  11/04/21 15:03	Dil Fac
Analyte	Result	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 15:03 11/04/21 15:03 11/04/21 15:03 Analyzed	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   <49.9	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 15:03 11/04/21 15:03 11/04/21 15:03 Analyzed 11/04/21 15:03	Dil Fac

11/08/21 11:20

4.95

mg/Kg

1000

Chloride

Lab Sample ID: 890-1502-111

# **Client Sample Results**

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
Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier	RL	MDI	Unit	D	Drangrad	Analyzod	Dil Fac
Analyte				MDL		— Б	Prepared	Analyzed	
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 15:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:46	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:46	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/03/21 13:15	11/04/21 15:46	
o-Terphenyl	105		70 - 130				11/03/21 13:15	11/04/21 15:46	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Metriou. 300.0 - Ariions, ion Cin	Jiliatograpily -	Oolubic							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	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** 

Lab Sample ID: 890-1502-112

11/03/21 13:15 11/04/21 16:07

Lab Sample ID: 890-1502-113

**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: SW-21 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Organic (	Compounds (GC)	(Continued)
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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

#### **Method: Total BTEX - Total BTEX 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

	Method: 8015 NM -	Diesel Ran	ige Organics	(DRO) (C	iC)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	l Analyzed	Dil Fac
Total TPH	154		49.9		mg/Kg			11/08/21 15:54	1

Mothod: 904ED N	IM Discol	Dange Ore	raniaa /	DBO) /	CCI
Method: 8015B N	AIM - DIESEL	Range Org	janicə (i		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 16:07	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)									
Oll 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

Method. 300.0 - Allions, foli Cilion	ialography - Solubi	<del>C</del>							
Analyte	Result Qualifie		MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chlorida	5770	50.1		ma/Ka			11/08/21 12:02	10	

70 - 130

Client Sample ID: SW-22 (15)

Date Collected: 10/26/21 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 12:18	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

Mothod:	Total RTF	Y - Total R	TFY Calculati	on

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	I	D	Prepared	Analyzed	Dil Fac
Total TPH			<49.9	U	49.9		mg/Kg				11/08/21 15:54	1

Lab Sample ID: 890-1502-113

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD 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

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	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:29	1
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	1
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
	9240	•	49.8		mg/Kg			11/08/21 12:12	10

Client Sample ID: SW-23 (15) Lab Sample ID: 890-1502-114 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	<0.00201	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 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 10:58	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	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/03/21 13:15	11/04/21 16:51	1
o-Terphenyl	101		70 <sub>-</sub> 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

**Matrix: Solid** Date Received: 10/29/21 12:45

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 **Matrix: Solid** 

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

(GRO)-C6-C10

Diesel Range Organics (Over

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 11:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 11:42	1
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)			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

Total BTEX	<0.00398	U	0.00398		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	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 17:14	1

MDL Unit

mg/Kg

Prepared

11/03/21 13:15

Analyzed

11/04/21 17:14

Result Qualifier

<50.0 U

C10-C28) 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
1-Chlorooctane	107	70 - 130		11/03/21 13:15	11/04/21 17:14	1
o-Terphenyl	106	70 - 130		11/03/21 13:15	11/04/21 17:14	1

50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2240		25.0		mg/Kg			11/08/21 12:54	5

Eurofins Xenco, Carlsbad

Dil Fac

11/10/2021

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	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 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   <49.8   <49.8   <49.8   <49.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80.8   <80	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	

Eurofins Xenco, Carlsbad

Lab Sample ID: 890-1502-117

Matrix: Solid

Lab Sample ID: 890-1502-117

Lab Sample ID: 890-1502-118

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: SW-26 (15)

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 15

Method: 8021B - Volatile Or	ganic Compounds	(GC) (Continued)
Michigal COLID Volume Of	gaine compounds	(GG) (GG) (GG)

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96	70 - 130	11/01/21 12:18	11/04/21 12:23	1

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg				11/09/21 10:58	1

l .		
Mothod: 904E NM Dia	sel Range Organics (DRO) (GC)	١
INICITIOU. OUTS ININI - DIC	sel Kalige Organics (DKO) (GC)	,

Analyte	Result	Qualifier	RL	MDL	Unit	D	ı	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		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 (	Jnit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9	r	ng/Kg		11/03/21 13:15	11/04/21 17:56	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9	r	ng/Kg		11/03/21 13:15	11/04/21 17:56	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	r	mg/Kg		11/03/21 13:15	11/04/21 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surroyate	Mecovery Quantilei	Lillits	riepaieu	Allalyzeu	DII Fac
1-Chlorooctane	104	70 - 130	11/03/21 13:15	11/04/21 17:56	1
o-Terphenyl	103	70 - 130	11/03/21 13:15	11/04/21 17:56	1
_					

 $\label{eq:method:method:method:one} \textbf{Method: 300.0 - Anions, Ion Chromatography - Soluble}$ 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	447		4.95		mg/Kg			11/08/21 13:15	1

Client Sample ID: SW-27 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 15

D.A	lathadi 0004D	Valatila	Organia	Campaunda	(CC)

wethout ouz ib - volatile Organ	inc compounds (	GC)							
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)	121		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

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

Eurofins Xenco, Carlsbad

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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

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 *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
C10-C28)									
OII 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	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9970		50.0		mg/Kg			11/08/21 13:25	10

Lab Sample ID: 890-1502-119 Client Sample ID: SW-28 (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	<0.00202	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 (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 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 <sub>-</sub> 130				11/03/21 13:15	11/04/21 18:39	1

Lab Sample ID: 890-1502-119

Client: Tetra Tech, Inc.

Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-28 (15) Date Collected: 10/26/21 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	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

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

416

Sample Depth: 15

Analyte

Chloride

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 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 10:58	1
- ***			0.00398		mg/Kg			11/09/21 10:58	1
Total BTEX  Method: 8015 NM - Diesel Range Analyte	Organics (DR		0.00398 RL	MDL	mg/Kg	— — D	Prepared	11/09/21 10:58  Analyzed	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		D	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte	Organics (DR) Result <a href="https://www.eps.com/result-249.8">&lt;49.8</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 <49.8	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 <49.8	Qualifier U RO) (GC) Qualifier			Unit mg/Kg			Analyzed 11/08/21 15:54	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR Result <49.8 ge Organics (Di Result	Qualifier U  RO) (GC) Qualifier U *1	RL		Unit mg/Kg		Prepared	Analyzed  11/08/21 15:54  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 <49.8 ge Organics (D Result <49.8	Qualifier U  RO) (GC) Qualifier U*1	RL 49.8 ————————————————————————————————————		Unit mg/Kg  Unit mg/Kg		Prepared 11/03/21 13:15	Analyzed  11/08/21 15:54  Analyzed  11/04/21 19:01	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 <49.8 ge Organics (D Result <49.8	Qualifier U  RO) (GC) Qualifier U*1  U	RL 49.8  RL 49.8  49.8		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/03/21 13:15 11/03/21 13:15	Analyzed 11/08/21 15:54  Analyzed 11/04/21 19:01 11/04/21 19:01	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 <49.8 ge Organics (DR Result <49.8 <49.8	Qualifier U  RO) (GC) Qualifier U*1  U	RL 49.8  RL 49.8  49.8  49.8		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 11/03/21 13:15 11/03/21 13:15 11/03/21 13:15	Analyzed 11/08/21 15:54  Analyzed 11/04/21 19:01 11/04/21 19:01	Dil Fac  Dil Fac  1  Dil Fac  1  Dil Fac  1

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Analyzed

11/08/21 13:46

Dil Fac

RL

5.00

MDL Unit

mg/Kg

D

Prepared

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	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:40	1
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
1,4-Difluorobenzene (Surr)	96		70 - 130				11/01/21 11:07	11/01/21 23:40	1
Method: Total BTEX - Total BTE	( 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			RL 49.9	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/08/21 15:54	Dil Fac
: Method: 8015B NM - Diesel Rang	ne Organics (D	RO) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 10:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 10:53	1
Oll Range Organics (Over C28-C36)			49.9		mg/Kg		11/03/21 13:58	44/04/04 40:50	
Oil Range Organics (Over C26-C30)	<49.9	U	49.9		mg/ixg		11/03/21 13.30	11/04/21 10:53	1
,	<49.9%Recovery		Limits		mg/rtg		Prepared	Analyzed	1 Dil Fac
Surrogate 1-Chlorooctane					mg/Kg				Dil Fac
Surrogate	%Recovery		Limits		mgritg		Prepared	Analyzed	Dil Fac
Surrogate 1-Chlorooctane	%Recovery 90 108	Qualifier	Limits 70 - 130		mg/kg		Prepared 11/03/21 13:58	Analyzed 11/04/21 10:53	1 Dil Fac 1
Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 90 108  pmatography -	Qualifier	Limits 70 - 130	MDL		<u>D</u>	Prepared 11/03/21 13:58	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

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Lab Sample ID: 890-1502-122

**Matrix: Solid** 

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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 - Vol	atile Organic Cor	npounds (GC	(Continued)
	atilo organio coi		, ( <b>-</b>

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

Mothod	<b>Total BTEX</b>	Total B	TEV Ca	loulation
wetnoa:	TOTAL BIEN	Total 🗖		liculation

Analyte	Result	Qualifier	RL	MDL	Unit	I	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	IUKU	11661

Analyte	Result	Qualifier	RL	MDL	Unit	D	ı	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg				11/08/21 15:54	1

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL Un	it	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)									
Oll 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

o-Terphenyl	93	70 - 130

Wethou. 300.0 - Amons, fon Chron	iatography - Soluble						
Analyte	Result Qualifier	RL	MDL	Unit	D Pre	pared Analyzed	Dil Fac
Chloride	109	4 99		ma/Ka		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

Mathad.	0024D	V-1-4:1-	O	Compounds	
wethod:	OUZID -	voiatile	Organic (	Jompounas.	166

wethod: 8021B - volatile Orga	nic Compounds (	(GC)							
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

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**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

Lab Sample ID: 890-1502-123

Lab Sample ID: 890-1502-124

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 (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 12:15	1
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							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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
o-Terphenyl	80		70 <sub>-</sub> 130				11/03/21 13:58	11/04/21 12:36	1

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11/10/2021

## **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 Matrix: Solid

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Sample Depth: 8

Method: 300.0 - Anions, Ion Chroma	tography -	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

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

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)	
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	
390-1502-2	BH-2 (6)	120	98	
890-1502-3	BH-3 (6)	122	70	
390-1502-4	BH-4 (6)	124	67 S1-	
390-1502-5	BH-5 (6)	140 S1+	97	
390-1502-6	BH-6 (6)	136 S1+	104	
390-1502-7	BH-7 (6)	123	97	
390-1502-8	BH-8 (6)	146 S1+	69 S1-	
390-1502-9	BH-9 (6)	130	93	
890-1502-10	BH-10 (6)	136 S1+	105	
390-1502-11	BH-11 (6)	112	76	
390-1502-12	BH-12 (6)	137 S1+	98	
390-1502-13	BH-13 (6)	120	96	
390-1502-14	BH-14 (6)	130	95	
390-1502-15	BH-15 (6)	137 S1+	98	
390-1502-16	BH-16 (6)	110	82	
390-1502-17	BH-17 (6)	123	98	
390-1502-18	BH-18 (6)	127	98	
390-1502-19	BH-19 (6)	117	81	
390-1502-20	BH-20 (6)	113	94	
90-1502-21	BH-21 (6)	99	72	
890-1502-21 MS	BH-21 (6)	133 S1+	111	
390-1502-21 MSD	BH-21 (6)	113	104	
390-1502-22	BH-22 (6)	130	98	
390-1502-23	BH-23 (6)	116	100	
390-1502-24	BH-24 (6)	126	96	
390-1502-25	BH-25 (15)	122	97	
390-1502-26	BH-26 (15)	123	107	
390-1502-27	BH-27 (15)	112	85	
390-1502-28	BH-28 (15)	121	104	
390-1502-29	BH-29 (15)	123	91	
390-1502-30	BH-30 (15)	71	70	
390-1502-31	BH-31 (15)	114	111	
390-1502-32	BH-32 (15)	86	93	
390-1502-33	BH-33 (15)	132 S1+	108	
390-1502-34	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	
390-1502-38	BH-38 (15)	129	118	
390-1502-39	BH-39 (15)	117	100	
390-1502-40	BH-40 (15)	115	100	
890-1502-41	BH-41 (15)	132 S1+	110	
390-1502-41 MS	BH-41 (15)	66 S1-	179 S1+	
390-1502-41 MSD	BH-41 (15)	70	216 S1+	
390-1502-41 W3D	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	
890-1502-81 MSD	BH-82 (15)	105	83	
890-1502-83	BH-83 (15)	107	90	
890-1502-84	BH-84 (15)	126	101	
890-1502-64		114		
	BH-85 (15)		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	. 5.55 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

-				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID			
LCSD 880-11111/2-A	Lab Control Sample Dup			
Surrogate Legend				
BFB = 4-Bromofluorobe	enzene (Surr)			
DFB7 = 1 4-Difluorober	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)	
890-1502-1	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. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	ОТРН1	Percent Surrogate Recovery (Acceptance Limits)
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	
890-1502-17	BH-18 (6)	100	107	
890-1502-19	* *	105	115	
890-1502-19	BH-19 (6)			
	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	112	
890-1502-38	BH-38 (15)	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	

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

02-49 BH-49 (15) 101 106 02-50 BH-50 (15) 1114 119 02-51 BH-51 (15) 101 106 02-52 BH-52 (15) 101 103 02-53 BH-52 (15) 96 98 02-54 BH-52 (15) 99 100 02-55 BH-53 (15) 99 100 02-55 BH-56 (15) 99 100 02-56 BH-56 (15) 99 102 02-56 BH-56 (15) 99 102 02-56 BH-57 (15) 99 102 02-58 BH-58 (15) 93 93 02-59 BH-59 (15) 110 110 02-60 BH-60 (15) 88 87 02-61 BH-61 (15) 50 S1- 34 S1- 02-61 MSD BH-61 (15) 75 61 S1- 02-62 BH-62 (15) 93 90 02-63 BH-63 (15) 93 90 02-64 BH-63 (15) 93 90 02-65 BH-65 (15) 93 90 02-66 BH-66 (15) 93 90 02-67 BH-67 (15) 99 107 02-68 BH-68 (15) 97 103 02-69 BH-69 (15) 99 107 02-69 BH-69 (15) 99 107 02-60 BH-66 (15) 99 107 02-61 BH-61 (15) 99 107 02-62 BH-63 (15) 99 107 02-63 BH-63 (15) 99 107 02-64 BH-68 (15) 99 107 02-65 BH-66 (15) 99 107 02-66 BH-66 (15) 99 107 02-67 BH-67 (15) 99 107 02-68 BH-68 (15) 97 98 02-69 BH-69 (15) 99 107 02-72 BH-72 (15) 99 107 02-73 BH-73 (15) 99 107 02-74 BH-74 (15) 99 107 02-75 BH-75 (15) 99 105 02-76 BH-76 (15) 99 105 02-77 BH-77 (15) 99 105 02-78 BH-78 (15) 99 105 02-79 BH-78 (15) 99 105 02-80 BH-80 (15) 99 105 02-81 MSD BH-81 (15) 95 97 02-82 BH-82 (15) 99 100 02-86 BH-86 (15) 99 100 02-80 BH-80 (15) 99 100	
March   Miles   Mile	
02-48 BH-48 (15) 111 111 111	Sample ID CI
02-49 BH-49 (15) 101 106 02-50 BH-50 (15) 114 119 02-51 BH-51 (15) 101 106 02-52 BH-52 (15) 101 103 02-52 BH-52 (15) 101 103 02-53 BH-53 (15) 96 98 02-54 BH-54 (15) 99 100 02-55 BH-55 (15) 99 100 02-56 BH-56 (15) 106 113 02-57 BH-57 (15) 99 102 02-58 BH-58 (15) 93 93 02-58 BH-58 (15) 93 93 02-59 BH-59 (15) 110 110 02-60 BH-60 (15) 88 87 02-61 BH-61 (15) 50 S1- 34 S1- 02-61 BH-61 (15) 75 61 S1- 02-62 BH-62 (15) 93 90 02-63 BH-63 (15) 93 90 02-64 BH-62 (15) 99 90 02-65 BH-63 (15) 99 90 02-66 BH-66 (15) 99 90 02-67 BH-67 (15) 99 90 02-68 BH-68 (15) 99 90 02-69 BH-69 (15) 99 90 02-69 90 90 90 90 90 90 90 90 90 90 90 90 90	<del>`</del>
02-50 BH-50 (15) 114 119 02-51 BH-51 (15) 101 106 02-51 BH-52 (15) 101 103 02-52 BH-52 (15) 101 103 02-53 BH-53 (15) 96 98 02-54 BH-54 (15) 99 100 02-55 BH-55 (15) 99 99 02-55 BH-55 (15) 99 99 02-56 BH-56 (15) 106 113 02-57 BH-57 (15) 99 102 02-58 BH-58 (15) 93 93 02-59 BH-59 (15) 110 110 110 02-60 BH-60 (15) 88 87 02-61 BH-61 (15) 50 51- 34 51- 02-61 BH-61 (15) 41 S1- 31 S1- 02-61 BH-61 (15) 95 95 02-63 BH-63 (15) 93 90 02-64 BH-63 (15) 93 90 02-64 BH-64 (15) 95 95 02-65 BH-65 (15) 93 90 02-64 BH-65 (15) 95 95 02-65 BH-68 (15) 97 103 02-66 BH-66 (15) 97 103 02-66 BH-66 (15) 102 112 02-67 BH-67 (15) 102 112 02-68 BH-68 (15) 97 103 02-69 BH-69 (15) 100 114 02-70 BH-70 (15) 97 103 02-71 BH-77 (15) 97 103 02-72 BH-72 (15) 109 114 02-73 BH-73 (15) 99 107 02-74 BH-73 (15) 99 107 02-75 BH-77 (15) 99 107 02-76 BH-77 (15) 99 107 02-77 BH-77 (15) 99 107 02-78 BH-77 (15) 99 107 02-79 BH-77 (15) 99 105 02-80 BH-80 (15) 91 101 02-81 MSD BH-81 (15) 91 101 02-81 MSD BH-81 (15) 95 97 02-82 BH-82 (15) 93 110 02-84 BH-84 (15) 93 110 02-86 BH-86 (15) 93 110 02-86	
02-51         BH-51 (15)         101         106           02-52         BH-52 (15)         101         103           02-53         BH-52 (15)         96         98           02-54         BH-54 (15)         99         90           02-55         BH-55 (15)         99         99           02-56         BH-56 (15)         106         113           02-57         BH-58 (15)         93         93           02-58         BH-58 (15)         93         93           02-59         BH-59 (15)         110         110           02-60         BH-60 (15)         88         87           02-61         BH-61 (15)         50 SH-34 S4 SH-           02-61         BH-61 (15)         41 SH-31 S1-           02-61         BH-61 (15)         75         61 SH-           02-61         BH-61 (15)         75         61 SH-           02-62         BH-62 (15)         93         90           02-63         BH-63 (15)         95         95           02-64         BH-64 (15)         97         103           02-65         BH-65 (15)         102         1112           02-66         BH-66 (15)	
02-62 BH-52 (15) 101 103 02-53 BH-53 (15) 96 98 02-54 BH-54 (15) 99 100 02-55 BH-55 (15) 99 99 02-56 BH-56 (15) 99 99 02-56 BH-56 (15) 99 99 02-57 BH-57 (15) 99 102 02-58 BH-58 (15) 93 393 02-59 BH-58 (15) 93 393 02-59 BH-58 (15) 110 110 02-60 BH-60 (15) 88 87 02-61 BH-61 (15) 50 S1- 34 S1- 02-61 BH-61 (15) 75 61 S1- 02-61 BH-61 (15) 75 61 S1- 02-61 BH-61 (15) 93 90 02-63 BH-62 (15) 93 90 02-64 BH-62 (15) 93 90 02-65 BH-63 (15) 93 90 02-66 BH-66 (15) 97 103 02-66 BH-66 (15) 97 103 02-67 BH-67 (15) 102 112 02-68 BH-68 (15) 97 98 02-69 BH-68 (15) 97 98 02-69 BH-69 (15) 97 98 02-69 BH-69 (15) 97 98 02-70 BH-70 (15) 97 103 02-71 BH-71 (15) 99 107 02-72 BH-72 (15) 115 128 02-73 BH-73 (15) 99 107 02-74 BH-74 (15) 99 107 02-75 BH-75 (15) 100 109 02-76 BH-76 (15) 100 109 02-77 BH-77 (15) 99 105 02-78 BH-78 (15) 100 109 02-79 BH-79 (15) 103 103 02-80 BH-80 (15) 93 96 02-81 BH-80 (15) 93 96 02-81 BH-78 (15) 99 107 02-72 BH-72 (15) 115 128 02-73 BH-73 (15) 99 107 02-74 BH-77 (15) 99 105 02-75 BH-76 (15) 93 96 02-76 BH-76 (15) 93 96 02-77 BH-77 (15) 99 105 02-78 BH-78 (15) 99 105 02-79 BH-79 (15) 99 105 02-79 BH-79 (15) 99 105 02-79 BH-79 (15) 99 105 02-81 BB-81 (15) 95 99 02-81 BB-81 (15) 93 110 02-82 BB-83 (15) 93 110 02-84 BB-84 (15) 93 110 02-85 BH-86 (15) 93 110 02-86 BH-86 (15) 98 108 02-86 BH-86 (15) 98 108 02-86 BH-86 (15) 99 107 02-89 BH-89 (15) 99 107	
02-53 BH-53 (15) 96 98 02-54 BH-54 (15) 99 100 02-55 BH-55 (15) 99 99 02-56 BH-55 (15) 106 113 02-57 BH-57 (15) 99 102 02-58 BH-58 (15) 99 30 02-58 BH-58 (15) 99 30 02-59 BH-59 (15) 110 110 02-60 BH-60 (15) 88 87 02-61 BH-61 (15) 50 S1- 34 S1- 02-61 MS BH-61 (15) 75 61 S1- 02-61 MS BH-61 (15) 75 61 S1- 02-63 BH-62 (15) 93 90 02-63 BH-62 (15) 93 90 02-63 BH-63 (15) 95 95 02-64 BH-62 (15) 97 103 02-66 BH-65 (15) 97 103 02-66 BH-65 (15) 99 107 02-66 BH-66 (15) 99 107 02-68 BH-68 (15) 99 107 02-68 BH-68 (15) 99 107 02-69 BH-69 (15) 102 112 02-69 BH-69 (15) 102 110 02-69 BH-69 (15) 99 107 02-70 BH-70 (15) 99 107 02-71 BH-71 (15) 99 107 02-72 BH-72 (15) 109 114 02-74 BH-73 (15) 99 107 02-75 BH-75 (15) 99 107 02-76 BH-76 (15) 99 107 02-77 BH-77 (15) 99 107 02-77 BH-77 (15) 99 107 02-78 BH-76 (15) 99 107 02-79 BH-76 (15) 99 100 02-77 BH-77 (15) 99 107 02-78 BH-76 (15) 99 105 02-79 BH-78 (15) 99 105 02-79 BH-78 (15) 99 105 02-81 MSD BH-81 (15) 95 99 02-81 BH-81 (15) 95 99 02-81 BH-81 (15) 95 99 02-82 BH-82 (15) 93 106 02-86 BH-86 (15) 93 110 02-89 BH-89 (15) 92 107 02-90 BH-90 (RS) (6) 94 112	
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02-67       BH-67 (15)       102       110         02-68       BH-68 (15)       97       98         02-69       BH-69 (15)       109       114         02-70       BH-70 (15)       97       103         02-71       BH-71 (15)       99       107         02-72       BH-72 (15)       115       128         02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MS       BH-81 (15)       95       99         02-82       BH-83 (15)       95       99         02-84       BH-84 (15)       94       105         02-85       BH-86 (15)       93 </td <td>502-65 BI</td>	502-65 BI
02-68       BH-68 (15)       97       98         02-69       BH-69 (15)       109       114         02-70       BH-70 (15)       97       103         02-71       BH-71 (15)       99       107         02-72       BH-72 (15)       115       128         02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-80 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-82 (15)       89       102         02-82       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93	502-66 BH
02-69       BH-69 (15)       109       114         02-70       BH-70 (15)       97       103         02-71       BH-71 (15)       99       107         02-72       BH-72 (15)       115       128         02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-86 (15)       93       110         02-86       BH-86 (15)       93       110         02-88       BH-88 (15)       98 <td>502-67 Bł</td>	502-67 Bł
02-69       BH-69 (15)       109       114         02-70       BH-70 (15)       97       103         02-71       BH-71 (15)       99       107         02-72       BH-72 (15)       115       128         02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-86 (15)       93       106         02-86       BH-86 (15)       93       110         02-88       BH-88 (15)       98 <td>502-68 Bł</td>	502-68 Bł
02-70     BH-70 (15)     97     103       02-71     BH-71 (15)     99     107       02-72     BH-72 (15)     115     128       02-73     BH-73 (15)     90     91       02-74     BH-74 (15)     98     102       02-75     BH-75 (15)     100     109       02-76     BH-76 (15)     93     96       02-77     BH-77 (15)     99     105       02-78     BH-78 (15)     108     112       02-79     BH-79 (15)     103     103       02-80     BH-80 (15)     109     122       02-81     BH-81 (15)     91     101       02-81 MS     BH-81 (15)     95     99       02-82     BH-82 (15)     89     102       02-83     BH-83 (15)     91     105       02-84     BH-84 (15)     94     105       02-85     BH-86 (15)     93     110       02-86     BH-86 (15)     93     110       02-87     BH-87 (15)     93     106       02-88     BH-88 (15)     98     108       02-89     BH-89 (15)     92     107       02-90     BH90 (RS ) (6)     94     112       02-91 <td< td=""><td></td></td<>	
02-71       BH-71 (15)       99       107         02-72       BH-72 (15)       115       128         02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       110         02-86       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-90 (RS) (6) <td< td=""><td></td></td<>	
02-72       BH-72 (15)       115       128         02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       99         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-87 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-89 (15)       92       107         02-90       BH90 (RS) (6)	
02-73       BH-73 (15)       90       91         02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)	
02-74       BH-74 (15)       98       102         02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-90 (RS) (6)       94       112         02-90       BH90 (RS) (6)       92       107         02-92       SW-1 (0-6)	
02-75       BH-75 (15)       100       109         02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-76       BH-76 (15)       93       96         02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       110         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-89 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-77       BH-77 (15)       99       105         02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-82       BH-83 (15)       91       105         02-84       BH-83 (15)       91       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-90 (RS ) (6)       94       112         02-90       BH-90 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-78       BH-78 (15)       108       112         02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-79       BH-79 (15)       103       103         02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	502-77 Bł
02-80       BH-80 (15)       109       122         02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-99 (15)       92       107         02-90       BH-91 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	502-78 Bi
02-81       BH-81 (15)       91       101         02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	502-79 BI
02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	502-80 BH
02-81 MS       BH-81 (15)       95       99         02-81 MSD       BH-81 (15)       95       97         02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	502-81 Bł
02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-82       BH-82 (15)       89       102         02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	502-81 MSD BI
02-83       BH-83 (15)       91       105         02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-84       BH-84 (15)       94       105         02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-85       BH-85 (15)       93       106         02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-86       BH-86 (15)       93       110         02-87       BH-87 (15)       93       110         02-88       BH-88 (15)       98       108         02-89       BH-89 (15)       92       107         02-90       BH90 (RS ) (6)       94       112         02-91       BH-91 (RS ) (6)       92       107         02-92       SW-1 (0-6)       90       106	
02-87     BH-87 (15)     93     110       02-88     BH-88 (15)     98     108       02-89     BH-89 (15)     92     107       02-90     BH90 (RS ) (6)     94     112       02-91     BH-91 (RS ) (6)     92     107       02-92     SW-1 (0-6)     90     106	
02-88     BH-88 (15)     98     108       02-89     BH-89 (15)     92     107       02-90     BH90 (RS ) (6)     94     112       02-91     BH-91 (RS ) (6)     92     107       02-92     SW-1 (0-6)     90     106	
02-89     BH-89 (15)     92     107       02-90     BH90 (RS ) (6)     94     112       02-91     BH-91 (RS ) (6)     92     107       02-92     SW-1 (0-6)     90     106	
02-90     BH90 (RS) (6)     94     112       02-91     BH-91 (RS) (6)     92     107       02-92     SW-1 (0-6)     90     106	
02-91 BH-91 (RS ) (6) 92 107 02-92 SW-1 (0-6) 90 106	
02-92 SW-1 (0-6) 90 106	
02-93 SW-2 (0-6) 89 106	502-93 S\

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	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-1502-94	SW-3 (0-6)	89	106	
90-1502-95	SW-4 (0-6)	90	107	
90-1502-96	SW-5 (0-6)	102	122	
90-1502-97	SW-6 (0-6)	89	98	
90-1502-98	SW-7 (0-6)	91	109	
90-1502-99	SW-8 (0-6)	91	104	
90-1502-100	SW-9 (0-6)	94	112	
90-1502-101	SW-10 (0-6)	100	100	
90-1502-101 MS	SW-10 (0-6)	101	93	
90-1502-101 MSD	SW-10 (0-6)	109	97	
90-1502-102	SW-11 (0-6)	106	104	
90-1502-103	SW-12 (10)	101	98	
90-1502-104	SW-13 (15)	86	83	
90-1502-105	SW-14 (15)	107	106	
90-1502-106	SW-15 (15)	102	100	
90-1502-107	SW-16 (15)	106	105	
90-1502-108	SW-17 (15)	97	97	
90-1502-109	SW-18 (15)	103	103	
90-1502-109	SW-19 (15)	103	103	
90-1502-110	SW-19 (15) SW-20 (15)	103	105	
90-1502-112	SW-21 (15)	107	107	
90-1502-113	SW-22 (15)	106	108	
90-1502-114	SW-23 (15)	104	101	
90-1502-115	SW-24 (15)	107	106	
90-1502-116	SW-25 (15)	104	105	
90-1502-117	SW-26 (15)	104	103	
90-1502-118	SW-27 (15)	99	97	
90-1502-119	SW-28 (15)	90	83	
90-1502-120	SW-29 (15)	103	99	
90-1502-121	SW-30 (RS) (6)	90	108	
90-1502-121 MS	SW-30 (RS) (6)	100	92	
90-1502-121 MSD	SW-30 (RS) (6)	92	84	
90-1502-122	SW-31 (RS) (4)	86	93	
90-1502-123	SW-32 (RS) (6)	84	83	
90-1502-124	SW-33 (RS) (8)	80	80	
CS 880-11223/2-A	Lab Control Sample	116	109	
CS 880-11255/2-A	Lab Control Sample	98	106	
CS 880-11273/2-A	Lab Control Sample	84	80	
CS 880-11356/2-A	Lab Control Sample	103	100	
CS 880-11364/2-A	Lab Control Sample	81	89	
CS 880-11375/2-A	Lab Control Sample	102	99	
CS 880-11376/2-A	Lab Control Sample	108	88	
CSD 880-11223/3-A	Lab Control Sample Dup	113	106	
CSD 880-11255/3-A	Lab Control Sample Dup	100	108	
CSD 880-11273/3-A	Lab Control Sample Dup	87	85	
CSD 880-11356/3-A	Lab Control Sample Dup	87	84	
CSD 880-11364/3-A	Lab Control Sample Dup	89	97	
CSD 880-11304/3-A	Lab Control Sample Dup	92	85	
CSD 880-11375/3-A CSD 880-11376/3-A	Lab Control Sample Dup	103	95	
00D 000-119/0/3-A	Lab Control Sample Dup	103	90	

Eurofins Xenco, Carlsbad

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12

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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)
		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

1

	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	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	•
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 08:33	11/01/21 12:08	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	•
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 08:33	11/01/21 12:08	•

MB MB

Surrogate	%Recovery Q	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
Yylenes Total	<0.00400	H	0.00400		ma/Ka		11/01/21 11:05	11/03/21 00:26	1

MB MB

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
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

**Matrix: Solid** 

Analysis Batch: 11206

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 11075

	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 Qualifier	Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1.4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-11075/2-A

Matrix: Solid

Analysis Batch: 11206

Client Sample ID: Lab	Control Sample Dup
	Date of Taxable Taxable I/NIA

Prep Type: Total/NA

Prep Batch: 11075

	Spike	LCSD LCSD				70Kec.		KPD	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09604	mg/Kg		96	70 - 130	22	35	

LCCD LCCD

Cnika

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 Samp	ple ID:	Lab	Contro	l 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 Client Sample ID: BH-1 (6)

**Matrix: Solid** 

**Analysis Batch: 11206** 

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

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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	В	lank
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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

мв мв

	1110	III D				
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

**Analysis Batch: 11022** 

Lab Sample ID: LCS 880-11076/1-A	Client Sample ID: Lab Control Sample
Matrix: Solid	Prep Type: Total/NA
Aviativata Datativa 44000	Dura Databa 44070

Prep Batch: 11076

	Spike	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

Lab Sample ID: LCSD 880-11076/2-A Matrix: Solid

**Analysis Batch: 11022** 

•	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

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

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Analysis Batch: 11022

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	

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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)

MS MS

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

Surrogate %Recovery 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
Benzene	<0.00200	U F1	0.0996	0.05695	F1	mg/Kg		57	70 - 130	33	35
Toluene	<0.00200	U F1	0.0996	0.05604	F1	mg/Kg		56	70 - 130	26	35
Ethylbenzene	<0.00200	U F1	0.0996	0.05757	F1	mg/Kg		58	70 - 130	35	35
m-Xylene & p-Xylene	<0.00399	U F1	0.199	0.1165	F1	mg/Kg		59	70 - 130	24	35
o-Xylene	<0.00200	U F1	0.0996	0.06067	F1	mg/Kg		61	70 - 130	26	35

MSD MSD

Surrogate	%Recovery C	Juaimer	Limits
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** 

**Analysis Batch: 11221** 

Prep Type: Total/NA

Prep Batch: 11109

мв мв Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 11/01/21 12:05 Benzene <0.00200 U 0.00200 11/02/21 17:47 mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 11/01/21 12:05 11/02/21 17:47 Ethylbenzene <0.00200 U 0.00200 11/01/21 12:05 11/02/21 17:47 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 11/01/21 12:05 11/02/21 17:47 <0.00200 U o-Xylene 0.00200 11/01/21 12:05 11/02/21 17:47 mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 11/01/21 12:05 11/02/21 17:47

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	11/01/21 1	12:05	11/02/21 17:47	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/21 1	12:05	11/02/21 17:47	1

Lab Sample ID: LCS 880-11109/1-A

**Matrix: Solid** 

**Analysis Batch: 11221** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 11109

	Spike	LUS	LUS				MREC.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09326		mg/Kg		93	70 - 130	
Toluene	0.100	0.09333		mg/Kg		93	70 - 130	
Ethylbenzene	0.100	0.1039		mg/Kg		104	70 - 130	
m-Xylene & p-Xylene	0.200	0.2053		mg/Kg		103	70 - 130	
o-Xylene	0.100	0.09913		mg/Kg		99	70 - 130	

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LCS LCS

%Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 113

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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** 

o-Xylene

**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 - 13023 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 0.100 0.1143 mg/Kg 114 70 - 130 14 35 LCSD LCSD

%Recovery Qualifier Limits Surrogate 128 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 103 70 - 130

Lab Sample ID: 890-1502-21 MS Client Sample ID: BH-21 (6)

**Matrix: Solid** 

**Analysis Batch: 11221** 

Prep Type: Total/NA 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 51 70 - 130 mg/Kg Toluene <0.00202 U 0.100 0.07531 74 70 - 130mg/Kg Ethylbenzene <0.00202 UF1 0.100 0.06742 F1 mg/Kg 67 70 - 130 0.200 56 70 - 130 m-Xylene & p-Xylene <0.00403 UF1 0.1125 F1 mg/Kg o-Xylene <0.00202 UF1 0.100 0.06405 F1 mg/Kg 64 70 - 130

MS MS Surrogate %Recovery Qualifier Limits S1+ 4-Bromofluorobenzene (Surr) 133 70 - 130 1,4-Difluorobenzene (Surr) 111 70 - 130

Lab Sample ID: 890-1502-21 MSD Client Sample ID: BH-21 (6)

**Matrix: Solid** 

**Analysis Batch: 11221** 

Prep Type: Total/NA

Prep Batch: 11109

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00202	U F1 F2	0.101	0.08364	F2	mg/Kg		82	70 - 130	47	35	
Toluene	<0.00202	U	0.101	0.07898		mg/Kg		78	70 - 130	5	35	
Ethylbenzene	<0.00202	U F1	0.101	0.06977	F1	mg/Kg		69	70 - 130	3	35	
m-Xylene & p-Xylene	<0.00403	U F1	0.202	0.1359	F1	mg/Kg		67	70 - 130	19	35	
o-Xylene	<0.00202	U F1	0.101	0.06888	F1	mg/Kg		68	70 - 130	7	35	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

#### **QC Sample Results**

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: MB 880-11111/5-A

Matrix: Solid

Analysis Batch: 11259

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11111

1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	
Ethylbenzene	0.100	0.08895		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1848		mg/Kg		92	70 - 130	
o-Xylene	0.100	0.1111		mg/Kg		111	70 - 130	

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** 

o-Xylene

**Analysis Batch: 11259** 

<b>Client Sample ID</b>	: Lab Control	Sample	Dup
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Prep Type: Total/NA Prep Batch: 11111

RPD LCSD LCSD %Rec. Spike Analyte Added Result Qualifier Unit %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

0.1243

0.100

LCSD LCSD

Surrogate %Recovery Qualifier Limits

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-1502-41 MS Client Sample ID: BH-41 (15)

Matrix: Solid

Analysis Batch: 11259

Prep Type: Total/NA

mg/Kg

Prep Batch: 11111

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00200 U F2 F1 0.101 0.01309 F1 12 Benzene mg/Kg 70 - 130 Toluene <0.00200 U F2 F1 0.101 0.005176 F1 mg/Kg 4 70 - 130

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#### 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: 890-1502-41 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 %Rec Limits D Ethylbenzene <0.00200 U F2 F1 0.101 0.006767 F1 6 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00399 0.202 <0.00403 U F1 mg/Kg 0 70 - 130 0.101 o-Xylene <0.00200 U F2 F1 0.01517 F1 mg/Kg 14 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130
1,4-Difluorobenzene (Surr)	179	S1+	70 - 130

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11111

Lab Sample ID: 890-1502-41 MSD **Matrix: Solid** 

**Analysis Batch: 11259** 

Sample Sample Spike MSD MSD %Rec. RPD %Rec Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit 0.0994 Benzene <0.00200 U F2 F1 0.02353 F2 F1 mg/Kg 23 70 - 130 57 35 Toluene 0.0994 12 <0.00200 U F2 F1 0.01239 F2 F1 mg/Kg 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 0.006042 F1 3 70 - 130 NC 35 m-Xylene & p-Xylene < 0.00399 U F1 mq/Kq 0.0994 o-Xylene <0.00200 U F2 F1 0.03039 F2 F1 30 70 - 130 67 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

MD MD

	IVID	IVID							
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 12:13	11/03/21 05:19	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/21 12:13	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 Project/Site: Kaiser SWD SDG: 212C-MD-02230

#### 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	LCS	LCS				%Rec.	
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** Prep Type: Total/NA

**Matrix: Solid Analysis Batch: 11221** 

Spike	LCSD	LCSD				%Rec.		RPD
Added	Result	Qualifier	Unit	D 9	%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
	Added 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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-1502-61 MS Client Sample ID: BH-61 (15) **Matrix: Solid Prep Type: Total/NA** 

**Analysis Batch: 11221** Prep Batch: 11112

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1 F2	0.100	0.02127	F1	mg/Kg		21	70 - 130	
Toluene	<0.00199	U F1 F2	0.100	0.03376	F1	mg/Kg		32	70 - 130	
Ethylbenzene	<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-Xylene	<0.00199	U F1 F2	0.100	0.03476	F1	mg/Kg		34	70 - 130	

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-1502-61 MSD Client Sample ID: BH-61 (15) **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

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 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

Limits

**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 11/01/21 12:16 11/03/21 17:26 mg/Kg <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

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**Matrix: Solid** 

**Analysis Batch: 11374** 

Client Sample ID: Lab Control Sample Dup

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 4-Bromofluorobenzene (Surr) 116 70 - 130

Eurofins Xenco, Carlsbad

Prep Type: Total/NA

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 880-11113/2-A

**Matrix: Solid** 

**Analysis Batch: 11374** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11113

LCSD LCSD

%Recovery Qualifier Surrogate 1,4-Difluorobenzene (Surr) 107 70 - 130

Lab Sample ID: 890-1502-81 MS Client Sample ID: BH-81 (15)

Limits

**Matrix: Solid** 

Analysis Batch: 11374

**Prep Type: Total/NA** 

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 Type: Total/NA

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	mg/Kg		41	70 - 130	67	35
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
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.201	0.1091	F2 F1	mg/Kg		53	70 - 130	55	35
o-Xylene	<0.00199	U F2 F1	0.100	0.04780	F2 F1	mg/Kg		48	70 - 130	65	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

Matrix: Solid

Analysis Batch: 11374

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Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 11114

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1
<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1
<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1
<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 05:00	1
<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1
<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 05:00	1
	Result <0.00200 <0.00200 <0.00200 <0.00400 <0.00200	MB MB Result Qualifier <0.00200 U <0.00200 U <0.00200 U <0.00400 U <0.00200 U <0.00400 U	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

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	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

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

%Recovery

114

106

Qualifier

Lab Sample ID: LCS 880-11114/1-A

Analysis Batch: 11374

**Matrix: Solid** 

Surrogate

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 11114

LCS LCS Spike Added Analyte Result Qualifier Unit %Rec Limits D 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 70 - 130 mg/Kg 96 m-Xylene & p-Xylene 0.200 0.1881 mg/Kg 94 70 - 130 o-Xylene aз

Limits

70 - 130

70 - 130

0.100 0.09302 mg/Kg 70 - 130 LCS LCS

Lab Sample ID: LCSD 880-11114/2-A

**Matrix: Solid** 

**Analysis Batch: 11374** 

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11114

LCSD LCSD RPD Spike %Rec. Added Result Qualifier RPD I imit Analyte Unit D %Rec Limits Benzene 0.100 0.08744 mg/Kg 87 70 - 130 3 35 Toluene 0.100 0.09130 mg/Kg 91 70 - 130 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 35 0.100 o-Xylene 0.09153 mg/Kg 92 70 - 130 2 35

LCSD LCSD Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 112 70 - 130 1,4-Difluorobenzene (Surr) 107 70 - 130

Lab Sample ID: 890-1502-101 MS

**Matrix: Solid** 

**Analysis Batch: 11374** 

Client Sample ID: SW-10 (0-6) Prep Type: Total/NA

Prep Batch: 11114

Sample Sample Spike MS MS Result Qualifier Analyte 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 - 130Ethylbenzene <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 Batch: 11374** 

Prep Batch: 11114 RPD Sample Sample Spike MSD MSD %Rec. Limit Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Benzene <0.00200 U F2 F1 0.100 37 35 0.04046 F2 F1 mg/Kg 39 70 - 130 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

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) Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 11374									Prep	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 %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 123 101 70 - 130 1,4-Difluorobenzene (Surr)

мв мв

MR MR

мв мв

Lab Sample ID: MB 880-11207/5-A Client Sample ID: Method Blank

**Analysis Batch: 11206** 

**Matrix: Solid** Prep Type: Total/NA

Prep Batch: 11207

Analyte Result Qualifier RL 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 Ethylbenzene <0.00200 U 0.00200 mg/Kg 11/02/21 09:20 11/02/21 13:33 m-Xylene & p-Xylene <0.00400 U 0.00400 11/02/21 09:20 11/02/21 13:33 mg/Kg o-Xylene <0.00200 U 0.00200 mg/Kg 11/02/21 09:20 11/02/21 13:33 <0.00400 U 0.00400 11/02/21 09:20 11/02/21 13:33 Xylenes, Total mg/Kg

MR MR 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) 70 - 130 11/02/21 09:20 71 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

	11.12	1112				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	54	S1-	70 - 130	11/02/21 15:1	13 11/03/21 12:01	1
1,4-Difluorobenzene (Surr)	182	S1+	70 - 130	11/02/21 15:1	13 11/03/21 12:01	1

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

Result Qualifier Analyte MDL Unit Prepared RL Analyzed Dil Fac Benzene < 0.00200 U 0.00200 11/04/21 08:30 11/04/21 11:26 mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 11/04/21 08:30 11/04/21 11:26 Ethylbenzene <0.00200 U 0.00200 mg/Kg 11/04/21 08:30 11/04/21 11:26 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 11/04/21 08:30 11/04/21 11:26

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued) 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

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

MR MR

MR MR

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

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-11388/1-A **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 11388

**Analysis Batch: 11420** 

	эріке	LCS	LUS			™Rec.	
Analyte	Added	Result	Qualifier Ur	nit D	%Rec	Limits	
Benzene	0.100	0.07875	m	g/Kg	79	70 - 130	
Toluene	0.100	0.09099	m	g/Kg	91	70 - 130	
Ethylbenzene	0.100	0.1049	m	g/Kg	105	70 - 130	
m-Xylene & p-Xylene	0.200	0.1959	m	g/Kg	98	70 - 130	
o-Xylene	0.100	0.1016	m	g/Kg	102	70 - 130	

LCS LCS

Surrogate	%Recovery Qu	alifier 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 Control Sample Dup

Prep Type: Total/NA Prep Batch: 11388

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07843		mg/Kg		78	70 - 130	0	35
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		80	70 - 130	24	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1.4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-1502-53 MS Client Sample ID: BH-53 (15)

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 11420 Prep Batch: 11388

Spike MS MS %Rec. Sample Sample Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits <0.00202 U 0.0994 0.07316 74 Benzene 70 - 130 mg/Kg Toluene <0.00202 U 0.0994 0.07604 mg/Kg 75 70 - 130 0.0994 77 Ethylbenzene <0.00202 U 0.07655 mg/Kg 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

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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** 

Analysis Batch: 11420

Prep Type: Total/NA

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
1												

MSD MSD

MS MS

Surrogate	%Recovery	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

Prep Batch: 11445

**Analysis Batch: 11449** 

	MB	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 Analysis Batch: 11449**  Prep Type: Total/NA

Prep Batch: 11445

	Spike	LCS L	LCS				%Rec.	
Analyte	Added	Result C	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	
Ethylbenzene m-Xylene & p-Xylene	0.100 0.200	0.1054 0.2176		mg/Kg mg/Kg		105 109	70 - 130 70 - 130	

LCS LCS

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 103 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: LCS 880-11445/1-A

Lab Sample ID: LCSD 880-11445/2-A

**Matrix: Solid** 

**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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11445

**Analysis Batch: 11449** Spike LCSD LCSD RPD %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 0.200 0.1558 70 - 130 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	Qualifier	Limits		
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	D	%Rec	Limits	
Benzene	0.00453	F1	0.0996	0.07184	F1	mg/Kg		68	70 - 130	
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	
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1288	F1	mg/Kg		64	70 - 130	
o-Xylene	<0.00200	U F1 F2	0.0996	0.08438		mg/Kg		85	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-1520-A-1-C MSD

Matrix: Solid

**Analysis Batch: 11449** 

Client Sample ID: Matrix Spike Duplicate

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

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	61	S1-	70 _ 130		
1,4-Difluorobenzene (Surr)	204	S1+	70 - 130		

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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** 

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

**Analysis Batch: 11449** 

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB MDL Unit Dil Fac Result Qualifier RL D Prepared Analyzed <0.00200 U 0.00200 mg/Kg 11/04/21 15:47 <0.00200 U 0.00200 mg/Kg 11/04/21 15:47 <0.00200 U 0.00200 11/04/21 15:47 mg/Kg <0.00400 U 0.00400 mg/Kg 11/04/21 15:47 <0.00200 U 0.00200 mg/Kg 11/04/21 15:47 <0.00400 U 0.00400 11/04/21 15:47 mg/Kg

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

LCS LCS %Rec. Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1209 mg/Kg 121 70 - 130 Toluene 0.100 0.1145 mg/Kg 114 70 - 130 0.100 106 Ethylbenzene 0.1064 mg/Kg 70 - 130 0.200 109 70 - 130 m-Xylene & p-Xylene 0.2177 mg/Kg 0.100 70 - 130 o-Xylene 0.1244 mg/Kg 124

LCS 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

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)

Lab Sample ID: MB 880-11223/1-A

Lab Sample ID: LCS 880-11223/2-A

**Matrix: Solid** 

**Analysis Batch: 11317** 

**Matrix: Solid** Analysis Batch: 11317 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11223

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						
	0/5							

мв 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
o-Terphenyl	113		70 - 130		11/02/21 11:44	11/03/21 10:40	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 11223

LCS LCS Spike %Rec. Added Analyte Result Qualifier Unit D %Rec Limits 1194 Gasoline Range Organics 1000 mg/Kg 119 70 - 130 (GRO)-C6-C10 1000 1003 Diesel Range Organics (Over mg/Kg 100 70 - 130C10-C28)

LCS LCS

Surrogate		%Recovery	Qualifier	Limits
l	1-Chlorooctane	116		70 - 130
l	o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-11223/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 11317** 

Prep Type: Total/NA

Prep Batch: 11223

Spike LCSD LCSD RPD %Rec. Added Limit Analyte Result Qualifier %Rec RPD Unit Limits Gasoline Range Organics 1000 1154 mg/Kg 115 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 986.8 mg/Kg 99 70 - 130 20

C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	113	70 - 130
o-Terphenyl	106	70 - 130

Lab Sample ID: 890-1502-1 MS Client Sample ID: BH-1 (6)

**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	
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)										

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)

MS MS

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

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** 

Analysis Batch: 11317

Prep Type: Total/NA Prep Batch: 11223

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <49.9 UF1 F2 1000 1120 F2 112 70 - 13032 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1198 <49.9 U mg/Kg 117 70 - 13020 C10-C28)

MSD MSD %Recovery Surrogate Qualifier Limits 70 - 130 1-Chlorooctane 114 70 - 130

109

Lab Sample ID: MB 880-11255/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

o-Terphenyl

**Analysis Batch: 11321** 

Prep Type: Total/NA

Prep Batch: 11255

MB MB MDL Unit Analyte Result Qualifier RL 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 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/02/21 14:45 11/03/21 10:22 C10-C28) 50.0 OII Range Organics (Over C28-C36) <50.0 U 11/02/21 14:45 11/03/21 10:22 mg/Kg

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 11/02/21 14:45 115 70 - 130 11/03/21 10:22 o-Terphenyl

Lab Sample ID: LCS 880-11255/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** 

**Analysis Batch: 11321** 

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-Terphenyl	106		70 - 130

Job ID: 890-1502-1 SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-11255/3-A

**Matrix: Solid** 

Analysis Batch: 11321

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11255

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1055		mg/Kg		105	70 - 130	11	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1037		mg/Kg		104	70 - 130	5	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 100 70 - 130 o-Terphenyl 108

Lab Sample ID: 890-1502-21 MS

Matrix: Solid

**Analysis Batch: 11321** 

Client Sample ID: BH-21 (6) Prep Type: Total/NA

Prep Batch: 11255

	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	1011		mg/Kg		101	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	847.1		mg/Kg		85	70 - 130	

	IVIS	IVIS			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	89		70 - 130		
o-Terphenyl	94		70 - 130		

Lab Sample ID: 890-1502-21 MSD

**Matrix: Solid** 

**Analysis Batch: 11321** 

Client Sample ID: BH-21 (6)

Prep Type: Total/NA Prep Batch: 11255

, <b>,</b>												
	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	1000	1099		mg/Kg		110	70 - 130	8	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.9	U	1000	943.3		mg/Kg		94	70 - 130	11	20	
C10-C28)												

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	101		70 - 130

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

ı		IVID	IVID								
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 10:22	1	
	(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 10:22	1	
	C10-C28)	.50.0		50.0				14/00/04 40 07	44/00/04 40 00		
l	OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 10:22	1	

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	1	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

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits	
Gasoline Range Organics	1000	883.1		mg/Kg	88	70 - 130	
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	916.4		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

LCSD LCSD

**Matrix: Solid** 

**Analysis Batch: 11323** 

Prep Type: Total/NA

Prep Batch: 11273

	Орікс	LOOD	LOOD				/ortec.		111 0	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	879.9		mg/Kg		88	70 - 130	0	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1024		mg/Kg		102	70 - 130	11	20	
C10-C28)										

Snike

LCSD LCSD

<49.9 U

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	87	70 - 130
o-Terphenyl	85	70 - 130

Lab Sample ID: 890-1502-41 MS Client Sample ID: BH-41 (15) **Matrix: Solid** 

Prep Type: Total/NA Prep Batch: 11273

70 - 130

**Analysis Batch: 11323** 

Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U 997 1108 111 70 - 130 mg/Kg

897.0

mg/Kg

997

(GRO)-C6-C10 Diesel Range Organics (Over

C10-C28)

MS MS

Surrogate	%Recovery Qualifier	r 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

**Matrix: Solid** 

Analysis Batch: 11323

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

**Analysis Batch: 11323** 

мв мв

Prep Type: Total/NA Prep Batch: 11356

MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac <50.0 U 50.0 11/03/21 10:38 11/03/21 19:59 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/03/21 10:38 11/03/21 19:59 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/03/21 10:38 11/03/21 19:59

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. Added Analyte Result Qualifier %Rec Unit 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 Q	ualitier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: LCSD 880-11356/3-A

**Matrix: Solid** 

Analysis Batch: 11323

<b>Client San</b>	iple ID: La	ab Contro	I Sample	Dup
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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)										

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

LCSD LCSD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-11356/3-A

**Matrix: Solid** 

**Analysis Batch: 11323** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11356

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 87 70 - 130 o-Terphenyl 84 70 - 130

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11356

Lab Sample ID: 890-1502-61 MS **Matrix: Solid** Analysis Batch: 11323

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <49.9 U F1 F2 Gasoline Range Organics 997 482.0 F1 48 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U F1 F2 997 328.9 F1 mg/Kg 31 70 - 130C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	41	S1-	70 - 130
o-Terphenyl	31	S1-	70 - 130

Lab Sample ID: 890-1502-61 MSD Client Sample ID: BH-61 (15)

**Matrix: Solid** 

**Analysis Batch: 11323** 

Prep Type: Total/NA

Prep Batch: 11356

Sample Sample Spike MSD MSD RPD %Rec. Analyte Result Qualifier hahhA 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 <49.9 U F1 F2 1000 633.8 F1 F2 Diesel Range Organics (Over mg/Kg 61 70 - 130 63 20 C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	61	S1-	70 - 130

Lab Sample ID: MB 880-11364/1-A Client Sample ID: Method Blank **Matrix: Solid** 

**Analysis Batch: 11416** 

Analyte

мв мв

Prep Type: Total/NA

Analyzed

Prepared

Prep Batch: 11364

Dil Fac

Gasoline Range Organics <50.0 U 50.0 11/03/21 11:37 11/04/21 10:00 mg/Kg (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

RL

MDL Unit

мв мв

Result Qualifier

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/03/21 11:37	11/04/21 10:00	1
o-Terphenyl	115		70 - 130	11/03/21 11:37	11/04/21 10:00	1

Prep Batch: 11364

## 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 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 11416

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	840.1		mg/Kg		84	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	883.5		mg/Kg		88	70 - 130	
C10-C28)								

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-11364/3-A **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 11416							Prep	Batch:	11364
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	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	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	995.4		mg/Kg		100	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	818.8		mg/Kg		80	70 _ 130	

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-1502-81 MSD Client Sample ID: BH-81 (15) Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 11416									Prep	Batch:	11364
	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	985.1		mg/Kg		99	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	815.8		mg/Kg		79	70 - 130	0	20

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 95

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: 890-1502-81 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

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 10:00	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 10:00	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 10:00	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepai	red	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

**Client Sample ID: Lab Control Sample** Lab Sample ID: LCS 880-11375/2-A

**Matrix: Solid** 

**Analysis Batch: 11418** 

Prep Type: Total/NA

Prep Batch: 11375

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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 Quali	fier Limits
1-Chlorooctane	102	70 - 130
o-Terphenyl	99	70 - 130

Lab Sample ID: LCSD 880-11375/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 11418** 

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)									

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	92	70 - 130
o-Terphenyl	85	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: 890-1502-101 MS

**Analysis Batch: 11418** 

**Matrix: Solid** 

Client Sample ID: SW-10 (0-6) Prep Type: Total/NA

Prep Batch: 11375

Prep Type: Total/NA

Prep Batch: 11375

	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 *1	997	925.0		mg/Kg		91	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	908.6		mg/Kg		88	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 101 o-Terphenyl 93 70 - 130

Lab Sample ID: 890-1502-101 MSD Client Sample ID: SW-10 (0-6)

Matrix: Solid

**Analysis Batch: 11418** 

	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	1000	1063		mg/Kg		105	70 - 130	14	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	1000	979.4		mg/Kg		94	70 - 130	8	20
C10-C28)											

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 109 70 - 130 o-Terphenyl 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
MB MB	

mg/Kg

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 09:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 09:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 09:53	1

	IVID IVID				
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 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

838.1

**Matrix: Solid Analysis Batch: 11414** 

Diesel Range Organics (Over

Analysis Batch: 11414							Prep B	atch: 11376
	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								

1000

C10-C28)

Eurofins Xenco, Carlsbad

70 - 130

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 103 70 - 130 1-Chlorooctane 95 70 - 130 o-Terphenyl

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 Added Analyte Result Qualifier 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

70 - 130 1-Chlorooctane 100 o-Terphenyl 92 70 - 130

Lab Sample ID: 890-1502-121 MSD Client Sample ID: SW-30 (RS) (6)

Limits

**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 93 Gasoline Range Organics <49.9 954.6 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

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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: Lab Control Sample Dup

Client Sample ID: Method Blank

**Prep Type: Soluble** 

Client Sample ID: Matrix Spike

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 880-11227/1-A

**Matrix: Solid** 

**Analysis Batch: 11379** 

MB MB

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** 

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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

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**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

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**Prep Type: Soluble** 

Client Sample ID: Lab Control Sample

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Job ID: 890-1502-1

Client Sample ID: SW-1 (0-6)

Client Sample ID: SW-1 (0-6)

**Prep Type: Soluble** 

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

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 Matrix: Solid

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		ualifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	5.00	mg/Kg			11/08/21 08:34	1

Lab Sample ID: LCS 880-11236/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

**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** 

7 m.u., 50.5 = u. 50.11 1 1 1 5 =												
	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)

**Matrix: Solid** 

**Analysis Batch: 11452** 

Analysis Daton. 11402										
	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	

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**Prep Type: Soluble** 

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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 Spike MSD MSD %Rec. RPD Sample Qualifier Analyte Result Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 1150 248 1261 4 mg/Kg 90 - 110 20

Lab Sample ID: MB 880-11237/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11453** 

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/07/21 05:07

Lab Sample ID: LCS 880-11237/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11453

LCS LCS %Rec. Spike Analyte Added Result Qualifier Unit %Rec Limits Chloride 236.9 250 mg/Kg 90 - 110

Lab Sample ID: LCSD 880-11237/3-A Client Sample ID: Lab Control Sample Dup

мв мв

**Matrix: Solid** 

**Analysis Batch: 11453** 

LCSD LCSD RPD Spike %Rec. Added RPD Limit Analyte Result Qualifier Unit D %Rec Limits Chloride 250 241.4 90 - 110 20 mg/Kg

Lab Sample ID: 890-1502-5 MS Client Sample ID: BH-5 (6) **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 11453** 

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 123 249 353.6 mg/Kg 93 90 - 110

Lab Sample ID: 890-1502-5 MSD

Matrix: Solid

**Analysis Batch: 11453** 

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added RPD Analyte Result Qualifier Unit D %Rec Limits Limit Chloride 123 249 352 1 mg/Kg 90 - 110

Lab Sample ID: 890-1502-15 MS

**Matrix: Solid** 

**Analysis Batch: 11453** 

MS MS %Rec. Sample Sample Spike Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec Chloride 4220 F1 1250 5802 F1 mg/Kg 126 90 - 110

Lab Sample ID: 890-1502-15 MSD

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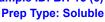
**Matrix: Solid** 

**Analysis Batch: 11453** 

MSD MSD Spike %Rec. RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 4220 1250 5826 F1 mg/Kg 128 90 - 110 20

Eurofins Xenco, Carlsbad

Client Sample ID: BH-15 (6)



**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: BH-5 (6)

**Prep Type: Soluble** 

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

Client Sample ID: BH-25 (15)

Client Sample ID: BH-25 (15)

Client Sample ID: BH-35 (15)

Client Sample ID: BH-35 (15)

Client Sample ID: Method Blank

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 RLMDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/07/21 09:27

Lab Sample ID: LCS 880-11238/2-A

**Matrix: Solid** 

**Analysis Batch: 11454** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 238.0 mg/Kg 95 90 - 110

Lab Sample ID: LCSD 880-11238/3-A

**Matrix: Solid** 

Analysis Batch: 11454

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 234.9 mg/Kg 90 - 110

Lab Sample ID: 890-1502-25 MS

**Matrix: Solid** 

Analysis Batch: 11454

Sample Sample MS MS Spike %Rec. Result Qualifier Added Result Qualifier %Rec Analyte Unit Limits Chloride 447 F1 250 648.9 F1 81 90 - 110 mg/Kg

Lab Sample ID: 890-1502-25 MSD

**Matrix: Solid** 

Analysis Batch: 11454

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 447 F1 656.3 F1 Chloride 250 mg/Kg 84 90 - 110

Lab Sample ID: 890-1502-35 MS

Matrix: Solid

Analysis Batch: 11454

Sample Sample Spike MS MS %Rec. Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits Chloride 333 F1 253 539.3 F1 mg/Kg 90 - 110

Lab Sample ID: 890-1502-35 MSD

**Matrix: Solid** 

Analysis Batch: 11454

MSD MSD %Rec. RPD Sample Sample Spike Added Result Qualifier Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 333 F1 253 539.2 F1 mg/Kg 82 90 - 110

Lab Sample ID: MB 880-11240/1-A

**Matrix: Solid** 

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**Analysis Batch: 11455** 

мв мв Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride 5.00 <5.00 mg/Kg 11/08/21 04:07

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: 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) **Prep Type: Soluble** 

**Matrix: Solid** 

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) **Prep Type: Soluble** 

**Matrix: Solid** 

**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) **Matrix: Solid Prep Type: Soluble** 

**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 **Prep Type: Soluble** 

**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	 

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: LCSD 880-11242/3-A

Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 11456

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit D Chloride 250 237.4 mg/Kg 95 90 - 110 20

Lab Sample ID: 890-1502-65 MS Client Sample ID: BH-65 (15)

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11456** Sample Sample Spike MS MS %Rec.

Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits Chloride 823 F1 250 1040 F1 mg/Kg 87 90 - 110

Lab Sample ID: 890-1502-65 MSD Client Sample ID: BH-65 (15)

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11456** 

MSD MSD %Rec. RPD Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 823 F1 250 1044 F1 mg/Kg 90 - 110

Lab Sample ID: 890-1502-75 MS Client Sample ID: BH-75 (15)

**Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 11456** MS MS Sample Sample Spike %Rec.

Result Qualifier Result Qualifier Added %Rec Analyte Unit D Limits Chloride 982 249 1200 F1 90 - 110 mg/Kg

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.

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 982 F1 1186 F1 Chloride 249 mg/Kg 82 90 - 110

Lab Sample ID: MB 880-11243/1-A Client Sample ID: Method Blank

**Matrix: Solid Prep Type: Soluble Analysis Batch: 11705** 

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Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 11/09/21 12:29

Lab Sample ID: LCS 880-11243/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid Prep Type: Soluble Analysis Batch: 11705** 

LCS LCS %Rec. Spike

Added Result Qualifier Limits Analyte Unit %Rec 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 %Rec Limits **RPD** Limit Chloride 250 253.1 mg/Kg 101 90 - 110 20

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RPD

## **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 Client Sample ID: BH-85 (15)

Matrix: Solid 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

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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 Batcl
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	

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Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

## **GC VOA (Continued)**

### Prep Batch: 11076 (Continued)

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 Batcl
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	

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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 Batcl
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	
890-1502-84	BH-84 (15)	Total/NA	Solid	5035	
890-1502-85	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	
890-1502-90	BH90 (RS) (6)	Total/NA	Solid	5035	
890-1502-91	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	
890-1502-95	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	

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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

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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

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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	1111
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
890-1502-45	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
890-1502-50	BH-50 (15)	Total/NA	Solid	8021B	11111
890-1502-51	BH-51 (15 )	Total/NA	Solid	8021B	11111
890-1502-52	BH-52 (15)	Total/NA	Solid	8021B	11111
890-1502-54	BH-54 (15)	Total/NA	Solid	8021B	11111
890-1502-55	BH-55 (15)	Total/NA	Solid	8021B	11111
890-1502-56	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	1111
890-1502-41 MS	BH-41 (15)	Total/NA	Solid	8021B	11111
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	8021B	1111

#### 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

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## **GC VOA (Continued)**

### **Analysis Batch: 11374 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-1502-82	BH-82 (15)	Total/NA	Solid	8021B	1111
390-1502-83	BH-83 (15)	Total/NA	Solid	8021B	1111
390-1502-84	BH-84 (15)	Total/NA	Solid	8021B	1111
390-1502-85	BH-85 (15)	Total/NA	Solid	8021B	1111
390-1502-86	BH-86 (15)	Total/NA	Solid	8021B	1111
90-1502-87	BH-87 (15)	Total/NA	Solid	8021B	1111
90-1502-88	BH-88 (15)	Total/NA	Solid	8021B	1111
90-1502-89	BH-89 (15)	Total/NA	Solid	8021B	1111
90-1502-90	BH90 (RS) (6)	Total/NA	Solid	8021B	1111
90-1502-91	BH-91 (RS) (6)	Total/NA	Solid	8021B	1111
90-1502-92	SW-1 (0-6)	Total/NA	Solid	8021B	1111
90-1502-93	SW-2 (0-6)	Total/NA	Solid	8021B	1111
90-1502-94	SW-3 (0-6)	Total/NA	Solid	8021B	1111
90-1502-95	SW-4 (0-6)	Total/NA	Solid	8021B	1111
90-1502-96	SW-5 (0-6)	Total/NA	Solid	8021B	1111
90-1502-97	SW-6 (0-6)	Total/NA	Solid	8021B	1111
90-1502-98	SW-7 (0-6)	Total/NA	Solid	8021B	1111
90-1502-99	SW-8 (0-6)	Total/NA	Solid	8021B	1111
90-1502-100	SW-9 (0-6)	Total/NA	Solid	8021B	1111
90-1502-101	SW-10 (0-6)	Total/NA	Solid	8021B	1111
90-1502-102	SW-11 (0-6)	Total/NA	Solid	8021B	1111
90-1502-103	SW-12 (10)	Total/NA	Solid	8021B	1111
90-1502-104	SW-13 (15)	Total/NA	Solid	8021B	1111
90-1502-105	SW-14 (15)	Total/NA	Solid	8021B	1111
90-1502-106	SW-15 (15)	Total/NA	Solid	8021B	1111
90-1502-107	SW-16 (15)	Total/NA	Solid	8021B	1111
90-1502-108	SW-17 (15)	Total/NA	Solid	8021B	1111
90-1502-109	SW-18 (15)	Total/NA	Solid	8021B	1111
90-1502-110	SW-19 (15)	Total/NA	Solid	8021B	1111
90-1502-111	SW-20 (15)	Total/NA	Solid	8021B	1111
90-1502-112	SW-21 (15)	Total/NA	Solid	8021B	1111
90-1502-113	SW-22 (15)	Total/NA	Solid	8021B	1111
90-1502-114	SW-23 (15)	Total/NA	Solid	8021B	1111
90-1502-115	SW-24 (15)	Total/NA	Solid	8021B	1111
90-1502-116	SW-25 (15)	Total/NA	Solid	8021B	1111
90-1502-117	SW-26 (15)	Total/NA	Solid	8021B	1111
90-1502-118	SW-27 (15)	Total/NA	Solid	8021B	1111
90-1502-119	SW-28 (15)	Total/NA	Solid	8021B	1111
/IB 880-11113/5-A	Method Blank	Total/NA	Solid	8021B	1111
1B 880-11114/5-A	Method Blank	Total/NA	Solid	8021B	1111
CS 880-11113/1-A	Lab Control Sample	Total/NA	Solid	8021B	1111
CS 880-11114/1-A	Lab Control Sample	Total/NA	Solid	8021B	1111
CSD 880-11113/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1111
.CSD 880-11114/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1111
90-1502-81 MS	BH-81 (15)	Total/NA	Solid	8021B	1111
90-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8021B	1111
90-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8021B	1111
90-1502-101 MSD	SW-10 (0-0)	Total/NA	Solid	8021B	1111

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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
890-1502-59	BH-59 (15)	Total/NA	Solid	8021B	11445
890-1502-60	BH-60 (15)	Total/NA	Solid	8021B	11445
890-1502-120	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	
890-1520-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**

L	ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
8	90-1502-1	BH-1 (6)	Total/NA	Solid	Total BTEX	
8	90-1502-2	BH-2 (6)	Total/NA	Solid	Total BTEX	
8	90-1502-3	BH-3 (6)	Total/NA	Solid	Total BTEX	
8	90-1502-4	BH-4 (6)	Total/NA	Solid	Total BTEX	

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

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## **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	

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		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	

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Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

## **GC VOA (Continued)**

### **Analysis Batch: 11768 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
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

### Pron 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	
890-1502-3	BH-3 (6)	Total/NA	Solid	8015NM Prep	
890-1502-4	BH-4 (6)	Total/NA	Solid	8015NM Prep	
890-1502-5	BH-5 (6)	Total/NA	Solid	8015NM Prep	
890-1502-6	BH-6 (6)	Total/NA	Solid	8015NM Prep	
390-1502-7	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	
890-1502-13	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	

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

## GC Semi VOA

## Prep Batch: 11255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
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 Batc
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	
390-1502-50	BH-50 (15)	Total/NA	Solid	8015NM Prep	
390-1502-51	BH-51 (15 )	Total/NA	Solid	8015NM Prep	
890-1502-52	BH-52 (15)	Total/NA	Solid	8015NM Prep	
390-1502-53	BH-53 (15)	Total/NA	Solid	8015NM Prep	
390-1502-54	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	
390-1502-60	BH-60 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11273/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
_CS 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	

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Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD 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

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

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## 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

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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 Batcl
390-1502-61	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	

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Project/Site: Kaiser SWD

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## 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 Batcl
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	

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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

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Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD 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 Batc
890-1502-1	BH-1 (6)	Total/NA	Solid	8015 NM	
890-1502-2	BH-2 (6)	Total/NA	Solid	8015 NM	
890-1502-3	BH-3 (6)	Total/NA	Solid	8015 NM	
890-1502-4	BH-4 (6)	Total/NA	Solid	8015 NM	
890-1502-5	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	
390-1502-13	BH-13 (6)	Total/NA	Solid	8015 NM	
390-1502-14	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	
390-1502-17	BH-17 (6)	Total/NA	Solid	8015 NM	
390-1502-18	BH-18 (6)	Total/NA	Solid	8015 NM	
90-1502-19	BH-19 (6)	Total/NA	Solid	8015 NM	
390-1502-20	BH-20 (6)	Total/NA	Solid	8015 NM	
390-1502-21	BH-21 (6)	Total/NA	Solid	8015 NM	
390-1502-22	BH-22 (6)	Total/NA	Solid	8015 NM	
390-1502-23	BH-23 (6)	Total/NA	Solid	8015 NM	
390-1502-24	BH-24 (6)	Total/NA	Solid	8015 NM	
390-1502-25	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	

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 Batc
390-1502-29	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	
890-1502-34	BH-34 (15)	Total/NA	Solid	8015 NM	
890-1502-35	BH-35 (15)	Total/NA	Solid	8015 NM	
890-1502-36	BH-36 (15)	Total/NA	Solid	8015 NM	
890-1502-37	BH-37 (15)	Total/NA	Solid	8015 NM	
890-1502-38	BH-38 (15)	Total/NA	Solid	8015 NM	
890-1502-39	BH-39 (15)	Total/NA	Solid	8015 NM	
890-1502-40	BH-40 (15)	Total/NA	Solid	8015 NM	
890-1502-41	BH-41 (15)	Total/NA	Solid	8015 NM	
890-1502-42	BH-42 (15)	Total/NA	Solid	8015 NM	
890-1502-43	BH-43 (15)	Total/NA	Solid	8015 NM	
890-1502-44	BH-44 (15)	Total/NA	Solid	8015 NM	
890-1502-45	BH-45 (15)	Total/NA	Solid	8015 NM	
890-1502-46	BH-46 (15)	Total/NA	Solid	8015 NM	
890-1502-47	BH-47 (15)	Total/NA	Solid	8015 NM	
890-1502-48	BH-48 (15)	Total/NA	Solid	8015 NM	
890-1502-49			Solid		
890-1502-49 890-1502-50	BH-49 (15)	Total/NA Total/NA	Solid	8015 NM 8015 NM	
	BH-50 (15)				
890-1502-51	BH-51 (15)	Total/NA	Solid	8015 NM	
890-1502-52	BH-52 (15)	Total/NA	Solid	8015 NM	
890-1502-53	BH-53 (15)	Total/NA	Solid	8015 NM	
890-1502-54	BH-54 (15)	Total/NA	Solid	8015 NM	
890-1502-55	BH-55 (15)	Total/NA	Solid	8015 NM	
890-1502-56	BH-56 (15)	Total/NA	Solid	8015 NM	
890-1502-57	BH-57 (15)	Total/NA	Solid	8015 NM	
890-1502-58	BH-58 (15)	Total/NA	Solid	8015 NM	
890-1502-59	BH-59 (15)	Total/NA	Solid	8015 NM	
890-1502-60	BH-60 (15)	Total/NA	Solid	8015 NM	
890-1502-61	BH-61 (15)	Total/NA	Solid	8015 NM	
890-1502-62	BH-62 (15)	Total/NA	Solid	8015 NM	
890-1502-63	BH-63 (15)	Total/NA	Solid	8015 NM	
890-1502-64	BH-64 (15)	Total/NA	Solid	8015 NM	
890-1502-65	BH-65 (15)	Total/NA	Solid	8015 NM	
890-1502-66	BH-66 (15)	Total/NA	Solid	8015 NM	
890-1502-67	BH-67 (15)	Total/NA	Solid	8015 NM	
890-1502-68	BH-68 (15)	Total/NA	Solid	8015 NM	
890-1502-69	BH-69 (15)	Total/NA	Solid	8015 NM	
890-1502-70	BH-70 (15)	Total/NA	Solid	8015 NM	
890-1502-71	BH-71 (15)	Total/NA	Solid	8015 NM	
890-1502-72	BH-72 (15)	Total/NA	Solid	8015 NM	
890-1502-73	BH-73 (15)	Total/NA	Solid	8015 NM	
890-1502-74	BH-74 (15)	Total/NA	Solid	8015 NM	
890-1502-75	BH-75 (15)	Total/NA	Solid	8015 NM	
890-1502-76	BH-76 (15)	Total/NA	Solid	8015 NM	
890-1502-77	BH-77 (15)	Total/NA	Solid	8015 NM	
890-1502-78	BH-78 (15)	Total/NA	Solid	8015 NM	
890-1502-79	BH-79 (15)	Total/NA	Solid	8015 NM	

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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.

Project/Site: Kaiser SWD

Job ID: 890-1502-1

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	

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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 Batch
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 Batch
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	
890-1502-34	BH-34 (15)	Soluble	Solid	DI Leach	
890-1502-35	BH-35 (15)	Soluble	Solid	DI Leach	
890-1502-36	BH-36 (15)	Soluble	Solid	DI Leach	
890-1502-37	BH-37 (15)	Soluble	Solid	DI Leach	
890-1502-38	BH-38 (15)	Soluble	Solid	DI Leach	

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

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## **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 Batch
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	

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# **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**

<b>Lab Sample ID</b> 890-1502-1	Client Sample ID BH-1 (6)	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 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

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## **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**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-92	SW-1 (0-6)	Soluble	Solid	300.0	11233
890-1502-93	SW-2 (0-6)	Soluble	Solid	300.0	11233
890-1502-94	SW-3 (0-6)	Soluble	Solid	300.0	11233
890-1502-95	SW-4 (0-6)	Soluble	Solid	300.0	11233
890-1502-96	SW-5 (0-6)	Soluble	Solid	300.0	11233
890-1502-97	SW-6 (0-6)	Soluble	Solid	300.0	11233
890-1502-98	SW-7 (0-6)	Soluble	Solid	300.0	11233
890-1502-99	SW-8 (0-6)	Soluble	Solid	300.0	11233
890-1502-100	SW-9 (0-6)	Soluble	Solid	300.0	11233
890-1502-101	SW-10 (0-6)	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
890-1502-92 MS	SW-1 (0-6)	Soluble	Solid	300.0	11233
890-1502-92 MSD	SW-1 (0-6)	Soluble	Solid	300.0	11233

### 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

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

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### 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

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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

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## **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 Batc
890-1502-45	BH-45 (15)	Soluble	Solid	300.0	1124
890-1502-46	BH-46 (15)	Soluble	Solid	300.0	1124
890-1502-47	BH-47 (15)	Soluble	Solid	300.0	1124
890-1502-48	BH-48 (15)	Soluble	Solid	300.0	1124
890-1502-49	BH-49 (15)	Soluble	Solid	300.0	1124
890-1502-50	BH-50 (15)	Soluble	Solid	300.0	1124
890-1502-51	BH-51 (15 )	Soluble	Solid	300.0	1124
890-1502-52	BH-52 (15)	Soluble	Solid	300.0	1124
890-1502-53	BH-53 (15)	Soluble	Solid	300.0	1124
890-1502-54	BH-54 (15)	Soluble	Solid	300.0	1124
890-1502-55	BH-55 (15)	Soluble	Solid	300.0	1124
890-1502-56	BH-56 (15)	Soluble	Solid	300.0	1124
890-1502-57	BH-57 (15)	Soluble	Solid	300.0	1124
890-1502-58	BH-58 (15)	Soluble	Solid	300.0	1124
390-1502-59	BH-59 (15)	Soluble	Solid	300.0	1124
890-1502-60	BH-60 (15)	Soluble	Solid	300.0	1124
890-1502-61	BH-61 (15)	Soluble	Solid	300.0	1124
890-1502-62	BH-62 (15)	Soluble	Solid	300.0	1124
890-1502-63	BH-63 (15)	Soluble	Solid	300.0	1124
390-1502-64	BH-64 (15)	Soluble	Solid	300.0	1124
MB 880-11240/1-A	Method Blank	Soluble	Solid	300.0	1124
LCS 880-11240/2-A	Lab Control Sample	Soluble	Solid	300.0	1124
LCSD 880-11240/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1124
890-1502-45 MS	BH-45 (15)	Soluble	Solid	300.0	1124
890-1502-45 MSD	BH-45 (15)	Soluble	Solid	300.0	1124
390-1502-55 MS	BH-55 (15)	Soluble	Solid	300.0	1124
890-1502-55 MSD	BH-55 (15)	Soluble	Solid	300.0	1124

## Analysis Batch: 11456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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

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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

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Job ID: 890-1502-1 Client: Tetra Tech, Inc. 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

Lab Sample ID: 890-1502-1

**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			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	CH	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 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 5.01 g 5 mL 11075 11/01/21 11:05 KL XEN MID Total/NA 8021B 5 mL 11/03/21 01:08 XEN MID Analysis 1 5 mL 11206 MR Total/NA Total BTEX 11768 XEN MID Analysis 11/08/21 17:11 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 11223 11/02/21 11:44 DM 10 mL Total/NA Analysis 8015B NM 11317 11/03/21 12:43 AJ XEN MID Soluble 11227 XEN MID Leach DI Leach 4.96 g 50 mL 11/02/21 11:52 CH

Lab Sample ID: 890-1502-3 Client Sample ID: BH-3 (6) Date Collected: 10/27/21 00:00 **Matrix: Solid** 

11379

11/06/21 06:09

CH

Date Received: 10/29/21 12:45

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			5.01 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

Γ	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 01:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID

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Released to Imaging: 9/1/2023 3:31:23 PM

XEN MID

Job ID: 890-1502-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: BH-4 (6)

Date Received: 10/29/21 12:45

Lab Sample ID: 890-1502-4 Date Collected: 10/27/21 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	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 Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab 5035 Total/NA Prep 4.96 g 5 mL 11075 11/01/21 11:05 KL XEN MID Total/NA Analysis 8021B 5 mL 5 mL 11206 11/03/21 02:09 MR XEN MID 1 Total/NA Total BTEX XEN MID Analysis 1 11768 11/08/21 17:11 AJ Total/NA Analysis 8015 NM 11598 11/05/21 13:50 XEN MID AJXEN MID Total/NA Prep 8015NM Prep 10.04 g 10 mL 11223 11/02/21 11:44 DM Total/NA Analysis 8015B NM 11317 11/03/21 13:43 AJ XEN MID 1 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 **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 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

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Client Sample ID: BH-7 (6)

Lab Sample ID: 890-1502-7 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 g	50 mL	11237	11/02/21 12:31	СН	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

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	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	СН	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 06:07	CH	XEN MID

Lab Sample ID: 890-1502-9 Client Sample ID: BH-9 (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			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	Type	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

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Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc.

Lab Sample ID: 890-1502-11

**Matrix: Solid** 

Client Sample ID: BH-11 (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 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 Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 11/01/21 11:05 Total/NA 4.99 g 5 mL 11075 KL XEN MID Total/NA 8021B 5 mL 11/03/21 05:34 XEN MID Analysis 1 5 mL 11206 MR Total/NA Total BTEX 11768 XEN MID Analysis 1 11/08/21 17:11 A.I Total/NA Analysis 8015 NM 11598 11/05/21 13:50 XEN MID Total/NA XEN MID Prep 8015NM Prep 10.03 g 11223 11/02/21 11:44 DM 10 mL Total/NA Analysis 8015B NM 11317 11/03/21 16:22 AJ XEN MID Soluble XEN MID Leach DI Leach 5.05 g 50 mL 11237 11/02/21 12:31 CH Soluble Analysis 300.0 1 11453 11/07/21 06:51 CH XEN MID

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

	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 05:54	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			10.03 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

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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	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	CH	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	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 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	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 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

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**Matrix: Solid** 

11/10/2021

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

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

	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	СН	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 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 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

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Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Date Received: 10/29/21 12:45

Client Sample ID: BH-21 (6) Lab Sample ID: 890-1502-21 Date Collected: 10/27/21 00:00

**Matrix: Solid** 

XEN MID

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 11109 11/01/21 12:05 KL XEN MID 8021B Total/NA Analysis 1 5 mL 5 mL 11221 11/02/21 18:15 MR XEN MID Total/NA Analysis Total BTEX 11768 11/09/21 10:40 ΑJ XEN MID Total/NA 8015 NM Analysis 1 11598 11/05/21 13:50 AJ XEN MID Total/NA 8015NM Prep 10 mL 11255 11/02/21 14:45 XEN MID Prep 10.03 g DM Total/NA Analysis 8015B NM 11321 11/03/21 11:27 AJ XEN MID Soluble DI Leach 50 mL 11237 11/02/21 12:31 СН XEN MID

Client Sample ID: BH-22 (6) Lab Sample ID: 890-1502-22

5 g

11453

11/07/21 08:27

CH

Date Collected: 10/27/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Soluble

Leach

Analysis

300.0

	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	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 18:35	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			10.02 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 12:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:35	CH	XEN MID

Client Sample ID: BH-23 (6) Lab Sample ID: 890-1502-23 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	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

	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

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Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-24

Matrix: Solid

Client Sample ID: BH-24 (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	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

Lab Sample ID: 890-1502-25 Client Sample ID: BH-25 (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	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	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 09:49	CH	XEN MID

Client Sample ID: BH-26 (15) Lab Sample ID: 890-1502-26 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			4.95 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

Lab Sample ID: 890-1502-27 Client Sample ID: BH-27 (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			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

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Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Client Sample ID: BH-27 (15)

Analysis

300.0

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-27

CH

11/07/21 10:18

11454

Matrix: Solid

XEN MID

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 DI Leach 11238 Leach 5.02 g 50 mL 11/02/21 12:34 СН XEN MID

1

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

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			5.03 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	Туре	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

Released to Imaging: 9/1/2023 3:31:23 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			4.98 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

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2

3

5

**b** 

9

10

13

EN MID

**Matrix: Solid** 

Client Sample ID: BH-31 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-31

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			5.03 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

Client Sample ID: BH-32 (15) Lab Sample ID: 890-1502-32

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			5.00 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 **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	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 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 00:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

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Client Sample ID: BH-34 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-34

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			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	СН	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	Туре	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	11/03/21 00:29	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	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 17:28	AJ	XEN MID
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 **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	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

Lab Sample ID: 890-1502-37 Client Sample ID: BH-37 (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			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

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**Matrix: Solid** 

11/10/2021

Client: Tetra Tech, Inc. 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 Lab Sample ID: 890-1502-37

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			5.05 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	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	11/03/21 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	СН	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

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Matrix: Solid

Job ID: 890-1502-1 Client: Tetra Tech, Inc. 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

Lab Sample ID: 890-1502-41

**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			5.01 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

Client Sample ID: BH-42 (15) Lab Sample ID: 890-1502-42 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 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 1 A.I 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 11238 XEN MID Leach DI Leach 5 g 50 mL 11/02/21 12:34 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

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

Lab Sample ID: 890-1502-44 Client Sample ID: BH-44 (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			4.98 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

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**Matrix: Solid** 

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

	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	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 **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 04:08	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	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 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

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Client Sample ID: BH-47 (15)

Date Collected: 10/27/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-47

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	11240	11/02/21 12:39	СН	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	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 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	Type	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

Released to Imaging: 9/1/2023 3:31:23 PM

	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

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Job ID: 890-1502-1 Client: Tetra Tech, Inc. 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

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 5035 Total/NA Prep 5.00 g 5 mL 11111 11/01/21 12:11 KL XEN MID 8021B Total/NA Analysis 1 5 mL 5 mL 11259 11/04/21 08:10 MR XEN MID Total/NA Analysis Total BTEX 11768 11/09/21 10:40 ΑJ XEN MID Total/NA 8015 NM Analysis 1 11598 11/05/21 13:50 AJ XEN MID Total/NA 8015NM Prep 10 mL 11273 XEN MID Prep 10.03 g 11/02/21 16:07 DM Total/NA Analysis 8015B NM 11323 11/03/21 16:03 AJ XEN MID Soluble DI Leach 50 mL 11240 11/02/21 12:39 СН XEN MID Leach 4.96 g 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 **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	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

Lab Sample ID: 890-1502-54 Client Sample ID: BH-54 (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	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 09:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

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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	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 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	Type	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

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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	Туре	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	CH	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 **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	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	Type	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

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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** 

**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	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 **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	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

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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

	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

Lab Sample ID: 890-1502-65 Client Sample ID: BH-65 (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			5.05 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) Lab Sample ID: 890-1502-66 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	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

Lab Sample ID: 890-1502-67 Client Sample ID: BH-67 (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			5.04 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

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

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

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			5.02 g	50 mL	11242	11/02/21 12:43	CH	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	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 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	Type	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

Released to Imaging: 9/1/2023 3:31:23 PM

	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

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Job ID: 890-1502-1 Client: Tetra Tech, Inc. 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

Lab Sample ID: 890-1502-71

**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			4.99 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

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

Lab Sample ID: 890-1502-73 Client Sample ID: BH-73 (15) Date Collected: 10/28/21 00:00 **Matrix: Solid** 

Date Received: 10/29/21 12:45

Dil Final Batch Batch Initial Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 4.96 g Total/NA Prep 5035 5 mL 11112 11/01/21 12:13 KL XEN MID Total/NA Analysis 8021B 5 mL 5 mL 11221 11/03/21 11:21 MR XEN MID Total/NA Analysis Total BTEX 11768 11/09/21 10:40 A.I XEN MID 1 Total/NA Analysis 8015 NM 11598 11/05/21 13:50 ΑJ 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 11323 11/04/21 02:31 XEN MID 1 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

Lab Sample ID: 890-1502-74 Client Sample ID: BH-74 (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			5.02 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

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Client Sample ID: BH-74 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-74

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			10.03 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	СН	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

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

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Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: BH-77 (15)

Client Sample ID: BH-78 (15)

Lab Sample ID: 890-1502-77

Matrix: Solid

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
Soluble	Leach	DI Leach			5.03 g	50 mL	11242	11/02/21 12:43	СН	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 12:34	CH	XEN MID

Lab Sample ID: 890-1502-78

**Matrix: Solid** 

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			5.05 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

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 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

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**Matrix: Solid** 

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: BH-81 (15)

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-1502-81

. 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)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-82

Matrix: Solid

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)

Date Collected: 10/28/21 00:00

Lab Sample ID: 890-1502-84

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 18:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

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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	СН	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:25	CH	XEN MID

Lab Sample ID: 890-1502-85 Client Sample ID: BH-85 (15) 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			5.03 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) Lab Sample ID: 890-1502-86 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			4.96 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

Lab Sample ID: 890-1502-87 Client Sample ID: BH-87 (15)

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			5.01 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

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**Matrix: Solid** 

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-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	Leach	DI Leach			5 g	50 mL	11243	11/02/21 12:46	СН	XEN MID
Į	Soluble	Analysis	300.0		1			11705	11/09/21 13:22	CH	XEN MID

Client Sample ID: BH-88 (15)

Lab Sample ID: 890-1502-88

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			5.00 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	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 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

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Job ID: 890-1502-1 SDG: 212C-MD-02230

Project/Site: Kaiser SWD Client Sample ID: BH-91 (RS) (6)

Lab Sample ID: 890-1502-91

Date Collected: 10/28/21 00:00 Date Received: 10/29/21 12:45

Client: Tetra Tech, Inc.

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

Lab Sample ID: 890-1502-92

Client Sample ID: SW-1 (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			5.00 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	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 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

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Client Sample ID: SW-3 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-94

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			10.03 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	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	11/04/21 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

Client Sample ID: SW-5 (0-6) Lab Sample ID: 890-1502-96 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			5.04 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

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Job ID: 890-1502-1 SDG: 212C-MD-02230

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: SW-6 (0-6)

Date Collected: 10/25/21 00:00 Date Received: 10/29/21 12:45 Lab Sample ID: 890-1502-97

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	11233	11/02/21 12:00	CH	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	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	11/04/21 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	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 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

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Released to Imaging: 9/1/2023 3:31:23 PM

Client: Tetra Tech, Inc.

Job ID: 890-1502-1

Project/Site: Kaiser SWD

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 Lab Sample ID: 890-1502-101

. 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	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 Date Received: 10/29/21 12:45 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			5.00 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 05:49	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	11/08/21 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 12:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11236	11/02/21 12:22	СН	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 09:36	CH	XEN MID

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

Dil Final Batch Batch Initial Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep Total/NA 5035 5.03 g 5 mL 11114 11/01/21 12:18 KL XEN MID Total/NA Analysis 8021B 5 mL 5 mL 11374 11/04/21 06:09 MR XEN MID Total/NA Analysis Total BTEX 11768 11/09/21 10:40 A.I XEN MID 1 Total/NA Analysis 8015 NM 11598 11/08/21 15:54 ΑJ 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 11418 11/04/21 12:32 XEN MID 1 Soluble Leach DI Leach 5.05 g 50 mL 11236 11/02/21 12:22 CH XEN MID Soluble Analysis 300.0 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 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 06:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

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**Matrix: Solid** 

2

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10

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Client: Tetra Tech, Inc. Job ID: 890-1502-1 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 **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	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	Туре	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	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 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

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**Matrix: Solid** 

Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

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 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 11236 Leach 5.04 g 50 mL 11/02/21 12:22 СН XEN MID 300.0 11/08/21 10:49 Soluble Analysis 1 11452 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

	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

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**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-1502-1 Project/Site: Kaiser SWD SDG: 212C-MD-02230

Client Sample ID: SW-20 (15)

Lab Sample ID: 890-1502-111 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			4.96 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 10:21	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	11/08/21 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 15:46	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 11:31	CH	XEN MID

Client Sample ID: SW-21 (15)

Lab Sample ID: 890-1502-112 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			5.02 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	СН	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 **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	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

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

	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	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

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**Matrix: Solid** 

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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

**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	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 12:43	CH	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	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 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

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**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-1502-1 SDG: 212C-MD-02230

Client Sample ID: SW-26 (15) Date Collected: 10/26/21 00:00

Lab Sample ID: 890-1502-117

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			5.05 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

Lab Sample ID: 890-1502-118

**Matrix: Solid** 

Date Collected: 10/26/21 00:00 Date Received: 10/29/21 12:45

Client Sample ID: SW-27 (15)

	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	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

Lab Sample ID: 890-1502-119

**Matrix: Solid** 

**Matrix: Solid** 

Client Sample ID: SW-28 (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			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

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	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 13:46	CH	XEN MID

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Job ID: 890-1502-1

Client: Tetra Tech, Inc. 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

Date Received: 10/29/21 12:45

Lab Sample ID: 890-1502-122

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	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

Lab Sample	ID:	890-1502-124
		Matrix: Solid

Γ	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

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### **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

Matrix: Solid

Lab Sample ID: 890-1502-124

	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	СН	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

### **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	

### **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

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### **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-1502-1 SDG: 212C-MD-02230

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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
890-1502-51	BH-52 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-52	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

### **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
890-1502-55	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	BH-65 (15)	Solid	10/27/21 00:00	10/29/21 12:45	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	BH-86 (15)	Solid	10/28/21 00:00	10/29/21 12:45	15
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
		Solid	10/25/21 00:00		0 - 6
890-1502-93	SW-2 (0-6)			10/29/21 12:45	
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
890-1502-104	SW-13 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
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

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
390-1502-118	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
390-1502-123	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

Date: Time:		Date:	June 10/2															Receiving Laboratory:		Project Location: (county, state)				eques
		e: Time:		BH-10 (6')	BH-9 (6')	BH-8 (6')	вн-7 (6')	BH-6 (6')	BH-5 (6')	BH-4 (6")	BH-3 (6')	BH-2 (6')	BH-1 (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: V	Chear	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:	88	
Date: Time:		Date: Time:	77	Date: X		×	×	×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	20-1502 Chain of Custody	
2	2.4 Rush Charges Authorized	Sample Temperature	ONLY X STANDARD	X REMARKS:	×	×	×	×	×	×	×	×		FILTER BTEX 8 TPH TX TPH 80 PAH 82 Total Me TCLP M TCLP Sc RCI GC/MS RCI GC/MS PCB's 8 NORM PLM (As Chloride Genera	ED (YOUR SEED (YOUR SEED)(YOUR SEED (YOUR SE	BTE (Ext to C GRO See See See See See See See See See Se	C35) - DRO - Ba Cd Cr Ba Cd C  624 -270C/62  TDS mistry (s	Pb Se r Pb Se	Hg Hg	st)		ST Specific Method N		Page1 of
	Received by: Date: Time: 2.2	Time: Received by: Date: Time: 2.7	Time: Received by: V Date: Time: Sample Temperature  Rush: Same Day 24 hr 48 hr  Rush Charges Authorized  Time: Received by: Date: Time: 2,2  Special Report Limits or TRRP Repo	12:45 (LOC CLAST 10.29.2) 1245 ONLY  Time: Received by: Date: Time: Sample Temperature  7:me: Received by: Date: Time: 2.4	Time:         Received by:         Date:         Time:         LAB USE         REMARKS:           1/2:4/5         (Lee Use)         10:29:21         12:4/5         ONLY         Rush:         Sample Temperature           Time:         Received by:         Date:         Time:         Sample Temperature         Rush Charges Authorized           Time:         Received by:         Date:         Time:         2:4         Rush Charges Authorized           Time:         Received by:         Date:         Time:         2:2         Special Report Limits or TRRP Report	Time:         Received by:         Date:         Time:         LAB USE Ime:         REMARKS:           17:45         QUEWED 10:29:21         12:45         ONLY         Received by:         Date:         Time:         Sample Temperature         RUSH: Same Day 24 hr 48 hr           Time:         Received by:         Date:         Time:         2:4         Rush Charges Authorized           Time:         Received by:         Date:         Time:         2:4         Special Report Limits or TRRP Report	10/27/2021   X	10/27/2021   TIME   TIME   10/27/2021   TIME	1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027/2021   1027	Samplud   Samp	Received by:   Date:   Time:	Received by:   Date:   Time:	Contained by:   Date:   Time:	Project #: 212C-MD-02230   Project #: 212C-MD-	Mailer   Solutions   Sampler Signature:	Maler Solutions	Maler Solutions   Sampler Sentature:   212C-MD-02230							

Relinquished by:		Relinquished by:	The M	Relinquished by:											( LAB USE )	LAB #		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Date: Time:		Date: Time:	16129121 12:45	Time	BH-20 (6")	ВН-19 (6')	BH-18 (6')	BH-17 (6')	BH-16 (6')	BH-15 (6')	BH-14 (6')	BH-13 (6')	BH-12 (6')	BH-11 (6')		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:	Har Dank	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:	
			8	_	×	×	×	×	×	×	×	×	×	×	WATE SOIL	R	MATRIX		Eze		212		Clair G	Midian Midian Tel (43
Date:		Date: Tir	0.29	Date: Tir	×	×	×	×	×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE		X PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	SUTW Wall Street, Sie 100 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
lime:		Time:	1.51 100	Time:											None # CON	TAINE			0		0			ж С
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		Sample Temperature	_	5	×	×	×		×	×	×				TPH T	(1005	(Ext to						ANA	
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t Limit	Rush Charges Authorized	e Day	, {	Ŕ	H		$\vdash$	-	-				-	1	NORM PLM (A	sbest	os)							
Special Report Limits or TRRP Report	orized	11 42			×	×	×	×	×	×	×	×	×	×	Chloride			TDC				_ {	Method	
RRP	•	l				+	$\pm$	$\perp$	$\perp$						Chlorid Genera		ulfate er Che	TDS mistry (s	ee att	ached I	ist)		c. Z	
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(Circle) HAND DELIVERED FEDEX UPS Tracking #

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Relinquished by:		Relinquished by:	End M	Relinquished by:											( LABUSE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4
Date: Time:		Date: Time:	10/29/21 12/92/01	Time:	BH-40 (15')	BH-39 (15')	BH-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:	I like (UX	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	TEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
Date:		Date:	P 10:29-21	Date:	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE		MATRIX PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Steet, Sie 100 Midland, Texas 78705 Tel (432) 682-4559 Fei (432) 682-3945
Time:		Time:	1045	Time:											# CON		ERS		no		30			Fax
		Sample Temperature	ONLY	LAB USE	×	×	×	×	×	×	×	×	×	×	TPH T TPH 8 PAH 8 Total M	X100 015M 32700 Metals	5 (Ext I I ( GRC ; Ag As	EX 8260 to C35) 0 - DRO - Ba Cd Cr	ORO - Pb Se	Hg			ANALYSIS RE	
Special Repo	Rush Charges Authorized	RUSH: Same Day	\[\text{\rm 1} \]	쏬											TCLP S TCLP S RCI GC/MS	Volati Semi S Vol.	les Volatile 8260E ni. Vol.	s					REQUEST (Circle or Specify	
Special Report Limits or TRRP Report	es Authorized	me Day 24 hr 48 hr			×	×	×	×	×	×	×	×	×	×	NORM PLM (A Chlorid Chlorid Gener	Asbes de de al W	stos) Sulfate	emistry (	see att	ached I	ist)		fv Method No	
eport		hr 72 hr													Hold	Calif	a Ddid						Ĕ	

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Midland, Fexas 79/05   Tel (432) 682-4559   Fax	Tel (432) 682-4559  (432) 682-4559  (432) 682-3946  Clair Gonzales  212C-MD-022:	Midland,Texas 179705  Tel (432) 682-4559  Fax  (432) 682-3946  Clair Gonzales  212C-MD-02230	Clair Gonzales  212C-MD-02230	### Clair Gonzales  212C-MD-02230	### Clair Gonzales  Clair Gonzales  212C-MD-02230	### ANALYSIS REQUEST  Clair Gonzales  Clair Gonzales  212C-MD-02230	### Clair Gonzales  Clair Gonzales  212C-MD-02230
ore 22	ore 22	Fax 2230	Fax  ANALYSIS  O - MRO)  O Se Ho	Fax  ANALYSIS REQUES  (Circle  See Hg b See Hg	ANALYSIS REQUEST  ANALYSIS REQUEST  (Circle or S  S Se Hg  D Se Hg  D Se Hg	ANALYSIS REQUEST  (Circle or Specify  See Hg  Do See Hg	ANALYSIS REQUEST  (Circle or Specify  See Hg  Do See Hg
SEZ-4559 SEZ-4559 Fax 123682-3946 ND-02230 Irel Moreno PRESERVATIVE METHOD	A46 Fax  A46 Fax  A67 Fax  A68	SERVATIVE RS /Z)	ВТЕХ 8260В  [Ext to C35)  GRO - DRO - ORO - MRO)   ДА S Ba Cd Ct Ph Se Ho	SERVATIVE  RES  (/N)  BTEX 8260B  (Ext to C35)  (GRO - DRO - ORO - MRO)  Ag As Ba Cd Cr Pb Se Hg  Ag As Ba Cd Cr Pb Se Hg  solutiles	SERVATIVE  BTEX 8260B  (Ext to C35) (GRO - DRO - ORO - MRO)  Ag As Ba Cd Cr Pb Se Hg  Ag As Ba Cd Cr Pb Se Hg  Solutions  (Circle Or Corollary Cor	## Prend   Pre	### ### ### ### ### ### ### ### ### ##
	RS	RS //N)	RS (N)  BTEX 8260B  Ext to C35)  GRO - DRO - ORO - MRO)  G AS Ba Cd Ct Ph Se Ho	NERS  (Y/N)  B BTEX 8260B  05 (Ext to C35)  M ( GRO - DRO - ORO - MRO)  C S Ag As Ba Cd Cr Pb Se Hg  Is Ag As Ba Cd Cr Pb Se Hg  Is Ag As Ba Cd Cr Pb Se Hg  Is Is Ag As Ba Cd Cr Pb Se Hg  Is Is Ag As Ba Cd Cr Pb Se Hg  Is Is Ag As Ba Cd Cr Pb Se Hg  Is Is Ag As Ba Cd Cr Pb Se Hg  Is Is Ag As Ba Cd Cr Pb Se Hg  Is Is Ag As Ba Cd Cr Pb Se Hg	NERS  I (Y/N)  1B BTEX 8260B  05 (Ext to C35)  M ( GRO - DRO - ORO - MRO)  C  S Ag As Ba Cd Cr Pb Se Hg  Ils Ag As Ba Cd Cr Pb Se Hg  Itiles  i Volatiles  I 8260B / 624	NERS  I (Y/N)  1B BTEX 8260B  05 (Ext to C35)  M ( GRO - DRO - ORO - MRO)  C  Is Ag As Ba Cd Cr Pb Se Hg  Is Ag As Ba Cd Cr Pb Se Hg  Is Ag As Ba Cd Cr Pb Se Hg  Itiles  I Volatiles  I 8260B / 624  mi. Vol. 8270C/625	BTEX 8260B Ext to C35) GRO - DRO - ORO - MRO)  g As Ba Cd Cr Pb Se Hg  g As Ba Cd Cr Pb Se Hg  latiles  260B / 624 Vol. 8270C/625 608

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Tetra Tech, Inc.	Relinquished by:		Relinquished by:	End,	Relinquished by:											( LAB USE )	LAB#		comments:		Decevies 1 shortens:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	7
Clair Gonzales   Fax   Clair Gonzales   Clair Gonzales   Clair Gonzales   Fax   Clair Gonzales   Fax   Clair Gonzales   Clair Gonzales   Fax   Clair Gonzales   Clair Gonzales   Fax   Clair Gonzales   Clair Gonz					Time		BH-89 (15')	BH-88 (15')	BH-87 (15')	BH-86 (15')	BH-85 (15')	BH-84 (15')	BH-83 (15')	BH-82 (15')	BH-81 (15')		SAMPLE IDENTIFICATION			Eurofins Xenco	Dusty McInturff - Permian Water Solutions		Lea County, New Mexico	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Date: Time:	Received by:		Received by:	Upe CAS	Received by:	10/28/2021	10/28/2021	10/28/2021	10/28/2021	10/28/2021	10/28/2021	10/28/2021	10/28/2021	10/28/2021	10/28/2021		YEAR: 2020	SAMPLING			Complex Ciange		Project #:		Site Manager:	
FILTERED (Y/N)						×										HCL HNO <sub>3</sub> ICE None		PRESERVATIVE METHOD		Ezequiel Moreno			212C-MD-02230		Clair Gonzales	946
	Special Repo	7	RUSH:	× 01/2	REMARK	×										FILTER BTEX 8 TPH TX TPH 80 PAH 82 Total Me TCLP M TCLP S RCI GC/MS GC/MS	ED (Y 021B (1005 115M ( 70C etals A etals A etals ( Vol. & Semi.	(Ext to GRO Ag As E Ag As s solatiles Vol. 8	C35) - DRO Ba Cd Cr Ba Cd C	ORO - Pb Se r Pb S	Hg				REQUEST	

	Relinquished by:		Relinquished by:	Kend 1	Relinquished by:											( LAB USE )	LAB #		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	H.
	Date: Time:		Date: Time:	Ph:21 12182101 15:46	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')	ВН-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:		Received by:	Clup (se	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	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
	0			5.01		×	×	×	×	×	×	×	×	×	×	WATE SOIL	R	MATRIX		Ezequi		212C-N		Clair Gonzales	901W Wall Sireet, St Midland,Texas 79705 Tel (432) 682-4559 (432) 682-394
	Date: Time:		Date: Time:	12.6	Date: Time:	×	×	×	×	×	×	×	×	×	×	HCL HNO <sub>3</sub> ICE None		PRESERVATIVE METHOD		Ezequiel Moreno		212C-MD-02230		zales	JOTAY WAIT Street, Sie 100 idland,Texas 79705 el (432) 662-4559 Fax 1432) 682-3946 Fax
				のよび												# CON									
			Sam		_	×	×	×	×	×	×	×	×	×	×	BTEX			EX 8260	В	J		<u> </u>		
יייייייייייייייייייייייייייייייייייייי			Sample Temperature	9	LAB USE	×	×	×	×	×	×	×	×	×	×	TPH 8			- DRO -	ORO -	MRO)			ANALYSIS	
5			nperat	ONLY	<b>JSE</b>	F		L		-						PAH 8		Δα Δε Ι	Ba Cd Cı	Ph So	Но			SIS	
			ure			上										TCLP	Metals	Ag As	Ba Cd C					REQUEST	
- 1		П	Ч	] [2	REMARKS:	$\vdash$	-	╀╌	+	-	-	$\vdash$			╁	TCLP			s					Circle	
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	Received by:		Received by:	Mi) Will	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		SAMPLING		Sampler Signature:		Project #:		Site Manager:	
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**Eurofins Xenco, Carlsbad** 

# **Chain of Custody Record**

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1089 N Canal St.	0	Shain c	Chain of Custody Record	ody R	ec	읔	<u></u>														Č.	eurofins		nviro	amen	Environment Testing	ing	
Phone 575-988-3199 Fax 575-988-3199				,																			-	America	à			•
Client Information (Sub Contract Lab)	Sampler			Lab PM Kramer		Jessica	g	1	ı	ı	ı		င္မ	Carrier Tracking No(s)	ackin	No(s	٠			ထ ဂ	COC No:	COC No: 890-488 1						
1	Phone			E-Mail jessic	E-Mail jessica kramer@eurofinset com	amei	<u>@</u>	rofin	set c	â			Ne Sta	State of Origin New Mexico	rigin					<del></del>	Page Page	Page Page 1 of 14		l			]	
Company Eurofins Xenco					Accreditations Required (See note NELAP - Louisiana NELAP	AP -	loui	quire	Accreditations Required (See note	LAP	- Texas	xas								<u>ہ</u> ہ	Job # 890-1	Job #: 890-1502-1						
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Phone: 432-704-5440(TeI)	PO #				Yanga (S	D) Full								***************************************					<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	title altocker.		MeOH Amchlor	- w 70	Na28	2203		<del>-</del>	
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BH-9 (6) (890-1502-9)	10/27/21	Mountain		Solid			×	×	×	<del> </del>	×	-							P 4	*								
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 he signed Chain of Cu	of method, ana amples must be stody attesting	lyte & accredita shipped back to said complica	ation compliand to the Eurofins ance to Eurofir	e upo Xenco	n out	subco labor C.	ntract atory o	labora or othe	atories r instr	s. Thi ruction	s sam Is will	ole shi oe pro	pmen vided	k is for Any	warde	es to	der ch	nain-c editat	of-cu	stody status	If the labor	atory	does r	ot cui	rently Xenco	LLC	
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Environment Testing America

# 1089 N Canal St Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 **Eurofins Xenco, Carlsbad Chain of Custody Record**

Client Information (Sub Contract Lab) Client Contact Shipping/Receiving	Sampler			Lab PM Kramer E-Mail jessica k	- I	Jessica (ramer@	Deurc	yfinse	con	1		င္က ႏွ	Carrier Tracking No(s) State of Origin New Mexico	acking rigin	No(s)			ठ क्रा हु द	COC No 890-488 2 Page: Page 2 of 14	
Eurofins Xenco					Accreditations Required (See not NELAP - Louisiana NELA	Accreditations Required (See note) NELAP - Louisiana NELAP	s Requ	iired (	NEL.	<sub>(P -</sub> Texas	exas					İ	I	ر اد ور	Job #: 890-1502-1	
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Phone: 432-704-5440(Tel)	PO #:					D) Full		le					·····				10000-5	e π		
Email	WO#				74: 103844H5-5-	Billion Control		Chloric									<u> </u>	in or entro	H ASCORDIC ACIO I Ice J - DI Water	I ISP Dodecahydrate U Acetone V MCAA
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Sample Identification - Client ID (Lab ID)	Sample Date	Time	D: /L	BT=Tissue, A=Air)	DY A NEWSCON		802	300	Tot	801		+	-			1	J	Y OI	Special In	Special Instructions/Note.
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BH-18 (6) (890-1502-18)	10/27/21	Mountain		Solid		×	×	×	×	×								-		
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d NM 88220	Cilalli oi custouy necoru	y zecora			America
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	Sampler	Lab PM.	Carrier Tracking No(s)	COC No:	
Information (Sub Contract Lab)		Kramer Jessica		890-488 3	
ntact	Phone:	E-Mail	State of Origin	Page:	
g/Receiving		jessica kramer@eurofinset com	New Mexico	Page 3 of 14	
		Accreditations Required (See note)		10h #-	

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Client Information (Sub Contract Lab)	Sampler			Lab PM. Krame	∟ab PM. Kramer Jessica	ssica						Carrier Tracking No(s)	Tracki	ng No(:	Ψ.		<b>~</b> ^	COC No: 890-488 3	
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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 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 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 obeing analyzed the sa he signed Chain of Cus	of method and imples must be stody attesting	alyte & accred e shipped bac to said compl	itation complian k to the Eurofins icance to Eurofi	ce upon Xenco	out sub LLC lab	contrac	or other	atories er instru	This s	ample will be	shipme	ent is fo	nward	es to a	ar chair accredi	1-of-cu	This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently clons will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC	tory does not curre rught to Eurofins X
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Deliverable Requested   II III IV Other (specify)	Primary Deliverable Rank. 2	ble Rank. 2	2		S	Special Instructions/QC Requirements	Instru	ctions	QC F	equir	emen	ts 13	5	Ę			9	vo o	months
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Custody Seals Intact.   Custody Seal No						Coole	Cooler Temperature(s)	perature	റ്	and Other Remarks	ner Rei	narks							
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Ver 06/08/2021

Eurofins Xenco, Carlsbad 1089 N Canal St. Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record	
environment Testing	

FILME 0/0-800-0188 Ldx 0/0-800-0188																					
Client Information (Sub Contract Lab)	Sampler			Lab PM Krame	Lab PM Kramer Jessica	essica	ענ					Car	Carrier Tracking No(s)	acking	No(s)				COC No 890-488 4		
Clent Contact Shipping/Receiving	Phone			E-Mail. jessic	E-Mail. jessica.kramer@eurofinset.com	amer(c	Deurc	finse	t.com			Ne Sta	State of Origin:	rigin:					Page. Page 4 of 14		
Eurofins Xenco					Accre	Accreditations Required (See note) NELAP - Louisiana NELAP	s Requ	iired (S	ee not	e) P - Texas	xas	ŀ					l		Job #: 890-1502-1		
Address 1211 W Florida Ave	Due Date Requested 11/4/2021	ā							Ana	alvsi	lvsis Requested		stec	_			ı		Preservation Codes	les	
City Midland	TAT Requested (days)	ys)·			grija-uni	nustránna.					$\dashv$	1	_			$\neg$		Burn			Hexane None
State Zip TX 79701					6. Šą.,	TPH								************				nost determina	D Nitric Acid E NaHSO4	Ω T (	Na2O4S Na2SO3
Phone: 432-704-5440(Tel)	PO#					o) Full		e										ne Marcola de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la companione de la compan			Na2S2O3 H2SO4
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Site	SSOW#				Whitelest "	Andrew Billion	alc BT	D/DI_LI	V									dostanick's	Other:		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix {w=water	Field Filtered S Perform MS/M	8015MOD_NM/8	8021B/5035FP_0	300_ORGFM_28	Total_BTEX_GC	8015MOD_Caic					anterestantenten franctische Sentententententente			Total Number	Special In	this l	Special Instructions/Note
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BH-28 (15) (890-1502-28)	10/27/21	Mountain		Solid		×	×	X	×	×								ايعو			
BH-29 (15) (890-1502-29)	10/27/21	Mountain		Solid		×	×	×	×	×								ا هر			THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY O
BH-30 (15) (890-1502-30)	10/27/21	Mountain		Solid		×	×	×	×	×		$\dashv$	$\dashv$					-4			
BH-31 (15) (890-1502-31)	10/27/21	Mountain		Solid		×	×	×	×	×	$\dashv$			1	1			4			
BH-32 (15) (890-1502-32)	10/27/21	Mountain		Solid		×	×	×	×	×	-							46			
ВН-33 (15) (890-1502-33)	10/27/21	Mountain	-	Solid		×	×	×	×	×		_						-			MANAGARI GARAGARI
BH-34 (15) (890-1502-34)	10/27/21	Mountain		Solid		×	×	×	×	×			7					ه جو			
ВН-35 (15) (890-1502-35)	10/27/21	Mountain		Solid		×	×	×	×	×	-	$\dashv$	十					4			
BH-36 (15) (890-1502-36)	10/27/21	Mountain		Solid		×	×	×	×	×						$\neg$		4			
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.	places the ownership opening analyzed the sa e signed Chain of Cus	of method ana mples must be tody attesting t	lyte & accredit shipped back o said complic	ation complian to the Eurofins ance to Eurofi	ce upor Xenco	out su	bcontr	act lab	pratorie her ins	es. Thi	s samp	vle ship	oment vided	is for	/ardec	unde s to a	r chair ccredi	n-of-citation	ustody If the laborate	lory do	es not currently Eurofins Xenco LLC
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Ver 06/08/2021

**Eurofins Xenco, Carlsbad** 

# **Chain of Custody Record**

eurofins Environment Testing America

Phone. 575-988-3199 Fax. 575-988-3199														
Client Information (Sub Contract Lab)	Sampler:			Lab PM Kramer Jessica	ssica				Carrier T	Carrier Tracking No(s)	ŝ		COC No 890-488 5	
Client Contact: Shipping/Receiving	Phone:			E-Mail iessica kramer@eurofinset o	ner@eu	ofinset	8		State of Origin	Origin			Page.	
Company Eurofins Xenco				Accredit	Accreditations Required (See NELAP - Louisiana NEI	juired (Se	e note): ELAP - Texas	Tayas					Job #:	
Address 1211 W Florida Ave	Due Date Requested 11/4/2021	ă					Δnaly	nio Ro	hnalvsis Reguested	٠			Preservation Codes	des
City Midland	TAT Requested (days)	iys).			_						$\dashv$		A HCL B NaOH	M Hexane N None
State Zip: TX 79701					TPH									P Na2O4S Q Na2SO3
Phone: 432-704-5440(Tel)	PO #			Designation of	O) Full	e								
Email	WO#			TOTAL DESCRIPTION	OM)	hlorid						· · · · · · · · · · · · · · · · · · ·	H ASCORDIC ACID	□ ISP Dodecahydrate □ Acetone ∨ MCAA
Project Name: Kaiser SWD	Project # 88000039			110000000000000000000000000000000000000		ACH (						ainers	K EDTA K EDA	W pH 4-5 Z other (specify)
Site:	SSOW#:			normaniani and and an			v 				····-	of cont	Other:	
		Sample	Sample Matrix Type (W-water Swsold (C=Comp. Carefull)	d Filtered S	5MOD_NM/80 	ORGFM_28I	I_BTEX_GC					il Number o		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	BI	Fie	-	-	╀				-	Tot	Special I	Special Instructions/Note
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BH-39 (15) (890-1502-39)	10/27/21	Mountain	Solid	2	× ;	× ;	<   > <   >	-	1	1		ie Le		
BH-40 (15) (890-1502-40)	10/27/21	Mountain	Solid	٩	-+	-	-+		1	$\downarrow$	1	-		
BH-41 (15) (890-1502-41)	10/27/21	Mountain	Solid	Ω.	×	×	×					. ( 100		
BH-42 (15) (890-1502-42)	10/27/21	Mountain	Solid	۵	×	×	×	$\dashv$			-	يخب		
BH-43 (15) (890-1502-43)	10/27/21	Mountain	Solid	۵	×	×	×				+	-		
BH-44 (15) (890-1502-44)	10/27/21	Mountain	Solid	٩	×	×	×				+	<u> </u>		
BH-45 (15) (890-1502-45)	10/27/21	Mountain	Solid	۵	×	×	×				$\dashv$	4		
Note Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laborat 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 attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	C places the ownership ix being analyzed, the sa the signed Chain of Cus	of method ana imples must be stody attesting	lyte & accreditation con shipped back to the Ei o said complicance to	ipliance upon c irofins Xenco L Eurofins Xenco	nut subcon LC laborat	tract labo	ratories. Ter instruc	This sampl	le shipmen e provided	t is forwar Any cha	ded under	chain-of-	custody If the laborant status should be br	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
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Custody Seal No					Cooler Temperature(	mperatu	e(s) °C and	nd Other Remarks.	emarks.					

**Eurofins Xenco, Carlsbad** 

# **Chain of Custody Record**

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Carlsbad NM 88220 Phone: 575,088,3190 Fay 575,088,3100			01 000	Cay In	2001	7													America
	Sampler			Lab PM Krame	Lab PM Kramer Jessica	à					Саті	Carrier Tracking No(s)	king N	Š			2 S	COC No R90-488 6	
	Phone			E-Mail	E-Mail lessica kramer@eurofinset com	@eur	ofinse	com			State	State of Origin.  New Mexico	8 3				Page.	Page. Page 6 of 14	
Company Eurofins Xenco				-	Accreditations Required (See note) NELAP - Louisíana NELAP - Texas	ns Requ Louisí	uired (S	See not	e) P - Te	xas	l		- 1			- 1	Job #:	Job#: 890-1502-1	
Address 1211 W Florida Ave	Due Date Requested 11/4/2021	ed					l	A	\nalvsis Requested	°R <sub>e</sub>	ATTES	2	1				망	Preservation Codes	les
City: Midland	TAT Requested (days):	ays):			-44	$\dashv$		_	_				_	-	$\dashv$			HCL NaOH	M Hexane N None
State Zip. TX, 79701				<del>,,,,,,</del> ,	<del>stantinu</del> sattana TPH													Zn Acetate Nitric Acid NaHSO4	O AsNaO2 P Na2O4S Q Na2SO3
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Site	SSOW#				) (Ye		DI_LE								********	cont	Other:	<b>в</b> г.	
					MS		28D/I		lc							rof			
				Matrix (w=water	Filtered rm MS/ IOD_NM	1/6036FP	RGFM_	BTEX_G	IOD_Cal							Numbe	normal (no. c., en-		
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab) <sub>BT</sub>	<u>.</u>	Per		300_		3016							ots	October 1999	Spacial In	structions/Note
	V	X	00	Trans.	X	myd		-			10.00			22.2		X			
BH-46 (15) (890-1502-46)	10/27/21	Mountain		Solid	×	×	×	×	×	_			_	_	_	4			
BH-47 (15) (890-1502-47)	10/27/21	Mountain		Solid	×	×	×	×	×				4	$\dashv$	$\dashv$				
BH-48 (15) (890-1502-48)	10/27/21	Mountain		Solid	×	×	×	×	×	_			_	_		ا کم	255.27.22.2		
BH-49 (15) (890-1502-49)	10/27/21	Mountain		Solid	×	×	×	×	×	$\dashv$	$\dashv$				-	<b>3</b>			
BH-50 (15) (890-1502-50)	10/27/21	Mountain		Solid	×	×	×	×	<u>×</u>	+	$\top$		_		+				
BH-51 (15 ) (890-1502-51)	10/27/21	Mountain		Solid	×	×	×	×	×	+	$\top$					- A			
BH-52 (15) (890-1502-52)	10/27/21	Mountain		Solid	×	×	×	×	×	$\dashv$	$\top$		_	$\dashv$				The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	
BH-53 (15) (890-1502-53)	10/27/21	Mountain		Solid	×		×	×	×	1	1			-		100	in the second	W-1	
BH-54 (15) (890-1502-54)	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 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 instruation immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.	C places the ownership x being analyzed the sa the signed Chain of Cu	of method ana amples must be stody attesting	alyte & accreditati e shipped back to to said complical	on compliance the Eurofins x	upon out s enco LLC	subconti	ract lab	oratorie ther ins	es Thi	s samp	e shipr e provi	nent is	forwar ny cha	ded ur	nder ch	ain-of-	custor	dy If the laborat	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					Sample Disposal ( A fee	le Dis	posa	(Af		y be	asses	sed i	fsan	ples	are	etali	ed h	may be assessed it samples are retained longer than 1 month)	month)
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Eurofins Xenco, Carlsbad 1089 N Canal St

Chain of Custody Record

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Environment Testing

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 Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199 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, G=grab) 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 Ice
DI Water
( EDTA
. 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 Company other (specify)

Ver: 06/08/2021

Carlsbad NM 88220 Phone 575-988-3199 Fax

575-988-3199

1089 N Canal St

Eurofins Xenco, Carlsbad

### Chain of Custody Record

Project Name Kaiser SWD BH-65 (15) (890-1502-65) BH-64 (15) (890-1502-64) State, Zip: TX 79701 BH-72 (15) (890-1502-72) BH-71 (15) (890-1502-71) BH-70 (15) (890-1502-70) BH-69 (15) (890-1502-69) BH-68 (15) (890-1502-68) BH-67 (15) (890-1502-67) BH-66 (15) (890-1502-66) Sample Identification - Client ID (Lab ID) Midland elinquished by elinquished by ossible Hazard Identification 132-704-5440(Tel) mpty Kit Relinquished 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. If the laboratory does not currently aintain 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 laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC laboratory. 211 W Flonda Ave Slient Information Custody Seals Intact. eliverable Requested I II III IV Other (specify) linquished by urofins Xenco າipping/Receiving Yes 8 (Sub Contract Lab) Custody Seal No Due Date Requested 11/4/2021 Primary Deliverable Rank WO# PO# AT Requested (days): )ate/Time hone Sample Date 10/28/21 10/28/21 10/28/21 10/28/21 10/27/21 10/27/21 10/27/21 10/28/21 10/27/21 Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Mountain Sample Time G=grab) (C=comp, Sample Type Preservation Code: Company Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Kramer Jessica jessica kramer@eurofinset com Ime: Field Filtered Sample (Yes or No) 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) 8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks ×  $\times$ × ×  $\times$ × ×  $\times$ × Return To Client × × × × × × 8021B/5035FP\_Calc BTEX × × × × 300\_ORGFM\_28D/DI\_LEACH Chloride × rotal\_BTEX\_GCV × × × ×  $\times$ Analysis Requested 8015MOD\_Calc × ×  $\times$ × × × × ×  $\times$ Disposal By Lab State of Origin New Mexico ethod of Shipment Date/Time Archive For 94**4** \*\* Total Number of containers , <u>256</u> <del>jak</del>e (**18** COC No 890-488 8 ΙG Junoc∞> Preservation Codes NaOH
Nitric Acid
Nitric Acid
Natric Acid 890-1502-1 age 8 of 14 age: M Hexane
None
None
National
National
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National Ver 06/08/202 other (specify) Months

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Environment Testing

1089 N Canal St Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199 Eurofins Xenco, Carlsbad

**Chain of Custody Record** 

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Client Information (Sub Contract Lab)	Gampio			Krame	Kramer Jessica	sica						Carner Fracking No(s)	rackir	)ON Q	٣			COC No. 890-488 9
Client Contact Shipping/Receiving	Phone			E-Mail Jessic	E-Mail Jessica kramer@eurofinset.com	ner@e	urofin	set.cc	3		<b>-</b> (0	State of Origin New Mexico	Origin	٦				Page: Page 9 of 14
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Phone 432-704-5440(Tel)	PO #				<b>L</b> illingston	) Full	le										on tradelli	Amchlor S
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BH-74 (15) (890-1502-74)	10/28/21	Mountain		Solid		×	×	×	×								إليجمر	
BH-75 (15) (890-1502-75)	10/28/21	Mountain		Solid		×	×	×	×			_				$\neg$	, <b>48</b> )	
BH-76 (15) (890-1502-76)	10/28/21	Mountain		Solid		×	×	×	×			_			$\dashv$		24	
BH-77 (15) (890-1502-77)	10/28/21	Mountain		Solid		×	×	×	×			_	$\dashv$		$\dashv$	$\neg$	.a.	
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BH-80 (15) (890-1502-80)	10/28/21	Mountain		Solid		×	×	×	×							$\dashv$	-	
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eurofins Environment Testing America

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ormation (Sub Contract Lab)		Kramer Jessica		890-488 10	
	Phone:	E-Mail	State of Origin	Page	
eceiving		jessica kramer@eurofinset.com	New Mexico	Page 10 of 14	
		Accreditations Required (See note):		Job #:	

Client Information (Sub Contract Lab)				Kram	Kramer Jessica	Sign									-		
Client Contact: Shipping/Receiving	Phone:			E-Mail	E-Mail  essica kramer@eurofinset.com	er@et	ırofins	et.com	_		State	State of Origin	0 -			Page Page 10 of 14	
Company: Eurofins Xenco					Accreditations Required (See NELAP - Louisiana, NEL	tions Re	quired siana.	See no	note): AP - Texas	xas	ı					Job #: 890_1502_1	
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1089 N Canal St Carlsbad NM 88220 Phone 575-988-3199 F

Eurofins Xenco, Carlsbad

# **Chain of Custody Record**

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-988-3199 Fax 575-988-3199				
	Sampler	Lab PM	Carrier Tracking No(s)	COC No.
ormation (Sub Contract Lab)		Kramer Jessica		890-488 11
	Phone:	E-Mail	State of Origin	Page:
sceiving		jessica kramer@eurofinset com	New Mexico	Page 11 of 14
		Accreditations Required (See note)		Job #:
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Client Information (Sub Contract Lab)				Kran	Namer Jessica	Sica					-					ç	-100		
Client Contact: Shipping/Receiving	Phone:			E-Mail iessic	E-Mail iessica kramer@eurofinset com	ner@e	urofin	set co	Ĭ		Sta	State of Origin	igin G			יק ס	Page: Page 11 of 14		
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SW-5 (0-6) (890-1502-96)	10/25/21	Mountain		Solid		×	×	×	×	$\Box$	$\dashv$	-		_		<u> </u>			
SW-6 (0-6) (890-1502-97)	10/25/21	Mountain		Solid		×	×	×	×							-4			
SW-7 (0-6) (890-1502-98)	10/26/21	Mountain		Solid		×	×	×	×							<u> </u>			
SW-8 (0-6) (890-1502-99)	10/26/21	Mountain		Solid		×	×	×	×							<b>.</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 in 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 sather the sather the sather the sather the signed Chain of Cu	of method and amples must be stody attesting	alyte & accredi	tation compliand to the Eurofins cance to Eurofir	e upon c Xenco L s Xenco	out subo	contract	laborat or other	ones	This sar	nple sh	ipment vided	is forwa Any chi	rded un inges to	der chail accredi	1-of-cut	tody If the labatus should be	oratory a	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.
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Custody Seals Intact: Custody Seal No						Coole	Cooler Temperature(s)	rature(	റ്	and Other Remarks	Rema	₹s.							

Eurofins Xenco, Carlsbad 1089 N Canal St Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199 **Chain of Custody Record** 🤹 eurofins

	Sampler			רמט	2									1			000	
Client Information (Sub Contract Lab)				Kram	Kramer Jessica	ssica							,	,			890-488 12	
Client Contact Shipping/Receiving	Phone:			E-Mail jessio	E-Mail jessica kramer@eurofinset com	ner@e	eurofir	nset c	ğ		Z St	State of Origin New Mexico	rigin Co				Page 12 of 14	
Company Eurofins Xenco					Accreditations Required (See not NELAP - Louisiana NELA	ations F	Require ursian	d (See	note):	)te)· ∖P - Texas							Job# 890-1502-1	
<sup>a</sup> ddress 1211 W Florida Ave	Due Date Requested 11/4/2021	ă					١		Analy	alvsis Requested	eau	ster	-	- [			Preservation Codes	les
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State, Zip TX 79701						TPH				***************************************		<del></del>				y	D Nitric Acid	P Na2O4S Q Na2SO3
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Environment Testing America

**Eurofins Xenco, Carlsbad** 

# **Chain of Custody Record**

1089 N Canal St Carlsbad NM 88220 Phone 575-988-3199 Fax. 575-988-3199  Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving Company Eurofins Xenco Address 1211 W Florida Ave City Midland State Zip TX 79701 Phone: 432-704-5440(Tel) Email Froject Name Kaiser SWD Site Sumple Identification - Client ID (Lab ID)  Sumple Identification - Client ID (Lab ID)	Sampler Phone  Due Date Requested 11/4/2021  TAT Requested (days) Project # 88000039 SSOW#:  WO #  10/28/21  M	Sample Time	Chain of Custody Record    Lab PM   Kramer Jessica   E-Mair     Jessica kramer   Jessica kr	Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   Record   R	Field Filtered Sample (Yes or No)  Perform MS/MSD (Yes or No)  X 8016MOD_NM/8016NM_S_Prep (MOD) Full TPH  X 8021B/6036FP_Calc BTEX  X 300_ORGFM_28D/DI_LEACH Chloride  X Total_BTEX_GCV  X 8016MOD_Calc	×   8021B/5035FP_Calc BTEX	× 300_ORGFM_28D/DI_LEACH Chloride    S	× 8016MOD_Cale	ysis R		Carrier Tra State of O New Me  Requested	Carrier Tracking No(s). 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SW-19 (15) (890-1502-110)	10/26/21	Mountain	Solid		×	×	×	<del>^</del>	$\neg$	_					_		۵			
SW-20 (15) (890-1502-111)	10/26/21	Mountain	Solid		×	×	×	$\hat{\mathbf{x}}$									*			
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SW-22 (15) (890-1502-113)	10/26/21	Mountain	Solid		×	×	×	$\frac{2}{x}$		7				_			-			
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Ver: 06/08/2021

Carlsbad NM 88220 Phone 575-988-3199 Fax 575-988-3199

**Eurofins Xenco, Carlsbad** 

🐝 eurofins Environment Testing America

**Chain of Custody Record** 

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Sample Disposal (A fee may be assessed if samples are retained longer than 1 mo.  Primary Deliverable Rank. 2  Special Instructions/QC Requirements  Date/Time  Date/Time  Date/Time  Company  Company  Company  Cooler Temperature(s) °C and Other Remarks.	Note Since laboratory accreditations are subject to change Eurofins Xenco LLC p maintain accreditation in the State of Origin listed above for analysis/tests/matrix b attention immediately. If all requested accreditations are current to date return the	laces the ownership eing analyzed the sa signed Chain of Cus	of method anal imples must be stody attesting t	yte & accreditat shipped back to o said complica	ion compliance the Eurofins >	upon lenco I Xenco	OTT C TTC III	bcontr	act lat ry or o	orator ther in		is samp	ble shi	ment ided	is forw Any cl	arded nange	under s to ac	chair credi	ı-of-cı ation	ustody If the laboratory status should be brough	does not currently to Eurofins Xenco LLC
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#### **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	
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="fam:46">&lt;6 mm (1/4").</a>	N/A	

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Eurofins Xenco, Carlsbad

#### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Containers requiring zero headspace have no headspace or bubble is

Job Number: 890-1502-1

SDG Number: 212C-MD-02230

List Source: Eurofins Xenco, Midland

List Creation: 11/01/21 08:46 AM

Login Number: 1502 List Number: 2

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	True	

N/A

MS/MSDs

<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

SKRAMER

Authorized for release by: 5/16/2022 4:19:28 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

..... Links .....

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results through

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Released to Imaging: 9/1/2023 3:31:23 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.

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2290-1 SDG: Lea County NM

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#### **Definitions/Glossary**

Job ID: 890-2290-1 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. F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD 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 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE) LOD 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: 890-2290-1

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.

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Lab Sample ID: 890-2290-1

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

	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 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	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/14/22 12:33	05/15/22 14:33	1
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	1
- Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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
Total IPH	522		50.0	mg/Kg			05/11/22 10:27	
							00/11/22 10:21	ĺ
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)					00/11/22 10:27	ĺ
		RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	
Analyte		Qualifier	RL	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared 05/10/22 08:18		Dil Fac
Analyte	Result	Qualifier			<u>D</u>		Analyzed	Dil Fac
C6-C10 Diesel Range Organics (Over	Result<50.0	Qualifier	50.0	mg/Kg	<u> </u>	05/10/22 08:18	Analyzed 05/10/22 13:54	Dil Fac
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result   <50.0   346   176     %Recovery	Qualifier U	50.0 50.0 50.0	mg/Kg mg/Kg	<u>D</u>	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared	Analyzed  05/10/22 13:54  05/10/22 13:54  05/10/22 13:54  Analyzed	Dil Fac
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	Result   <50.0   346   176	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	Analyzed 05/10/22 13:54 05/10/22 13:54 05/10/22 13:54	Dil Fac
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane (Surr)	Result   <50.0   346   176     %Recovery	Qualifier U	50.0 50.0 50.0	mg/Kg mg/Kg	<u>D</u>	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared	Analyzed  05/10/22 13:54  05/10/22 13:54  05/10/22 13:54  Analyzed	Dil Fac
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane (Surr)	Result   <50.0   346   176	Qualifier  U  Qualifier	50.0 50.0 50.0 <b>Limits</b> 70 - 130	mg/Kg mg/Kg	<u>D</u>	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared 05/10/22 08:18	Analyzed  05/10/22 13:54  05/10/22 13:54  05/10/22 13:54  Analyzed  05/10/22 13:54	Dil Fac
Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)	Result   <50.0   346   176	Qualifier  U  Qualifier	50.0 50.0 50.0 <b>Limits</b> 70 - 130	mg/Kg mg/Kg	<u>D</u>	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared 05/10/22 08:18	Analyzed  05/10/22 13:54  05/10/22 13:54  05/10/22 13:54  Analyzed  05/10/22 13:54	Dil Fac

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

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

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

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 RTEX - Total B	RTEX Calculation							
Method: Total BTEX - Total B		Qualifier	RI	Unit	D	Prenared	<b>∆</b> nalvzed	Dil Fac
Method: Total BTEX - Total B Analyte Total BTEX		Qualifier	RL	Unit mg/Kg	D	Prepared	Analyzed 05/16/22 16:56	Dil Fac

Method: 8015 NM - Diesel Range O	rganics (DRC	)) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	145		49.9	mg/Kg			05/11/22 10:27	1

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
Oll Range Organics (Over C28-C36)	82.6		49.9	mg/Kg		05/10/22 08:18	05/10/22 16:05	1

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-Terphenyl (Surr)	113	70 - 130	05/10/22 08:18	05/10/22 16:05	1

Method: 300.0 - Anions, Ion Chrom	natography - 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

Sample Depth: 5

**Total TPH** 

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	
1,4-Difluorobenzene (Surr)	102		70 - 130			05/14/22 12:33	05/15/22 15:28	1
- Method: Total BTEX - Total B	ΓEX 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 Rai	nge Organics (DR	O) (GC)						

**Eurofins Carlsbad** 

05/11/22 10:27

50.0

412

mg/Kg

6

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10

12

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Lab Sample ID: 890-2290-3

Client: Tetra Tech, Inc. Job ID: 890-2290-1 Project/Site: Kaiser SWD 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	247		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
C10-C28)								
Oll Range Organics (Over	165		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
C28-C36)								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	114		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
			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

**Matrix: Solid** 

Job ID: 890-2290-1

SDG: Lea County NM

Lab Sample ID: 890-2290-4

**Client Sample ID: BH-95** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Method: 300.0 - Anions, Ion Chror	natography - 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 Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 16:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 16:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/14/22 12:33	05/15/22 16:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			05/14/22 12:33	05/15/22 16:23	1
1,4-Difluorobenzene (Surr)	102		70 - 130			05/14/22 12:33	05/15/22 16:23	1
Method: Total BTEX - Total BT	EX 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 Ran	ge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	166		49.9	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Ra	nge 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 15:21	1
Diesel Range Organics (Over C10-C28)	55.3		49.9	mg/Kg		05/10/22 08:18	05/10/22 15:21	1
Oll Range Organics (Over C28-C36)	111		49.9	mg/Kg		05/10/22 08:18	05/10/22 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130			05/10/22 08:18	05/10/22 15:21	1
o-Terphenyl (Surr)	95		70 - 130			05/10/22 08:18	05/10/22 15:21	1

**Eurofins Carlsbad** 

05/12/22 08:08

mg/Kg

25.2

1350

Chloride

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 238	Qualifier	49.9	mg/Kg	D	Prepared	Analyzed 05/11/22 10:27	Dil Fa
<u>-</u>					=			
Method: 8015B NM - Diesel Ra	nge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit		Prepared		
C6-C10					D	Frepareu	Analyzed	Dil Fa
	<49.9	U	49.9	mg/Kg	— –	05/10/22 08:18	<b>Analyzed</b> 05/10/22 14:59	
Diesel Range Organics (Over C10-C28)	<49.9 <b>97.6</b>	U	49.9 49.9			<u>.</u>		
Diesel Range Organics (Over		U		mg/Kg		05/10/22 08:18	05/10/22 14:59	
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	97.6		49.9	mg/Kg mg/Kg		05/10/22 08:18 05/10/22 08:18	05/10/22 14:59 05/10/22 14:59	
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	97.6 140 %Recovery 108		49.9 49.9	mg/Kg mg/Kg		05/10/22 08:18 05/10/22 08:18 05/10/22 08:18	05/10/22 14:59 05/10/22 14:59 05/10/22 14:59	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	97.6 140 %Recovery		49.9 49.9 <b>Limits</b>	mg/Kg mg/Kg	บ	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared	05/10/22 14:59 05/10/22 14:59 05/10/22 14:59 05/10/22 14:59	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane (Surr)	97.6 140 <u>%Recovery</u> 108 99	Qualifier	49.9 49.9 <u>Limits</u> 70 - 130	mg/Kg mg/Kg	U	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared 05/10/22 08:18	05/10/22 14:59 05/10/22 14:59 05/10/22 14:59 05/10/22 14:59 Analyzed 05/10/22 14:59	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)	97.6 140 <u>%Recovery</u> 108 99 nromatography -	Qualifier	49.9 49.9 <u>Limits</u> 70 - 130	mg/Kg mg/Kg	<u>U</u>	05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 05/10/22 08:18 Prepared 05/10/22 08:18	05/10/22 14:59 05/10/22 14:59 05/10/22 14:59 05/10/22 14:59 Analyzed 05/10/22 14:59	Dil Fa

**Client Sample ID: BH-98** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Date Received. 05/00/

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** 

Lab Sample ID: 890-2290-7

Released to Imaging: 9/1/2023 3:31:23 PM

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no Canobad

Matrix: Solid

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

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 BT	ΓEX 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 Rar	nge Organics (DR	O) (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 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 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 Chloropotomo (Curri)			70 130			05/40/22 09:49	05/10/22 15:12	

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fa

 1-Chlorooctane (Surr)
 117
 70 - 130
 05/10/22 08:18
 05/10/22 15:43
 05/10/22 15:43

 o-Terphenyl (Surr)
 108
 70 - 130
 05/10/22 08:18
 05/10/22 15:43

 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
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	<0.00201	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)			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
- Method: Total BTEX - Total B1	EX 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	1
Method: 8015 NM - Diesel Rar	ige Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			50.0	mg/Kg			05/11/22 10:27	

Eurofins Carlsbad

Lab Sample ID: 890-2290-8

**Matrix: Solid** 

Lab Sample ID: 890-2290-8

#### **Client Sample Results**

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

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	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
C10-C28)								
Oll Range Organics (Over	73.6		50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
C28-C36)								
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
			24.9	mg/Kg			05/12/22 13:41	5

Lab Sample ID: 890-2290-9 **Client Sample ID: BH-100** 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	<0.00198	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 BT	EX 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 Ran	ge Organics (DR	O) (GC)						
Analyte	Result	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	inge 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
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
C10-C28)								
Oll Range Organics (Over	56.8		49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
C28-C36)								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	106		70 - 130			05/10/22 08:18	05/10/22 16:49	1
o-Terphenyl (Surr)	96		70 - 130			05/10/22 08:18	05/10/22 16:49	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-100** 

Lab Sample ID: 890-2290-9 Date Collected: 05/06/22 00:00 Matrix: Solid

Sample Depth: 5

	Method: 300.0 - Anions, Ion Chrom	natography -	Soluble						
1	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

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Date Received: 05/06/22 15:23

Sample Depth: 5

Analyto

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

Analyte	Result	Quanner	112	Oint	 ricparca	Allalyzou	Diriac	
Total BTEX	<0.00398	U	0.00398	mg/Kg	 	05/16/22 16:56	1	
 Method: 8015 NM - Diesel Range O	rganics (DRC	O) (GC)						

Result Qualifier

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Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Range	Organics (DF	RO) (GC)						

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
OII 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

Chloride	2460	24.8	mg/Kg			05/12/22 13:57	5
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 300.0 - Anions, Ion Chrom	atography - Soluble						
o-Terphenyi (Surr)	103	70 - 130			05/10/22 06.16	05/10/22 12.49	,

**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** 

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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 Fac
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/14/22 18:55	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/14/22 18:55	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/14/22 18:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			05/14/22 12:37	05/14/22 18:55	1
1,4-Difluorobenzene (Surr)	103		70 - 130			05/14/22 12:37	05/14/22 18:55	1
- Method: Total BTEX - Total BTEX	X 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	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)						
Analyte	•	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 Ran	ge 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 17:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:32	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	124		70 - 130			05/10/22 08:18	05/10/22 17:32	1
o-Terphenyl (Surr)	118		70 - 130			05/10/22 08:18	05/10/22 17:32	1
Method: 300.0 - Anions, Ion Chr	omatography -	Soluble						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
, j to							•	

**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

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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

Lab Sample ID: 890-2290-13

Matrix: Solid

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
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	ge 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 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 18:15	

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Lab Sample ID: 890-2290-13

Client: Tetra Tech, Inc. Job ID: 890-2290-1 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	ge 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
Oll 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)			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	omatography -	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
-								
Method: 8015 NM - Diesel Rang								
Analyte	Result	Qualifier	RL	Unit	D	Prepared		
						Frepareu	Analyzed	Dil Fac
Total TPH	176		49.9	mg/Kg	_ =	Frepareu	05/11/22 10:27	Dil Fac
Total TPH : Method: 8015B NM - Diesel Rai		RO) (GC)	49.9	mg/Kg	_ =			
• ***	nge Organics (D	RO) (GC) Qualifier	49.9	mg/Kg		Prepared		
Method: 8015B NM - Diesel Rai	nge Organics (D	Qualifier					05/11/22 10:27	1
Method: 8015B NM - Diesel Rai Analyte	nge Organics (D	Qualifier	RL	Unit		Prepared	05/11/22 10:27  Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rai Analyte C6-C10 Diesel Range Organics (Over C10-C28)	nge Organics (D Result <49.9	Qualifier	RL 49.9 49.9	<b>Unit</b> mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	05/11/22 10:27  Analyzed  05/10/22 20:02  05/10/22 20:02	Dil Fac
Method: 8015B NM - Diesel Rai Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	nge Organics (D Result <49.9	Qualifier	RL 49.9	Unit mg/Kg		Prepared 05/10/22 08:18	05/11/22 10:27  Analyzed  05/10/22 20:02	Dil Fac
Method: 8015B NM - Diesel Rai Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	nge Organics (DI Result <49.9 54.4	Qualifier	RL 49.9 49.9	<b>Unit</b> mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	05/11/22 10:27  Analyzed  05/10/22 20:02  05/10/22 20:02	1 Dil Fac 1
Method: 8015B NM - Diesel Rai Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	nge Organics (DI Result <49.9 54.4	Qualifier U	RL 49.9 49.9	<b>Unit</b> mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	05/11/22 10:27  Analyzed  05/10/22 20:02  05/10/22 20:02	1 Dil Fac 1
Method: 8015B NM - Diesel Rai Analyte C6-C10 Diesel Range Organics (Over C10-C28)	nge Organics (D)  Result  <49.9  54.4  122	Qualifier U	RL 49.9 49.9 49.9	<b>Unit</b> mg/Kg mg/Kg		Prepared 05/10/22 08:18 05/10/22 08:18	05/11/22 10:27  Analyzed  05/10/22 20:02  05/10/22 20:02	1 Dil Fac 1 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-105

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 5

Method: 300.0 - Anions, Ion Chrom	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

Lab Sample ID: 890-2290-15

Analyzed

Lab Sample ID: 890-2290-14

**Matrix: Solid** 

Sample Depth: 5

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

Total BTEX	<0.800 U	0.800	mg/Kg			05/16/22 16:56	1
– Method: 8015 NM - Diesel 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 - Diesel Rang	je Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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

Unit

Prepared

Oll Range Organics (Over C28-C36)	1670	249	mg/Kg	05/10/22 08:18	05/10/22 18:37	5
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	atography - S	oluble						
Analyte	Result (	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	736		24.9	mg/Kg			05/12/22 16:27	5

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Dil Fac

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 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 338	Qualifier		Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/11/22 10:27	Dil Fa
			00.0	mg/rtg			00/11/22 10.27	
Method: 8015B NM - Diesel Ra	• •		-		_			B.: E
Analyte		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 19:41	
Diesel Range Organics (Over C10-C28)	169		50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	
Oll Range Organics (Over	169		50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	
C28-C36)				3. 3				
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 24.9	Unit	D	Prepared	Analyzed 05/12/22 16:35	Dil Fa

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.398		0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
				0 0				
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

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#### **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

Method: 8021B - Volatile Organic Compounds (GC) (Continued)	

Surrogate	%Recovery Qua	alifier 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 BTEX 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 Range Organics (DRO) (G	C
Method: 0013 NM - Dieser Range Organics (DIXO) (C	, ,

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 -	. Niosol Rango (	rnanice (DRO	) (GC)
Michiga, ou lob Mili	Dicaci italige	Ji gaines (bite	, (00)

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	7670		250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
C10-C28)								
Oll Range Organics (Over	1310		250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
COO COO								

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 Chromatography - 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

nic Compounds (	GC)						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
110		70 - 130			05/14/22 12:37	05/14/22 21:09	1
105		70 - 130			05/14/22 12:37	05/14/22 21:09	1
	Result   <0.00200   <0.00200   <0.00200   <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   <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	Result   Qualifier	Result   Qualifier   RL	Result         Qualifier         RL         Unit           <0.00200	Result         Qualifier         RL         Unit         D           <0.00200	Result         Qualifier         RL         Unit         D         Prepared           <0.00200	<0.00200         U         0.00200         mg/Kg         05/14/22 12:37         05/14/22 21:09           <0.00200

Mothod:	Total RT	Y - Total I	RTEY Ca	lculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	ma/Ka			05/16/22 16:56	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (	DRO)	(GC
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Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.4	49.9	mg/Kg			05/11/22 10:27	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-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
<b>ANALYSIS TABLE</b>

Lab Sample ID: 890-2290-19

Lab Sample ID: 890-2290-18

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.402	U	0.402	mg/Kg		05/14/22 12:37	05/14/22 22:58	200
Toluene	<0.402	U	0.402	mg/Kg		05/14/22 12:37	05/14/22 22:58	200
Ethylbenzene	<0.402	U	0.402	mg/Kg		05/14/22 12:37	05/14/22 22:58	200
m-Xylene & p-Xylene	<0.805	U	0.805	mg/Kg		05/14/22 12:37	05/14/22 22:58	200
o-Xylene	<0.402	U	0.402	mg/Kg		05/14/22 12:37	05/14/22 22:58	200
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 12:37	05/14/22 22:58	200
1,4-Difluorobenzene (Surr)	96		70 - 130			05/14/22 12:37	05/14/22 22:58	200
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.805	U	0.805	mg/Kg			05/16/22 16:56	1
Method: 8015 NM - Diesel Rang	• • •							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1660		50.0	mg/Kg			05/11/22 10:27	1
Method: 8015B NM - Diesel Ra								
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 C10-C28)	1400		50.0	mg/Kg		05/10/22 08:18	05/11/22 07:03	1
Oll Range Organics (Over C28-C36)	263		50.0	mg/Kg		05/10/22 08:18	05/11/22 07:03	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	111		70 - 130			05/10/22 08:18	05/11/22 07:03	i

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Job ID: 890-2290-1 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

Method: 300.0 - Anions, Ion Chron	natography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	577		25.2	mg/Kg			05/12/22 16:52	5

Client Sample ID: BH-111

Date Collected: 05/06/22 00:00

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 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 BT	EX 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	
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	64.3		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 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	
Oll 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	
o-Terphenyl (Surr)	94		70 - 130			05/10/22 08:18	05/10/22 20:45	
Method: 300.0 - Anions, Ion C	hromatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	3640		25.1	mg/Kg	_		05/12/22 15:24	

Lab Sample ID: 890-2290-21

#### **Client Sample Results**

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 Fa
Benzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/15/22 00:44	
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/15/22 00:44	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	87		70 - 130			05/14/22 12:37	05/15/22 00:44	
1,4-Difluorobenzene (Surr)	92		70 - 130			05/14/22 12:37	05/15/22 00:44	
Method: Total BTEX - Total BTEX	( Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/16/22 16:56	
Analyte	Result	Qualifier	RL	1114	D	D		
	ittosuit	Qualifici	RL.	Unit	U	Prepared	Analyzed	Dil Fa
	362	<u>quamor</u>	50.0	mg/Kg	— <del>-</del>	Prepared	05/11/22 10:27	
Total TPH	362	<u> </u>				Prepared		
Total TPH Method: 8015B NM - Diesel Ranç	362 ge Organics (D	<u> </u>			<u>D</u>	Prepared		
Total TPH  Method: 8015B NM - Diesel Rang Analyte	362 ge Organics (D	RO) (GC) Qualifier	50.0	mg/Kg			05/11/22 10:27	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang  Analyte  C6-C10	362 ge Organics (DI Result	RO) (GC) Qualifier	50.0	mg/Kg		Prepared	05/11/22 10:27  Analyzed	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte  C6-C10 Diesel Range Organics (Over C10-C28)	362 ge Organics (Di Result 362 <50.0	RO) (GC) Qualifier *1	50.0  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33	05/11/22 10:27  Analyzed  05/10/22 19:05  05/10/22 19:05	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over	362 ge Organics (Di Result 362	RO) (GC) Qualifier *1	50.0 RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 05/09/22 16:33	05/11/22 10:27  Analyzed  05/10/22 19:05	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte  C6-C10 Diesel Range Organics (Over C10-C28)	362 ge Organics (Di Result 362 <50.0	RO) (GC) Qualifier *1 U	50.0  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33	05/11/22 10:27  Analyzed  05/10/22 19:05  05/10/22 19:05	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	362 ge Organics (Di Result 362 <50.0	RO) (GC) Qualifier *1 U	50.0  RL  50.0  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33	05/11/22 10:27  Analyzed 05/10/22 19:05 05/10/22 19:05	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	362 ge Organics (D) Result 362 <50.0 <50.0 %Recovery	RO) (GC) Qualifier *1 U	50.0  RL  50.0  50.0  50.0  Limits	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33 05/09/22 16:33 Prepared	05/11/22 10:27  Analyzed  05/10/22 19:05  05/10/22 19:05  Analyzed	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte  C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	362  ge Organics (D)  Result  362  <50.0  <50.0  %Recovery  116  123	RO) (GC) Qualifier *1 U  Qualifier	50.0  RL  50.0  50.0  50.0  Limits  70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33 05/09/22 16:33  Prepared 05/09/22 16:33	05/11/22 10:27  Analyzed 05/10/22 19:05 05/10/22 19:05  Analyzed 05/10/22 19:05	Dil Fa
Total TPH  Method: 8015B NM - Diesel Rang Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)	362   ge Organics (Dignormal Result   362	RO) (GC) Qualifier *1 U  Qualifier	50.0  RL  50.0  50.0  50.0  Limits  70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33 05/09/22 16:33  Prepared 05/09/22 16:33	05/11/22 10:27  Analyzed 05/10/22 19:05 05/10/22 19:05  Analyzed 05/10/22 19:05	Dil Fa

**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** 

3

4

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13

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
Oll 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	

#### **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

ab Sample ID 90-2290-1 90-2290-2 90-2290-3 90-2290-4 90-2290-5 90-2290-6 90-2290-7 90-2290-8 90-2290-9 90-2290-10	Client Sample ID  BH-92 BH-93 BH-94 BH-95 BH-96 BH-97 BH-98 BH-99 BH-100	98 96 99 99 107 106 103	103 100 102 102 102 102 101	
90-2290-2 90-2290-3 90-2290-4 90-2290-5 90-2290-6 90-2290-7 90-2290-8 90-2290-9 90-2290-10	BH-93 BH-94 BH-95 BH-96 BH-97 BH-98 BH-99	96 99 99 107 106 103	100 102 102 102 101	
90-2290-3 90-2290-4 90-2290-5 90-2290-6 90-2290-7 90-2290-8 90-2290-9 90-2290-10	BH-94 BH-95 BH-96 BH-97 BH-98 BH-99	99 99 107 106 103	102 102 102 101	
90-2290-4 90-2290-5 90-2290-6 90-2290-7 90-2290-8 90-2290-9 90-2290-10	BH-95 BH-96 BH-97 BH-98 BH-99	99 107 106 103	102 102 101	
90-2290-5 90-2290-6 90-2290-7 90-2290-8 90-2290-10	BH-96 BH-97 BH-98 BH-99	107 106 103	102 101	
90-2290-6 90-2290-7 90-2290-8 90-2290-9 90-2290-10	BH-97 BH-98 BH-99	106 103	101	
90-2290-7 90-2290-8 90-2290-9 90-2290-10	BH-98 BH-99	103		
90-2290-8 90-2290-9 90-2290-10	BH-99			
90-2290-9 90-2290-10			100	
90-2290-10	DI 100	113	103	
	DH-100	109	99	
00 0000 40 140	BH-101	105	101	
90-2290-10 MS	BH-101	103	108	
90-2290-10 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	
0-2290-14	BH-105	105	92	
0-2290-15	BH-106	90	94	
0-2290-16	BH-107	90	98	
0-2290-17	BH-108	99	98	
0-2290-18	BH-109	110	105	
0-2290-19	BH-110	74	96	
90-2290-20	BH-111	100	100	
90-2290-21	BH-112	87	92	
0-2290-22	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	
B 880-25563/5-A	Method Blank	77	94	
B 880-25564/5-A	Method Blank	77	92	

DFBZ = 1,4-Difluorobenzene (Surr)

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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.

Job ID: 890-2290-1

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)	
890-2290-8	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	
890-2290-21	BH-112	116	123	
890-2290-22	BH-113	101	108	
LCS 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+	
LCSD 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)

Released to Imaging: 9/1/2023 3:31:23 PM

Client: Tetra Tech, Inc. Job ID: 890-2290-1 SDG: Lea County NM Project/Site: Kaiser SWD

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

Lab Sample ID: LCS 880-25563/1-A

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25563

	<b>Spike</b>	LCS	LCS				%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	Qualifier	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	Client Sam	ple ID: Lab	Control	Sample Dup
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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

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. Project/Site: Kaiser SWD

Job ID: 890-2290-1

SDG: Lea County NM

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-25564/5-A **Matrix: Solid** 

Analysis Batch: 25561

мв мв

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 25564

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

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 **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25561 Prep Batch: 25564

Spike	LCS	LCS			%Rec	
Added	Result	Qualifier Un	it [	%Rec	Limits	
0.100	0.1104	mg	/Kg	110	70 - 130	
0.100	0.1137	mg	/Kg	114	70 - 130	
0.100	0.1151	mg	/Kg	115	70 - 130	
0.200	0.2290	mg	/Kg	115	70 - 130	
0.100	0.1106	mg	/Kg	111	70 - 130	
	Added 0.100 0.100 0.100 0.100 0.200	Added         Result           0.100         0.1104           0.100         0.1137           0.100         0.1151           0.200         0.2290	Added         Result         Qualifier         Unit           0.100         0.1104         mg           0.100         0.1137         mg           0.100         0.1151         mg           0.200         0.2290         mg	Added         Result         Qualifier         Unit         I           0.100         0.1104         mg/Kg           0.100         0.1137         mg/Kg           0.100         0.1151         mg/Kg           0.200         0.2290         mg/Kg	Added         Result         Qualifier         Unit         D         %Rec           0.100         0.1104         mg/Kg         110           0.100         0.1137         mg/Kg         114           0.100         0.1151         mg/Kg         115           0.200         0.2290         mg/Kg         115	Added         Result         Qualifier         Unit         D         %Rec         Limits           0.100         0.1104         mg/Kg         110         70 - 130           0.100         0.1137         mg/Kg         114         70 - 130           0.100         0.1151         mg/Kg         115         70 - 130           0.200         0.2290         mg/Kg         115         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 L	.CSD				%Rec		RPD
Analyte	Added	Result C	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 Qualif	ier 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

Job ID: 890-2290-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2290-10 MS Client Sample ID: BH-101 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25561 Prep Batch: 25564

Sample Sample Spike MS MS %Rec Analyte 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

**Matrix: Solid** 

**Analysis Batch: 25561** Prep Batch: 25564 Sample Sample Spike MSD MSD Result Qualifier RPD Analyte Added Result Qualifier Unit D %Rec Limits 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

0.07935

0.100

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 87 70 - 130 1,4-Difluorobenzene (Surr) 96 70 - 130

<0.00199

U

#### 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

o-Xylene

Analysis Batch: 25231

ı		MB	MR						
	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	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 11:21	1
	C10-C28)								
	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 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 1-Chlorooctane (Surr) 70 - 130 05/09/22 16:33 05/10/22 11:21 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** Prep Type: Total/NA

**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 C10-C28)	1000	1226		mg/Kg		123	70 - 130	

LCS LCS %Recovery Surrogate Qualifier Limits

1-Chlorooctane (Surr) 70 - 130 123

**Eurofins Carlsbad** 

Prep Batch: 25199

Client Sample ID: BH-101

79

mg/Kg

70 - 130

Prep Type: Total/NA

10

Prep Batch: 25199

35

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 Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 25231** 

Prep Type: Total/NA

Prep Batch: 25199

LCSD LCSD Spike %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit C6-C10 1000 1077 mg/Kg 108 70 - 130 23 20 Diesel Range Organics (Over 1000 1304 130 70 - 1306 20 mg/Kg

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 129 70 - 130 1-Chlorooctane (Surr) o-Terphenyl (Surr) 132 S1+ 70 - 130

Lab Sample ID: 880-14554-A-1-C MS

**Matrix: Solid** 

Analysis Batch: 25231

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 25199

Spike MS MS %Rec Sample Sample Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec C6-C10 <50.0 U \*1 1000 1064 106 70 - 130 mg/Kg <50.0 U 1000 109 Diesel Range Organics (Over 1112 mg/Kg 70 - 130

C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane (Surr) 70 - 130 109 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

Sample Sample Spike MSD MSD %Rec **RPD** Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit C6-C10 <50.0 U \*1 998 90 20 899.1 mg/Kg 70 - 130 17 998 969.3 95 Diesel Range Organics (Over <50.0 U mg/Kg 70 - 13014 20

C10-C28)

MSD MSD

%Recovery Qualifier Limits Surrogate 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 50.0 05/10/22 08:18 Diesel Range Organics (Over <50.0 U 05/10/22 11:44 mg/Kg 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 Batch: 25221

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

мв мв

MB MB

Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane (Surr)	110		70 - 130		
o-Terphenyl (Surr)	117		70 - 130		

Prepared Analyzed Dil Fac 05/10/22 08:18 05/10/22 11:44 05/10/22 08:18 05/10/22 11:44

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-25221/2-A **Matrix: Solid** 

Analysis Batch: 25235

Spike

Prep Type: Total/NA

Prep Batch: 25221

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
C6-C10	1000	1043		mg/Kg		104	70 - 130
Diesel Range Organics (Over	1000	993.9		mg/Kg		99	70 - 130

	LUS	LUS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130
o-Terphenyl (Surr)	93		70 - 130

Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Lab Sample ID: LCSD 880-25221/3-A

**Analysis Batch: 25235** 

Prep Type: Total/NA Prep Batch: 25221

Spike LCSD LCSD %Rec RPD Limit Analyte Added Result Qualifier RPD 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 70 - 130 o-Terphenyl (Surr) 109

Lab Sample ID: 890-2290-10 MS Client Sample ID: BH-101 **Matrix: Solid** 

**Analysis Batch: 25235** 

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Prep Type: Total/NA Prep Batch: 25221

	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	<49.9	U	1000	983.9		mg/Kg		98	70 - 130
C40 C20\									

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	107		70 - 130
o-Terphenyl (Surr)	92		70 - 130

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

**Matrix: Solid** 

Analysis Batch: 25235

IO MSD				Cl	lient Sample ID: BH	-101
					Prep Type: Tota	ıl/NA
					Prep Batch: 25	5221
Sample	Sample	Spike	MSD	MSD	%Rec	RPD

	Sample	Sample	<b>Бріке</b>	MOD	MISD				%Rec		KPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
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

MB MB

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	U	5.00	mg/Kg			05/12/22 06:55	1

Lab Sample ID: LCS 880-25289/2-A **Client Sample ID: Lab Control Sample** Matrix: Solid **Prep Type: Soluble** 

Analysis Batch: 25351

	Spike	LUS	LUS				/orec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	270.0		mg/Kg	_	108	90 - 110	

Lab Sample ID: LCSD 880-25289/3-A

**Matrix: Solid** 

Analysis Batch: 25351

	Spike	LCSD LCSD				%Rec		RPD	
Analyte	Added	Result Qualifi	er Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	269.9	mg/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 **Prep Type: Soluble** 

**Matrix: Solid** 

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** 

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

Job ID: 890-2290-1

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2290-11 MS Client Sample ID: BH-102 **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 25351

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Analyte Added Unit D %Rec Limits Chloride 2550 1260 3909 mg/Kg 107 90 - 110

Lab Sample ID: 890-2290-11 MSD Client Sample ID: BH-102 **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 25351** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	2550		1260	3911		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-25414/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 25429

мв мв Analyte Result Qualifier RL Unit D 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** 

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 245.3 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-25414/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 25429

LCSD LCSD Spike %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 245.1 mg/Kg 98 90 - 110

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 Added Result Qualifier Analyte Result Qualifier Unit D %Rec Limits Chloride 208 248 438.3 mg/Kg 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	



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 Batcl
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	

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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 Batch
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	

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

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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 Batch
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	

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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

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2290-1

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 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 25563 Total/NA 5.04 g 05/14/22 12:33 MR XEN MID 5 mL Total/NA 8021B 25561 05/15/22 15:01 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 10.02 g 05/10/22 08:18 DM 10 mL Total/NA Analysis 8015B NM 25235 05/10/22 16:05 SM XEN MID Soluble SC XEN MID Leach DI Leach 5.03 g 50 mL 25289 05/10/22 17:06 Soluble Analysis 300.0 5 25351 05/12/22 07:44 CH XEN MID

Client Sample ID: BH-94

Date Collected: 05/06/22 00:00

Lab Sample ID: 890-2290-3

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	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

Date Collected: 05/06/22 00:00

Lab Sample ID: 890-2290-4

Matrix: Solid

Date Received: 05/06/22 15:23

Released to Imaging: 9/1/2023 3:31:23 PM

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

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2

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1 4

Matrix: Solid

12

14

Matrix: Solid

**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	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			10.01 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 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		10			25351	05/12/22 08:00	CH	XEN MID

Client Sample ID: BH-96 Lab Sample ID: 890-2290-5 **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	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 MIC
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	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 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

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**Matrix: Solid** 

**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 **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	05/14/22 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

**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

**Client Sample ID: BH-103** Lab Sample ID: 890-2290-12 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			4.96 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 19:21	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 17:54	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		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

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	05/14/22 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

**Client Sample ID: BH-105** Lab Sample ID: 890-2290-14

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Г	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

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**Matrix: Solid** 

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**Matrix: Solid** 

**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 **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			5.00 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		200			25561	05/14/22 22:04	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			10.04 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
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

Lab Sample ID: 890-2290-16 **Client Sample ID: BH-107** 

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			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

Lab Sample ID: 890-2290-17 Client Sample ID: BH-108

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 Total/NA	Prep Analysis	8015NM Prep 8015B NM		5	10.01 g	10 mL	25221 25235	05/10/22 08:18 05/10/22 18:58	DM SM	XEN MID XEN MID

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**Matrix: Solid** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2290-1

SDG: Lea County NM

**Client Sample ID: BH-108** 

Lab Sample ID: 890-2290-17

Matrix: Solid

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

**Client Sample ID: BH-109** 

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
Soluble	Leach	DI Leach			4.98 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 16:44	CH	XEN MID

Lab Sample ID: 890-2290-18

**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	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

Lab Sample ID: 890-2290-19

**Matrix: Solid** 

Client Sample ID: BH-110 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			4.97 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 **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			4.95 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

Job ID: 890-2290-1 SDG: Lea County NM

**Client Sample ID: BH-112** 

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

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	Туре	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.

<b>Authority</b> Texas		ogram	Identification Number	<b>Expiration Date</b>
		ELAP	T104704400-21-22	06-30-22
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.	•	, , ,	.,
the agency does not of Analysis Method	fer certification .  Prep Method	Matrix	Analyte	.,
0 ,		Matrix Solid	, , ,	

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## **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** 

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## **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

JOD 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

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Tetra Tech, Inc.	Tech, Inc.
Project #: 212C-MD-02230   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequiel Moreno   Sampler Signature:   Ezequie	See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Gonzales   See Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manager:   Clair Manag
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TCLP Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Volatiles  TCLP Semi Volatiles	TCLP Metals Ag As Ba Cd Cf Pb Se Hg  TCLP Volatiles  TCLP Semi Volatiles  TCLP Semi Volatiles  RCI  GC/MS Vol. 8260B / 624  GC/MS Semi. Vol. 8270C/625  PCB's 8082 / 608  NORM  PLM (Asbestos)  X X X X X X X X X X X X X Chloride  Chloride Sulfate TDS  General Water Chemistry (see attached list)  Anion/Cation Balance
TCLP Semi Volatiles	TCLP Semi Volatiles
	# PLM (Asbestos)  PLM (Asbestos)  PLM (Asbestos)  PLM (Asbestos)  PLM (Asbestos)  Chloride  Chloride Sulfate TDS  General Water Chemistry (see attached list)  Anion/Cation Balance

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Date: Time:	Date: Time:	Mars 5/6/22 1523		BH-110 (5')	BH-109 (5')	BH-108 (5')	вн-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.
Received by:	Received by:	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		C C C C C C C C C C C C C C C C C C C		Project #:		Site Manager:	
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(Circle) HAND DELIVERED FEDEX UPS Tracking#	i	TANDARD	X X REMARKS:	×	×	×	×	×	×	×	×	×	PAH 8 Total N TCLP I TCLP S RCI GC/MS GC/MS PCB'S NORM PLM ( Chloric Gener	RED (18021ER NO. 18021ER NO. 1	Y/N) B BT (Ext to (Ext to (GRO) Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag As Ag Ag As Ag Ag As Ag Ag As Ag Ag Ag Ag Ag Ag Ag Ag Ag Ag Ag Ag Ag	- DRO - Ba Cd C Ba Cd C S  / 624 8270C/6	ORO r Pb S Cr Pb S	e Hg Ge Hg	list)		ANALYSIS REQUEST (Circle or Specify Method No.)	

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	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:		
	Date: Time:	Date: Time:	6	$\vdash$		×	×	×	×	×	×	WATI SOIL HCL HNO ICE None	3	MATRIX PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (422) 682-4559 Fax (432) 682-3946	
(Circle) HAND DELIVERED FEDEX UPS Tracking #.	Special Report Limits or TRRP Report	orized	ONLY  BILL Same Day 24 br 48 br	REMARKS:		×	×	×	×	×	×	BTEX TPH TPH PAH Total TCLP TCLP RCI GC/M GC/M PCB's NOR! PLM Chlor Gene	8021 TX100 8015M 8270C Metals Metals Volati Semi S Vol. S Sem (Asbesside	(Y/N) B BT 5 (Ext t) 1 (GRC Ag As s Ag As s Ag As eles Volatiles 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E 8260E	8 / 624 8270C/6	ORO	Se Hg			(Circle or Specify Method No.)		Page 3
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**Eurofins Carlsbad** 

**Seurofins** Environment Testing America

1089 N Canal St	2	hain	Chain of Custody Bacord	7 2 7		2							رە قىر	eurofins	Environment Testing
Carisbad, NM 88220 Phone: 575-988-3199 Fax. 575-988-3199				3		\$		_							America
Client Information (Sub Contract Lab)	Sampler			Lab PM Krame	Lab PM Kramer Jessica	ica a			ൂ	Carrier Tracking No(s)	ng No(s)			COC No 890-747 1	
	Phone:			E-Mail Jessi	ica Kram	er@et.e	E-Mail Jessica Kramer@et.eurofinsus col	COM	Ne Sta	State of Origin: New Mexico	0 =			Page: Page 1 of 3	
Company Eurofins Environment Testing South Centr					Accreditations Requ NELAP - Texas	ions Requ	ccreditations Required (See note). ELAP - Texas	ote).						Job #: 890-2290-1	
Address 1211 W Florida Ave	Due Date Requested 5/12/2022						<u>≽</u>	Analysis	Requested	sted				Preservation Codes	des
City Midland	TAT Requested (days):	/s):			2							_			M Hexane N None
State, Zip: TX, 79701													ygagesag sir allitassatSta	D - Nitric Acid	P - Na2O4S Q Na2SO3
Phone: 432-704-5440(Tel)	PO#				1,77	TPH .				***********************			PVEODPEN Am Distract	F - MeOH G Amchlor	R Na2S2O3 S H2SO4
Email	WO#				o)	p Full 1							kala	H Ascorbic Acid I Ice J - DI Water	T TSP Dodecahydrate U Acetone V MCAA
Project Name: Kaiser SWD	Project # 88001057				s or N	S_Pre						~~~~~	ainer	K EDTA	W - pH 4-5 Z other (specify)
Site:	SSOW#:				SD (Ye	15NM_							f con	Other:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp,	Matrix (W=water S=solid, O=waste/oll,	ield Filtered S erform MS/MI	015MOD_NM/80 015MOD_Calc							otal Number o		
	M	X	400	ion Code:	X	1000						Sad	X		
BH-92 (890-2290-1)	5/6/22	Mountain		Solid		×							4		
BH-93 (890-2290-2)	5/6/22	Mountain		Solid		×									
BH-94 (890-2290-3)	5/6/22	Mountain		Solid		×							24		
BH-95 (890-2290-4)	5/6/22	Mountain		Solid		× ×						_	4		
ВН-96 (890-2290-5)	5/6/22	Mountain		Solid		×			$\dashv$				(مقد		
ВН-97 (890-2290-6)	5/6/22	Mountain		Solid		×							-A		
ВН-98 (890-2290-7)	5/6/22	Mountain		Solid		× ×							4		
BH-99 (890-2290-8)	5/6/22	Mountain		Solid		×						_			
BH-100 (890-2290-9)	5/6/22	Mountain		Solid		×							<b>4</b>		
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.	Testing South Centra ve for analysis/tests/r ral LLC attention imr	I LLC places t natrix being an nediately If al	he ownership on the sailyzed the sail requested acc	of method ana mples must be creditations are	lyte & accre shipped ba current to	editation cack to the date retu	ompliance Eurofins Er	upon out su vironment ed Chain of	ibcontract Testing Sc Custody a	laboratorie uth Centra ttesting to	s This s	ample sh oratory c	ipment r other lo Eurof	is forwarded under d instructions will be pr fins Environment Tes	hain-of-custody If the rovided Any changes to sting South Central LLC.
Possible Hazard Identification Unconfirmed					Sam	ple Dis	Sample Disposal ( A fee	fee may be	be ass	assessed if san	sample	s are r	etaine	assessed if samples are retained longer than 1	1 month)
Deliverable Requested I II III IV Other (specify)	Prımary Deliverable Rank	ble Rank 2			Spec	ial Instr	Special Instructions/QC R		equirements.		ľ				
Empty Kit Relinquished by		Date			Time:	7				Method	Method of Shipment:	ent:			
Relinquished by Out Out 5,9.33	Date/Time			Company	72	Carrent Carre		R		ŀ	Day		$\exists$	<del>}</del> }	Company
Remiquismed by	Date/Time			Company	70	Received by	ج (				Date/Time	Time	~		Company
Relinquished by	Date/Time			Company	70	Received by	¥.				Date/Time	Time			Company
Custody Seals Intact: Custody Seal No  A Yes A No					0	ooler Ten	Cooler Temperature(s) °C and Other Remarks	) °C and Ot	her Remar	S					
		-													

Ver 06/08/2021

•	Chain of Custody Record	/ Record		Seurofins Environment Testing
x 575-988-3199				- PRINCIPER
	Sampler	Lab PM	Carrier Tracking No(s)	COC No:
Sub Contract Lab)		Kramer Jessica		890-747 2
	Phone	E-Mail	State of Origin	Page:
		Jessica Kramer@et eurofinsus com	New Mexico	Page 2 of 3
:		Accreditations Required (See note)		Job#
ting South Centr		NELAP - Texas		890-2290-1

Eurofins Carlsbad			
1089 N Canal St.			eurofins
Carlsbad NM 88220	Clidili of Custody Record		
Phone 575-988-3199 Fax 575-988-3199			21100
	Sampler Lab PM	Carrier Tracking No(s)	COC No:
Client Information (Sub Contract Lab)	Kramer Jessica		890-747 3
Client Contact:	Phone		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Shipping/Receiving		State of Origin	Page:
Company:	Jessica Kramer@et.eurofinsus com	New Mexico	Page 3 of 3

	Sampler			Lab PM			Carrier Tracking No(s)	ing No(s)		COC No:	
Client Contact: (Sub Contract Lab)				Kramer Jessica	lessica					890-747 3	
Shipping/Receiving				Jessica K	(ramer@	Jessica Kramer@et.eurofinsus com	New Mexico	ö⊃		Page 3 of 3	
Eurofins Environment Testing South Centr				NEL Accre	Accreditations Requ NELAP - Texas	Accreditations Required (See note): NELAP - Texas	į			Job #. 890-2290-1	
1211 W Florida Ave	Due Date Requested 5/12/2022	ä				Analysis Re	Requested			Preservation Codes	des
City Midland	TAT Requested (days):	ıys):			steete de la	_					1
State Zip TX 79701				in and and a second	7 				. wy	D Nitric Acid	O ASNAO2 P Na2O4S O Na2SO3
Phone 432-704-5440(Tel)	PO#:			N. September	TPH					F MeOH G Amchior	
Email	WO#			- CONTRACTOR CONTRACTOR	a a suite and a suite and a suite and a suite and a suite and a suite and a suite and a suite and a suite and a					S. resemble to the design	T TSP Dodecahydrate U Acetone V MCAA
Hroject Name Kaiser SWD	Project #: 88001057			receivements.					siner	K EDTA	
Site	SSOW#			22222222222	Chester.				cont	Other:	
				21222770024240	/8015				r of r	Second Serve	
			Sample Matrix	ilterec	m MS/	DD_Cal			umbe		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	(C=comp, o=waste/oil, G=grab) BT=Tissue, A=Air)	Field	8015N	8016N			Total	ettikottaria.	Special Instructions/Note
		X	Preservation Code:	ë X			44		V		
BH-110 (890-2290-19)	5/6/22	Mountain	Solid	ā	×	×				Herry	
BH-111 (890-2290-20)	5/6/22	Mountain	Solid	ā	×	×					
BH-112 (890-2290-21)	5/6/22	Mountain	Solid	ā	×	×			<b>A</b>	6.7.4	
BH-113 (890-2290-22)	5/6/22	Mountain	Solid	ā	×	×					
SW-34 (890-2290-23)	5/6/22	Mountain	Solid	ā	×	*			<u> </u>		
SW-35 (890-2290-24)	5/6/22	Mountain	Solid	ā	×	*					
SW-36 (890-2290-25)	5/6/22	Mountain	Solid	<u>a</u> .	×	×			4.1		
SW-37 (890-2290-26)	5/6/22	Mountain	Solid	<u>a</u> .	×	×					
Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compilance 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 laboratory or other instructions will be provided Any charges 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 complicance to Eurofins Environment Testing South Central LLC.	Testing South Centrave for analysis/tests/tral LLC attention im	al LLC places th matrix being and	e ownership of methorallyzed the samples ne	od analyte & anust be shippe	accreditation ack to the dack to the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date	n compliance upon out subcor the Eurofins Environment Tests return the signed Chain of Cus	itract laboratorie ng South Centra tody attesting to	s This sam	ple shipmer story or othe ance to Eur	it is forwarded under cl r instructions will be pr	on out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the romment Testing South Central LLC laboratory or other instructions will be provided. Any changes to Chain of Custody attesting to said complicance to Euroffiss Environment Testing South Central ILC.
Possible Hazard Identification Unconfirmed				S	ample D	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	assessed if	samples	□ retaii	ned longer than 1	month)
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank. 2	ible Rank. 2		S	pecial In	Requiren	nents.	Lab	3	Archive Fut	Wonins
Empty Kit Relinquished by:		Date		Time	کا		Method	Method of Shipment:			
Relinquished by Cup Son 200	Date/Time <sup>.</sup>		Company	Ý	Receive	9, 11, 12		Date/Tip		とた	Сотрапу
J	Date/Time		Company		Received	id by		Date/Time	1	•	Company
Relinquished by	Date/Time		Company	Y	Received by	ed by:	Management of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	Date/Time	6		Company
Custody Seals Intact Custody Seal No					Cooler 1	Cooler Temperature(s) °C and Other Remarks.	emarks.				

## **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	N/A	

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<6mm (1/4").

## **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

Login Number: 2290 List Number: 2 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	

<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

J. KRAMER

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

IOIOIACCESS

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 3:31:23 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.

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2290-2 SDG: Lea County NM

# **Table of Contents**

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QC Association Summary	14
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## **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

Percent Recovery %R 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.

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Sample Depth: 0 - 5

Client: Tetra Tech, Inc. Job ID: 890-2290-2 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

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	05/15/22 01:36	
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	1
- 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	1
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1520		49.9	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	1100	*1	49.9	mg/Kg		05/09/22 16:33	05/10/22 20:10	1
Diesel Range Organics (Over C10-C28)	422		49.9	mg/Kg		05/09/22 16:33	05/10/22 20:10	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/09/22 16:33	05/10/22 20:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130			05/09/22 16:33	05/10/22 20:10	1
o-Terphenyl (Surr)	106		70 - 130			05/09/22 16:33	05/10/22 20:10	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte		0 110						
Allalyto	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

**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	Organic Compounds (GC)
A a look a	Desuit Ouglities

Analyte	Result	Qualifier	KL	Unit	U	Prepared	Anaiyzed	DII 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

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2290-24

Matrix: Solid

Method: Total BTEX - Total BTEX	( 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 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	1
Method: 8015B NM - Diesel Rang Analyte	, ,	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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 C10-C28)	435		49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
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

RL

24.8

Unit

mg/Kg

D

Prepared

Client Sample ID: SW-36

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23

Sample Depth: 0 - 5

Analyte

Chloride

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

1150

Lab Sample ID: 890-2290-25

Analyzed

05/12/22 13:46

**Matrix: Solid** 

Dil Fac

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							
		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX		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  Method: 8015 NM - Diesel Ran	Result <0.201	U			<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total BTEX	Result <0.201	U (GC)	0.201	mg/Kg	=		05/16/22 16:56	1
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte	Result 4280	O) (GC) Qualifier	0.201 <b>RL</b>	mg/Kg	=		05/16/22 16:56  Analyzed	1
Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte Total TPH	ge Organics (DR) Result 4280 unge Organics (D	O) (GC) Qualifier	0.201 <b>RL</b>	mg/Kg	=		05/16/22 16:56  Analyzed	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-36** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Sample Depth: 0 - 5

**REMOVED FROM ANALYSIS TABLE** 

**ANALYSIS TABLE** 

Lab Sample ID: 890-2290-25

Matrix: Solid

Ю

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	4130		50.0	mg/Kg		05/09/22 16:33	05/10/22 19:48	1
C10-C28)								
Oll 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						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1980		25.0	mg/Kg			05/12/22 13:55	5

**Client Sample ID: SW-37** Lab Sample ID: 890-2290-26 **REMOVED FROM** Date Collected: 05/06/22 00:00 Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 0 - 5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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	mg/Kg		05/14/22 12:37	05/15/22 04:13	25
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
Xylenes, Total	<0.100	U	0.100	mg/Kg		05/14/22 12:37	05/15/22 04:13	25
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
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	mg/Kg			05/16/22 16:56	1
• -			0.100	mg/Kg			05/16/22 16:56	1
: Method: 8015 NM - Diesel Range	Organics (DR		0.100	mg/Kg Unit		Prepared	05/16/22 16:56  Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte  Total TPH	Organics (DR	O) (GC)			D	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DRO Result 346	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Organics (DR Result 346 ge Organics (D	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Organics (DR Result 346 ge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	RL 50.0	Unit mg/Kg			Analyzed 05/11/22 10:27	1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte C6-C10	e Organics (DR Result 346 ge Organics (DI Result	O) (GC) Qualifier  RO) (GC) Qualifier		Unit mg/Kg		Prepared	Analyzed 05/11/22 10:27 Analyzed	1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte C6-C10 Diesel Range Organics (Over	e Organics (DR Result 346 ge Organics (DR Result <50.0	O) (GC) Qualifier  RO) (GC) Qualifier	RL 50.0	Unit mg/Kg  Unit mg/Kg		Prepared 05/09/22 16:33	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:53	1
Method: 8015 NM - Diesel Range Analyte	e Organics (DR Result 346 ge Organics (DR Result <50.0	Qualifier  RO) (GC) Qualifier  U *1	RL 50.0	Unit mg/Kg  Unit mg/Kg		Prepared 05/09/22 16:33	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:53	1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR Result 346 ge Organics (DR Result <50.0	Qualifier  RO) (GC) Qualifier  U *1	RL 50.0 50.0 50.0	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:53 05/10/22 20:53	1 Dil Fac 1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR Result 346 ge Organics (DR Result <50.0 346 <50.0	Qualifier  RO) (GC) Qualifier  U *1	RL 50.0 50.0 50.0 50.0	Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 05/09/22 16:33 05/09/22 16:33	Analyzed 05/11/22 10:27  Analyzed 05/10/22 20:53 05/10/22 20:53	Dil Fac 1 1 1

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-2290-2 Project/Site: Kaiser SWD SDG: Lea County NM

RL

25.3

Unit

mg/Kg

D

Prepared

**Client Sample ID: SW-37** 

Date Collected: 05/06/22 00:00 Date Received: 05/06/22 15:23 Sample Depth: 0 - 5

Analyte

Chloride

Method: 300.0 - Anions, Ion Chromatography - Soluble

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

1510

Lab Sample ID: 890-2290-26

Analyzed

05/12/22 14:05

Matrix: Solid

Dil Fac

## **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)	
890-2290-23	SW-34	99	98	
390-2290-24	SW-35	103	101	
890-2290-25	SW-36	99	97	
890-2290-26	SW-37	102	102	
890-2290-A-10-E MS	Matrix Spike	103	108	
890-2290-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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
4554-A-1-C MS	Matrix Spike	109	108	
4554-A-1-D MSD	Matrix Spike Duplicate	94	94	
2290-23	SW-34	108	106	
290-24	SW-35	118	116	
290-25	SW-36	124	126	
290-26	SW-37	108	108	
380-25199/2-A	Lab Control Sample	123	124	
O 880-25199/3-A	Lab Control Sample Dup	129	132 S1+	
880-25199/1-A	Method Blank	99	103	

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** 

**Matrix: Solid** 

Analysis Batch: 25561

Analysis Batch: 25561

**Matrix: Solid** Analysis Batch: 25561 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25564

	МВ	MB						
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

Surrogate	%Recovery	Qualifier	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

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 0.200 0.2290 70 - 130 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

**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 Qualifier	Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1,4-Difluorobenzene (Surr)	107	70 - 130

Lab Sample ID: 890-2290-A-10-E MS

Lab Sample ID: LCSD 880-25564/2-A

**Matrix: Solid** 

Analysis Batch: 25561

Client Sample ID: Matrix Spike 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	

## 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) (Continued)

Lab Sample ID: 890-2290-A-10-E MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** 

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 Qual	ifier Limits
4-Bromofluorobenzene (Surr)	103	70 - 130
1,4-Difluorobenzene (Surr)	108	70 - 130

Lab Sample ID: 890-2290-A-10-F MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 25561

Prep Type: Total/NA

Prep Batch: 25564

Prep Batch: 25564

Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00199 U 0.08471 mg/Kg 85 70 - 130 18 35 Toluene <0.00199 U 0.100 82 70 - 130 0.08214 mg/Kg 11 35 Ethylbenzene <0.00199 U 0.100 0.08185 mg/Kg 82 70 - 130 9 35 <0.00398 U 0.200 0.1660 83 70 - 130 8 35 m-Xylene & p-Xylene mg/Kg 0.100 <0.00199 U 0.07935 79 70 - 130 o-Xylene mg/Kg 10

MSD MSD

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	87	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Client Sample ID: Method Blank Lab Sample ID: MB 880-25199/1-A **Matrix: Solid** 

Analysis Batch: 25231

Official Campic ID. Mictiloa Dialik	
Prep Type: Total/NA	
Prep Batch: 25199	

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

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							Prep	Batch: 25199
	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)								

Client: Tetra Tech, Inc. Job ID: 890-2290-2 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** 

Analysis Batch: 25231

Prep Type: Total/NA

Prep Batch: 25199

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C10	1000	1077	*1	mg/Kg		108	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	1000	1304		mg/Kg		130	70 - 130	6	20

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	129		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

Analysis Batch: 25231

Prep Type: Total/NA

Prep Batch: 25199

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C10	<50.0	U *1	1000	1064		mg/Kg		106	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1112		mg/Kg		109	70 - 130	
	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

	Sample	Sample	<b>Бріке</b>	M2D	MISD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C10	<50.0	U *1	998	899.1		mg/Kg		90	70 - 130	17	20
Diesel Range Organics (Over	<50.0	U	998	969.3		mg/Kg		95	70 - 130	14	20
C10-C28)											

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	94		70 - 130
o-Terphenvl (Surr)	94		70 <sub>-</sub> 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

### 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

MB MB

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

**Matrix: Solid** 

**Analysis Batch: 25429** 

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 245.3 mg/Kg 98 90 - 110

Lab Sample ID: LCSD 880-25414/3-A

**Matrix: Solid** 

Analysis Batch: 25429

LCSD LCSD RPD Spike %Rec 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

**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

# **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 Batcl
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

Job ID: 890-2290-2

Client: Tetra Tech, Inc. 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

Lab Sample ID: 890-2290-24 **Client Sample ID: SW-35** Date Collected: 05/06/22 00:00 **Matrix: Solid** 

Date Received: 05/06/22 15:23

Prep

Analysis

Leach

Analysis

8015NM Prep

8015B NM

DI Leach

300.0

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 25564 Total/NA Prep 5.02 g 05/14/22 12:37 MR XEN MID 5 mL Total/NA 8021B 25561 05/15/22 02:02 XEN MID Analysis 1 MR Total/NA Total BTEX 25659 05/16/22 16:56 XEN MID Analysis 1 SM Total/NA Analysis 8015 NM 25344 05/11/22 10:27 SM XEN MID

Client Sample ID: SW-36 Lab Sample ID: 890-2290-25 Date Collected: 05/06/22 00:00

5

10.03 g

5.04 g

25199

25231

25414

25429

10 mL

50 mL

05/09/22 16:33

05/10/22 20:32

05/12/22 11:30

05/12/22 13:46

DM

SM

CH

CH

Date Received: 05/06/22 15:23

Total/NA

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			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	СН	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:55	CH	XEN MID

**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

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	5	5.4.1		<b>5</b> ''		<b>-</b>	5.4.			
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 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** 

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XEN MID XEN MID

**Matrix: Solid** 

XEN MID

XEN MID

### 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	Туре	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

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# **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		ELAP	T104704400-21-22	06-30-22
The following analytes	and the street and the state of the state of		to defend the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control	
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the agency does not of	fer certification.	•	, , ,	ay include analytes for

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# **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** 

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# **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

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		The	Relinquished by:										LAB USE )	LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	7
Date: Time:	Date: Time:		BH-101 (5') Date: Time:	BH-100 (5')	ВН-99 (5')	BH-98 (5')	вн-97 (5')	BH-96 (5')	ВН-95 (5')	BH-94 (5')	ВН-93 (5')	BH-92 (5')		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:	( loc ha	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	DATE	YEAR: 2020	SAMPLING		Sampler Signature:	] '	Project #:		Site Manager:	
Date: Time:	Date: Time:	. 5.6.33 1533	Date: Time:			×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE METHOD		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 862-4559 Fax (432) 882-3946
D DELIVERED F	Sample Temperature    A O     Rush Charges Authorized	ONLY	AR ISE REMARKS:	× × × × × × × × × × × × × × × × × × ×	× ×	×	×	×	×	×	×	×	PAH 8: Total M TCLP N TCLP S RCI GC/MS GC/MS PCB'S NORM PLM (A Chlorid	RED (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (100) (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1	Y/N) B BTI G (Ext to GRO Ag As Is Ag As As Ses Solution (GRO Ag As Is Ag As As Ses Solution (GRO Ag As Is Ag As As As As As As As As As As As As As	- DRO - Ba Cd C Ba Cd C s / 624 8270C/6	ORO - r Pb Se r Pb S	e Hg e Hg	list)	890-2290 Chain of Custody		

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	Date: Time:		Date: Time:	S/6/22 1523	Date: Time:	BH-111 (5')	BH-110 (5')	ВН-109 (5')	BH-108 (5')	BH-107 (5')	BH-106 (5')	BH-105 (5')	BH-104 (5')	ВН-103 (5')	ВН-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	1037: 2020	SAMPLING			Campler Cinnature.	Project #:		Site Manager:		
	Date: Time:		/ Date: Time:	CD-31.9 40	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATI SOIL HCL HNO: ICE None	3	MATRIX PRESERVATIVE		Ezequiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432), 882-459 Fax (432) 682-3946	
(Circle) HAND DELIVERED FEDEX UPS Tracking #	Special Report Limits or TRRP Report	Rush Charges Authorized	Sample Temperature		m A	×		×	×	×	×	×	×	×	×	TPH I	802° TX100 8015N 8270 Metal Volat Semi S Vol S Seri 8808 (Asbe ide	(Y/N)  B B B  D5 (Ext  (GRC  C C S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag As  S Ag A	Ba Cd C s Ba Cd C s Ba Cd C s Ba Cd C es 3 / 624 8270C/6	ORO r Pb S Cr Pb S	e Hg Se Hg	list)		ANALYSIS REQUEST  (Circle or Specify Method No.)		Page
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	Date: Time:		Date: Time:	June 5/6/22 15 ch	: Time:		Q44-01 (0-0)	SIM 27 (0 F)	SW-36 (0-5")	SW-35 (0-5')	SW-34 (0-5')	BH-113 (5')	BH-112 (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:	()(00)	Received by:		SIGIZOZE	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	DATE	$\dashv$	YEAR: 2020	SAMPLING			Sampler Signature:		Project #:		Site Manager:		
	Date: Time:		/ Date: Time:	Dr D. C ad					×	×	×	×	×	WAT SOIL HCL HNC ICE None	)3	#	MATRIX PRESERVATIVE		Leddaig: Morolo	Ezecuiel Moreno		212C-MD-02230		Clair Gonzales	901W Wall Street, Ste 100 Midband,Tcxas 79705 Tel (432) 682-4559 Fax (432) 682-3946	
(Circle) HAND DELIVERED FEDEX UPS Tracking #:	Special Report Limits or TRRP Report	Rush Charges Authorized	Sample Temperature RUSH: Same Day 24 hr 48	ONLY	_				×	×	×	×	×	TPH PAH Total TCLF TCLF RCI GC/M GC/M GC/M PCB' NOR PLM Chlor Gene	K 802 TX10 8015 8270 Meta V Vola V Serri MS Vo MS Se S 808 M (Asberride	O (Y/IIB) OOS (III) OOC OC OC OC OC OC OC OC OC OC OC OC OC	BTI Ext to GRO I AS I AS I AS I AS I AS I AS I AS I A	/ 624 8270C/	- ORO	Se Se	Hg Hg	list)	 	ANALYSIS REQUEST (Circle or Specify Method No.)		rage
	Report		48 hr 72 hr	}										Hold	n/Cat	ion E	Balar	nce								o Cl

# **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	

Released to Imaging: 9/1/2023 3:31:23 PM

### **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	

Released to Imaging: 9/1/2023 3:31:23 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: 890-2515-1

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

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### **Definitions/Glossary**

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

### **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

<b></b>	Quanto: 20001.ption
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.

# **HPLC/IC**

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) 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)

Negative / Absent NEG POS Positive / Present

PQL Practical Quantitation Limit

**PRES** Presumptive Quality Control QC

**RER** Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RI

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: 890-2515-1

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.

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Eurofins Carlsbad 7/20/2022

### **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)** 

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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

Matrix: Solid

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Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

Lab Sample ID: 890-2515-2

Client Sample ID: SW35 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Method: 8021B - Vola	tile Organic Com	nounds (GC)	(Continued)
MICHIGA. OUL ID - VOIC	unc Organic Com	pourius (OO)	(Oontiniaca)

Surrogate	%Recovery Qualifi	er Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96	70 - 130	07/14/22 09:52	07/15/22 13:17	1

### Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	0	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			_	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

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	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Survey made	9/ <b>Danay</b> amı	Ovelifier	l imaida				Dramavad	Amalumad	Dil Foo
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
1-Chl	Chlorooctane	92	70 - 130		07/12/22 14:24	07/12/22 2
o-Terp	erphenyl	06	70 - 130	(	07/12/22 14:24	07/12/22 2
_ '	• •					

Method: 300.0 - Anions, Ion C	Chromatography - Soluble
	B 11 6 110

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244	4.98	mg/Kg		_	07/14/22 04:18	1

Client Sample ID: SW36 0-6

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

Mothod: 9021D	Volatile Organie	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

motification colling to a game		,							
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

Mothod:	Total RTEY	- Total RTFY	Calculation

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	) (GC)
ı	Michiga. 00 to Min - Diese	i italige Organics (Dito	, (00)

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

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21:50 21:50

Matrix: Solid

Lab Sample ID: 890-2515-3

Lab Sample ID: 890-2515-3

# **Client Sample Results**

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

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	07/12/22 22:11	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:11	1
C10-C28)									
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

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)							
- Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	Dil Fac
Analyte	Result   <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9  ge Organics (D	Qualifier U		MDL	mg/Kg	D	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9  ge Organics (D	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	Result <49.9  ge Organics (D 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 Diesel Range Organics (Over	Result <49.9  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  07/12/22 22:33	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	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 22:33  07/12/22 22:33	1 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 <49.9  ge Organics (D Result <49.9  <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 07/12/22 14:24 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 22:33  07/12/22 22:33	

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 Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.7		4.99		mg/Kg			07/14/22 04:37	1

Lab Sample ID: 890-2515-5 Client Sample ID: BH-106 6 **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	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/22 09:52	07/15/22 18:18	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:18	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/22 09:52	07/15/22 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				07/14/22 09:52	07/15/22 18:18	1
1,4-Difluorobenzene (Surr)	113		70 - 130				07/14/22 09:52	07/15/22 18:18	1
- Method: Total BTEX - Total B	TEX 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 Rar	nge Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

• •								
Total TPH	<50.0	U	50.0	mg/K	g		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/K	g	07/12/22 14:24	07/12/22 22:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/K	g	07/12/22 14:24	07/12/22 22:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/K	g	07/12/22 14:24	07/12/22 22:54	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			07/12/22 14:24	07/12/22 22:54	1
o-Terphenyl	125		70 - 130			07/12/22 14:24	07/12/22 22:54	1

RL

4.95

MDL Unit

mg/Kg

D

Prepared

Result Qualifier

21.0

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Analyzed

07/14/22 04:46

Dil Fac

Analyte

Chloride

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	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	110		70 - 130				07/14/22 09:52	07/15/22 18:38	
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	
Method: 8015 NM - Diesel Range			DI	MDI	Unit	п	Drangrad	Analyzod	Dil Fa
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
		Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed 07/13/22 09:51	
Analyte	Result <50.0	Qualifier U RO) (GC)		MDL		<u>D</u>	<u> </u>		
Analyte Total TPH	Result <50.0  Ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier	50.0			<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>	07/13/22 09:51	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10	Result <50.0  Ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U	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	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 07/12/22 14:24	07/13/22 09:51  Analyzed  07/12/22 23:16	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 <50.0)	Qualifier 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
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 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
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   <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 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 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 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
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   <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 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
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	Qualifier 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

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

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Lab Sample ID: 890-2515-7

Matrix: Solid

3

5

7

10

12

13

Lab Sample ID: 890-2515-7

Lab Sample ID: 890-2515-8

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-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	Janic Com	poulius (C	3C) (	(Continueu)	

Surrogate	%Recovery Qualifier	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) (G	C
Method: 0013 NM - Dieser Range Organics (DIXO) (C	, ,

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

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 04:16	1
Diesel Range Organics (Over C10-C28)	99.5		50.0		mg/Kg		07/12/22 14:24	07/13/22 04:16	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 04:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Q	Qualifier 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 Chroma	tography - 🤄	Soluble

Analyte	Result	Qualifier	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

Date Received: 07/08/22 16:08

Sample Depth: 10

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	0.0439		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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0439		0.0402		mg/Kg			07/15/22 08:13	1

Method: 8015 NM - Dies	el Range Organics (DRO)	(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

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9

3

0

0

10

12

Lab Sample ID: 890-2515-8

# **Client Sample Results**

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 Date Received: 07/08/22 16:08

Sample Depth: 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		07/12/22 14:24	07/13/22 04:38	1
Diesel Range Organics (Over C10-C28)	86.1		49.9		mg/Kg		07/12/22 14:24	07/13/22 04:38	1
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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH-116 10 Lab Sample ID: 890-2515-9 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
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0597		0.0403		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	196		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	07/13/22 03:54	1
Diesel Range Organics (Over C10-C28)	196		49.9		mg/Kg		07/12/22 14:24	07/13/22 03:54	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 03:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				07/12/22 14:24	07/13/22 03:54	1

Lab Sample ID: 890-2515-9

Client: Tetra Tech, Inc.

Job ID: 890-2515-1
Project/Site: Kaiser SWD

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

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	

Client Sample ID: BH-117 10

Date Collected: 07/06/22 00:00

Lab Sample ID: 890-2515-10

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	1
o-Xylene	<0.0199	U	0.0199		mg/Kg		07/14/22 09:52	07/15/22 20:22	1
Xylenes, Total	<0.0398	U	0.0398		mg/Kg		07/14/22 09:52	07/15/22 20:22	1
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	1
1,4-Difluorobenzene (Surr)	127		70 - 130				07/14/22 09:52	07/15/22 20:22	1
Method: Total BTEX - Total BTI	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 Rang Analyte	Result	Qualifier		MDL		<u>D</u>	Prepared	Analyzed	Dil Fa
Total TPH	743		50.0		mg/Kg			07/13/22 09:51	
Method: 8015B NM - Diesel Rai	nge 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	07/13/22 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	romatography -	Soluble							
Method: 300.0 - Anions, Ion Ch Analyte		Soluble Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

**Eurofins Carlsbad** 

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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** 

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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

			•	
03	70 - 130	07/18/22 15:14	07/19/22 16:21	50
62 S1-	70 - 130	07/18/22 15:14	07/19/22 16:21	50
	103 62 S1-			

# **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 O	rganics (DRO)	(GC)						
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4480	249		mg/Kg			07/13/22 09:51	1

	.99 (	/(/							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		07/12/22 14:24	07/13/22 03:12	5
Diesel Range Organics (Over C10-C28)	3970		249		mg/Kg		07/12/22 14:24	07/13/22 03:12	5
Oll Range Organics (Over C28-C36)	507		249		mg/Kg		07/12/22 14:24	07/13/22 03:12	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

%Recovery Qualifier Limits Prepared Analyzed Dil Fac 90 70 - 130 07/12/22 14:24 07/13/22 03:12 5 94 70 - 130 07/12/22 14:24 07/13/22 03:12 5

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Chloride

Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac 187 4.95 mg/Kg 07/14/22 08:46

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08

Client Sample ID: BH-119 8

**REMOVED FROM ANALYSIS TABLE** 

**Matrix: Solid** 

Lab Sample ID: 890-2515-12

Sample Depth: 8

1-Chlorooctane

o-Terphenyl

Method: 8021B - Volatile Organ	ic 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 Qua	alifier 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 Result Qualifier D Dil Fac 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 C28-C36)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	07/12/22 14:24	07/13/22 03:33	5
o-Terphenyl	100		70 - 130	07/12/22 14:24	07/13/22 03:33	5

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier Dil Fac RLMDL Unit Prepared Analyzed Chloride 25.1 07/14/22 09:14 3960 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

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2515-13

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (	GC	,
motification totaling organic compounds (	,	,

ic compounds (	,00)							
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  %Recovery 120	<pre>&lt;0.00201 U F1 F2 &lt;0.00201 U F1 F2 &lt;0.00402 U F1 F2 &lt;0.00201 U F1 F2 &lt;0.00402 U F1 F2 &lt;0.00402 U F1 F2 </pre> <pre>%Recovery Qualifier</pre> 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 (	Calculation								
Analyte	Result	Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	r	ng/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 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2515-13

Matrix: Solid

Sample Depth: 8

Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)							
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 Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed <49.8 U 49.8 07/12/22 14:24 07/12/22 23:37 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U 49.8 07/12/22 14:24 07/12/22 23:37 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <49.8 U 49.8 mg/Kg 07/12/22 14:24 07/12/22 23:37 %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 1-Chlorooctane 88 70 - 130 07/12/22 14:24 07/12/22 23:37 o-Terphenyl 102 70 - 130 07/12/22 14:24 07/12/22 23:37

١	Method: 300.0 - Anions, Ion Chron	natography -	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

Lab Sample ID: 890-2515-14

Date Collected: 07/06/22 00:00
Date Received: 07/08/22 16:08

<49.9 U

Sample Depth: 8

Ethylbenzene	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
m-Xylene & p-Xylene	Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
co-Xylene         < 0.00201         U         0.00201         mg/kg         07/14/22 99:57         07/15/22 02:01           Xylenes, Total         < 0.00402         U         0.00402         mg/kg         07/14/22 09:57         07/15/22 02:01           Surrogate         %Recovery         Qualifier         Limits         Prepared         Analyzed           4-Bromofluorobenzene (Surr)         137         S1+         70 - 130         07/14/22 09:57         07/15/22 02:01           Method: Total BTEX - Total BTEX Calculation         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Total BTEX         <0.00402	Ethylbenzene	<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	m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Surrogate   %Recovery   Qualifier   Limits   Prepared   Analyzed	o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
4-Bromofluorobenzene (Surr) 137 S1+ 70 - 130 1,4-Diffluorobenzene (Surr) 80 70 - 130 07/14/22 09:57 07/15/22 02:01 1,4-Diffluorobenzene (Surr) 80 70 - 130 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/15/22 02:01 07/14/22 09:57 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01 07/15/22 02:01	Xylenes, Total	<0.00402	U	0.00402		mg/Kg		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           Method: Total BTEX - Total BTEX Calculation           Analyte         Result Qualifier         RL MDL Unit         D Prepared         Analyzed           Total BTEX         < 0.00402	Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total BTEX Calculation  Analyte Result Qualifier RL MDL Unit D Prepared Analyzed  Total BTEX < 0.00402 U 0.00402 mg/Kg 07/15/22 08:13  Method: 8015 NM - Diesel Range Organics (DRO) (GC)  Analyte Result Qualifier RL MDL Unit D Prepared Analyzed  Total TPH < < 49.9 U 49.9 mg/Kg 07/13/22 09:51  Method: 8015B NM - Diesel Range Organics (DRO) (GC)  Analyte Result Qualifier RL MDL Unit D Prepared Analyzed  Gasoline Range Organics (DRO) (GC)  Analyte Result Qualifier RL MDL Unit D Prepared Analyzed  Gasoline Range Organics < < 49.9 U 49.9 mg/Kg 07/12/22 14:24 07/12/22 23:59  (GRO)-C6-C10	4-Bromofluorobenzene (Surr)	137	S1+	70 - 130				07/14/22 09:57	07/15/22 02:01	1
Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed	1,4-Difluorobenzene (Surr)	80		70 - 130				07/14/22 09:57	07/15/22 02:01	1
Total BTEX										
Method: 8015 NM - Diesel Range Organics (DRO) (GC)           Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Total TPH         <49.9	Method: Total BTEX - Total BT	EX Calculation								
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Total TPH         <49.9			Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Total TPH         <49.9	Analyte	Result			MDL		<u>D</u>	Prepared		Dil Fac
Method: 8015B NM - Diesel Range Organics (DRO) (GC)   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   O7/12/22 23:59	<b>Analyte</b> Total BTEX	Result   <0.00402	U		MDL		<u>D</u>	Prepared		Dil Fac
AnalyteResultQualifierRLMDLUnitDPreparedAnalyzedGasoline Range Organics<49.9	Analyte Total BTEX Method: 8015 NM - Diesel Ran	Result <0.00402	U (GC)	0.00402		mg/Kg			07/15/22 08:13	Dil Fac
AnalyteResultQualifierRLMDLUnitDPreparedAnalyzedGasoline Range Organics<49.9	Analyte Total BTEX Method: 8015 NM - Diesel Ran Analyte	Result <0.00402  age Organics (DR) Result	O) (GC) Qualifier	0.00402		mg/Kg			07/15/22 08:13  Analyzed	1
(GRO)-C6-C10	Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH	Result <0.00402  age Organics (DRI Result <49.9	O) (GC) Qualifier	0.00402		mg/Kg			07/15/22 08:13  Analyzed	1
Diesel Range Organics (Over <49.9 U 49.9 mg/Kg 07/12/22 14:24 07/12/22 23:59	Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH  Method: 8015B NM - Diesel Ra	rige Organics (DR) Result <49.9  ange Organics (DI) Result <49.9	O) (GC) Qualifier U	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	1
2.000	Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH  Method: 8015B NM - Diesel Ra Analyte Gasoline Range Organics	rige Organics (DR Result <49.9  ange Organics (Di Result Result Result Result Result Result Result Result Result Result Result Result	O) (GC) Qualifier U  RO) (GC) Qualifier	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

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07/12/22 23:59

49.9

mg/Kg

07/12/22 14:24

OII Range Organics (Over C28-C36)

C10-C28)

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**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1

Lab Sample ID: 890-2515-14

Lab Sample ID: 890-2515-15

SDG: Lea County NM

Matrix: Solid

**Matrix: Solid** 

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 Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5280		101		mg/Kg			07/14/22 18:25	20

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

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 Fa
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 02:54	
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 02:54	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130				07/14/22 09:57	07/15/22 02:54	
1,4-Difluorobenzene (Surr)	80		70 - 130				07/14/22 09:57	07/15/22 02:54	
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			07/15/22 08:13	
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	
- -			49.9		mg/Kg			07/13/22 09:51	
: Method: 8015B NM - Diesel Ranç	ge Organics (D	RO) (GC)		MDI			Posterior		
Method: 8015B NM - Diesel Ranç Analyte	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared 07/40/00 44-04	Analyzed	Dil Fa
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL		<u>D</u>	Prepared 07/12/22 14:24		Dil Fa
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>	<u>.</u>	Analyzed	Dil Fa
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>	07/12/22 14:24	Analyzed 07/13/22 00:41 07/13/22 00:41	Dil Fa
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	<b>RL</b> 49.9	MDL	Unit mg/Kg	<u>D</u>	07/12/22 14:24	Analyzed 07/13/22 00:41	Dil Fa
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	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 14:24	Analyzed 07/13/22 00:41 07/13/22 00:41	Dil Fa
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 <49.9	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24	Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41	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	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>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 Prepared	Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41 Analyzed	Dil Fa
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  Method: 300.0 - Anions, Ion Chro	ge Organics (D Result <49.9 <49.9 <49.9 **Recovery**  89  103	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>	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 Prepared 07/12/22 14:24	Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41  Analyzed 07/13/22 00:41	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	ge Organics (D Result <49.9 <49.9 <49.9  **Recovery 89 103  comatography -	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_	07/12/22 14:24 07/12/22 14:24 07/12/22 14:24 Prepared 07/12/22 14:24	Analyzed 07/13/22 00:41 07/13/22 00:41 07/13/22 00:41  Analyzed 07/13/22 00:41	Dil Fa  Dil Fa

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

**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

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	74		70 - 130				07/14/22 09:57	07/15/22 03:20	
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			07/15/22 08:13	
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			07/13/22 09:51	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	
C10-C28)	<50.0 <50.0		50.0 50.0		mg/Kg mg/Kg		07/12/22 14:24 07/12/22 14:24	07/13/22 01:24 07/13/22 01:24	
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U							Dil Fa
C10-C28) Oll Range Organics (Over C28-C36) Surrogate		U	50.0				07/12/22 14:24	07/13/22 01:24	Dil Fa
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane	<50.0	U	50.0 <i>Limits</i>				07/12/22 14:24  Prepared	07/13/22 01:24  Analyzed	
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 **Recovery 93 107	U Qualifier	50.0  Limits  70 - 130				07/12/22 14:24  Prepared  07/12/22 14:24	07/13/22 01:24  Analyzed  07/13/22 01:24	
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chloroctane o-Terphenyl  Method: 300.0 - Anions, Ion Chro	<50.0  **Recovery 93 107  omatography -	U Qualifier	50.0  Limits  70 - 130	MDL	mg/Kg	D	07/12/22 14:24  Prepared  07/12/22 14:24	07/13/22 01:24  Analyzed  07/13/22 01:24	<i>Dil Fa</i>

Client Sample ID: BH-125 8 Lab Sample ID: 890-2515-18 **Matrix: Solid** 

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	<0.00200	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
- Method: Total BTEX - Total B1	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
raidiyto							•	•	

**Eurofins Carlsbad** 

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	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		07/12/22 14:24	07/13/22 01:46	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:46	1
C10-C28)									
OII 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	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3800		25.0		mg/Kg			07/14/22 19:02	5

Lab Sample ID: 890-2515-19 Client Sample ID: BH-126 8 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
Oll 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
			70 <sub>-</sub> 130				07/12/22 14:24	07/13/22 02:07	

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

Client Sample ID: BH-126 8

Lab Sample ID: 890-2515-19 Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Matrix: Solid

Sample Depth: 8

Method: 300.0 - Anions, Ion Chroma	atography - Soluble							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4170	100		mg/Kg			07/14/22 19:11	20

Client Sample ID: BH-127 8 Lab Sample ID: 890-2515-20

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	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	
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	
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 04:39	
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 04:39	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130				07/14/22 09:57	07/15/22 04:39	
1,4-Difluorobenzene (Surr)	77		70 - 130				07/14/22 09:57	07/15/22 04:39	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			07/15/22 08:13	1
Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Anglyzad	Dil Fac
Analyte Total TPH	<del>Kesuit</del> <49.9		49.9	MIDL			Prepared	Analyzed	DII Fac
	<49.9	U	49.9		mg/Kg			07/13/22 09:51	
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		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 Fa
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 lan Chu	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro	omatograpmy								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2515-21

# **Client Sample Results**

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	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
Analyte Total TPH		Qualifier	RL	MDL	UIIIL	D	Prepared	Analyzed	Dil Fac
Total TPH									
- -	<b>~49.9</b>	U	49.9		mg/Kg			07/13/22 09:51	
Method: 8015B NM - Diesel Ran			49.9		mg/Kg				
Method: 8015B NM - Diesel Rang Analyte	ge Organics (D		49.9	MDL		D	Prepared		1
	ge Organics (D	RO) (GC)		MDL		<u>D</u>	Prepared 07/12/22 15:30	07/13/22 09:51	1 Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over	ge Organics (D Result	RO) (GC)  Qualifier  U F1	RL	MDL	Unit	<u>D</u>		07/13/22 09:51  Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <49.9	RO) (GC) Qualifier U F1	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 11:31	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 F1 U F1	RL 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 15:30 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 11:31  07/13/22 11:31	1 Dil Fac
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 U F1	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 15:30 07/12/22 15:30 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 11:31  07/13/22 11:31	Dil Face 1 1 1 Dil Face
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 U F1	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	Unit mg/Kg mg/Kg	<u>D</u>	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 11:31  07/13/22 11:31  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	ge Organics (D Result <49.9 <49.9 <49.9  **Recovery 93 107	RO) (GC) Qualifier U F1 U F1 U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 15:30 07/12/22 15:30 07/12/22 15:30 <b>Prepared</b> 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 11:31  07/13/22 11:31  Analyzed  07/13/22 11:31	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	ge Organics (D  Result  <49.9  <49.9  <49.9  **Recovery  93  107  omatography -	RO) (GC) Qualifier U F1 U F1 U Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	07/12/22 15:30 07/12/22 15:30 07/12/22 15:30 <b>Prepared</b> 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 11:31  07/13/22 11:31  Analyzed  07/13/22 11:31	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	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 05:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 05:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 05:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 05:32	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

**Matrix: Solid** 

Lab Sample ID: 890-2515-22

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 Organ	nic Compounds	(GC)	(Continued)	
mothed collis	no compoundo	<b>, – – ,</b>	(00::::::::::::::::::::::::::::::::::::	

Surrogate	%Recovery Quali	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

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	07/15/22 08:13	1

l .		
Mothod: 904E NM Dia	sel Range Organics (DRO) (GC)	١
INICITIOU. OUTS ININI - DIC	sel Kalige Organics (DKO) (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

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

Method: 300.0 - Anions,	lon Chromatogra <sub>l</sub>	ohy - Soluble

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
 Lab Sample ID: 890-2515-23

 Date Collected: 07/07/22 00:00
 Matrix: Solid

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B -	Volatile	Organia	Compounds	(CC)
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wethou. 602 fb - volatile Orga	nic 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

Method:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result Qu	ıalifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398 U	0.00398	ma/K	.a		07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (G	ı	Method:	8015 NM -	- Diesel	Range	<b>Organics</b>	(DRO)	(GC
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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** 

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Lab Sample ID: 890-2515-23

Lab Sample ID: 890-2515-24

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-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 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	63.5		49.9		mg/Kg			07/13/22 09:51	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		07/12/22 15:30	07/13/22 13:20	1
Diesel Range Organics (Over C10-C28)	63.5		49.9		mg/Kg		07/12/22 15:30	07/13/22 13:20	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 13:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				07/12/22 15:30	07/13/22 13:20	1
o-Terphenyl	0.05	04	70 <sub>-</sub> 130				07/12/22 15:30	07/13/22 13:20	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1

SDG: Lea County NM

Lab Sample ID: 890-2515-24

Matrix: Solid

Client Sample ID: BH-131 8

Date Received: 07/08/22 16:08 Sample Depth: 8

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Dil Fac Analyte RL MDL Unit D Prepared Analyzed 5.00 07/14/22 08:07 Chloride 85.5 mg/Kg

Client Sample ID: BH-132 8

Date Collected: 07/07/22 00:00

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Sample Depth: 8

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2515-25

**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 08:11	
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	•
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/22 09:57	07/15/22 08:11	
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/22 09:57	07/15/22 08:11	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	150	S1+	70 - 130				07/14/22 09:57	07/15/22 08:11	
1,4-Difluorobenzene (Surr)	74		70 - 130				07/14/22 09:57	07/15/22 08:11	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX		U	0.00396		mg/Kg			07/15/22 08:13	1
Method: 8015 NM - Diesel Range Analyte		O) (GC)  Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	
- 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 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
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 13:41	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	88		70 - 130				07/12/22 15:30	07/13/22 13:41	1
o-Terphenyl	102		70 - 130				07/12/22 15:30	07/13/22 13:41	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2515-26

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	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 08:49	1
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	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 08:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				07/14/22 09:57	07/15/22 08:49	1
1,4-Difluorobenzene (Surr)	81		70 - 130				07/14/22 09:57	07/15/22 08:49	1
Method: Total BTEX - Total BTEX	X 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
Mothed: 2045 NM Discal Depart	Overenies (DD	0) (00)							
Method: 8015 NM - Diesel Range	•	U) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH		Qualifier U		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/13/22 09:51	
				MDL		<u>D</u>	Prepared		
	<50.0	U		MDL		<u>D</u>	<u>Prepared</u>		
Total TPH	<50.0  ge Organics (D  Result	RO) (GC) Qualifier				D	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang	<50.0	RO) (GC) Qualifier	50.0		mg/Kg		<u> </u>	07/13/22 09:51	1 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	07/13/22 09:51  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	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 14:03	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 07/12/22 15:30 07/12/22 15:30	07/13/22 09:51  Analyzed  07/13/22 14:03  07/13/22 14:03	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 (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 15:30 07/12/22 15:30 07/12/22 15:30	07/13/22 09:51  Analyzed 07/13/22 14:03 07/13/22 14:03	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	<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 15:30 07/12/22 15:30 07/12/22 15:30 Prepared	07/13/22 09:51  Analyzed 07/13/22 14:03 07/13/22 14:03  07/13/22 14:03  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 (D) Result <50.0 <50.0 <50.0 <86 101	CODE CODE CODE CODE CODE CODE CODE CODE	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 14:03  07/13/22 14:03  Analyzed 07/13/22 14:03	1 Dil Fac 1 1
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 %Recovery 86 101 omatography -	CODE CODE CODE CODE CODE CODE CODE CODE	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 14:03  07/13/22 14:03  Analyzed 07/13/22 14:03	Dil Fac  1  1  1  Dil Fac  1

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)	142	S1+	70 - 130				07/14/22 09:57	07/15/22 09:16	1

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Lab Sample ID: 890-2515-27

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**Matrix: Solid** 

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-2515-1 SDG: Lea County NM

Lab Sample ID: 890-2515-27

Lab Sample ID: 890-2515-28

Matrix: Solid

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	<ul> <li>Volatile Organic</li> </ul>	Compounds (G	C) (Continued)

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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403		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 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	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86	70 - 130	07/12/22 15:30	07/13/22 14:24	1
o-Terphenyl	101	70 - 130	07/12/22 15:30	07/13/22 14:24	1

Method: 300.0 - Anions,	on Chromatography	· - Soluble
	_	

Analyte	Result	Qualifier	RL	MDL	Unit	ס	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

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

wethou: 602 fb - volatile Orga	ilic Collipoulius (	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	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/15/22 08:13	1

Method: 8015 NM - Diesel Range Organics (DRO) (0
--------------------------------------------------

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

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Lab Sample ID: 890-2515-28

# **Client Sample Results**

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	,
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 14:45	,
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 Lab Sample ID: 890-2515-29 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 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	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 15:30	07/13/22 15:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 15:07	1
Oll 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

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2515-1

SDG: Lea County NM

Client Sample ID: BH-136 8 Date Collected: 07/07/22 00:00

Lab Sample ID: 890-2515-29

Matrix: Solid

Sample Depth: 8

Date Received: 07/08/22 16:08

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	490		4.98		mg/Kg			07/14/22 10:09	1	

Client Sample ID: BH-137 8 Lab Sample ID: 890-2515-30

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 Fa
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)		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	
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			07/15/22 08:13	
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	ge Organics (D	RO) (GC)							
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 Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	91		70 - 130				07/12/22 15:30	07/13/22 15:28	
o-Terphenyl	104		70 - 130				07/12/22 15:30	07/13/22 15:28	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	167		5.00		mg/Kg			07/14/22 10:17	

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	1
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 BTEX	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
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	55.9		50.0		mg/Kg			07/13/22 09:51	1
: Method: 8015B NM - Diesel Ran	ge Organics (D								1
: Method: 8015B NM - Diesel Ran	ge Organics (D Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	07/13/22 09:51  Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier		MDL		<u>D</u>	Prepared 07/12/22 15:30		
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result	Qualifier	RL	MDL	Unit	<u>D</u>		Analyzed	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D Result <50.0	Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	07/12/22 15:30	Analyzed 07/13/22 16:11	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)	ge Organics (D Result <50.0	Qualifier U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u> </u>	07/12/22 15:30 07/12/22 15:30	Analyzed 07/13/22 16:11 07/13/22 16:11	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 <50.0 55.9 <50.0	Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/12/22 15:30 07/12/22 15:30 07/12/22 15:30	Analyzed 07/13/22 16:11 07/13/22 16:11 07/13/22 16:11	1 1 1 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 55.9 <50.0	Qualifier U		MDL	Unit mg/Kg mg/Kg	<u> </u>	07/12/22 15:30 07/12/22 15:30 07/12/22 15:30 Prepared	Analyzed 07/13/22 16:11 07/13/22 16:11 07/13/22 16:11 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D  Result  <50.0  55.9  <50.0  %Recovery  98  111	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 15:30 07/12/22 15:30 07/12/22 15:30 <b>Prepared</b> 07/12/22 15:30	Analyzed 07/13/22 16:11 07/13/22 16:11 07/13/22 16:11  Analyzed 07/13/22 16:11	1 1 1 1 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  55.9  <50.0  %Recovery  98  111  omatography -	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>	07/12/22 15:30 07/12/22 15:30 07/12/22 15:30 <b>Prepared</b> 07/12/22 15:30	Analyzed 07/13/22 16:11 07/13/22 16:11 07/13/22 16:11  Analyzed 07/13/22 16:11	·

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	1

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Lab Sample ID: 890-2515-32

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**Matrix: Solid** 

Lab Sample ID: 890-2515-32

Lab Sample ID: 890-2515-33

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-139 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Sample Depth: 8

Method: 8021B - Volatile Organic Con	noounds (GC)	(Continued)
motifical collision of gains con	ipodiido (OO)	( Continuou,

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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	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

Method: 8015 NM - Diesel	Damas Ossasias /		10
i Methon: XU15 NIVI - DIESEI	Range Urganics i	DRUN (G	

Analyte	Result Qualifie	er 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
OII 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

П				
	1-Chlorooctane	92	70 - 130	
	o-Terphenyl	106	70 - 130	

	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
ĺ	Method: 300 0 - Anions Ion Chron	natography - Solublo				

Analyte	Result Qualifier	RL	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 -	Volatile Organic	c Compounds (GC)

michiod. 002 ID - Volutile Orga	ine compounds	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 10:08	07/15/22 23:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 10:08	07/15/22 23:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 10:08	07/15/22 23:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				07/14/22 10:08	07/15/22 23:49	1
1,4-Difluorobenzene (Surr)	107		70 - 130				07/14/22 10:08	07/15/22 23:49	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	I	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka				07/15/22 08:13	1

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

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	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
					mg/Kg			07/14/22 15:31	

Client Sample ID: BH-141 8

Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Released to Imaging: 9/1/2023 3:31:23 PM

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	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		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

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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

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# **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	

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# **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) (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				
BFB = 4-Bromofluorobei	nzene (Surr)			

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	

OTPH = o-Terphenyl

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29669/5-A

Analysis Batch: 29700

**Matrix: Solid** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29669

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	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	
Toluene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	
Ethylbenzene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	
m-Xylene & p-Xylene	<0.000800	U	0.000800		mg/Kg		07/13/22 13:52	07/14/22 11:30	
o-Xylene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	
Xylenes, Total	<0.00800	U	0.000800		mg/Kg		07/13/22 13:52	07/14/22 11:30	

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** 

Xylenes, Total

Client Sample ID: Method Blank Prep Type: Total/NA

07/15/22 11:11

Prep Batch: 29722

Analysis Batch: 29790

MR MR Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac mg/Kg Benzene <0.00200 U 0.00200 07/14/22 09:52 07/15/22 11:11 Toluene <0.00200 U 0.00200 mg/Kg 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

0.00400

mg/Kg

MB MB

<0.00400 U

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	07/14/22 09:52	07/15/22 11:11	1
1,4-Difluorobenzene (Surr)	108		70 - 130	07/14/22 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** 

07/14/22 09:52

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 Qualifie	er 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	Contr	ol	San	ıple	Dup
				D	<b>-</b>		<b>-</b>	I/NI A

Prep Type: Total/NA

Prep Batch: 29722

	<b>Spike</b>	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

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 880-29722/2-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
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.09023		mg/Kg		90	70 - 130	8	35
Ethylbenzene	0.100	0.08012		mg/Kg		80	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1601		mg/Kg		80	70 - 130	7	35
o-Xylene	0.100	0.08531		mg/Kg		85	70 - 130	5	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

	IVID	INID							
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 01:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 01:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 01:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 01:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 01:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 09:57	07/15/22 01:08	1

MB MB

Surrogate	%Recovery Qualifier	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

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 880-29723/2-A

**Matrix: Solid** 

**Analysis Batch: 29700** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29723 %Rec RPD

Analyte Added Result Qualifier Unit %Rec Limits RPD Limit m-Xylene & p-Xylene 0.200 0.2043 102 70 - 130 6 35 mg/Kg o-Xylene 0.100 0.1087 mg/Kg 109 70 - 130

LCSD LCSD

Spike

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

Client Sample ID: BH-120 8

**Matrix: Solid** 

Analysis Batch: 29700

Lab Sample ID: 890-2515-13 MS

Prep Type: Total/NA

Prep Batch: 29723

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1 F2	0.100	0.08436	-	mg/Kg		84	70 - 130	
Toluene	<0.00201	U F1 F2	0.100	0.08782		mg/Kg		88	70 - 130	
Ethylbenzene	<0.00201	U F1 F2	0.100	0.08772		mg/Kg		88	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.1196	F1	mg/Kg		60	70 - 130	
o-Xylene	<0.00201	U F1 F2	0.100	0.09763		mg/Kg		97	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1 4-Difluorobenzene (Surr)	78		70 - 130

Client Sample ID: BH-120 8 Lab Sample ID: 890-2515-13 MSD

**Matrix: Solid** 

Analysis Batch: 29700

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

MR MR

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 Client Sample ID: Method Blank

**Matrix: Solid** 

Analysis Batch: 29790

Prep Type: Total/NA

Prep Batch: 29739

	IIID	IVID							
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

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

	МВ	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** 

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 29790 Prep Batch: 29739

ike LCS LCS %Rec
ded Result Qualifier Unit D %Rec Limits
100 0.09154 mg/Kg 92 70 - 130
100 0.08982 mg/Kg 90 70 - 130
100 0.08005 mg/Kg 80 70 - 130
200 0.1608 mg/Kg 80 70 - 130
100 0.08701 mg/Kg 87 70 - 130
100 0.08982 mg/Kg 90 70 - 130 100 0.08005 mg/Kg 80 70 - 130 200 0.1608 mg/Kg 80 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 **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid Analysis Batch: 29790** 

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 mg/Kg 79 70 - 130 35 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** Prep Type: Total/NA **Analysis Batch: 29790** 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	
· I										

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

**Eurofins Carlsbad** 

Prep Type: Total/NA

Prep Batch: 29739

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

	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
o-Xylene	<0.00199	U	0.100	0.08371		mg/Kg		84	70 - 130	2	35

MSD MSD

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** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29987

**Analysis Batch: 30016** 

MB MB

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	<0.000800	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

	Sį	oike LC	SD LCSD	)			%Rec		RPD
Analyte	Ad	ded Re	sult Qualit	fier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.	100 0.1	75	mg/Kg		108	70 - 130	6	35
Toluene	0.	100 0.1	084	mg/Kg		108	70 - 130	6	35

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

Lab Sample ID: 880-17011-A-1-D MS

**Matrix: Solid** 

**Analysis Batch: 30016** 

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 29987

ı		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	Qualifier	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

**Matrix: Solid** Analysis Batch: 29499 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 50.0 <50.0 U 07/12/22 14:24 07/12/22 19:42 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 07/12/22 14:24 07/12/22 19:42 mg/Kg C10-C28)

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

Analyte	Result	Qualifier	RL	MDL	Unit	I	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

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	07/12/22 14:24	07/12/22 19:42	1
o-Terphenyl	108		70 - 130	07/12/22 14:24	07/12/22 19:42	1

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCS 880-29557/2-A **Matrix: Solid** Prep Type: Total/NA Prep Batch: 29557

Analysis Batch: 29499

Spike LCS LCS Added Analyte Result Qualifier Unit %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 70 - 130 86 C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-29557/3-A Client Sample ID: Lab Control Sample Dup

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**Matrix: Solid** 

Analysis Batch: 29499

Prep Type: Total/NA Prep Batch: 29557

	Spike	LCSD	LUSD			/onec		KFD	
Analyte	Added	Result	Qualifier Unit	: <b>D</b>	%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					
Surrogate	%Recovery	Qualifier	Limits			
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

Released to Imaging: 9/1/2023 3:31:23 PM

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 (GRO)-C6-C10	<49.9	U F2	996	1008		mg/Kg		98	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	849.4		mg/Kg		85	70 - 130	

	MS		
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	79		70 - 130

### 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	<49.9	U F2	998	742.9	F2	mg/Kg		72	70 - 130	30	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	998	860.6		mg/Kg		86	70 - 130	1	20
C10-C28)											

MSD MSD

Surrogate	%Recovery	Qualifier	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 C10-C28) 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)								

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** 

<b>Client San</b>	iple ID: La	ab Contro	I Sample	Dup
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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

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: Tetra Tech, Inc. Project/Site: Kaiser SWD

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

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <49.9 UF1 <49.8 UF1 996 0 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 996 0 <49.9 U F1 <49.8 U F1 mg/Kg 70 - 130

C10-C28)

MS MS %Recovery Surrogate Qualifier Limits 79 70 - 130 1-Chlorooctane 92 70 - 130 o-Terphenyl

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

%Rec RPD

MSD MSD Sample Sample Spike Analyte Result Qualifier hahhA Result Qualifier Unit %Rec Limits 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 Surrogate Limits 70 - 130 1-Chlorooctane 80 o-Terphenyl 70 - 130 93

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29402/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 29640** 

мв мв MDL Unit Dil Fac Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 07/14/22 03:23

Lab Sample ID: LCS 880-29402/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29640

Spike LCS LCS %Rec Analyte Added Result Qualifier Limits Unit Chloride 250 258.0 mg/Kg 103 90 - 110

Job ID: 890-2515-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-29402/3-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

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	20.4		251	271.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2515-11 MS Client Sample ID: BH-118 10 **Prep Type: Soluble** 

**Matrix: Solid** 

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	<b>Spike</b>	MSD	MSD				%Rec		KPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	187		248	438.6		mg/Kg		101	90 - 110	0	20	

Lab Sample ID: MB 880-29401/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29646

	IVID IVID						
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	-	ma/Ka		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** 

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 266.9 mg/Kg 107 90 - 110

Client Sample ID: BH-128 8

Client Sample ID: BH-138 8

**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 Client Sample ID: BH-128 8 **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29646

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	582		252	828.8		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-2515-31 MS Client Sample ID: BH-138 8 **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29646

	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 batch: 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. Job ID: 890-2515-1 Project/Site: Kaiser SWD 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	

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	

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2515-1

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** 

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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
390-2515-1	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	
390-2515-4	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	
390-2515-7	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	
390-2515-16	BH-123 8	Total/NA	Solid	8015 NM	
390-2515-17	BH-124 8	Total/NA	Solid	8015 NM	
390-2515-18	BH-125 8	Total/NA	Solid	8015 NM	
890-2515-19	BH-126 8	Total/NA	Solid	8015 NM	
390-2515-20	BH-127 8	Total/NA	Solid	8015 NM	
390-2515-21	BH-128 8	Total/NA	Solid	8015 NM	
390-2515-22	BH-129 8	Total/NA	Solid	8015 NM	
390-2515-23	BH-130 8	Total/NA	Solid	8015 NM	
390-2515-24	BH-131 8	Total/NA	Solid	8015 NM	
890-2515-25	BH-132 8	Total/NA	Solid	8015 NM	
390-2515-26	BH-133 8	Total/NA	Solid	8015 NM	
390-2515-27	BH-134 8	Total/NA	Solid	8015 NM	
390-2515-28	BH-135 8	Total/NA	Solid	8015 NM	
390-2515-29	BH-136 8	Total/NA	Solid	8015 NM	
390-2515-30	BH-137 8	Total/NA	Solid	8015 NM	
390-2515-31	BH-138 8	Total/NA	Solid	8015 NM	
390-2515-32	BH-139 8	Total/NA	Solid	8015 NM	
390-2515-33	BH-140 8	Total/NA	Solid	8015 NM	
890-2515-34	BH-141 8	Total/NA	Solid	8015 NM	

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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 Batch
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	
390-2515-14	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	
890-2515-1 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	

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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

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	Type	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		1	5 mL	5 mL	29790	07/15/22 12:56	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	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 20:46	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 03:51	CH	XEN MID

Client Sample ID: SW35 0-6 Lab Sample ID: 890-2515-2

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			4.98 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

Client Sample ID: SW36 0-6 Lab Sample ID: 890-2515-3 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			4.96 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

Released to Imaging: 9/1/2023 3:31:23 PM

	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** 

**Matrix: Solid** 

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 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 22:33 SM XEN MID 1 5.01 g 29402 07/11/22 09:13 XEN MID Soluble Leach DI Leach 50 mL KS 07/14/22 04:37 Soluble Analysis 300.0 1 29640 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

<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	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 **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			5.04 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 **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			4.95 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

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 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	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 MID
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

**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	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	Type	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** 

Client Sample ID: BH-118 10

Lab Sample ID: 890-2515-11 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			4.95 g	5 mL	29987	07/18/22 15:14	MR	XEN MID
Total/NA	Analysis	8021B		50			30016	07/19/22 16:21	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	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		5			29499	07/13/22 03:12	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29402	07/11/22 09:13	KS	XEN MIC
Soluble	Analysis	300.0		1			29640	07/14/22 08:46	CH	XEN MID

Client Sample ID: BH-119 8 Lab Sample ID: 890-2515-12

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			5.00 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 18:59	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		5			29499	07/13/22 03:33	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		5			29640	07/14/22 09:14	CH	XEN MID

Client Sample ID: BH-120 8 Lab Sample ID: 890-2515-13

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			4.97 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	CH	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	Type	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** 

Client Sample ID: BH-121 8

Date Collected: 07/06/22 00:00 Date Received: 07/08/22 16:08 Lab Sample ID: 890-2515-14

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			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 23:59	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		20			29640	07/14/22 18:25	CH	XEN MID

Client Sample ID: BH-122 8

Date Collected: 07/06/22 00:00

Lab Sample ID: 890-2515-15

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			4.95 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

Date Collected: 07/06/22 00:00

Lab Sample ID: 890-2515-16

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	Туре	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

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**Matrix: Solid** 

3

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6

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9

11

Client Sample ID: BH-124 8

Lab Sample ID: 890-2515-17 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
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	Туре	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	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 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	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 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** 

Client Sample ID: BH-128 8

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08 Lab Sample ID: 890-2515-21

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 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 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			4.98 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 05:32	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 12:36	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 07:52	CH	XEN MID

Client Sample ID: BH-130 8 Lab Sample ID: 890-2515-23 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			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

Client Sample ID: BH-131 8 Lab Sample ID: 890-2515-24 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			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

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**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2515-1 Project/Site: Kaiser SWD SDG: Lea County NM

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	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 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

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		
Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Prep	5035			4.96 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Analysis	8021B		1			29700	07/15/22 09:16	MR	XEN MID
Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Prep Analysis	8015NM Prep			10.01 g	10 mL	29563 29603	07/12/22 15:30	DM AJ	XEN MID
	Prep Analysis Analysis Analysis Prep	Type Method Prep 5035 Analysis 8021B Analysis Total BTEX Analysis 8015 NM Prep 8015NM Prep	Type Method Run  Prep 5035  Analysis 8021B  Analysis Total BTEX  Analysis 8015 NM  Prep 8015NM Prep	Type         Method         Run         Factor           Prep         5035         Factor           Analysis         8021B         1           Analysis         Total BTEX         1           Analysis         8015 NM         1           Prep         8015NM Prep	Type         Method         Run         Factor         Amount           Prep         5035         4.96 g           Analysis         8021B         1           Analysis         Total BTEX         1           Analysis         8015 NM         1           Prep         8015NM Prep         10.01 g	Type         Method         Run         Factor         Amount         Amount           Prep         5035         4.96 g         5 mL           Analysis         8021B         1           Analysis         Total BTEX         1           Analysis         8015 NM         1           Prep         8015 NM Prep         10.01 g         10 mL	Type         Method         Run         Factor         Amount         Amount         Number           Prep         5035         4.96 g         5 mL         29723           Analysis         8021B         1         29700           Analysis         Total BTEX         1         29793           Analysis         8015 NM         1         29634           Prep         8015 NM Prep         10.01 g         10 mL         29563	Type         Method         Run         Factor         Amount         Amount         Number         or Analyzed           Prep         5035         4.96 g         5 mL         29723         07/14/22 09:57           Analysis         8021B         1         29700         07/15/22 09:16           Analysis         Total BTEX         1         29793         07/15/22 08:13           Analysis         8015 NM         1         29634         07/13/22 09:51           Prep         8015 NM Prep         10.01 g         10 mL         29563         07/12/22 15:30	Type         Method         Run         Factor         Amount         Amount         Number         or Analyzed         Analyst           Prep         5035         4.96 g         5 mL         29723         07/14/22 09:57         EL           Analysis         8021B         1         29700         07/15/22 09:16         MR           Analysis         Total BTEX         1         29793         07/15/22 08:13         AJ           Analysis         8015 NM         1         29634         07/13/22 09:51         SM           Prep         8015 NM Prep         10.01 g         10 mL         29563         07/12/22 15:30         DM

**Eurofins Carlsbad** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

SDG: Lea County NM

Job ID: 890-2515-1

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 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			4.99 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

Lab Sample ID: 890-2515-28

**Matrix: Solid** 

Date Collected: 07/07/22 00:00 Date Received: 07/08/22 16:08

Client Sample ID: BH-135 8

	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	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	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 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

**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	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

Client Sample ID: BH-138 8

Lab Sample ID: 890-2515-31 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			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 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			4.95 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 Lab Sample ID: 890-2515-33 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			5.03 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 Lab Sample ID: 890-2515-34 Date Collected: 07/07/22 00:00

Date Received: 07/08/22 16:08

Released to Imaging: 9/1/2023 3:31:23 PM

Γ	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	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** 

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### **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	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 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

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### **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	Р	rogram	Identification Number	Expiration Date
Texas	N	IELAP	T104704400-22-24	06-30-23
The following analytes a the agency does not offe	' '	out the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes for which
Analysis Method	Analysis Method Prep Method		Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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### **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	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** 

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### **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
890-2515-34	BH-141 8	Solid	07/07/22 00:00	07/08/22 16:08	8

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ANALYSIS RECOVERS    STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   STATE   S	ANALYSIS REQUEST    X X X X   BITEN BOTTS   BITEN EVILLE						-			×	×	×	×	HNO		PRESERVATIVE METHOD		Oliver		MD-02230	alech com	ZHIes .	Reduce.
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### **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 <6mm (1/4").	N/A	

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2515-1 SDG Number: Lea County NM

Liet Source: Eurofine Midland

List Source: Eurofins Midland List Creation: 07/12/22 11:11 AM

Login Number: 2515 List Number: 2

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	Johnnent
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	
s the Field Sampler's name present on COC?	True	
here are no discrepancies between the containers received and the COC.	True	
amples are received within Holding Time (excluding tests with immediate Ts)	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	

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# **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

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### **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

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#### **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.

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

**Eurofins Carlsbad** 

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#### **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.

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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 BTEX	( 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: 2015 NM Discol Bones	Organica (DR	0) (CC)							
Method: 8015 NM - Diesel Range Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			50.0		mg/Kg			07/18/22 09:27	1
	-00.0	Ü	00.0		9/119			01710722 00.21	
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	П			mg/Kg		07/15/22 08:42		
5 5	<b>\30.0</b>	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 11:12	1
5 5	<50.0		50.0 50.0		mg/Kg		07/15/22 08:42	07/15/22 11:12 07/15/22 11:12	1
(GRO)-C6-C10									
(GRO)-C6-C10 Diesel Range Organics (Over		U							1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U U	50.0		mg/Kg		07/15/22 08:42	07/15/22 11:12	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate	<50.0 <50.0	U U	50.0 50.0		mg/Kg		07/15/22 08:42 07/15/22 08:42	07/15/22 11:12 07/15/22 11:12	·
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0 <50.0 <b>%Recovery</b>	U U	50.0 50.0 <i>Limits</i>		mg/Kg		07/15/22 08:42 07/15/22 08:42 <b>Prepared</b>	07/15/22 11:12 07/15/22 11:12 Analyzed	1 1 <i>Dil Fac</i>
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 <50.0 <i>*Recovery</i> 81 88	U U <b>Qualifier</b>	50.0 50.0 <u>Limits</u> 70 - 130		mg/Kg		07/15/22 08:42 07/15/22 08:42 <b>Prepared</b> 07/15/22 08:42	07/15/22 11:12 07/15/22 11:12 <b>Analyzed</b> 07/15/22 11:12	1 1 <i>Dil Fac</i>
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	<50.0 <50.0 **Recovery 81 88  **pomatography -	U U <b>Qualifier</b>	50.0 50.0 <u>Limits</u> 70 - 130	MDL	mg/Kg	D	07/15/22 08:42 07/15/22 08:42 <b>Prepared</b> 07/15/22 08:42	07/15/22 11:12 07/15/22 11:12 <b>Analyzed</b> 07/15/22 11:12	1 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** 

Lab Sample ID: 890-2553-2

**Matrix: Solid** 

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Lab Sample ID: 890-2553-2

07/15/22 08:42 07/15/22 12:16 07/15/22 08:42 07/15/22 12:16

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 Compounds	(GC) (Continued)
Method. 002 1D - Volatile Organic Compounds	(OO) (Oolillillided)

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

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	1	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg				07/19/22 09:14	1

Analyte	Result	Qualifier	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 Organics (DRO) (GC)

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 12:16	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 12:16	1
C10-C28)									
Oll 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

1-Chlorooctane	99	70 - 130
o-Terphenyl	104	70 - 130

Method: 300.0 - Anions, Ion Chron	natography -	Soluble								
Analyte	Result	Qualifier	RL	MDL	Unit	0	)	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 - Volatile Organic Compounds (GC)

Result	Qualifier							
	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
< 0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
< 0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
< 0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
113		70 - 130				07/14/22 16:53	07/18/22 13:09	1
96		70 - 130				07/14/22 16:53	07/18/22 13:09	1
	<0.00201 <0.00201 <0.00402 <0.00201 <0.00402 <i>Recovery</i> 113		<0.00201	<0.00201 U 0.00201 <0.00201 U 0.00201 <0.00402 U 0.00402 <0.00201 U 0.00201 <0.00402 U 0.00402	<0.00201	<0.00201	<0.00201	<0.00201

#### Method: Total BTEX - Total BTEX 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: 8015 NM - Dies	el Range Organics (DRO)	(GC)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	226	50.0	mg/Kg			07/18/22 09:27	1

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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	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
(GRO)-C6-C10									
Diesel Range Organics (Over	226		50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
C10-C28)									
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
	501		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	
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 13:30	
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 13:30	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	110		70 - 130				07/14/22 16:53	07/18/22 13:30	
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 13:30	
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/19/22 09:14	-
-									
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	D	Prepared	Analyzed 07/18/22 09:27	
Analyte	Result   <50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U				<u>D</u>	Prepared Prepared		,
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg			07/18/22 09:27	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  e Organics (D Result	Qualifier U  RO) (GC) Qualifier U	50.0		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	Result Construction Result  \$\frac{\text{Result}}{\text{\$<50.0}}\$	Qualifier 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 12:37	Dil Fa
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 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 12:37  07/15/22 12:37	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 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 12:37  07/15/22 12:37	Dil Fac

Job ID: 890-2553-1 SDG: Lea County NM

Client Sample ID: BH-145 5'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 5'

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-2553-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chrom	atography -	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 Matrix: Solid

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 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	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	1
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 Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				07/14/22 16:53	07/18/22 13:51	1
1,4-Difluorobenzene (Surr)	111		70 - 130				07/14/22 16:53	07/18/22 13:51	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		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 12:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:58	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				07/15/22 08:42	07/15/22 12:58	1
o-Terphenyl	82		70 - 130				07/15/22 08:42	07/15/22 12:58	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	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 BTI	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	
Method: 8015 NM - Diesel Rang	ge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	537		50.0		mg/Kg			07/18/22 09:27	
Method: 8015B NM - Diesel Ra	nge 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		07/15/22 08:42	07/15/22 15:52	
Diesel Range Organics (Over C10-C28)	478		50.0		mg/Kg		07/15/22 08:42	07/15/22 15:52	
Oll Range Organics (Over C28-C36)	59.0		50.0		mg/Kg		07/15/22 08:42	07/15/22 15:52	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	85		70 - 130				07/15/22 08:42	07/15/22 15:52	
o-Terphenyl	88		70 - 130				07/15/22 08:42	07/15/22 15:52	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	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

Sample Depth: 6'

Method: 8021B - Volatile Organic Compounds (GC)											
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		

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2553-1

Lab Sample ID: 890-2553-7

SDG: Lea County NM

Matrix: Solid

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	D	Prepared	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 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		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

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, Io	n Chromatography - Soluble		
Analyte	Result Qualifier	RL	

<0.00404 U

	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
۱	Chloride	6.69		4.97		mg/Kg			07/16/22 22:47	1

Client Sample ID: BH-149 6'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 6'

Total BTEX

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 14:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/14/22 16:53	07/18/22 14:53	1
1,4-Difluorobenzene (Surr)	110		70 - 130				07/14/22 16:53	07/18/22 14:53	1

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07/19/22 09:14

0.00404

mg/Kg

**Matrix: Solid** 

Lab Sample ID: 890-2553-8

Lab Sample ID: 890-2553-8

Lab Sample ID: 890-2553-9

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD 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'

Method: 8015 NM - Diesel Range O	rganics (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

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 <sub>-</sub> 130				07/15/22 08:42	07/15/22 17:38	1

Method: 300.0 - Anions, Ion Chromatography - 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 Fa
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	
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	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				07/14/22 16:53	07/18/22 15:14	
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 15:14	1
Method: Total BTEX - Total BTE		0 115	D.			_			5
Method: Total BTEX - Total BTE	EX Calculation								
Method: Total BTEX - Total BTE Analyte Total BTEX		Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/19/22 09:14	Dil Fac
Analyte	Result   <0.00399	U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX	Result <0.00399	U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rang	Result <0.00399	U (GC)	0.00399		mg/Kg			07/19/22 09:14	
Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte	Result	O) (GC) Qualifier	0.00399		mg/Kg			07/19/22 09:14  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte Total TPH	ge Organics (DR) Result 83.6 nge Organics (D	O) (GC) Qualifier	0.00399		mg/Kg  Unit mg/Kg			07/19/22 09:14  Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte  Total TPH  Method: 8015B NM - Diesel Rang	ge Organics (DR) Result 83.6 nge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	0.00399 RL 50.0	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	07/19/22 09:14  Analyzed  07/18/22 09:27	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (DR) Result 83.6 nge Organics (DI) Result	O) (GC) Qualifier  RO) (GC) Qualifier	0.00399  RL  50.0	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	07/19/22 09:14  Analyzed  07/18/22 09:27  Analyzed	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
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 Fac
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	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 15:35	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 15:35	1
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 Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				07/14/22 16:53	07/18/22 15:35	1
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 15:35	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			07/19/22 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	126		50.0		mg/Kg			07/18/22 09:27	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		07/15/22 08:42	07/15/22 16:56	1
Diesel Range Organics (Over C10-C28)	126		50.0		mg/Kg		07/15/22 08:42	07/15/22 16:56	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 16:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/15/22 08:42	07/15/22 16:56	1
o-Terphenyl	99		70 - 130				07/15/22 08:42	07/15/22 16:56	1
o-rerphenyi -									
Section (1997)  Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
		Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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'

	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	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	110		70 - 130				07/18/22 13:40	07/19/22 17:37	
1,4-Difluorobenzene (Surr)	99		70 - 130				07/18/22 13:40	07/19/22 17:37	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			07/19/22 09:14	
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	74.9		50.0		ma/Ka			07/18/22 09:27	
Total TPH	74.9		50.0		mg/Kg		· ·		
Method: 8015B NM - Diesel Ran	ge Organics (D					_		07/18/22 09:27	
Method: 8015B NM - Diesel Ran Analyte	ge Organics (D	Qualifier	RL	MDL	Unit	D	Prepared	07/18/22 09:27  Analyzed	Dil Fac
Method: 8015B NM - Diesel Ran	ge Organics (D	Qualifier		MDL		<u>D</u>	Prepared 07/15/22 08:42	07/18/22 09:27	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier	RL	MDL	Unit	<u>D</u>		07/18/22 09:27  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	Qualifier U	RL	MDL	Unit mg/Kg	<u>D</u>	07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 18:42	Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	Qualifier U	RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed  07/15/22 18:42  07/15/22 18:42	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 <50.0 74.9	Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42	07/18/22 09:27  Analyzed 07/15/22 18:42 07/15/22 18:42	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) Surrogate	ge Organics (D Result <50.0 74.9 <50.0	Qualifier U	RL 50.0 50.0 50.0	MDL	Unit mg/Kg mg/Kg	D	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 <b>Prepared</b>	07/18/22 09:27  Analyzed  07/15/22 18:42  07/15/22 18:42  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	ge Organics (D  Result  <50.0  74.9  <50.0  %Recovery  78  83	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>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 <b>Prepared</b> 07/15/22 08:42	07/18/22 09:27  Analyzed 07/15/22 18:42  07/15/22 18:42  Analyzed  07/15/22 18:42	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  <50.0  74.9  <50.0  %Recovery  78  83  omatography -	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>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 <b>Prepared</b> 07/15/22 08:42	07/18/22 09:27  Analyzed 07/15/22 18:42  07/15/22 18:42  Analyzed  07/15/22 18:42	Dil Fac

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** 

Lab Sample ID: 890-2553-12

Lab Sample ID: 890-2553-12

Lab Sample ID: 890-2553-13

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-153 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57

Sample Depth: 6'

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
Method. 002 1D - Volatile Organic Compounds	(OO) (Oolillillided)

Surrogate	%Recovery Qualifier	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>BTEX</b> - Total	<b>BTEX Calculation</b>

Analyte	Result	Qualifier	RL	MDL	Unit	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg		_	07/19/22 09:14	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117	49.9	mg/Kg			07/18/22 09:27	1

Method: 8015B NM - Diesel Range Organi	ics (DRO) (GC)
mothed of the block runge or guin	100 (5.10) (50)

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

o-Terphenyl	84	70 - 130	07/15/22 08:42	07/15/22 15:06	1
Method: 300.0 - Anjons, Ion Chromatography	v - Soluble				

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.7	4.98	mg/Kg			07/16/22 23:51	1

Client Sample ID: BH-154 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 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:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/19/22 09:14	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1330		50.0	mg/Kg			07/18/22 09:27	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-154 6'

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57 **REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2553-13

Matrix: Solid

Sample Depth: 6'

Method: 8015B NM - Diesel Rai	nge 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		07/15/22 08:42	07/15/22 13:41	
Diesel Range Organics (Over C10-C28)	1070		50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	•
Oll Range Organics (Over C28-C36)	261		50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	81		70 - 130				07/15/22 08:42	07/15/22 13:41	
o-Terphenyl	82		70 - 130				07/15/22 08:42	07/15/22 13:41	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	77.4		4.98		mg/Kg			07/17/22 00:01	

Lab Sample ID: 890-2553-14 Client Sample ID: BH-155 6'

Date Collected: 07/12/22 00:00 Matrix: Solid

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	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	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	111		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 14:45	1
Diesel Range Organics (Over	111		50.0		mg/Kg		07/15/22 08:42	07/15/22 14:45	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 14:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				07/15/22 08:42	07/15/22 14:45	1

Job ID: 890-2553-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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

Sample Depth: 6'

Method: 300.0 - Anions, Ion Chroma	atography -	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

Client Sample ID: BH-156 6' Lab Sample ID: 890-2553-15

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'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 19:19	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 19:19	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	118		70 - 130				07/18/22 13:40	07/19/22 19:19	
1,4-Difluorobenzene (Surr)	95		70 - 130				07/18/22 13:40	07/19/22 19:19	
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	
<u> </u>	<50.0		50.0		mg/Kg			07/18/22 09:27	
Analyte Total TPH		Qualifier U	<b>RL</b> 50.0	MDL		D	Prepared	Analyzed 07/18/22 09:27	Dil Fa
•									
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
	•	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Gasoline Range Organics	•	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 07/15/22 08:42	Analyzed 07/15/22 19:03	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>	<u>.</u>		Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <50.0	Qualifier U	50.0	MDL	mg/Kg	<u> </u>	07/15/22 08:42	07/15/22 19:03	Dil Fa
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>	07/15/22 08:42 07/15/22 08:42	07/15/22 19:03 07/15/22 19:03	Dil Fa
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>D</u>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42	07/15/22 19:03 07/15/22 19:03 07/15/22 19:03	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   <50.0   <50.0   <50.0   <50.0   <60.0   %Recovery	Qualifier U U U	50.0 50.0 50.0 <i>Limits</i>	MDL	mg/Kg	<u>D</u>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 <b>Prepared</b>	07/15/22 19:03 07/15/22 19:03 07/15/22 19:03 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	Result	Qualifier  U  U  Qualifier	50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg	<u> </u>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 <b>Prepared</b> 07/15/22 08:42	07/15/22 19:03 07/15/22 19:03 07/15/22 19:03 Analyzed 07/15/22 19:03	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	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>	07/15/22 08:42 07/15/22 08:42 07/15/22 08:42 <b>Prepared</b> 07/15/22 08:42	07/15/22 19:03 07/15/22 19:03 07/15/22 19:03 Analyzed 07/15/22 19:03	Dil Fa

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 Sample Depth: 6' REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2553-17

Matrix: Solid

Solid

\_

6

9

40

13

5

5

Dil Fac

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130				07/18/22 13:40	07/19/22 20:41	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
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9550		250		mg/Kg			07/18/22 09:27	1
Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC)							
Analyte		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	7890		250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
C10-C28)									
	1660		250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
Oll Range Organics (Over C28-C36)	1000								

70 - 130

70 - 130

RL

4.99

MDL Unit

mg/Kg

Client Sample ID: SW-50 0-6'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

1-Chlorooctane

o-Terphenyl

Analyte

Chloride

REMOVED FROM ANALYSIS TABLE

77

88

117

Result Qualifier

Lab Sample ID: 890-2553-18

07/15/22 13:19

07/15/22 13:19

Analyzed

07/17/22 00:56

07/15/22 08:42

07/15/22 08:42

Prepared

D

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: Total BTEX - Total B1	TEX 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	

### Client Sample Results

Job ID: 890-2553-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

RL

49.9

RL

49.9

49.9

49 9

RL

4.95

Limits

70 - 130

70 - 130

MDL

MDL Unit

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

MDL Unit

mg/Kg

mg/Kg

D

D

D

Prepared

Prepared

07/15/22 08:42

07/15/22 08:42

07/15/22 08:42

Prepared

07/15/22 08:42

07/15/22 08:42

Prepared

07/18/22 13:40

Prepared

07/18/22 13:40

07/18/22 13:40

Client Sample ID: SW-50 0-6'

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Method: 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 07/12/22 00:00 Date Received: 07/12/22 16:57 Sample Depth: 0' - 6'

Analyte

Analyte

(GRO)-C6-C10

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

Gasoline Range Organics

**Diesel Range Organics (Over** 

Oll Range Organics (Over C28-C36)

**Total TPH** 

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2553-18

Analyzed 07/18/22 09:27

Analyzed

07/15/22 18:21

07/15/22 18:21

07/15/22 18:21

Analyzed

07/15/22 18:21

07/15/22 18:21

Analyzed

07/17/22 01:06

Analyzed

07/19/22 20:00

07/19/22 20:00

07/19/22 20:00

07/19/22 20:00

07/19/22 20:00 07/19/22 20:00

Analyzed

07/19/22 20:00

07/19/22 20:00

Matrix: Solid

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Dil Fac

Lab Sample ID: 890-2553-19 Matrix: Solid

Result Qualifier

Result Qualifier

152

<49.9

152

<49.9 U

74

78

9.67

%Recovery

Qualifier

Analyte Chloride 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'

Xylenes, Total

REMOVED FROM **ANALYSIS TABLE** 

Result Qualifier

Method: 8021B - Volatile Organic Compounds (GC) Result Qualifier Analyte <0.00200

MDL RL Unit Prepared 0.00200 07/18/22 13:40 Benzene mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 07/18/22 13:40 0.00200 07/18/22 13:40 Ethylbenzene <0.00200 U mg/Kg m-Xylene & p-Xylene <0.00399 U 0.00399 mg/Kg 07/18/22 13:40 o-Xylene <0.00200 U 0.00200 mg/Kg 07/18/22 13:40

Qualifier Surrogate %Recovery Limits 4-Bromofluorobenzene (Surr) 116 70 - 130 1.4-Difluorobenzene (Surr) 104 70 - 130

<0.00399 U

**Method: Total BTEX - Total BTEX Calculation** 

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00399 0.00399 07/19/22 09:14 mg/Kg

0.00399

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac **Total TPH** 50.0 mg/Kg 07/18/22 09:27

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		07/15/22 08:43	07/15/22 19:24	1
(GRO)-C6-C10									
Diesel Range Organics (Over	202		50.0		mg/Kg		07/15/22 08:43	07/15/22 19:24	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:43	07/15/22 19:24	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 1

Client Sample ID: SW-52 0-6'

Date Collected: 07/12/22 00:00

Lab Sample ID: 890-2553-20

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 0' - 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 20:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:20	1
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	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:20	1
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
1,4-Difluorobenzene (Surr)	97		70 - 130				07/18/22 13:40	07/19/22 20:20	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			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	81.4		49.8		mg/Kg			07/18/22 09:27	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	49.8		mg/Kg		07/15/22 08:43	07/15/22 16:13	1
Diesel Range Organics (Over C10-C28)	81.4		49.8		mg/Kg		07/15/22 08:43	07/15/22 16:13	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/15/22 08:43	07/15/22 16:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/15/22 08:43	07/15/22 16:13	1
o-Terphenyl	97		70 - 130				07/15/22 08:43	07/15/22 16:13	1
Mothod: 200 0 Aniono lon Chri	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro	matography -								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

# **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

				Percent Su	rrogate Re
		BFB1	DFBZ1		
ab Sample ID	Client Sample ID	(70-130)	(70-130)		
80-17008-A-21-C MS	Matrix Spike	107	95		
80-17008-A-21-D MSD	Matrix Spike Duplicate	117	92		
390-2553-1	BH-142 5'	109	107		
390-2553-1 MS	BH-142 5'	97	85		
390-2553-1 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		
390-2553-9	BH-150 6'	105	108		
390-2553-10	BH-151 6'	111	108		
390-2553-11	BH-152 6'	110	99		
90-2553-12	BH-153 6'	108	93		
390-2553-13	BH-154 6'	96	95		
890-2553-14	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		
Surrogate Legend					

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	

**Eurofins Carlsbad** 

3

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10

12

13

# **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	

100 - 1-Chlorodciane

OTPH = o-Terphenyl

Client: Tetra Tech, Inc. Job ID: 890-2553-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29774/5-A

Lab Sample ID: LCS 880-29774/1-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

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29774

Analysis Batch: 29893 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09196 mg/Kg 92 70 - 130 Toluene 0.100 0.1153 mg/Kg 115 70 - 130 0.100 Ethylbenzene 0.1149 mg/Kg 115 70 - 130 0.200 0.2397 120 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.1241 70 - 130 o-Xylene mg/Kg 124

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	114	70 - 130
1,4-Difluorobenzene (Surr)	88	70 - 130

Lab Sample ID: LCSD 880-29774/2-A

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 29893

**Client Sample ID: Lab Control Sample Dup** 

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	

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: 890-2553-1 MS

Analysis Batch: 29893

**Matrix: Solid** 

	Prep Type: Total/NA
	Prep Batch: 29774
	%Rec
~ -	

Client Sample ID: BH-142 5'

Sample	Sample	Spike	MS	MS				%Rec	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
<0.00200	U	0.100	0.07967		mg/Kg		80	70 - 130	
<0.00401	U	0.200	0.1588		mg/Kg		79	70 - 130	
<0.00200	U	0.100	0.08167		mg/Kg		82	70 - 130	
	Result <0.00200 <0.00401	Sample         Sample           Result         Qualifier           <0.00200	Result         Qualifier         Added           <0.00200	Result         Qualifier         Added         Result           <0.00200	Result          Qualifier         Added          Result Qualifier         Qualifier           <0.00200	Result Qualifier         Added Added         Result Qualifier         Unit Unit Unit Unit Unit Unit Unit Unit	Result          Qualifier         Added          Result Qualifier         Qualifier Unit mg/Kg         D           <0.00200	Result          Qualifier         Added          Result          Qualifier         Unit          D         %Rec            <0.00200	Result Qualifier         Added Added         Result Qualifier         Unit Unit Unit Unit Unit Unit Unit Unit

MS MS

MB MB

Surrogate	%Recovery Quality	fier Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	85	70 - 130

Lab Sample ID: 890-2553-1 MSD Client Sample ID: BH-142 5' **Matrix: Solid** Prep Type: Total/NA Prep Batch: 29774

**Analysis Batch: 29893** 

Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier %Rec RPD Limit Analyte Unit Limits 0.0994 0.06644 F1 Benzene <0.00200 UF1 mg/Kg 67 70 - 130 22 35 Toluene 0.0994 0.07947 80 70 - 130 <0.00200 U mg/Kg 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 78 70 - 130 35 mg/Kg 3 0.0994 <0.00200 U 0.08160 82 70 - 130 o-Xylene mg/Kg 0

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 118 1,4-Difluorobenzene (Surr) 70 - 130 90

Lab Sample ID: MB 880-29947/5-A

**Matrix: Solid** 

Analysis Batch: 30015

Client Sample ID: Method Blank
Prep Type: Total/NA
Pren Batch: 29947

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 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

	МВ	МВ				
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

Analysis Batch: 30015

1,4-Difluorobenzene (Surr)

Job ID: 890-2553-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-29947/1-A Client Sample ID: Lab Control Sample **Matrix: Solid** 

Prep Type: Total/NA

Prep Batch: 29947

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits D 0.100 0.09506 95 70 - 130 o-Xylene mg/Kg

70 - 130

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 108 70 - 130

96

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-29947/2-A Matrix: Solid Prep Type: Total/NA

**Analysis Batch: 30015** Prep Batch: 29947

LCSD LCSD Spike RPD Limit Analyte Added Result Qualifier Unit %Rec Limits D Benzene 0.100 0.08247 mg/Kg 82 70 - 130 2 35 Toluene 0.100 0.08858 mg/Kg 89 70 - 130 35 Ethylbenzene 0.100 0.08883 mg/Kg 89 70 - 130 35 m-Xylene & p-Xylene 0.200 0.1891 mg/Kg 95 70 - 130 35 0.100 0.1032 70 - 130 35 o-Xylene mg/Kg 103 8

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 109 70 - 130 1,4-Difluorobenzene (Surr) 94 70 - 130

Lab Sample ID: 880-17008-A-21-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 30015** Prep Batch: 29947 Sample Sample Child Me Me % Pac

	Sample	Sample	Spike	IVIO	IVIO				/onec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F2 F1	0.100	0.01945	F1	mg/Kg		19	70 - 130	
Toluene	<0.00201	U F2 F1	0.100	0.01816	F1	mg/Kg		18	70 - 130	
Ethylbenzene	<0.00201	U F2 F1	0.100	0.01493	F1	mg/Kg		14	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.03295	F1	mg/Kg		15	70 - 130	
o-Xylene	0.00273	F2 F1	0.100	0.01888	F1	mg/Kg		16	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 107 70 - 130 1,4-Difluorobenzene (Surr) 95

Lab Sample ID: 880-17008-A-21-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 30015** Prep Batch: 29947

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Result Qualifier Added Limit Analyte Unit %Rec Limits RPD Benzene <0.00201 U F2 F1 0.0998 0.03835 F2 F1 mg/Kg 38 70 - 130 65 35 0.0998 Toluene <0.00201 U F2 F1 0.05746 F2 F1 58 70 - 130104 35 mg/Kg Ethylbenzene <0.00201 U F2 F1 0.0998 0.04190 F2 F1 mg/Kg 41 70 - 130 95 35 m-Xylene & p-Xylene 0.200 <0.00402 U F2 F1 0.05289 F2 F1 mg/Kg 25 70 - 13046 35 o-Xylene 0.00273 F2 F1 0.0998 0.02937 F2 F1 mg/Kg 27 70 - 130 43 35

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 Qualifier 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 Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 07/15/22 08:42 07/15/22 10:08 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 07/15/22 08:42 07/15/22 10:08 C10-C28) 50.0 07/15/22 08:42 07/15/22 10:08 Oll Range Organics (Over C28-C36) <50.0 U mg/Kg

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29795

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1009		mg/Kg		101	70 - 130	15	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1041		mg/Kg		104	70 - 130	5	20	

C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifi	er Limits
1-Chlorooctane	127	70 - 130
o-Terphenyl	128	70 - 130

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)

Lab Sample ID: 890-2553-1 MS

**Matrix: Solid** Analysis Batch: 29788 Client Sample ID: BH-142 5' Prep Type: Total/NA

Prep Batch: 29795

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<50.0	U	1000	884.9		mg/Kg		87	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<50.0	U	1000	756.2		mg/Kg		72	70 - 130	
C10-C28)										

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 82 o-Terphenyl 79 70 - 130

Lab Sample ID: 890-2553-1 MSD Client Sample ID: BH-142 5'

Matrix: Solid

**Analysis Batch: 29788** 

Prep Type: Total/NA

Prep Batch: 29795

	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	999	939.7		mg/Kg		92	70 - 130	6	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	999	809.8		mg/Kg		77	70 - 130	7	20
C10-C28\											

C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 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 **Prep Type: Soluble** 

**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 Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29864

	Spike	LCS LCS	•			70Rec	
Analyte	Added	Result Qua	alifier 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

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2553-1 MS Client Sample ID: BH-142 5' **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29864

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits Chloride 167 F1 248 444.9 F1 mg/Kg 112 90 - 110

Lab Sample ID: 890-2553-1 MSD Client Sample ID: BH-142 5' **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29864

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 167 F1 248 444.7 F1 mg/Kg 112 90 - 110 0

Lab Sample ID: 890-2553-11 MS Client Sample ID: BH-152 6'

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 29864

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 16.0 251 292.7 110 90 - 110 mg/Kg

Lab Sample ID: 890-2553-11 MSD Client Sample ID: BH-152 6' **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29864

Spike Sample Sample MSD MSD RPD %Rec Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result Limits 292.7 Chloride 16.0 251 110 90 - 110 20 mg/Kg

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. Job ID: 890-2553-1 Project/Site: Kaiser SWD 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

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

	Sample ID 2553-1	Client Sample ID BH-142 5'	Prep Type Total/NA	Matrix Solid	Method 8015 NM	Prep Batch
	2553-2	BH-143 5'	Total/NA	Solid	8015 NM	
890-2	2553-3	BH-144 5'	Total/NA	Solid	8015 NM	

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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 Batcl
890-2553-1	BH-142 5'	Soluble	Solid	DI Leach	
890-2553-2	BH-143 5'	Soluble	Solid	DI Leach	
390-2553-3	BH-144 5'	Soluble	Solid	DI Leach	
890-2553-4	BH-145 5'	Soluble	Solid	DI Leach	
390-2553-5	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	
390-2553-9	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	
890-2553-17	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	
LCS 880-29754/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29754/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2553-1 MS	BH-142 5'	Soluble	Solid	DI Leach	
890-2553-1 MSD	BH-142 5'	Soluble	Solid	DI Leach	
890-2553-11 MS	BH-152 6'	Soluble	Solid	DI Leach	
890-2553-11 MSD	BH-152 6'	Soluble	Solid	DI Leach	

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2553-1

SDG: Lea County NM

# HPLC/IC

#### Analysis Batch: 29864

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
390-2553-13	BH-154 6'	Soluble	Solid	300.0	29754
890-2553-14	BH-155 6'	Soluble	Solid	300.0	29754
390-2553-15	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
390-2553-18	SW-50 0-6'	Soluble	Solid	300.0	29754
390-2553-19	SW-51 0-6'	Soluble	Solid	300.0	29754
390-2553-20	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
390-2553-1 MS	BH-142 5'	Soluble	Solid	300.0	29754
390-2553-1 MSD	BH-142 5'	Soluble	Solid	300.0	29754
390-2553-11 MS	BH-152 6'	Soluble	Solid	300.0	29754
890-2553-11 MSD	BH-152 6'	Soluble	Solid	300.0	29754

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2553-1 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

	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

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	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 12:48	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 12:16	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 21:42	CH	XEN MID

Client Sample ID: BH-144 5' Lab Sample ID: 890-2553-3

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			4.97 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 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			4.95 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** 

**Matrix: Solid** 

**Matrix: Solid** 

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 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			10.00 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 MIC
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	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 14:24	SM	XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2553-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-148 6'

Analysis

Soluble

300.0

Date Collected: 07/12/22 00:00
Date Received: 07/12/22 16:57

Lab Sample ID: 890-2553-7

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			5.03 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 5035 4.95 g 29774 07/14/22 16:53 MR XEN MID Prep 5 mL Total/NA 8021B 5 mL 5 mL 29893 07/18/22 14:53 MR XEN MID Analysis 1 Total/NA Total BTEX 30030 07/19/22 09:14 XEN MID Analysis SM 1 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 10.03 g 10 mL DM 8015B NM 29788 XEN MID Total/NA Analysis 07/15/22 17:38 SM 50 mL Soluble DI Leach 5.02 g 29754 07/14/22 12:47 SMC XEN MID Leach

Client Sample ID: BH-150 6' Lab Sample ID: 890-2553-9

29864

07/16/22 22:56

CH

Date Collected: 07/12/22 00:00 Matrix: Solid
Date Received: 07/12/22 16:57

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	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 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			5.03 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** 

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XEN MID

Job ID: 890-2553-1 SDG: Lea County NM

Client Sample ID: BH-152 6'

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Date Collected: 07/12/22 00:00

Lab Sample ID: 890-2553-11 **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 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

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 29947 Total/NA Prep 4.99 g 5 mL 07/18/22 13:40 MR XEN MID 8021B Total/NA 5 mL 30015 07/19/22 17:57 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 15:06 SM XEN MID Soluble 29754 07/14/22 12:47 XEN MID Leach DI Leach 5.02 g 50 mL SMC Soluble Analysis 300.0 29864 07/16/22 23:51 СН XEN MID

Lab Sample ID: 890-2553-13 Client Sample ID: BH-154 6'

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 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

Job ID: 890-2553-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-155 6'

Date Received: 07/12/22 16:57

Lab Sample ID: 890-2553-14 Date Collected: 07/12/22 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 Analysis 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 29788 07/15/22 14:45 SM XEN MID 1 Soluble 29754 07/14/22 12:47 SMC XEN MID Leach DI Leach 4.95 g 50 mL 300.0 29864 07/17/22 00:29 Soluble Analysis 1 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 **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			5.02 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	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 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 Total/NA	Prep Analysis	8015NM Prep 8015B NM		5	10.00 g	10 mL	29795 29788	07/15/22 08:42 07/15/22 13:19	DM SM	XEN MID XEN MID

**Eurofins Carlsbad** 

**Matrix: Solid** 

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 Lab Sample ID: 890-2553-17

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			5.01 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'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Lab Sample ID: 890-2553-19

**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	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

Soluble	Analysis	300.0	1	29864	07/17/22 01:15 CH	XEN MID
Client Sam	ple ID: SW-52	0-6'			Lab Sample ID:	890-2553-20
Date Collecte	d: 07/12/22 00:0	0				Matrix: Solid
Date Receive	d: 07/12/22 16:57	7				

	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 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

# **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		ogram	Identification Number	<b>Expiration Date</b>	
Texas	NI	ELAP	T104704400-22-24	06-30-23	
The following analytes	ara inalizadad in thia ranart hi	it the leberatory is not contiffi	iad butba gavarning authority. This list was		
the agency does not of	. ,	at the laboratory is not certil	ied by the governing authority. This list ma	ay include analytes for t	
,	. ,	Matrix	Analyte	ay include analytes for t	
the agency does not of	fer certification.	•	, , ,	ay include analytes for v	

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# **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** 

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# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Joh ID: 800 2553 1

JOD 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'
890-2553-20	SW-52 0-6'	Solid	07/12/22 00:00	07/12/22 16:57	0' - 6'

890-2553 Chain of Custody

Analysis Request of Chain of Custody Record LAB# ᆏ 4-146 エービ エーラユ 7148 ・コス ンヤノ つよって Tetra Tech, Inc. Mater SAMPLE IDENTIFICATION 6 O, a) 5 22/21 Lenco 1657 3 21211 ORIGINAL COPY 7112122 ピスピ 22/21/12 11212 SAMPLING 217L-MD-02230 Chanzales @tetratech.com TIME WATER MATRIX SOIL 901W Well Street, Ste 100 Midfand, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946 nonzales Date: HCL PRESERVATIVE HNO: ICE 8) (0) None FOO-MU-1 165% # CONTAINERS Sample Temperature
36.4 (Circle) HAND DELIVERED ONLY TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C (Circle or Specify Method 6.0-**ANALYSIS REQUEST** TCLP Volatiles N REAL RUSH: Same Day Special Report Limits or TRRP Report Rush Charges Authorized STANDARD GC/MS Semi. Vol. 8270C/625 CIP. Cooling In Proces NORM PLM (Asbestos) 24 hr Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) 48 hr Anion/Cation Balance 72 hr Hold

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	Relinquished by:	,	Relinquished by:	4	Relinguished by:											( LAB USE )	LAB #			Comments:	Receiving Laboratory:	invoice to:	(county, state)	Project Location	Client Name:	급
	by: Date: Time:		Date:	4/ 7/n/22	1	SW-57 (0-6)	SW-51 (0-b)	52-50(0-6°)	BH-158 (b)	84-157 (6')	٦		BH-154 (G)	(9) 551-HE	(M) 251-HB		SAMPLE IDENTIFICATION				readons: KUTORIAS YEARD	of mian water Solutions-	Les County, 23	Kaiser Swu	Permion Worker Soluti	Tetra Tech, Inc.
	Received by:		Received by:	57 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Received by:	711117	21211	17(12)	211112	7/17/17/	7/12/72	75/21/17	7/12/17	7/12/22	12/12/17	DATE	YEAR: 2020	SAMPLING		,	Sampler signature:	95- JUST	1. 212	Project #: 4	CVV2 Site Manager:	c.
	Date: Time:		/ Date: Time:		Date: Time:	X		X	X	N N	N N	X	<del>7</del>	7	<i>≠</i>	WATE SOIL HCL HNO: ICE None		MAIRIA	1	1	with h	M. Intuit	- MU-07730		rous Chanzaves	901W Wall Street, Ste 100 Middard, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
(Circle)			Sample			7	N	×	ブ	Y	×	 	7	Z	7	# CON FILTE BTEX TPH	8021 X100	ERS (Y/N) B E 5 (Ex	STEX	35)						
W HAND DELIVERED FEDEX UPS	□ Special Re		ple Temperature RUSH: Same Day		곳	<b>X</b>	メ - -	<b>7</b>	7	×	<i>&gt;</i>	<b>Z</b>		✓ 	7	TPH 8 PAH 1 Total I TCLP TCLP TCLP GC/M:	Metals Metals Volatil Semi	Ag A s Ag / es Volati 8260	As Ba (As Ba (Ba) (Ba) (Ba) (Ba) (Ba) (Ba) (Ba) (	Cd Cr	Pb Se	Hg			ANALYSIS REQUEST (Circle or Specify Method No.	
S Tracking #:	Special Report Limits or TRRP Report	Rush Charges Authorized	ame Day 24 hr 48 hr 72 hr			×	*	7	X	X	7	メ	7		7	PCB's NORM PLM ( Chlori Chlori Gene Anion	Asbes de de ral Wa	tos) Sulfa	ite T	TDS atry (s	ee af	ached	list)		Method No.)	
			3													Hold										

# **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 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: 890-2553-1 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	

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<6mm (1/4").





# **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.



Client: Tetra Tech, Inc. Project/Site: Kaiser SWD Laboratory Job ID: 890-2689-1 SDG: Lea County NM

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# **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Qualifiers** 

**GC 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.

**GC Semi VOA** 

Qualifier **Qualifier Description** 

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** 

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

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) Minimum Detectable Concentration (Radiochemistry) MDC

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

**Practical Quantitation Limit PQL** 

**PRES** Presumptive QC **Quality Control** 

**RER** Relative Error Ratio (Radiochemistry)

RI 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.

Project/Site: Kaiser SWD

Job ID: 890-2689-1

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.

Eurofins Carlsbad 8/11/2022 (Rev. 1)

Job ID: 890-2689-1 SDG: Lea County NM

Project/Site: Kaiser SWD Client Sample ID: BH-118 (13')

Lab Sample ID: 890-2689-1 Matrix: Solid

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Client: Tetra Tech, Inc.

 Method: 8021B - Volatile Organ	ic Compo	unds (GC)							
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 08/05/22 11:19 08/06/22 01:44 mg/Kg o-Xylene <0.00202 U 0.00202 mg/Kg 08/05/22 11:19 08/06/22 01:44 <0.00404 U 0.00404 Xylenes, Total mg/Kg 08/05/22 11:19 08/06/22 01:44

	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
l	1,4-Difluorobenzene (Surr)	96		70 - 130	08/05/22 11:19	08/06/22 01:44	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/k	(g		08/08/22 14:27	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL Analyte MDL Unit D **Prepared** Analyzed Dil Fac

Total TPH	247		49.9		mg/Kg			08/04/22 09:51	1
Method: 8015B NM - Diesel Ra	nge Organ	ics (DRO) (G	SC)						
Analyte	Result	Qualifier	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 22:32	1

Gasoline Range Organics <49.9 U mg/Kg 08/03/22 09:25 08/03/22 22:32 (GRO)-C6-C10 **Diesel Range Organics (Over** 247 49.9 mg/Kg 08/03/22 09:25 08/03/22 22:32 C10-C28) Oll Range Organics (Over C28-C36) <49.9 U 49.9 mg/Kg 

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')

Lab Sample ID: 890-2689-2 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
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

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-119 (10')

Date Collected: 07/26/22 12:00

113

Lab Sample ID: 890-2689-2 **Matrix: Solid** 

Date Received: 07/29/22 14:06

o-Terphenyl

Method: Total BTEX - Total BT	EX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/08/22 14:27	1
Method: 8015 NM - Diesel Ran	ge Organio	s (DRO) (G	iC)						

Method, outo MM - Dieser Kang	je Organic	א) (שאש) פ	<b>3</b> C)						
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	08/03/22 20:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 20:23	1
Oll 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
1-Chlorooctane	99	-	70 - 130				08/03/22 09:25	08/03/22 20:23	1

Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	382		25.1		mg/Kg			08/06/22 06:41	5

70 - 130

Lab Sample ID: 890-2689-3 Client Sample ID: BH-158 (8') Date Collected: 07/26/22 12:00 **Matrix: Solid** 

Date Received: 07/29/22 14:06	

Released to Imaging: 9/1/2023 3:31:23 PM

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 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
4-Bromofluorobenzene (Surr)			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	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
L	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	<50.0	U	50.0		mg/Kg			08/04/22 09:51	1

Analyte	Result	Qualifier	KL	MIDL	Unit	ט	Prepared	Analyzed	DII Fac
Total TPH	<50.0	U	50.0	r	mg/Kg			08/04/22 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	<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 C10-C28)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 23:57	1
C10-C20)									

Job ID: 890-2689-1 SDG: Lea County NM

Client Sample ID: BH-158 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-2689-3

**Matrix: Solid** 

	Method: 8015B NM - Diesel Range	Organics (DRO)	(GC) (Continued)
ı	A 14 -	D 14 O 11C	DI 140

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 Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.8	5.00	mg/Kg		_	08/06/22 06:50	1

# 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

Method: 8021B - Volatile Organic Compounds (GC)

Welliou. 602 ID - Volatile O	rgariic Compo								
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 01:03	1
Toluene	< 0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	1
Ethylbenzene	< 0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 01:03	1
o-Xylene	< 0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 01:03	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				08/05/22 11:19	08/06/22 01:03	1
1,4-Difluorobenzene (Surr)	89		70 - 130				08/05/22 11:19	08/06/22 01:03	1

<b>Method: Total</b>	BTEX - Total	I BTEX Calculation
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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	

Method: 80	15 NM - Diese	Range Organics	(DRO) (GC)
			(-::-) ()

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		ma/Ka			08/04/22 09:51	

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

	ugo	.00 (2.10)	()						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 00:58	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 00:58	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 00:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				08/03/22 09:25	08/04/22 00:58	1
o-Terphenyl	96		70 - 130				08/03/22 09:25	08/04/22 00:58	1

Welliou. 300.0 - Allions, Ion Ci	ili olilatograpily - 3	Olubie					
Analyte	Result Qualifier	r RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.0	4.97	mg/k	(g	•	08/06/22 07:00	1

Client: Tetra Tech, Inc.

Job ID: 890-2689-1
Project/Site: Kaiser SWD

SDG: Lea County NM

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	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	<50.0	U	50.0		mg/Kg			08/04/22 09:51	1
Method: 8015B NM - Diese	•		• •						
Analyto		Ouglifior	DI		Unit	ח	Droparod	hozylenA	Dil Eac

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	romatograp	ohy - Solu	ble						
Analyte	Result	Qualifier	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

**Eurofins Carlsbad** 

2

3

6

8

10

12

13

14

## **Client Sample Results**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2689-1

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

Method: Total BTEX - Total E	<b>STEX Calcula</b>	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	ange Organic	s (DRO) (G	C)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.9		50.0		mg/Kg			08/04/22 09:51	1
Method: 8015B NM - Diesel F	Range Organi	ics (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 22:53	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 22:53	1
C10-C28)									
Oll Range Organics (Over	58.9		50.0		mg/Kg		08/03/22 09:25	08/03/22 22:53	1

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 1-Chlorooctane
 87
 70 - 130
 08/03/22 09:25
 08/03/22 22:53
 1

 o-Terphenyl
 91
 70 - 130
 08/03/22 09:25
 08/03/22 22:53
 1

Method: 300.0 - Anions, Ion Chromatography - SolubleAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride58125.3mg/Kg08/06/22 07:365

Client Sample ID: BH-160 (8')
Date Collected: 07/26/22 12:00

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

C28-C36)

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	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/22 11:19	08/06/22 03:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 03:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/22 11:19	08/06/22 03:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				08/05/22 11:19	08/06/22 03:06	1
1,4-Difluorobenzene (Surr)	89		70 - 130				08/05/22 11:19	08/06/22 03:06	1
<b>Method: Total BTEX - Total</b>	I BTEX Calcula	tion							
		tion Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: Total BTEX - Total Analyte Total BTEX		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 14:27	Dil Fac
Analyte Total BTEX	<0.00399	Qualifier U	0.00399	MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel	Result <0.00399  Range Organic	Qualifier U	0.00399	MDL MDL		<u>D</u> D	Prepared Prepared		1
Analyte	Result <0.00399  Range Organic	Qualifier U s (DRO) (0	0.00399 GC)		mg/Kg	_ =		08/08/22 14:27	Dil Fac Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel   Analyte Total TPH	Result <0.00399  Range Organic Result 217	Qualifier U S (DRO) (O	0.00399  GC)  RL  50.0		mg/Kg Unit	_ =		08/08/22 14:27  Analyzed	1
Analyte Total BTEX  Method: 8015 NM - Diesel Analyte	Result <0.00399  Range Organic Result 217  I Range Organ	Qualifier U S (DRO) (O	0.00399  GC)  RL  50.0		mg/Kg Unit	_ =		08/08/22 14:27  Analyzed	1

**Eurofins Carlsbad** 

(GRO)-C6-C10

Lab Sample ID: 890-2689-7 Client Sample ID: BH-160 (8') Date Collected: 07/26/22 12:00

91

**Matrix: Solid** 

08/03/22 09:25 08/03/22 21:49

Date Received: 07/29/22 14:06

Method: 8015B NM - Diesel   Analyte		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

Method: 300.0 - Anions, Ion C	hromatography - Soli	uble					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	563	25.2	mg/Kg			08/06/22 07:46	5

70 - 130

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

o-Terphenyl

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	,
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 I	BTEX Calcula	tion							
A seals sta	DI4	O	ъ.	MDI	Unit	D	Duamanal	Analyzed	Dil Fa
Analyte	Result	Qualifier	RL	MDL			Prepared	Analyzeu	Dil Fac
Total BTEX	<0.00398		0.00398	WIDL	mg/Kg		Prepared	08/08/22 14:27	DII Fat
Total BTEX  Method: 8015 NM - Diesel R	<0.00398	U (ORO) (O	0.00398		mg/Kg	_ =	<u> </u>	08/08/22 14:27	1
Total BTEX	<0.00398	U	0.00398 GC)		mg/Kg Unit	<u></u>	Prepared	08/08/22 14:27  Analyzed	1
Total BTEX  Method: 8015 NM - Diesel R	<0.00398	U (ORO) (O	0.00398		mg/Kg	_ =	<u> </u>	08/08/22 14:27	Dil Fac
Total BTEX  Method: 8015 NM - Diesel R  Analyte	<0.00398  ange Organic Result 218  Range Organ	S (DRO) (O Qualifier	0.00398  GC)  RL  49.9		mg/Kg Unit	_ =	<u> </u>	08/08/22 14:27  Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Ranalyte  Total TPH	<0.00398  ange Organic Result 218  Range Organ	s (DRO) (C	0.00398  GC)  RL  49.9	MDL	mg/Kg Unit	_ =	<u> </u>	08/08/22 14:27  Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Ranalyte  Total TPH  Method: 8015B NM - Diesel	<0.00398  ange Organic Result 218  Range Organ	S (DRO) (O Qualifier	0.00398  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
Total BTEX  Method: 8015 NM - Diesel Ranalyte  Total TPH  Method: 8015B NM - Diesel Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00398  ange Organic Result 218  Range Organ Result	S (DRO) (O Qualifier	0.00398  GC)  RL  49.9  (GC)  RL	MDL	mg/Kg  Unit mg/Kg  Unit	<u></u> <u></u>	Prepared Prepared 08/03/22 09:25	08/08/22 14:27  Analyzed  08/04/22 09:51  Analyzed	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Ranalyte  Total TPH  Method: 8015B NM - Diesel Analyte  Gasoline Range Organics (GRO)-C6-C10	<0.00398 ange Organic Result 218 Range Organ Result <49.9	S (DRO) (O Qualifier	0.00398  GC)  RL  49.9  (GC)  RL  49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u></u> <u></u>	Prepared  Prepared  08/03/22 09:25  08/03/22 09:25	08/08/22 14:27  Analyzed 08/04/22 09:51  Analyzed 08/03/22 22:11	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Ranalyte  Total TPH  Method: 8015B NM - Diesel Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	<0.00398  ange Organic Result 218  Range Organ Result <a href="#">&lt;49.9</a> 147	S (DRO) (O Qualifier  ics (DRO) Qualifier U	0.00398  GC)  RL  49.9  (GC)  RL  49.9  49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u></u> <u></u>	Prepared  Prepared  08/03/22 09:25  08/03/22 09:25	08/08/22 14:27  Analyzed 08/04/22 09:51  Analyzed 08/03/22 22:11 08/03/22 22:11	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Ranalyte  Total TPH  Method: 8015B NM - Diesel Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	<0.00398 ange Organic Result 218 Range Organ Result <49.9 147 71.4	S (DRO) (O Qualifier  ics (DRO) Qualifier U	0.00398  RL 49.9  (GC) RL 49.9  49.9  49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u></u> <u></u>	Prepared  Prepared  08/03/22 09:25  08/03/22 09:25  08/03/22 09:25	08/08/22 14:27  Analyzed 08/04/22 09:51  Analyzed 08/03/22 22:11 08/03/22 22:11 08/03/22 22:11	Dil Fac

Job ID: 890-2689-1 SDG: Lea County NM

Client Sample ID: BH-161 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Lab Sample ID: 890-2689-8

**Matrix: Solid** 

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte Result Qualifier RL**MDL** Unit D Prepared Analyzed Dil Fac 25.0 08/06/22 07:55 Chloride 515 mg/Kg

Client Sample ID: BH-162 (8')

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

REMOVED FROM **ANALYSIS TABLE**  Lab Sample ID: 890-2689-9

**Matrix: Solid** 

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		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 B	TEX Calculation						
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 Ran	ge Organic	s (DRO) (G	iC)						
Analyte	Result	Qualifier	RL	MDL (	Jnit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	n	ng/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 Chloroctone	97		70 120				08/02/22 00:25	09/04/22 00:19	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Method: 300.0 - Anions, Ion Chron	natography - Solul	ole						
o-Terphenyl	94	70 - 130		C	08/03/22 09:25	08/04/22 00:18	1	
r-Chiorooctarie	0/	10 - 130		C	10/03/22 09.25	06/04/22 00.16	1	

24.9

mg/Kg

Client Sample ID: BH-163 (8') Lab Sample ID: 890-2689-10 Date Collected: 07/26/22 12:00 Matrix: Solid

106

Date Received: 07/29/22 14:06

**Chloride** 

Method: 8021B - Volatile	Organic Compou	nds (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

**Eurofins Carlsbad** 

08/06/22 08:04

Lab Sample ID: 890-2689-10 Client Sample ID: BH-163 (8')

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
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 02:25	1
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
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				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 02:25	1
- Method: Total BTEX - Total B	TEX 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
		Qualifier			11:4	_	B		
Method: 8015 NM - Diesel Rai Analyte					11!4	_	B		
			RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	<50.0		50.0	MDL	mg/Kg	D	Prepared	Analyzed 08/04/22 09:51	Dil Fac
Total TPH	<50.0	U	50.0	MDL		<u>D</u>	Prepared		Dil Fac
Total TPH  Method: 8015B NM - Diesel R	<50.0	U	50.0			— <u>Б</u>	Prepared		Dil Fac
Total TPH  Method: 8015B NM - Diesel R Analyte Gasoline Range Organics	<50.0	ics (DRO) Qualifier	50.0 (GC)		mg/Kg	_ =	<u> </u>	08/04/22 09:51	1
Total TPH  Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 ange Organ Result	U ics (DRO) Qualifier	50.0 (GC)		mg/Kg	_ =	Prepared	08/04/22 09:51  Analyzed	1
Total TPH  Method: 8015B NM - Diesel R  Analyte  Gasoline Range Organics (GRO)-C6-C10	<50.0  ange Organ  Result  <50.0	ics (DRO) Qualifier U	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
Total TPH  Method: 8015B NM - Diesel R  Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0  ange Organ Result <50.0 <50.0	U  ics (DRO) Qualifier U  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
Total TPH  Method: 8015B NM - Diesel R Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0  ange Organ Result <50.0 <50.0 <50.0	U  ics (DRO) Qualifier U  U	50.0 (GC) RL 50.0 50.0 50.0		mg/Kg  Unit mg/Kg mg/Kg	_ =	Prepared 08/03/22 09:25 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 08/03/22 23:37	1 Dil Fac

	Method: 300.0 - Anions, Ion Ch	romatogra	phy - Solut	ble						
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	107		5.02		mg/Kg			08/06/22 08:13	1

Client Sample ID: BH-164 (8') Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

**REMOVED FROM ANALYSIS TABLE**  Lab Sample ID: 890-2689-11 **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		mg/Kg			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 <sub>-</sub> 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 Org Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201		0.00201		mg/Kg	— <u>-</u>	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	
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	
o-Xylene	< 0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	
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 Fa
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							
Method: Total BTEX - Total B Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/08/22 14:27	Dil Fa
Analyte Total BTEX Method: 8015 NM - Diesel Ra	Result <0.00402	Qualifier U	0.00402 OC)		mg/Kg	_ =		08/08/22 14:27	
Analyte Total BTEX Method: 8015 NM - Diesel Ra Analyte	Result <0.00402 nge Organic Result	<b>Qualifier</b> U	0.00402 GC) RL		mg/Kg	<u>D</u>	Prepared Prepared	08/08/22 14:27  Analyzed	
Analyte Total BTEX Method: 8015 NM - Diesel Ra Analyte	Result <0.00402	Qualifier U	0.00402 OC)		mg/Kg	_ =		08/08/22 14:27	
Analyte Total BTEX Method: 8015 NM - Diesel Ra Analyte Total TPH	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 F	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	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte Total TPH  Method: 8015B NM - Diesel F Analyte Gasoline Range Organics	Result <0.00402  nge Organic Result 64.6  Range Organic	Qualifier U  S (DRO) (O Qualifier  ics (DRO) Qualifier	0.00402	MDL	mg/Kg  Unit mg/Kg	<u></u> <u></u>	Prepared	08/08/22 14:27  Analyzed 08/04/22 09:51	Dil Fac
	Result <0.00402  nge Organic Result 64.6  Range Organic Result	Qualifier U  S (DRO) (O Qualifier  ics (DRO) Qualifier	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 08/03/22 23:15	Dil Fac

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	08/03/22 09:25	08/03/22 23:15	1
o-Terphenyl	98		70 - 130	08/03/22 09:25	08/03/22 23:15	1

Method: 300.0 - Anions, Ion Ch	romatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	613		24.9		mg/Kg			08/06/22 08:50	5

Client Sample ID: SW-43 (0-4') Lab Sample ID: 890-2689-13 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	<0.00202	U	0.00202		mg/Kg		08/07/22 12:02	08/08/22 00:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/07/22 12:02	08/08/22 00:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/07/22 12:02	08/08/22 00:42	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/07/22 12:02	08/08/22 00:42	1
o-Xylene	<0.00202	U F1	0.00202		mg/Kg		08/07/22 12:02	08/08/22 00:42	1
Xylenes, Total	<0.00403	U F1	0.00403		mg/Kg		08/07/22 12:02	08/08/22 00:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/07/22 12:02	08/08/22 00:42	1
1,4-Difluorobenzene (Surr)	88		70 - 130				08/07/22 12:02	08/08/22 00:42	1

Allalyte	Result	Qualifier	NL.	MDL	Ullit	U	riepaieu	Allalyzeu	DII Fac	
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/08/22 14:27	1	
Method: 8015 NM - Diesel Ran	ge Organic	s (DRO) (G0	C)							

		- (/ (/	,						
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 Rar	nge Organi	cs (DRO) (G	C)						
Analyto	•	Qualifier	, DI	MDI	Unit	D	Dropared	Analyzod	Dil Esc

Analyte	Result	Qualifier	KL	MDL Unit	D Prepared	Anaiyzea	DII Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg	08/03/22 09:25	08/04/22 01:38	1
(GRO)-C6-C10							
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg	08/03/22 09:25	08/04/22 01:38	1
C10-C28)							
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	08/03/22 09:25	08/04/22 01:38	1
_					_		
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	88	-	70 - 130		08/03/22 09:25	08/04/22 01:38	1
o-Terphenyl	94		70 - 130		08/03/22 09:25	08/04/22 01:38	1

Method: 300.0 - Anions, Ion Ch	romatogra	phy - Solu	ble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.9		5.00		mg/Kg			08/06/22 08:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	
Toluene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/07/22 12:02	08/08/22 01:03	
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/07/22 12:02	08/08/22 01:03	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	120		70 - 130				08/07/22 12:02	08/08/22 01:03	
1,4-Difluorobenzene (Surr)	93		70 - 130				08/07/22 12:02	08/08/22 01:03	
Method: Total BTEX - Total	BTEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/08/22 14:27	
Method: 8015 NM - Diesel I	Range Organic	s (DRO) (0	SC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
	<49.9		49.9		mg/Kg			08/04/22 09:51	

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 01:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 01:58	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 01:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				08/03/22 09:25	08/04/22 01:58	1
o-Terphenyl	92		70 - 130				08/03/22 09:25	08/04/22 01:58	1

Method: 300.0 - Anions, Ion C	hromatography - Solub	le					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111	5.04	mg/Kg			08/06/22 20:26	1
<del>-</del>							

Client Sample ID: SW-40 (0-13')

Date Collected: 07/29/22 12:00

Lab Sample ID: 890-2689-15

Matrix: Solid

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		08/07/22 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

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## **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** 

Method: Total BTEX - Total B7	TEX 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	,
Method: 8015 NM - Diesel Rar	nge Organic	s (DRO) (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.8	U	49.8		mg/Kg			08/04/22 09:51	
- Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	84		70 - 130				08/03/22 09:25	08/04/22 02:18	-
To see to a see at	90		70 - 130				08/03/22 09:25	08/04/22 02:18	
o-Terphenyl	30								
- ' ' '		phy - Solu	ble						
Method: 300.0 - Anions, Ion C Analyte	hromatogra	phy - Solu Qualifier	ble RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

## **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** 

			Perce	ent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2689-1	BH-118 (13')	94	96	
390-2689-2	BH-119 (10')	114	92	
890-2689-2 MS	BH-119 (10')	124	98	
890-2689-2 MSD	BH-119 (10')	112	93	
390-2689-3	BH-158 (8')	110	93	
390-2689-4	SW-50 (0-6')	117	89	
390-2689-5	SW-51 (0-6')	111	91	
890-2689-6	BH-159 (8')	131 S1+	91	
890-2689-7	BH-160 (8')	135 S1+	89	
890-2689-8	BH-161 (8')	106	77	
890-2689-9	BH-162 (8')	108	87	
890-2689-10	BH-163 (8')	122	82	
890-2689-11	BH-164 (8')	124	99	
890-2689-12	BH-165 (13')	115	91	
890-2689-13	SW-43 (0-4')	110	88	
890-2689-13 MS	SW-43 (0-4')	114	95	
890-2689-13 MSD	SW-43 (0-4')	120	94	
890-2689-14	SW-39 (0-13')	120	93	
890-2689-15	SW-40 (0-13')	108	77	
LCS 880-31573/1-A	Lab Control Sample	106	90	
LCS 880-31669/1-A	Lab Control Sample	100	99	
LCSD 880-31573/2-A	Lab Control Sample Dup	112	94	
LCSD 880-31669/2-A	Lab Control Sample Dup	101	101	
MB 880-31335/5-A	Method Blank	99	89	
MB 880-31573/5-A	Method Blank	101	91	
MB 880-31602/5-A	Method Blank	95	80	
MB 880-31669/5-A	Method Blank	130	111	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

_			Percer	nt Surrogate Recov
		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**

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)

Matrix: Solid Prep Type: Total/NA

			Perce	nt Surrogate Recovery (Acceptance Limits)
		1001	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				

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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

	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	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/02/22 14:31	08/05/22 11:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/02/22 14:31	08/05/22 11:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/02/22 14:31	08/05/22 11:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/02/22 14:31	08/05/22 11:25	1

MB MB

Surrogate	%Recovery Qu	ualifier 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 MB Analyte Result Qualifier RLMDL Unit Prepared Analyzed Dil Fac Benzene 08/05/22 11:19 08/06/22 00:00 <0.00200 U 0.00200 mg/Kg Toluene mg/Kg 08/05/22 11:19 08/06/22 00:00 <0.00200 U 0.00200 Ethylbenzene mg/Kg 08/05/22 11:19 08/06/22 00:00 <0.00200 U 0.00200 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 08/05/22 11:19 08/06/22 00:00 o-Xylene <0.00200 U 0.00200 mg/Kg 08/05/22 11:19 08/06/22 00:00 Xylenes, Total <0.00400 U 0.00400 mg/Kg 08/05/22 11:19 08/06/22 00:00

MB MB

Surrogate	%Recovery	Qualifier	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 Qualifi	er Limits
4-Bromofluorobenzene (Surr)	106	70 - 130
1,4-Difluorobenzene (Surr)	90	70 - 130

Lab Sample ID: LCSD 880-31573/2-A

**Matrix: Solid** 

Analyte Benzene

**Analysis Batch: 31540** 

							Prep Ty	pe: Tot	al/NA	
31540							Prep E	atch: 3	31573	
	Spike	LCSD	LCSD				%Rec		RPD	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
	0.100	0.09262		mg/Kg		93	70 - 130	7	35	

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## QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

## 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 D %Rec Limits RPD Limit Toluene 0.100 0.09534 mg/Kg 95 70 - 130 7 35 0.100 Ethylbenzene 0.1047 mg/Kg 105 70 - 130 0 35 0.200 0.2146 mg/Kg 107 70 - 130 35 m-Xylene & p-Xylene n 0.100 2 35 o-Xylene 0.1189 mg/Kg 119 70 - 130

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 Result Qualifier Analyte Added Result Qualifier D %Rec Limits Unit Benzene <0.00200 U 0.101 0.09178 91 70 - 130 mg/Kg 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 0.201 <0.00399 U 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	Qualifier	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

_	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	0.08524		mg/Kg		85	70 - 130	7	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	<0.00399	U	0.200	0.1787		mg/Kg		90	70 - 130	22	35
o-Xylene	<0.00200	U	0.0998	0.1036		mg/Kg		104	70 - 130	19	35

MSD MSD

Surrogate	%Recovery Qualifier	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

MB MB

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

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2689-1 SDG: Lea County NM

**Prep Type: Total/NA** 

Prep Batch: 31602

Client Sample ID: Method Blank

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-31602/5-A **Matrix: Solid** 

**Analysis Batch: 31654** 

MB	MB						•	
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		08/05/22 13:42	08/07/22 13:44	1
< 0.00400	U	0.00400		mg/Kg		08/05/22 13:42	08/07/22 13:44	1

	MB MB				
Surrogate	%Recovery Qualifier	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** 

Analyte o-Xylene Xylenes, Total

**Client Sample ID: Method Blank** Prep Type: Total/NA

Prep Batch: 31669

**Analysis Batch: 31654** MB MB

	11.10	1410							
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				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	08/07/22 12:02	08/08/22 00:21	1
1,4-Difluorobenzene (Surr)	111		70 - 130	08/07/22 12:02	08/08/22 00:21	1

Lab Sample ID: LCS 880-31669/1-A

Lab Sample ID: LCSD 880-31669/2-A

**Matrix: Solid** 

Analysis Batch: 31654

**Client Sample ID: Lab Control Sample Prep Type: Total/NA** 

Client Sample ID: Lab Control Sample Dup

	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

Matrix: Solid Analysis Batch: 31654							Prep Ty Prep E	•	
	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

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	atch: 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	

Spike

Added

0.100

0.100

0.100

0.200

0.100

MSD MSD

0.1039

0.1120

0.1218

0.2532

0.1413 F1

Result Qualifier Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 114 1,4-Difluorobenzene (Surr) 70 - 130 95

Lab Sample ID: 890-2689-13 MSD

**Matrix: Solid** 

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

**Analysis Batch: 31654** 

Client Sample ID: SW-43 (0-4')

70 - 130

70 - 130

70 - 130

70 - 130

112

122

126

141

Prep Type: Total/NA Prep Batch: 31669

%Rec **RPD** Limits D %Rec RPD Limit 104 70 - 130 35

1

3

	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)

Sample Sample

<0.00202 U

<0.00202 U

<0.00202 U

<0.00403 U

<0.00202 UF1

Result Qualifier

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

	IAID	IAID							
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	MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyze	d 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

**Eurofins Carlsbad** 

35

35

35

## QC Sample Results

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: LCS 880-31397/2-A

Lab Sample ID: LCSD 880-31397/3-A

**Matrix: Solid** 

**Analysis Batch: 31371** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 31397

Spike LCS LCS %Rec Added Result Qualifier %Rec Limits Analyte Unit D Gasoline Range Organics 1000 1052 mg/Kg 105 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1023 102 mg/Kg 70 - 130

C10-C28)

LCS LCS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 109 70 - 130 o-Terphenyl 107

**Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** Prep Type: Total/NA Prep Batch: 31397

**Analysis Batch: 31371** 

LCSD LCSD Spike %Rec **RPD** Added Result Qualifier Limits **RPD** Limit Analyte Unit D %Rec Gasoline Range Organics 1000 1144 70 - 130 8 20 mg/Kg 114 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1065 mg/Kg 106 70 - 1304 20 C10-C28)

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 111 70 - 130 o-Terphenyl 110 70 - 130

Client Sample ID: BH-119 (10') Lab Sample ID: 890-2689-2 MS

**Matrix: Solid** 

**Analysis Batch: 31371** 

Prep Type: Total/NA Prep Batch: 31397 %Rec Spike MS MS Sample Sample

Analyte Result Qualifier Added Unit %Rec Limits Result Qualifier Gasoline Range Organics Ū 999 104 70 - 130 <49.9 1062 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 844.1 84 70 - 130 mg/Kg

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 96 70 - 130

92 70 - 130 o-Terphenyl

Lab Sample ID: 890-2689-2 MSD Client Sample ID: BH-119 (10') **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 31371** Prep Batch: 31397 Sample Sample Spike MSD MSD %Rec **RPD** 

Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec <49.9 U Gasoline Range Organics 999 906.5 mg/Kg 88 70 - 13016 20 (GRO)-C6-C10 <49.9 U 999 780.0 mg/Kg 78 70 - 130 8 20 Diesel Range Organics (Over C10-C28)

MSD MSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 88

**Eurofins Carlsbad** 

8/11/2022 (Rev. 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: 890-2689-2 MSD

**Matrix: Solid** 

**Analysis Batch: 31371** 

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 84 70 - 130 Client Sample ID: BH-119 (10')

Prep Type: Total/NA Prep Batch: 31397

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31360/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

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 Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**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 Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**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 Client Sample ID: BH-118 (13') **Prep Type: Soluble** 

**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

**Eurofins Carlsbad** 

Client Sample ID: BH-118 (13')

Client Sample ID: BH-164 (8')

**Prep Type: Soluble** 

**Prep Type: Soluble** 

## **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**

Prep Batch: 31335

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. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

## **GC VOA (Continued)**

### **Analysis Batch: 31654 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type Matrix Method		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	
90-2689-6 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

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	
890-2689-3	BH-158 (8')	Total/NA	Solid	8015 NM	
890-2689-4	SW-50 (0-6')	Total/NA	Solid	8015 NM	
890-2689-5	SW-51 (0-6')	Total/NA	Solid	8015 NM	
890-2689-6	BH-159 (8')	Total/NA	Solid	8015 NM	
890-2689-7	BH-160 (8')	Total/NA	Solid	8015 NM	
890-2689-8	BH-161 (8')	Total/NA	Solid	8015 NM	
890-2689-9	BH-162 (8')	Total/NA	Solid	8015 NM	
890-2689-10	BH-163 (8')	Total/NA	Solid	8015 NM	
890-2689-11	BH-164 (8')	Total/NA	Solid	8015 NM	
890-2689-12	BH-165 (13')	Total/NA	Solid	8015 NM	
890-2689-13	SW-43 (0-4')	Total/NA	Solid	8015 NM	
890-2689-14	SW-39 (0-13')	Total/NA	Solid	8015 NM	
890-2689-15	SW-40 (0-13')	Total/NA	Solid	8015 NM	

Job ID: 890-2689-1 Client: Tetra Tech, Inc. 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**

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
390-2689-10	BH-163 (8')	Soluble	Solid	300.0	31360
390-2689-11	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

#### Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

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** 

	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 MIC
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	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 22:32	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 06:13	AJ	EETSC M

Client Sample ID: BH-119 (10') Lab Sample ID: 890-2689-2 **Matrix: Solid** 

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Run **Factor Amount** Amount Number or Analyzed **Analyst** Lab Total/NA 5035 31573 08/05/22 11:19 MR EETSC MID Prep 5.01 g 5 mL Total/NA 8021B 5 mL 31540 08/06/22 00:22 MR EETSC M Analysis 5 mL 1 Total/NA Total BTEX Analysis 31779 08/08/22 14:27 SM EETSC M 1 Total/NA 8015 NM EETSC M Analysis 1 31489 08/04/22 09:51 AJ Total/NA Prep 8015NM Prep 10.03 g 10 mL 31397 08/03/22 09:25 DM EETSC M Total/NA 8015B NM Analysis 1 31371 08/03/22 20:23 AJ EETSC M Soluble 31360 08/02/22 19:05 SMC Leach DI Leach 4.99 g 50 mL EETSC M 300.0 08/06/22 06:41 AJ Soluble Analysis 5 31623 EETSC M

Client Sample ID: BH-158 (8') Lab Sample ID: 890-2689-3 Date Collected: 07/26/22 12:00 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	31573	08/05/22 11:19	MR	EETSC MIC
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') Lab Sample ID: 890-2689-4 Date Collected: 07/26/22 12:00 Matrix: Solid

Date Received: 07/29/22 14:06

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
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 01:03	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M

### **Lab Chronicle**

Client: Tetra Tech, Inc. Job ID: 890-2689-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-50 (0-6')

Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-4 Date Collected: 07/26/22 12:00

**Matrix: Solid** 

Batch Dil Initial Batch Batch Final Prepared **Prep Type** Method or Analyzed Type Run **Factor Amount** Amount Number Analyst Lab Total/NA 8015 NM 31489 08/04/22 09:51 AJ EETSC MIC Analysis Total/NA Prep 8015NM Prep 10.04 g 10 mL 31397 08/03/22 09:25 DM EETSC M Total/NA Analysis 8015B NM 31371 08/04/22 00:58 AJ EETSC M 1 08/02/22 19:05 SMC 5.03 g 31360 EETSC M Soluble Leach DI Leach 50 mL Soluble Analysis 300.0 31623 08/06/22 07:00 AJ EETSC M 1

Client Sample ID: SW-51 (0-6') 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 MIC
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	Prep	8015NM Prep			10.00 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 01:18	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 07:09	AJ	EETSC M

Lab Sample ID: 890-2689-6 Client Sample ID: BH-159 (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			4.99 g	5 mL	31573	08/05/22 11:19	MR	EETSC MI
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') Lab Sample ID: 890-2689-7 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
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	DM AJ	EETSC M

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-2689-1 SDG: Lea County NM

SDG: Lea County NM

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 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

Client Sample ID: BH-161 (8')

Date Collected: 07/26/22 12:00

Lab Sample ID: 890-2689-8

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
Total/NA	Prep	5035			5.03 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 03:27	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

Client Sample ID: BH-162 (8')

Date Collected: 07/26/22 12:00

Lab Sample ID: 890-2689-9

Matrix: Solid

Date Collected: 07/26/22 12:00 Date Received: 07/29/22 14:06

Dil Batch Batch 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 MIC Total/NA 8021B Analysis 5 mL 5 mL 31540 08/06/22 02:05 MR EETSC M 1 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 31371 1 08/04/22 00:18 AJ EETSC M Soluble 31360 Leach DI Leach 5.02 g 50 mL 08/02/22 19:05 SMC EETSC M Soluble Analysis 300.0 31623 08/06/22 08:04 AJ 5 EETSC M

Client Sample ID: BH-163 (8')

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 MIC
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** 

Lab Sample ID: 890-2689-10

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**Matrix: Solid** 

Job ID: 890-2689-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc.

Lab Sample ID: 890-2689-11

Lab Sample ID: 890-2689-12

Lab Sample ID: 890-2689-13

Lab Sample ID: 890-2689-14

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

Client Sample ID: BH-164 (8') 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			4.97 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 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

	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	31573	08/05/22 11:19	MR	EETSC MID
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	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 23:15	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 08:50	AJ	EETSC M

Client Sample ID: SW-43 (0-4')

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			4.96 g	5 mL	31669	08/07/22 12:02	EL	EETSC MI
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 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

**Eurofins Carlsbad** 

**Matrix: Solid** 

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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** 

	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')

Date Collected: 07/29/22 12:00

Lab Sample ID: 890-2689-15

Matrix: Solid

Date Collected: 07/29/22 12:00 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
Total/NA	Prep	5035			5.02 g	5 mL	31669	08/07/22 12:02	EL	EETSC MII
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** 

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# **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 Texas		ogram	Identification Number	Expiration Date
		ELAP	T104704400-22-24	06-30-23
The following analyte	s are included in this rend	ort but the laboratory is r	not certified by the governing authority.	This list may include analytes for y
the agency does not	•	ore, but the laboratory is i	iot certified by the governing authority.	This list may include analytes for v
,	•	Matrix	Analyte	This list may include analytes for v
the agency does not	offer certification.	•		This list may include analytes for v

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**Method Description** 

**Total BTEX Calculation** 

Microextraction

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

## **Method Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Method

Total BTEX

8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

8021B

Job ID: 890-2689-1 SDG: Lea County NM

Protocol	Laboratory
SW846	EETSC MID
TAL SOP	EETSC MID
SW846	EETSC MID
SW846	EETSC MID
MCAWW	EETSC MID
SW846	EETSC MID
SW846	EETSC MID
ASTM	EETSC 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:**

EETSC MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

# **Sample Summary**

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD 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	07/26/22 12:00	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
890-2689-13	SW-43 (0-4')	Solid	07/26/22 12:00	07/29/22 14:06
890-2689-14	SW-39 (0-13')	Solid	07/29/22 12:00	07/29/22 14:06
890-2689-15	SW-40 (0-13')	Solid	07/29/22 12:00	07/29/22 14:06

	Relinquished by:	,	Rélinguished by:	Religioned by:											( ONLY )	LAB #		Comments:		Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	ā		Analysis Rec
	y: Date: Time:		Date: Time:	Date: Time: 7/20/27 1405	BH-163 (8')	ВН-162 (8')	ВН-161 (8')	ВН-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 McInturff		Lea County, NM	Kaiser SWD	Permian Water Solutions	l .	Tetra Tech Inc.	Analysis Request of Chain of Custody Record
ORIGINAL COPY	Received by:			Received by:	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:		Project #:		Site Manager			
~	Date: Time:		Date: Time:	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE		reyton Oliver			212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 682-4559 Fax (437) 682-3946	Midland, Texas 79705	890-2689 Chain of
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(Circle) HAND DELIVERED FEDEX UPS	<i>v</i> □		Sample Temperature RUSH: S	AB USE ONLY X STAI											PAH 82 Total Me TCLP M TCLP V TCLP S RCI GC/MS	270C etals A fetals folatile emi V	Ag As Ag As s olatile	Ba Cd C	cr Pb S	Se Hg				YSIS REQUEST (Circle or Specif			
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			72 hr		F	F						F		<u> </u>	Hold												of

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	y: Date: Time:			JOHI CL/37/2 - 1 4	y: 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.
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	Date: Time:			100/2 pt 7/20/2	Date: Time:		×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub> ICE None	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	901W Wall Sires, Sie 100 Widand, Texas 79705 Tel (432) 662-4559 Fax (432) 662-3945
(Circle) HAND DELIVERED	15. D	15.4	Sample Temperature	140/ LAB 03E ONE	AB LICE ON		×				×	# CONTAII FILTERED BTEX 8021 TPH TX100 TPH 8015 PAH 82700 Total Metals	NERS (Y/N)  IB BT 05 (Ext to the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the con	EX 8260 o C35) - DRO -	ORO -				ANALYSIS RI	
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*	s or TRRP Report	nized	24 hr 48 hr 72 hr				×	×	×	×	×	Chloride Chloride General W Anion/Cati	Sulfate	emistry (		tached	list)		Method No.)	

## **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

Login Number: 2689

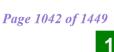
List Source: Eurofins Midland
List Number: 2

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 <6mm (1/4").	N/A	

141 OJ 1449





# **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

**Review your project** results through EOL

.....LINKS

Received by OCD: 8/29/2023 3:58:56 PM

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 3:31:23 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: 890-2784-1

SDG: Lea County NM

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## **Definitions/Glossary**

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

#### **Qualifiers**

GC VC	Α
Qualific	-

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.

Qualifier Description

#### **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.

#### HPI C/IC

III LONG	
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**

Abbreviation

MCL

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

Duplicate Error Ratio (normalized absolute difference) DER

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) Estimated Detection Limit (Dioxin) EDL Limit of Detection (DoD/DOE) LOD LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry) MDL Method Detection Limit

MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

EPA recommended "Maximum Contaminant Level"

Negative / Absent NEG 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) Toxicity Equivalent Quotient (Dioxin) TEQ

# **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

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### **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') (890-2784-55), SW-66 (6-10') (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.

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### 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.

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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	1

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Lab Sample ID: 890-2784-2

Matrix: Solid

Lab Sample ID: 890-2784-2

Lab Sample ID: 890-2784-3

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

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 - Vol	atile Organic Cor	npounds (GC	(Continued)
	atilo organio coi		, ( <b>-</b>

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85	70 - 130	08/30/22 12:01	09/01/22 00:20	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	< 0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1

Mothod: 8015 NM - D	iceal Range Organics	(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

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		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

o-Terphenyl	71	70 - 130

Method: 300.0 - Anions, ion Chron	natograpny - 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)

michiod. 002 ID - Volutile Orga	inc compounds	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	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

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			09/01/22 12:44	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	D	Pr	epared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0		mg/Kg				08/23/22 11:36	1

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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		50.0		mg/Kg	— <u> </u>	08/22/22 13:43	08/23/22 00:03	1
(GRO)-C6-C10					5 5				
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	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	325		5.00		mg/Kg			08/29/22 04:28	

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			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
o-Terphenyl	82		70 <sub>-</sub> 130				08/22/22 13:43	08/23/22 00:24	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD 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 Chromatography - 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

Sample Depth: 8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/30/22 12:01	09/01/22 01:21	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/30/22 12:01	09/01/22 01:21	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	121		70 - 130				08/30/22 12:01	09/01/22 01:21	
1,4-Difluorobenzene (Surr)	89		70 - 130				08/30/22 12:01	09/01/22 01:21	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/01/22 12:44	
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			08/23/22 11:36	
Method: 8015B NM - Diesel Rang									
Analyte		Qualifier	RL	MDL		<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 00:45	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:45	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:45	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	68	S1-	70 - 130				08/22/22 13:43	08/23/22 00:45	
o-Terphenyl	82		70 - 130				08/22/22 13:43	08/23/22 00:45	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
	892		5.03		mg/Kg			08/29/22 04:59	

Lab Sample ID: 890-2784-6

# **Client Sample Results**

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 Fa
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 BTEX	( 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	92.4	Qualifier	<b>RL</b> 49.9		mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fa
			40.0		mg/rtg			00/20/22 11.00	
Method: 8015B NM - Diesel Rang									
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 01:06	
(GRO)-C6-C10  Diesel Range Organics (Over	92.4		49.9		mg/Kg		08/22/22 13:43	08/23/22 01:06	
C10-C28)	92.4		40.0		mg/itg		00/22/22 10.40	00/20/22 01:00	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 01:06	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	62	S1-	70 - 130				08/22/22 13:43	08/23/22 01:06	
o-Terphenyl	76		70 - 130				08/22/22 13:43	08/23/22 01:06	
Method: 300.0 - Anions, Ion Chro	omatography	Soluble							
Metriod. 300.0 - Ariions, ion Chr	Jiliatograpily -	Oolubic							
Analyte	0.,	Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed	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

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Lab Sample ID: 890-2784-7

Matrix: Solid

Client Sample ID: BH-166 (8')

Date Collected: 08/18/22 00:00

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

Lab Sample ID: 890-2784-7

Matrix: Solid

Lab Sample ID: 890-2784-8

**Matrix: Solid** 

Date Received: 08/19/22 08:00 Sample Depth: 8

Method: 8021B	- Volatile	Organic Co	mpounds	(GC)	(Continued)	)
moundar our is	· olutilo	organic co	poullao	1/	( Continuou	,

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 Organics (DRO)	(GC)		

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 -	. Niosol Rango (	rnanice (DRO	) (GC)
Michiga, ou lob Mili	Dicaci italige	Ji gaines (bite	, (00)

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)									
OII 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

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
o-Terphenyl	71		70 - 130	08/22/22 13:43	08/23/22 01:27	1

# Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualit		MDL Unit	D	Prepared	Analyzed	Dil 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	Volatile Organie	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	DII Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/01/22 12:44	1

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	D	Pr	epared	Analyzed	Dil Fac
Total TPH			<50.0	U	50.0		mg/Kg				08/23/22 11:36	1

**Eurofins Carlsbad** 

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Lab Sample ID: 890-2784-8

Lab Sample ID: 890-2784-9

**Matrix: Solid** 

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

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 01:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:49	1
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

Client Sample ID: BH-168 (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	<0.00201	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

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

Lab Sample ID: 890-2784-9

Client Sample ID: BH-168 (5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 5

Method: 300.0 - Anions, Ion Chromatography - 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 **Matrix: Solid** 

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 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	1
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	1
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
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	80.5		50.0		mg/Kg			08/23/22 11:36	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		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
		0 - 1 - 1 - 1 -							
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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 Fa
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	-
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 04:25	
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 04:25	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	130		70 - 130				08/30/22 12:01	09/01/22 04:25	
1,4-Difluorobenzene (Surr)	87		70 - 130				08/30/22 12:01	09/01/22 04:25	
Method: Total BTEX - Total BTE)	( 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	
Method: 8015 NM - Diesel Range Analyte Total TPH		Qualifier	<b>RL</b> 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fa
Mathada 0045D NM - Discal Dona	O	DO) (OO)			0 0				
Method: 8015B NM - Diesel Rang Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9		49.9		mg/Kg	_ =	08/22/22 13:43	08/23/22 03:14	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:14	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:14	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	57	S1-	70 - 130				08/22/22 13:43	08/23/22 03:14	
1-Chioroccane			70 100				08/22/22 13:43	08/23/22 03:14	
	66	S1-	70 - 130						
o-Terphenyl : : Method: 300.0 - Anions, Ion Chro			70 - 130						
o-Terphenyl	omatography -		70 <u>-</u> 130	MDL	Unit	D	Prepared	Analyzed	Dil Fa

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

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Matrix: Solid

Lab Sample ID: 890-2784-12

Client: Tetra Tech, Inc.

Job ID: 890-2784-1
Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: BH-171 (5')

Lab Sample ID: 890-2784-12

Date Collected: 08/18/22 00:00 Matrix: Solid
Date Received: 08/19/22 08:00

Sample Depth: 5

Method: 8021B - Volatile Organic Compounds (GC) (Continued)										
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fa					
1,4-Difluorobenzene (Surr)	84	70 - 130	08/30/22 12:01	09/01/22 04:46						

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 (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 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		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		

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 Jon Chron	natography - Soluble				

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

Lab Sample ID: 890-2784-13

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6

Analyte

Total TPH

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
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			09/01/22 12:44	1

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Analyzed

08/23/22 11:36

RL

49.9

MDL Unit

mg/Kg

Prepared

Result Qualifier

<49.9 U

Dil Fac

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

Client Sample ID: BH-172 (6')

Lab Sample ID: 890-2784-13

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Matrix: Solid

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
Chloride	253		5.02		mg/Kg			08/29/22 06:17	

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

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	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		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
	77		70 <sub>-</sub> 130				08/22/22 13:43	08/23/22 04:17	

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1

SDG: Lea County NM

Client Sample ID: BH-173 (6')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6

Lab Sample ID: 890-2784-14

Matrix: Solid

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

Client Sample ID: BH-174 (6') Lab Sample ID: 890-2784-15 **Matrix: Solid** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 6

Analyte

(GRO)-C6-C10

Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	1
Toluene	< 0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	1
Ethylbenzene	< 0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	1
m-Xylene & p-Xylene	<0.00393	U	0.00393		mg/Kg		08/30/22 12:01	09/01/22 05:47	1
o-Xylene	< 0.00196	U	0.00196		mg/Kg		08/30/22 12:01	09/01/22 05:47	1
Xylenes, Total	<0.00393	U	0.00393		mg/Kg		08/30/22 12:01	09/01/22 05:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				08/30/22 12:01	09/01/22 05:47	1
1,4-Difluorobenzene (Surr)	81		70 - 130				08/30/22 12:01	09/01/22 05:47	1
- Method: Total BTEX - Total B1	ΓEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00393	U	0.00393		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	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg	08/22/22 13:43	08/23/22 04:38	1
C10-C28)							
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	08/22/22 13:43	08/23/22 04:38	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
our ogute	70110001019	Qualifici	Lilling		, repared	Analyzea	D.,
1-Chlorooctane		S1-	70 - 130		08/22/22 13:43	08/23/22 04:38	1
							1

RL

50.0

MDL Unit

mg/Kg

Prepared

08/22/22 13:43

Result Qualifier

<50.0 U

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	131		5.01		mg/Kg			08/29/22 07:44	1

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Dil Fac

Analyzed

08/23/22 04:38

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 Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	1
Ethylbenzene	< 0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 06:07	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 06:07	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 06:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				08/30/22 12:01	09/01/22 06:07	1
1,4-Difluorobenzene (Surr)	92		70 - 130				08/30/22 12:01	09/01/22 06:07	1
Method: Total BTEX - Total BTEX	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
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared		
						=		Analyzed	DII Fac
Total TPH	<49.9	U	49.9		mg/Kg	_ =		08/23/22 11:36	
Total TPH  Method: 8015B NM - Diesel Ran			49.9		mg/Kg	_ =			
- -	ge Organics (D		49.9 <b>RL</b>	MDL			Prepared		1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier		MDL				08/23/22 11:36	Dil Fac
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		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 (D Result <49.9	RO) (GC) Qualifier U	RL 49.9	MDL	Unit mg/Kg mg/Kg		Prepared 08/22/22 13:43 08/22/22 13:43	08/23/22 11:36  Analyzed  08/23/22 04:59  08/23/22 04:59	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		Prepared 08/22/22 13:43	08/23/22 11:36  Analyzed  08/23/22 04:59	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 <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	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 08/23/22 04:59 08/23/22 04:59 08/23/22 04:59  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 59	RO) (GC) Qualifier U	RL 49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg		Prepared 08/22/22 13:43 08/22/22 13:43	08/23/22 11:36  Analyzed 08/23/22 04:59 08/23/22 04:59 08/23/22 04:59	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 <49.9 <49.9 <49.9 %Recovery	RO) (GC) Qualifier U U Qualifier	RL 49.9 49.9 49.9 <i>Limits</i>	MDL	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 08/23/22 04:59 08/23/22 04:59 08/23/22 04:59  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  59  71  omatography -	RO) (GC) Qualifier U U Qualifier S1-	RL 49.9 49.9 49.9  Limits 70 - 130 70 - 130		Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared  08/22/22 13:43  08/22/22 13:43  08/22/22 13:43  Prepared  08/22/22 13:43  08/22/22 13:43	08/23/22 11:36  Analyzed 08/23/22 04:59 08/23/22 04:59  08/23/22 04:59  Analyzed 08/23/22 04:59	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  59  71  omatography -	RO) (GC) Qualifier U U Qualifier S1-	RL 49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg 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 08/23/22 04:59 08/23/22 04:59  08/23/22 04:59  Analyzed 08/23/22 04:59	Dil Face  1  Dil Face  1  Dil Face  1  Dil Face  1  Dil Face  1  1

**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

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Lab Sample ID: 890-2784-17

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Matrix: Solid

Lab Sample ID: 890-2784-17

Lab Sample ID: 890-2784-18

Matrix: Solid

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**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

Method: 8021B -	Volatile Ord	anic Com	nounds (	GC) (	(Continued)	
Method. 002 1D	Volatile Oit	jaine com	poullus (	$\circ\circ$	(Continueu)	

Surrogate	%Recovery Qual	lifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91	70 - 130	08/30/22 12:01	09/01/22 06:28	1

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

Analyte	Result Qualifier		MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	ma/Ka			09/01/22 12:44	1

П				
ı	Method: 8015 NM	Diocal Rand	no Organice	(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

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 I	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	1	mg/Kg		08/22/22 13:43	08/23/22 05:21	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0	ı	mg/Kg		08/22/22 13:43	08/23/22 05:21	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	ı	mg/Kg		08/22/22 13:43	08/23/22 05:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	58	S1-	70 - 130	08/	/22/22 13:43	08/23/22 05:21	1
o-Terphenyl	69	S1-	70 - 130	08/	/22/22 13:43	08/23/22 05:21	1

Method: 300.0 - Anions,	Ion Chromato	ography	/ - Soluble

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	554	5.05		mg/Kg			08/29/22 08:00	1

**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

Mothod: 9021D	Volatile Organie	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

motification collis		()							
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	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 06:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 06:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:01	09/01/22 06:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 06:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:01	09/01/22 06:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				08/30/22 12:01	09/01/22 06:48	1
1,4-Difluorobenzene (Surr)	93		70 - 130				08/30/22 12:01	09/01/22 06:48	1

Mothod:	Total RT	Y - Total I	RTEY Ca	lculation

Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403 U	J	0.00403		ma/Ka			09/01/22 12:44	1

Analyte	Result	Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	n	ng/Kg			08/23/22 11:36	1

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Lab Sample ID: 890-2784-18

Lab Sample ID: 890-2784-19

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

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

Method: 8015B NM - Diesel Range	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 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
								00/00/00 05 10	
1-Chlorooctane	59	S1-	70 - 130				08/22/22 13:43	08/23/22 05:42	7
1-Chlorooctane o-Terphenyl	59 73	S1-	70 <sub>-</sub> 130 70 <sub>-</sub> 130				08/22/22 13:43 08/22/22 13:43	08/23/22 05:42 08/23/22 05:42	1
		S1-							1
	73								1
o-Terphenyl	73 <b>matography</b> -			MDL	Unit	D			1 1 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

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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 Chrom	atography -	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: 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 Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 18:05	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 18:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 18:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:16	08/31/22 18:05	1
1,4-Difluorobenzene (Surr)	106		70 - 130				08/30/22 12:16	08/31/22 18:05	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
Analyte	Result	Qualifier	RL	MDI	Unit	D	Danagara		
			IXL	IVIDE	Ollit	U	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	MDL	mg/Kg	=	Prepared	<b>Analyzed</b> 08/23/22 11:36	
Total TPH Method: 8015B NM - Diesel Ranç				MDL			Prepared		
- -	ge Organics (Di	RO) (GC) Qualifier		MDL	mg/Kg	<u></u>	Prepared		1
: Method: 8015B NM - Diesel Ran	ge Organics (D	RO) (GC) Qualifier	49.9		mg/Kg	_ =	<u> </u>	08/23/22 11:36	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (Di	RO) (GC) Qualifier	49.9		mg/Kg	_ =	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	ge Organics (Di Result <49.9	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 13:21	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	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 13:21  08/24/22 13:21	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 <49.9	RO) (GC) Qualifier 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 13:21 08/24/22 13:21	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)  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		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 13:21  08/24/22 13:21  08/24/22 13:21  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  **Recovery 117 114	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 13:21 08/24/22 13:21  Analyzed 08/24/22 13:21	Dil Fac  1  1  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 117 114  comatography -	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 13:21 08/24/22 13:21  Analyzed 08/24/22 13:21	Dil Fac  1  1  1  Dil Fac  1

**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	1

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Matrix: Solid

Lab Sample ID: 890-2784-22

Lab Sample ID: 890-2784-22

Lab Sample ID: 890-2784-23

**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 Compou	nds (GC) (Continued)
Welliou. 002 ID - Volatile Organic Compou	iius (OO) (Ooiitiiiu <del>c</del> u)

Surrogate	%Recovery Qι	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105	70 - 130	08/30/22 12:16	08/31/22 18:25	1

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	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 (DRO) (			
Method: 8015 NM = Diesel Rande Ordanics (DRO) (	Made al. COAT NIM Diag		: (DDO) (OO)
	Wetnoo: 8015 NW - Dies	iei Kande Ordani	ICS (IJKU) (GU)

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

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 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				08/22/22 16:33	08/24/22 14:26	1

1-Chlorooctane	114	70 - 130
o-Terphenyl	110	70 - 130

_							
Method: 300.0 - Anions, Ion Cl	hromatography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Allalyte	Result C	zuaiiilei	NL.	WIDE OILL	 riepaieu	Allalyzeu	Dil Fac
Chloride	1560		25.1	mg/Kg		08/29/22 08:54	5

**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

moniour cozina rolatilo organi		,							
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	DII Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/01/22 12:44	1

	Method: 8015 NM -	- Diesel Range	Organics	(DRO)	(GC)
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Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	r	mg/Kg			08/23/22 11:36	1

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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		50.0		mg/Kg	— <u>-</u>	08/22/22 16:33	08/24/22 14:47	
(GRO)-C6-C10	<b>\30.0</b>	U	30.0		ilig/Rg		00/22/22 10.55	00/24/22 14.47	ı
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	omatography -	Soluble							
		O1161	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	RL.	MIDL	Ullit	U	riepaieu	Allalyzeu	Diriac

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	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 19:06	1
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	1
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)							
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fac
Analyte Total TPH		Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		
Analyte	Result <49.9	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			08/23/22 11:36	1
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		Prepared	08/23/22 11:36  Analyzed	1 Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	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 15:17	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	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 15:17  08/24/22 15:17	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  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 15:17 08/24/22 15:17	1 Dil Fac

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Lab Sample ID: 890-2784-24

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

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

Sample Depth: 4.5

	Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Į	Chloride	1050		4.97		mg/Kg			08/29/22 09:10	1

Client Sample ID: BH-184 (4.5')

Date Collected: 08/18/22 00:00

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

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
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	•	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 (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		08/22/22 16:33	08/24/22 16:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 16:17	1
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-Terphenyl	109		70 - 130				08/22/22 16:33	08/24/22 16:17	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			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 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-2784-26

Matrix: Solid

Sample Depth: 4.5

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	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	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		08/22/22 16:33	08/24/22 16:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 16:39	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 16:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				08/22/22 16:33	08/24/22 16:39	1
o-Terphenyl	113		70 - 130				08/22/22 16:33	08/24/22 16:39	1
		0 - 1 - 1 - 1 -							
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							

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

Chloride

REMOVED FROM ANALYSIS TABLE

588

Lab Sample ID: 890-2784-27

08/29/22 09:42

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Method. 002 1D - Volatile Orga	ilic compounds (	<b>GC</b> )							
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 20:07	1
Toluene	<0.00200	U	0.00200		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
m-Xylene & p-Xylene	<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
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:16	08/31/22 20:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/30/22 12:16	08/31/22 20:07	1

5.01

mg/Kg

## **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

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**Matrix: Solid** 

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 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	914		50.0		mg/Kg			08/23/22 11:36	1
Method: 8015B NM - Diesel Rang	o Organice (D	PO) (GC)							
Analyte		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 18:48	1
(GRO)-C6-C10									
Diesel Range Organics (Over	914		50.0		mg/Kg		08/22/22 16:33	08/24/22 18:48	1
C10-C28)									
Oll 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
our oguto			70 - 130				08/22/22 16:33	08/24/22 18:48	1
1-Chlorooctane	92								
	92 91		70 - 130				08/22/22 16:33	08/24/22 18:48	1
1-Chlorooctane o-Terphenyl	91	Soluble	70 - 130				08/22/22 16:33	08/24/22 18:48	1
1-Chlorooctane	91 omatography -	Soluble Qualifier	70 <sub>-</sub> 130 RL	MDL	Unit	D	08/22/22 16:33  Prepared	08/24/22 18:48  Analyzed	1 Dil Fac

Client Sample ID: BH-187 (4.5')

Lab Sample ID: 890-2784-28

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

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

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
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	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 17:23	1
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 17:23	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 17:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				08/22/22 16:33	08/24/22 17:23	1
o-Terphenyl	97		70 - 130				08/22/22 16:33	08/24/22 17:23	1

**Eurofins Carlsbad** 

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Lab Sample ID: 890-2784-29

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD 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

Method: 300.0 - Anions, Ion Chromatography - 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

Released to Imaging: 9/1/2023 3:31:23 PM

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	08/31/22 22:59	
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	08/31/22 22:59	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	88		70 - 130				08/30/22 12:16	08/31/22 22:59	
1,4-Difluorobenzene (Surr)	109		70 - 130				08/30/22 12:16	08/31/22 22:59	
Method: Total BTEX - Total BTEX	K 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	•		DI	MDI	11-24		Burnand	Amakanad	D!! E
Analyte		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 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		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
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/22/22 16:33	08/24/22 17:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	95		70 - 130				08/22/22 16:33	08/24/22 17:44	1
1-Chiorodciane			70 - 130				08/22/22 16:33	08/24/22 17:44	1
	93		70 - 100						
o-Terphenyl : : Method: 300.0 - Anions, Ion Chro		Soluble							
o-Terphenyl	omatography -	Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2784-31

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

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	2
Toluene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	2
Ethylbenzene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	2
m-Xylene & p-Xylene	<0.0808	U	0.0808		mg/Kg		08/30/22 12:16	08/31/22 21:09	2
o-Xylene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	2
Xylenes, Total	<0.0808	U	0.0808		mg/Kg		08/30/22 12:16	08/31/22 21:09	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		70 - 130				08/30/22 12:16	08/31/22 21:09	2
1,4-Difluorobenzene (Surr)	87		70 - 130				08/30/22 12:16	08/31/22 21:09	2
Method: Total BTEX - Total BTE)	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.0808	U	0.0808		mg/Kg			09/01/22 12:44	
Analyte Total TPH	151	Qualifier	<b>RL</b> 49.9		mg/Kg	D	Prepared	Analyzed 08/23/22 11:36	Dil Fa
			43.3		mg/rtg			00/25/22 11.50	
Method: 8015B NM - Diesel Rang						_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:15	
(GRO)-C6-C10  Diesel Range Organics (Over	151		49.9		mg/Kg		08/22/22 16:33	08/24/22 20:15	
C10-C28)	101		10.0		mg/rtg		00/22/22 10:00	00/2 1/22 20:10	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:15	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	118		70 - 130				08/22/22 16:33	08/24/22 20:15	
o-Terphenyl	116		70 - 130				08/22/22 16:33	08/24/22 20:15	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	mg/Kg	D	Prepared	Analyzed	Dil Fa

**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

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	

**Eurofins Carlsbad** 

Lab Sample ID: 890-2784-32

**Matrix: Solid** 

Lab Sample ID: 890-2784-32

Lab Sample ID: 890-2784-33

**Matrix: Solid** 

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	Organic Con	npounds (GC	(Continued)
	g	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, (

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106	70 - 130	08/30/22 12:16	08/31/22 23:19	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	<0.00403	U	0.00403		mg/Kg			09/01/22 12:44	1

Mothod: 8015 NM -	Diosal Panga	Organice	(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

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	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 18:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 18:06	1
Oll 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	Qualifier	Limits	Prepare	d Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	08/22/22 16	5:33 08/24/22 18:06	1
o-Terphenyl	113		70 - 130	08/22/22 16	5:33 08/24/22 18:06	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	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

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		08/30/22 12:16	08/31/22 23:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	08/31/22 23:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				08/30/22 12:16	08/31/22 23:40	1
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:16	08/31/22 23:40	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		_	09/01/22 12:44	1

Method: 8015 NM - Diesel	Range Organics	(DRO)	(GC)	١
Mictilioa. 00 10 Min - Diesei	Range Organics	(Divo)	$(\mathbf{c})$	ı.

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** 

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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

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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			5.04		mg/Kg			08/29/22 10:52	

**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

	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 BTE)	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
Mothod: 2015 NM Diocal Bangs	Organica (DD)	0) (CC)							
Method: 8015 NM - Diesel Range			RI	MDI	Unit	n	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	Result	Qualifier	RL 49.9	MDL	Unit ma/Ka	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fac
Analyte		Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared		
Analyte	Result   <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9  ge Organics (Di	Qualifier U		MDL MDL	mg/Kg	<u>D</u>	Prepared Prepared		
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			08/23/22 11:36	1
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		Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 20:58	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		Prepared	08/23/22 11:36  Analyzed	1 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		Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 20:58	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  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 20:58  08/24/22 20:58	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   <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 20:58  08/24/22 20:58	1 Dil Fac 1

Lab Sample ID: 890-2784-34

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

Sample Depth: 4.5 - 8

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	955	F2 F1	5.04		mg/Kg			08/29/22 14:49	1

Client Sample ID: SW-45 (0-8')

Date Collected: 08/18/22 00:00

Lab Sample ID: 890-2784-35

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	<0.00201	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 Fac
Total BTEX	0.0568		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	1110		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	79.7		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:32	1
Diesel Range Organics (Over C10-C28)	1030		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:32	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				08/22/22 16:33	08/24/22 19:32	1
o-Terphenyl	99		70 - 130				08/22/22 16:33	08/24/22 19:32	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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 BTE	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	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range			RI	MDI	Unit	n	Prenared	<b>∆</b> nalvzed	Dil Fac
•		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	Result   <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	Result <49.9  ge Organics (Di	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte  Gasoline Range Organics	Result <49.9  ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	=	· · ·	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 (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	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range 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	=	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)	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 08/22/22 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 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 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 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	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	Dil Fac  1  1  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) 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  1  Dil Fac  1

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

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Lab Sample ID: 890-2784-37

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**Matrix: Solid** 

Lab Sample ID: 890-2784-37

Lab Sample ID: 890-2784-38

**Matrix: Solid** 

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 Organic Compound	s (GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92	70 - 130	08/30/22 12:16	09/01/22 01:01	1

Mathad:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401 U	0.00401	ma/Ka			09/01/22 12:44	1

l .		
Mothod: 904E NM Dia	sel Range Organics (DRO) (GC)	١
INICITIOU. OUTS ININI - DIC	sei Kange Organics (DKO) (GC)	,

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

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 21:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 21:41	1
Oll 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

Surrogate	%Recovery	Qualifier	Limits	Prepai	red	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	08/22/22	16:33	08/24/22 21:41	1
o-Terphenyl	112		70 - 130	08/22/22	16:33	08/24/22 21:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifie		MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	558	4.98	mg/Kg	3		08/29/22 15:28	1

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: 8021B -	Volatile Organ	ic Compounds	(GC)
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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 RTF	X - Total RTFX	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 Range	Organics	(DRO)	(GC)
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Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117	50.0	mg/Kg			08/23/22 11:36	1

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Lab Sample ID: 890-2784-38

08/29/22 15:36

Lab Sample ID: 890-2784-39

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

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	Rosult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

4.99

70.5

mg/Kg

**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

Chloride

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 BTEX	( 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)							
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 08/23/22 11:36	Dil Fac
Analyte	Result 264	Qualifier		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result 264 ge Organics (D	Qualifier		MDL	mg/Kg	<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result 264 ge Organics (D	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg			08/23/22 11:36	1
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 264 ge Organics (D	Qualifier  RO) (GC)  Qualifier	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 Diesel Range Organics (Over	Result 264 ge Organics (D Result <50.0	Qualifier  RO) (GC) Qualifier  U	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 08/22/22 16:33	08/23/22 11:36  Analyzed  08/24/22 19:10	Dil Fac
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 264 ge Organics (D Result <50.0	Qualifier  RO) (GC) Qualifier  U	50.0  RL  50.0  50.0		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 19:10  08/24/22 19:10	1 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 264  ge Organics (D) Result <50.0  264 <50.0	Qualifier  RO) (GC) Qualifier U	50.0  RL  50.0  50.0  50.0		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 19:10 08/24/22 19:10 08/24/22 19:10	1 Dil Fac

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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

Lab Sample ID: 890-2784-39

Matrix: Solid

Method: 300.0 - A	nions, Ion Chromatography -	Soluble						
Analyte	Result	Qualifier F	L MDL	_ Unit	D	Prepared	Analyzed	Dil Fac
Chloride	975		.0	mg/Kg			08/29/22 15:59	5

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

Total DTEV

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 02:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 02:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 02:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 02:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				08/30/22 12:16	09/01/22 02:02	1
1,4-Difluorobenzene (Surr)	100		70 - 130				08/30/22 12:16	09/01/22 02:02	1

IOIAI BIEX	<0.00396	U	0.00396		ilig/Kg			09/01/22 12:44	1
Method: 8015 NM - Diesel R	ange 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 (DI	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

0.00000

MDL Unit

Prepared

Analyzed

00/04/22 42:44

Gasoline Range Organics	<49.9	U	49.9	mg/Kg	08/22/22 16:33	08/24/22 22:02	1
(GRO)-C6-C10							
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg	08/22/22 16:33	08/24/22 22:02	1
C10-C28)							
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	08/22/22 16:33	08/24/22 22:02	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130		08/22/22 16:33	08/24/22 22:02	
							,
o-Terphenyl	106		70 - 130		08/22/22 16:33	08/24/22 22:02	1

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2180		25.1		mg/Kg			08/29/22 16:07	5

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

	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 BTEX	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
			RI	MDI	Unit	ח	Prenared	Analyzed	Dil Fa
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
Total TPH	<50.0		50.0	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	
	<50.0	U (GC)		MDL		<u> </u>	<u> </u>		
Total TPH  Method: 8015B NM - Diesel Rang	<50.0  ge Organics (D  Result	RO) (GC) Qualifier	50.0			D	Prepared Prepared		1
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0	RO) (GC) Qualifier	50.0		mg/Kg		<u> </u>	08/23/22 11:36	Dil Fac
Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0  ge Organics (D  Result	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 C10-C28)	<50.0  ge Organics (D  Result  <50.0  <50.0	RO) (GC) Qualifier 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 Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0  ge Organics (D)  Result  <50.0	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 (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	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 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
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) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 <8ecovery 91 95 omatography -	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 <8ecovery 91 95 omatography -	CODE CODE CODE CODE CODE CODE CODE CODE	50.0  RL 50.0  50.0  50.0  Limits 70 - 130		mg/Kg  Unit mg/Kg  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

Date Received: 00/15/22 00:00

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	

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Matrix: Solid

Lab Sample ID: 890-2784-42

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 - 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 Q	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	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00394	U	0.00394		mg/Kg			09/01/22 12:44	1

Method: 8015 NM	l - Diesel Range O	Prognics (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

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		08/23/22 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)									
Oll 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

cucgu.c	, ,	~~~~				,u. y = 0 u
1-Chlorooctane	74		70 - 130		08/23/22 10:46	08/24/22 23:29
o-Terphenyl	76		70 - 130	1	08/23/22 10:46	08/24/22 23:29

Method: 300.0 - Anions, lo	n Chromatography - 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 RTF	X - Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	< 0.00399	U	0.00399		ma/Ka			09/01/22 12:44	1	

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

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	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 06:40	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 06:40	,
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)							
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	<b>RL</b>	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 08/23/22 11:36	Dil Fac
Analyte	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9	Qualifier U		MDL MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result <49.9	Qualifier U RO) (GC) Qualifier	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 Result	Qualifier U  RO) (GC) Qualifier U	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 (D Result <49.9	Qualifier U  RO) (GC) Qualifier U	49.9  RL 49.9		mg/Kg  Unit mg/Kg	_	Prepared 08/23/22 10:46	08/23/22 11:36  Analyzed  08/25/22 00:12	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	_	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
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	49.9  RL 49.9  49.9  49.9		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  08/25/22 00:12  08/25/22 00:12	

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

09/01/22 12:44

Matrix: Solid

N	Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Α	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C	hloride	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

Total BTEX

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	Pocult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

 Method: 8015 NM - Diesel Range Org	anics (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
_									

0.0200

mg/Kg

<0.0200 U

Method: 8015B NM - Diesel Rar Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8		49.8		mg/Kg	_ =	08/23/22 10:46	08/25/22 00:33	1
Diesel Range Organics (Over C10-C28)	7350		49.8		mg/Kg		08/23/22 10:46	08/25/22 00:33	1
Oll Range Organics (Over C28-C36)	1620		49.8		mg/Kg		08/23/22 10:46	08/25/22 00:33	1
Surrogate	%Recovery	Qualifier	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 Chrom	natography -	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	
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	•
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	
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	,
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	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
Mothod: 9015 NM Discal Bange	Organics (DB)	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 08/23/22 11:36	
Analyte Total TPH	Result   <50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte	Result <50.0	Qualifier U				<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		· ·	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 <50.0  ge Organics (Dige Result )	Qualifier U  RO) (GC) Qualifier U	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		Qualifier 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  08/25/22 00:54	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 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 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 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 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	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 08/23/22 10:46 08/23/22 10:46 08/23/22 10:46 Prepared	08/23/22 11:36  Analyzed  08/25/22 00:54  08/25/22 00:54  08/25/22 00:54  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 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 08/25/22 00:54  08/25/22 00:54  Analyzed 08/25/22 00:54	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	Qualifier 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 08/25/22 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

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	

Matrix: Solid

Lab Sample ID: 890-2784-47

Lab Sample ID: 890-2784-47

Lab Sample ID: 890-2784-48

Matrix: Solid

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-60 (0-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Sample Depth: 0 - 13

Method: 8021B - Volatile Or	ganic Compounds	(GC) (Continued)
Michigal COLID Volume Of	gaine compounds	(GG) (GG) (GG)

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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	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

Method: 8015 NM -	. Diesel Range	Organics	(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

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		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,	lon Chromatogra <sub>l</sub>	ohy - Soluble

Analyte		alifier 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

Mothod: 0001D	Valatile Or	aonio Comp	aunda (CC)

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

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

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 Sample ID: SW-61 (8-13")

Da Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

Client Sample ID: SW-61 (8-13')	Lab Sample ID: 890-2784-48
Date Collected: 08/18/22 00:00	Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed <50.0 U \*1 50.0 08/22/22 16:29 08/23/22 20:43 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.0 **Diesel Range Organics (Over** mg/Kg 08/22/22 16:29 08/23/22 20:43 76.1 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 08/22/22 16:29 08/23/22 20:43 %Recovery Qualifier Limits Analyzed Dil Fac Surrogate Prepared 70 - 130 08/22/22 16:29 1-Chlorooctane 97 08/23/22 20:43 o-Terphenyl 88 70 - 130 08/22/22 16:29 08/23/22 20:43 Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride 3730 49.8 mg/Kg 08/29/22 17:39

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

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC)

motification volution of	gaine compounds (	ino compounds (co)							
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 08:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 08:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 08:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 08:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 08:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 08:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	08/30/22 12:2	9 09/01/22 08:02	1
1,4-Difluorobenzene (Surr)	103		70 - 130	08/30/22 12:2	9 09/01/22 08:02	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	

Analyte	Resuit	Qualifier	KL	MIDE	Ullit	U	riepaieu	Allalyzeu	DII Fac	
Total TPH	1570		49.9		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	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/23/22 22:50	1	
(GRO)-C6-C10										
Diesel Range Organics (Over	1570		49.9		mg/Kg		08/22/22 16:29	08/23/22 22:50	1	

Surve mete	0/ Daggerom.	Ovalifian	l inside		Dramarad	Analyzad	Dil 5
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	08/22/22 16:29	08/23/22 22:50	1
Diesel Range Organics (Over C10-C28)	1570		49.9	mg/Kg	08/22/22 16:29	08/23/22 22:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	08/22/22 16:29	08/23/22 22:50	1
o-Terphenyl	92		70 - 130	08/22/22 16:29	08/23/22 22:50	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

Client Sample ID: SW-62 (8-13')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 **REMOVED FROM ANALYSIS TABLE**  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	
Chloride	825		5.01		mg/Kg			08/29/22 17:46	1	

Client Sample ID: SW-63 (8-13') Lab Sample ID: 890-2784-50 Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Method: 8021B - Volatile Organic	Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 08:22	
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 08:22	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	102		70 - 130				08/30/22 12:29	09/01/22 08:22	
1,4-Difluorobenzene (Surr)	101		70 - 130				08/30/22 12:29	09/01/22 08:22	
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			09/01/22 12:44	
Analyte Total TPH	<b>Result</b> <49.9	Qualifier U	<b>RL</b> 49.9	MDL	Unit mg/Kg	D	Prepared	Analyzed 08/23/22 11:36	Dil Fa
• •			43.3		mg/itg			00/25/22 11.50	
Method: 8015B NM - Diesel Rang Analyte		RO) (GC) 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	
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	,
5 5 ,									
C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	,
C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <b>%Recovery</b>		49.9		mg/Kg		08/22/22 16:29  Prepared	08/23/22 21:04  Analyzed	
C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane					mg/Kg				Dil Fa
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	%Recovery		Limits		mg/Kg		Prepared	Analyzed	Dil Fa
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	<b>%Recovery</b> 97 89	Qualifier	Limits 70 - 130		mg/Kg		<b>Prepared</b> 08/22/22 16:29	Analyzed 08/23/22 21:04	Dil Fac
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 97 89 omatography -	Qualifier	Limits 70 - 130	MDL	mg/Kg	D	<b>Prepared</b> 08/22/22 16:29	Analyzed 08/23/22 21:04	Dil Fac

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	
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	
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			RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range						_			B.: F
Method: 8015 NM - Diesel Range Analyte		Qualifier	RL	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   <50.0	Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U RO) (GC)	50.0		mg/Kg	=	· ·	08/23/22 11:36	1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Result <50.0  ge Organics (D Result	Qualifier U RO) (GC) Qualifier	50.0	MDL	mg/Kg	<u>D</u>	Prepared	08/23/22 11:36  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg	=	· ·	08/23/22 11:36	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0  ge Organics (D Result	Qualifier U  RO) (GC) Qualifier U *1	50.0		mg/Kg  Unit mg/Kg	=	Prepared	08/23/22 11:36  Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte	Result <50.0  ge Organics (D) Result <50.0	Qualifier U  RO) (GC) Qualifier U *1	50.0 RL 50.0		mg/Kg	=	Prepared 08/22/22 16:29	08/23/22 11:36  Analyzed  08/23/22 23:11	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 <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
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   <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	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   <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 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   <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
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   <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  08/23/22 23:11  Analyzed  08/23/22 23:11	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	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 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  08/23/22 23:11  Analyzed  08/23/22 23:11	1 Dil Fac

Client Sample ID: SW-65 (8-10')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Date Received. 00/13/22 00:00

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	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 11:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:29	09/01/22 11:52	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-2784-52

**Matrix: Solid** 

Lab Sample ID: 890-2784-52

Lab Sample ID: 890-2784-53

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

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 Con	noounds (GC)	(Continued)
motifical collision of gains con	ipodiido (OO)	( Continuou,

Surrogate	%Recovery	Qualifier	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

l .		
Mothod: 904E NM Dia	sel Range Organics (DRO) (GC)	١
INICITIOU. OUTS ININI - DIC	sei Kange Organics (DKO) (GC)	,

Analyte		Result	Qualifier	RL	MDL	Unit	- 1	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 (DRO) (GC)

D Flepaleu	Analyzed	Dil Fac
08/22/22 16:29	08/23/22 23:32	1
08/22/22 16:29	08/23/22 23:32	1
08/22/22 16:29	08/23/22 23:32	1
Prepared	Analyzed	Dil Fac
	08/22/22 16:29 08/22/22 16:29	08/22/22 16:29 08/23/22 23:32 08/22/22 16:29 08/23/22 23:32 08/22/22 16:29 08/23/22 23:32

Surrogate	/ortecovery	Quanner	Lillits	rrepareu	Allalyzeu
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	I	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)

mountain colling and and and		(/							
Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	1	mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Toluene	<0.00198	U	0.00198	1	mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Ethylbenzene	<0.00198	U	0.00198	1	mg/Kg		08/30/22 12:29	09/01/22 12:13	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	1	mg/Kg		08/30/22 12:29	09/01/22 12:13	1
o-Xylene	<0.00198	U	0.00198	1	mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Xylenes, Total	<0.00396	U	0.00396	1	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	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/01/22 12:44	1

	Method: 8015 NM - Diesel	Range Organics (DRO	) (GC)
ı	Michiga. 00 to 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			08/23/22 11:36	1

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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

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	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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	1
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	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	08/24/22 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	1
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

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Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

1.0 L.ID 000.0704.54

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

Lab Sample ID: 890-2784-54

Matrix: Solid

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	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/30/22 12:29	09/01/22 12:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:53	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/30/22 12:29	09/01/22 12:53	1
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
1,4-Difluorobenzene (Surr)	108		70 - 130				08/30/22 12:29	09/01/22 12:53	•
- Method: Total BTEX - Total B1	TEX 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

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	e 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		08/22/22 16:29	08/24/22 00:36	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				08/22/22 16:29	08/24/22 00:36	1
o-Terphenyl	102		70 - 130				08/22/22 16:29	08/24/22 00:36	1

Method: 300.0 - Anions, Ion Chrom	atography -	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 BTEX	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	o Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1890		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	08/23/22 22:07	1
Diesel Range Organics (Over C10-C28)	1890		50.0		mg/Kg		08/22/22 16:29	08/23/22 22:07	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 22:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				08/22/22 16:29	08/23/22 22:07	1
o-Terphenyl	97		70 - 130				08/22/22 16:29	08/23/22 22:07	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	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

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
4-Bromofluorobenzene (Surr)	94		70 - 130				08/30/22 12:29	09/01/22 14:35	20

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Lab Sample ID: 890-2784-57

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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 Organic Compo	unds (GC)	(Continued)
Metrica. 002 rb - Volatile Organic Compo	ullus (OO)	(Continueu)

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 Ra	inge Organics (DRO) (GC)		
Analyto	Pocult Qualifier	DI	MDI Unit

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1770	49.8	mg/Kg			08/23/22 11:36	1

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		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	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95	70 - 130	08/22/22 16:29	08/23/22 22:29	1
o-Terphenyl	89	70 - 130	08/22/22 16:29	08/23/22 22:29	1

Method: 300.0 - Anions, Ion Chromato	graph	<b>y</b> -	Sol	luble	
	_		_		

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)

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	X - Total RTFX	Calculation

Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403 U	J	0.00403		ma/Ka			09/01/22 12:44	1

н	Made al. COAF NIM Diana	D O! (DDO)	(00)
ı	Method: 8015 NM - Diese	Rande Ordanics (DRO)	1 ((=(.)
ı	Michiga. Colo IVIII Dicoc	range Organico (Bra	, , , , ,

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

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Lab Sample ID: 890-2784-58

08/29/22 10:07

# **Client Sample Results**

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-2784-1

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

Chloride

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	08/24/22 00:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:57	1
Oll 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 - 130				08/22/22 16:29	08/24/22 00:57	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

24.9

1460

mg/Kg

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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/NA

atrix: Solid				Prep Type: Total/N
				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2784-1	BH-120 (8')	120	96	
390-2784-1 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	
390-2784-4	BH-159 (8')	107	80	
390-2784-5	BH-162 (8')	121	89	
390-2784-6	BH-164 (8')	114	100	
390-2784-7	BH-166 (8')	115	90	
390-2784-8	BH-167 (8')	106	90	
390-2784-9	BH-168 (5')	120	94	
390-2784-10	BH-169 (5')	128	84	
390-2784-11	BH-170 (5')	130	87	
390-2784-12	BH-171 (5')	124	84	
390-2784-13	BH-172 (6')	124	80	
390-2784-14	BH-173 (6')	123	90	
390-2784-15	BH-174 (6')	130	81	
390-2784-16	BH-175 (4.5')	113	92	
390-2784-17	BH-176 (4.5')	116	91	
390-2784-18	BH-177 (4.5')	117	93	
390-2784-19	BH-178 (4.5')	117	88	
390-2784-20	BH-179 (4.5')	119	90	
390-2784-21	BH-180 (4.5')	94	106	
390-2784-21 MS	BH-180 (4.5')	97	105	
390-2784-21 MSD	BH-180 (4.5')	98	103	
890-2784-22	BH-181 (4.5')	90	105	
390-2784-23	BH-182 (4.5')	93	108	
390-2784-24	BH-183 (4.5')	91	108	
390-2784-25	BH-184 (4.5')	93	109	
390-2784-26	BH-185 (4.5')	95	110	
390-2784-27	BH-186 (4.5')	91	108	
890-2784-28	BH-187 (4.5')	93	107	
390-2784-29	BH-188 (4.5')	96	106	
390-2784-30	BH-189 (4.5')	88	109	
390-2784-31	SW-38 (4.5-13')	100	87	
390-2784-32	SW-42 (4.5-8')	89	106	
390-2784-33	SW-43 (6-8')	95	108	
390-2784-34	SW-44 (4.5-8')	95	97	
390-2784-35	SW-45 (0-8')	90	97	
390-2784-36	SW-46 (0-5')	103	99	
390-2784-37	SW-47 (0-5')	93	92	
390-2784-38	SW-48 (6-8')	99	92 97	
390-2784-39	SW-49 (4.5-6')	99	104	
390-2784-40	SW-53 (0-8')	99 95	104	
390-2784-40 390-2784-41	SW-53 (0-6 ) SW-54 (0-4.5')	94	100	
390-2784-41 MS				
	SW-54 (0-4.5')	100	103	
390-2784-41 MSD	SW-54 (0-4.5')	94	98	
390-2784-42	SW-55 (4.5-8')	92	100	

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	
890-2784-56	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)

Prop Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	ОТРН1	referred Surrogate Recovery (Acceptance Limits)
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')	96 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')	114	115	
890-2784-47	SW-60 (0-13')	87	91	
890-2784-48	SW-61 (8-13')	97	88	
890-2784-49	SW-62 (8-13')	97	92	
890-2784-50	SW-63 (8-13')	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				

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Client: Tetra Tech, Inc. Job ID: 890-2784-1 SDG: Lea County NM Project/Site: Kaiser SWD

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	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	08/31/22 23:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	08/31/22 23:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	08/31/22 23:38	1

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

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-33358/1-A

Matrix: Solid

Analysis Batch: 33411

Prep Type: Total/NA

Prep Batch: 33358

	<b>Spike</b>	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 Q	ualifier	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

<b>Client Sample ID</b>	: Lab Control	Sample	Dup
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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 Q	ualifier	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		ma/Ka		87	70 - 130	

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 %Rec Limits Ethylbenzene <0.00198 U 0.101 0.09489 94 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00397 U 0.201 0.1923 mg/Kg 96 70 - 130 <0.00198 U 0.101 0.1183 o-Xylene 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	

Lab Sample ID: 890-2784-1 MSD Client Sample ID: BH-120 (8') **Matrix: Solid** Prep Type: Total/NA Prep Batch: 33358

**Analysis Batch: 33411** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00198	U	0.100	0.08882		mg/Kg		89	70 - 130	1	35
Toluene	<0.00198	U	0.100	0.08598		mg/Kg		86	70 - 130	1	35
Ethylbenzene	<0.00198	U	0.100	0.09412		mg/Kg		94	70 - 130	1	35
m-Xylene & p-Xylene	<0.00397	U	0.200	0.1897		mg/Kg		95	70 - 130	1	35
o-Xylene	<0.00198	U	0.100	0.1170		mg/Kg		117	70 - 130	1	35

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 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
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Prep Type: Total/NA

Prep Batch: 33361

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier U	nit D	%Rec	Limits	
Benzene	0.100	0.1051	m	g/Kg	105	70 - 130	
Toluene	0.100	0.1026	m	g/Kg	103	70 - 130	
Ethylbenzene	0.100	0.09908	m	g/Kg	99	70 - 130	
m-Xylene & p-Xylene	0.200	0.1821	m	g/Kg	91	70 - 130	

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-33361/1-A

Matrix: Solid

Analysis Batch: 33465

Spike LCS LCS

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	
o-Xylene		0.100	0.09507		mg/Kg		95	70 - 130	 

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-33361/2-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 33465

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
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
o-Xylene	0.100	0.07842		mg/Kg		78	70 - 130	19	35

	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

Matrix: Solid

Client Sample ID: BH-180 (4.5')

Prep Type: Total/NA

Analysis Batch: 33465 Prep Batch: 33361

	Sample	Sample	Spike	MS	MS				%Rec	
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 Qua	lifier Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: 890-2784-21 MSD

Matrix: Solid

Client Sample ID: BH-180 (4.5')

Prep Type: Total/NA

Analysis Bataly 22465

Analysis Batch: 33465

Prep Batch: 33361

Sample Sample Sample Spike MSD MSD MSD %Rec RPD

	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	0.1083		mg/Kg		108	70 - 130	0	35
Toluene	<0.00199	U	0.100	0.1076		mg/Kg		107	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.1023		mg/Kg		102	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1866		mg/Kg		93	70 - 130	0	35
o-Xylene	<0.00199	U	0.100	0.09828		mg/Kg		98	70 - 130	1	35

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Prep Batch: 33361

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### 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

**Matrix: Solid** 

Analysis Batch: 33465

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33362

мв мв

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 05:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 05:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 05:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 05:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 05:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:29	09/01/22 05:11	1

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

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 90 70 - 130

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') Lab Sample ID: 890-2784-41 MS

Analysis Batch: 33465

**Matrix: Solid** Prep Type: Total/NA

Prep Batch: 33362

	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

Lab Sample ID: 890-2784-41 MSD Client Sample ID: SW-54 (0-4.5')

**Matrix: Solid** 

**Analysis Batch: 33465** 

Prep Type: Total/NA

Prep Batch: 33362

	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	0.09574		mg/Kg		96	70 - 130	7	35
Toluene	<0.00202	U	0.0998	0.09569		mg/Kg		96	70 - 130	4	35
Ethylbenzene	<0.00202	U	0.0998	0.08913		mg/Kg		89	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1611		mg/Kg		81	70 - 130	0	35
o-Xylene	<0.00202	U	0.0998	0.08747		mg/Kg		88	70 - 130	1	35

MSD MSD

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** 

Prep Type: Total/NA

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

MB MB

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

### QC Sample Results

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

Lab Sample ID: LCS 880-32669/2-A

**Matrix: Solid** 

Analysis Batch: 32586

**Matrix: Solid** 

Analysis Batch: 32586

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32669

	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 13:43	08/22/22 21:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/22/22 21:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/22/22 21:31	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130	08/22/22 13:43	08/22/22 21:31	1
o-Terphenyl	79		70 - 130	08/22/22 13:43	08/22/22 21:31	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 32669

LCS LCS Spike Added Result Qualifier Analyte Unit D %Rec Limits 1000 719.7 72 Gasoline Range Organics mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 892.1 mg/Kg 89 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	73		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: LCSD 880-32669/3-A

**Matrix: Solid** 

Analysis Batch: 32586

Prep Type: Total/NA

Prep Batch: 32669

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	 1000	724.7		mg/Kg		72	70 - 130	1	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	912.3		mg/Kg		91	70 - 130	2	20	
C10 C20)										

C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	74	70 - 130
o-Terphenyl	86	70 - 130

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

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U F1	999	522.3	F1	mg/Kg		50	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U F1	999	558.6	F1	mg/Kg		56	70 - 130	
C10-C28)										

Prep Type: Total/NA

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 Batch: 32669 Sample Sample Spike MSD MSD %Rec RPD Qualifier Analyte Result Qualifier Added Result Unit D %Rec Limits RPD Limit <49.9 UF1 998 552.9 F1 53 70 - 1306 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 998 578.2 F1 58 <49.9 U F1 mg/Kg 70 - 1303 20

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 52 S1-70 - 130 1-Chlorooctane o-Terphenyl 56 S1-70 - 130

Lab Sample ID: MB 880-32713/1-A Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 32730** 

Prep Batch: 32713 MB MB MDL Unit Result Qualifier RL D Prepared Analyzed Dil Fac

Analyte Gasoline Range Organics <50.0 U 50.0 mg/Kg 08/22/22 16:29 08/23/22 15:45 (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 U 50.0 08/23/22 15:45 OII Range Organics (Over C28-C36) 08/22/22 16:29 mg/Kg

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 98 70 - 130 08/22/22 16:29 08/23/22 15:45 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** Prep Type: Total/NA Analysis Batch: 32730 Prep Batch: 32713

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	819.0		mg/Kg		82	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	925.9		mg/Kg		93	70 - 130	
C10-C28)								

LCS LCS %Recovery Qualifier Surrogate Limits 1-Chlorooctane 516 S1+ 70 - 130

484 S1+

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70 - 130

o-Terphenyl

Lab Sample ID: LCSD 880-32713/3-A

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)

Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 32730 Prep Batch: 32713

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1054	*1	mg/Kg		105	70 - 130	25	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	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** Prep Type: Total/NA

**Analysis Batch: 32730** Prep Batch: 32713

	Sample	Sample	Spike	IVIO	IVIS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	770.6		mg/Kg		76	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	934.1		mg/Kg		91	70 - 130	

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 Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 32730 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 78 20 Gasoline Range Organics 789.4 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

MB MB

Lab Sample ID: MB 880-32714/1-A Client Sample ID: Method Blank **Matrix: Solid** 

Prep Type: Total/NA **Analysis Batch: 32806** Prep Batch: 32714

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 08/22/22 16:33 08/24/22 11:55 mg/Kg (GRO)-C6-C10 50.0 08/22/22 16:33 08/24/22 11:55 Diesel Range Organics (Over <50.0 U mg/Kg C10-C28) 08/22/22 16:33 <50.0 U 50.0 OII Range Organics (Over C28-C36) mg/Kg 08/24/22 11:55

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

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

Job ID: 890-2784-1

SDG: Lea County NM

Prep Batch: 32714

Prep Type: Total/NA

6

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MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepare	d Analyzed	I Dil Fac
	1-Chlorooctane	96		70 - 130	08/22/22 1	6:33 08/24/22 11	:55 1
l	o-Terphenyl	96		70 - 130	08/22/22 1	6:33 08/24/22 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** 

**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

1078

mg/Kg

108

70 - 130

1000

Diesel Range Organics (Over C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	568	S1+	70 - 130
o-Terphenvl	565	S1+	70 - 130

Lab Sample ID: 890-2784-21 MS Client Sample ID: BH-180 (4.5')

**Matrix: Solid** 

Prep Type: Total/NA Analysis Batch: 32806 Prep Batch: 32714

ı		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	
ı	040,000)										

C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	89		70 - 130

Client Sample ID: BH-180 (4.5')

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: 890-2784-21 MSD

Matrix: Solid									•	Type: To	
Analysis Batch: 32806									Pre	p Batch:	32714
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Δnalvte	Result	Qualifier	habbΔ	Result	Qualifier	Unit	n	%Rec	l imite	RPD	Limit

	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 %Recovery Qualifier Limits Surrogate

1-Chlorooctane 70 - 130 109 o-Terphenyl 88 70 - 130

**Analysis Batch: 32808** 

.ab Sample ID: MB 880-32774/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA

Prep Batch: 32774

мв мв Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 08/24/22 16:17 Gasoline Range Organics <50.0 U 50.0 mg/Kg 08/23/22 10:46 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 08/23/22 10:46 08/24/22 16:17 OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 08/23/22 10:46 08/24/22 16:17

MB MB Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 1-Chlorooctane 94 70 - 130 08/23/22 10:46 08/24/22 16:17 o-Terphenyl 94 70 - 130 08/23/22 10:46 08/24/22 16:17

Lab Sample ID: LCS 880-32774/2-A

Matrix: Solid					Prep Type: Tota				
Analysis Batch: 32808							Prep	p Batch: 32774	
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
		1005				100			

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1065		mg/Kg		106	70 - 130	 
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1056		mg/Kg		106	70 - 130	
C10-C28)								

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 575 S1+ 70 - 130 o-Terphenyl 577 S1+

Lab Sample ID: LCSD 880-32774/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid Analysis Batch: 32808** 

7 mary 510 Datom 62000								- Dato	<b></b>	
	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)

**Eurofins Carlsbad** 

**Client Sample ID: Lab Control Sample** 

Prep Batch: 32774

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-2784-1 SDG: Lea County NM

# Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

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

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 527 S1+ 70 - 130 o-Terphenyl 538 S1+ 70 - 130

LCSD LCSD

Lab Sample ID: 880-18428-A-1-C MS

**Matrix: Solid** 

**Analysis Batch: 32808** 

Chefft 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	

MS MS Surrogate %Recovery Qualifier Limits 96 70 - 130 1-Chlorooctane 85 70 - 130 o-Terphenyl

Lab Sample ID: 880-18428-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 32808** 

Prep Type: Total/NA

Prep Batch: 32774

Sample Sample MSD MSD Spike Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits RPD Limit D Gasoline Range Organics <49.9 U 998 953.0 mg/Kg 92 70 - 130 9 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 998 885.0 mg/Kg 89 70 - 130 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 84 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 MDL Unit Dil Fac Analyte Result Qualifier RL D 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 Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 33167** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Limits Unit Chloride 250 248.2 mg/Kg 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') **Prep Type: Soluble** 

**Matrix: Solid** 

**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** 

**Matrix: Solid** 

**Analysis Batch: 33168** 

LCS LCS 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 RPD 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** 

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** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: BH-183 (4.5')

Client Sample ID: BH-183 (4.5')

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

**Client Sample ID: SW-44 (4.5-8')** 

**Client Sample ID: SW-44 (4.5-8')** 

Client Sample ID: SW-57 (6-8')

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**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: 890-2784-24 MS

Matrix: Solid

Analysis Batch: 33168

	Sample	Sample	Spike	Spike MS MS			%Rec				
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	1050		249	1247	4	mg/Kg		78	90 - 110		

Lab Sample ID: 890-2784-24 MSD

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

Matrix: Solid

Analysis Batch: 33169

MB MB

Analyte	Result	Qualifier	RL	MDL U	Init	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	m	ng/Kg			08/29/22 14:25	1

Lab Sample ID: LCS 880-32584/2-A

Matrix: Solid

**Analysis Batch: 33169** 

	<b>Spike</b>	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

Matrix: Solid

Analysis Batch: 33169

	Spike	LCSD	LCSD				70 KeC		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

Matrix: Solid

Analysis Batch: 33169

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	955	F2 F1	252	1151	F1	ma/Ka		78	90 - 110	

Lab Sample ID: 890-2784-34 MSD

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

Released to Imaging: 9/1/2023 3:31:23 PM

Matrix: Solid

Analysis Batch: 33169

Analysis Batch: 33169										
	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	

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Client Sample ID: SW-57 (6-8')

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: SW-67 (8-10')

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: 890-2784-44 MSD

**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	65.5		250	322.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: MB 880-32585/1-A

**Matrix: Solid** 

**Analysis Batch: 33170** 

MB	ME

MDL Unit Dil Fac Analyte Result Qualifier RL 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	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	250.5		mg/Kg	_	100	90 - 110	

Lab Sample ID: LCSD 880-32585/3-A

**Matrix: Solid** 

Analysis Batch: 33170

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	248.0		mg/Kg		99	90 - 110	1	20

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		mg/Kg		105	90 - 110	

Lab Sample ID: 890-2784-54 MSD

**Matrix: Solid** 

Analysis Batch: 33170

7 many one Battern College												
	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	

**Eurofins Carlsbad** 

Client Sample ID: SW-67 (8-10') **Prep Type: Soluble** 

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 Batcl
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	
390-2784-30	BH-189 (4.5')	Total/NA	Solid	5035	
390-2784-31	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	

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Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

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 Batc
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

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Client: Tetra Tech, Inc.

Job ID: 890-2784-1

Project/Site: Kaiser SWD

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 Batc
890-2784-21	BH-180 (4.5')	Total/NA	Solid	8021B	3336
890-2784-22	BH-181 (4.5')	Total/NA	Solid	8021B	3336
890-2784-23	BH-182 (4.5')	Total/NA	Solid	8021B	3336
890-2784-24	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
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8021B	3336
890-2784-58	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

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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 Batcl
890-2784-1	BH-120 (8')	Total/NA	Solid	Total BTEX	_
890-2784-2	BH-124 (8')	Total/NA	Solid	Total BTEX	
890-2784-3	BH-132 (8')	Total/NA	Solid	Total BTEX	
890-2784-4	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	
890-2784-22	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	
890-2784-28	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	

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Job ID: 890-2784-1 Client: Tetra Tech, Inc. 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 Batcl
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	

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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	

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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 Batc
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	

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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 Batc
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	
890-2784-11	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	
890-2784-21	BH-180 (4.5')	Total/NA	Solid	8015 NM	
890-2784-22	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	
890-2784-26	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	
890-2784-30	BH-189 (4.5')	Total/NA	Solid	8015 NM	
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8015 NM	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8015 NM	
890-2784-33	SW-43 (6-8')	Total/NA	Solid	8015 NM	
890-2784-34	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	
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8015 NM	
890-2784-40	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				8015 NM	
890-2784-43	SW-56 (0-4.5') SW-57 (6-8')	Total/NA Total/NA	Solid Solid	8015 NM	
890-2784-45	SW-57 (6-6) SW-58 (6-8')	Total/NA	Solid	8015 NM	
890-2784-45	SW-59 (6-8')	Total/NA	Solid	8015 NM	

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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

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 Batcl
890-2784-14	BH-173 (6')	Soluble	Solid	DI Leach	_
890-2784-15	BH-174 (6')	Soluble	Solid	DI Leach	
390-2784-16	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	
390-2784-19	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	
90-2784-22	BH-181 (4.5')	Soluble	Solid	DI Leach	
90-2784-23	BH-182 (4.5')	Soluble	Solid	DI Leach	
90-2784-24	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	
90-2784-29	BH-188 (4.5')	Soluble	Solid	DI Leach	
90-2784-30	BH-189 (4.5')	Soluble	Solid	DI Leach	
90-2784-31	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	

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 Batcl
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	

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD 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
890-2784-27	BH-186 (4.5')	Soluble	Solid	300.0	32583
890-2784-28	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

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

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13

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-1

Client Sample ID: BH-120 (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 5035 33358 Total/NA Prep 5.04 g 5 mL 08/30/22 12:01 EL **EET MID** 8021B MR Total/NA Analysis 1 5 mL 5 mL 33411 09/01/22 00:00 **EET MID** Total/NA Analysis Total BTEX 33551 09/01/22 12:44 SM **EET MID** Total/NA 8015 NM 32780 08/23/22 11:36 **EET MID** Analysis 1 SM Total/NA 8015NM Prep 32669 08/22/22 13:43 EET MID Prep 10.02 g 10 mL DM Total/NA Analysis 8015B NM 32586 08/22/22 22:36 SM **EET MID** Soluble DI Leach 4.99 g 50 mL 32582 08/21/22 19:23 SMC EET MID Leach Soluble Analysis 300.0 5 0 mL 0 mL 33167 08/29/22 04:12 СН **EET MID** 

Lab Sample ID: 890-2784-2

Date Collected: 08/18/22 00:00

Client Sample ID: BH-124 (8')

**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

**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	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

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	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

Client Sample ID: BH-159 (8')

Date Collected: 08/18/22 00:00

Lab Sample ID: 890-2784-4 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	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 **Matrix: Solid** 

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	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 MIC

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	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 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

Lab Sample ID: 890-2784-7 Client Sample ID: BH-166 (8')

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

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**Matrix: Solid** 

Job ID: 890-2784-1 SDG: Lea County NM

Project/Site: Kaiser SWD Client Sample ID: BH-166 (8')

Client: Tetra Tech, Inc.

Lab Sample ID: 890-2784-7

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
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

Lab Sample ID: 890-2784-8

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Client Sample ID: BH-167 (8')

**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	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

Date Collected: 08/18/22 00:00

Client Sample ID: BH-168 (5')

**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 **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	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

Job ID: 890-2784-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-170 (5') Lab Sample ID: 890-2784-11

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 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

Client Sample ID: BH-171 (5') Lab Sample ID: 890-2784-12

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 5.05 g 5 mL 33358 08/30/22 12:01 EL EET MID Total/NA 8021B 5 mL **EET MID** Analysis 1 5 mL 33411 09/01/22 04:46 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 32669 Prep 8015NM Prep 10.01 g 08/22/22 13:43 DM **EET MID** 10 mL Total/NA Analysis 8015B NM 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 0 mL 0 mL 33167 08/29/22 06:10 СН **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 MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 06:17	CH	EET MID

Lab Sample ID: 890-2784-14 Client Sample ID: BH-173 (6') Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

Γ	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

Job ID: 890-2784-1 SDG: Lea County NM

**EET MID** 

**Matrix: Solid** 

**EET MID** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-14

Client Sample ID: BH-173 (6') 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 Analysis 8015 NM 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 32586 08/23/22 04:17 SM **EET MID** 

5.05 g

0 mL

1

1

08/29/22 07:20 СН **EET MID** Lab Sample ID: 890-2784-15

SMC

32583

33168

33168

50 mL

0 mL

0 mL

08/21/22 19:29

08/29/22 07:44

СН

Lab Sample ID: 890-2784-16

Client Sample ID: BH-174 (6')

Leach

Analysis

DI Leach

300.0

300.0

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Soluble

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			5.09 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

0 mL

1

**Client Sample ID: BH-175 (4.5')** 

Analysis

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	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

**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	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 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

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Lab Sample ID: 890-2784-17

**Matrix: Solid** 

Client Sample ID: BH-176 (4.5')

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 Lab Sample ID: 890-2784-17

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			4.95 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

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			4.96 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 06:48	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			10.03 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 05:42	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 08:07	CH	EET MID

Client Sample ID: BH-178 (4.5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

.ab Sample II	D: 890-2784-19
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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	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')** 

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab Samp	ole ID:	890-2784-20 Matrix: Solid
08/29/22 08:31	СН	EET MID
00/21/22 10:20	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

Job ID: 890-2784-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-180 (4.5')

Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-21 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			5.03 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 1 **EET MID** 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 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 14:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 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 09:02	CH	EET MID

Client Sample ID: BH-183 (4.5')

Date Collected: 08/18/22 00:00 **Matrix: Solid** 

Date Received: 08/19/22 08:00

Γ	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** 

Lab Sample ID: 890-2784-24

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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

**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			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

Client Sample ID: BH-184 (4.5')

Lab Sample ID: 890-2784-25

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			5.00 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')

Date Collected: 08/18/22 00:00

Lab Sample ID: 890-2784-26

Matrix: Solid

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	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

Client Sample ID: BH-186 (4.5') Lab Sample ID: 890-2784-27

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

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**Matrix: Solid** 

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9/1/2022

**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	Type	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 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			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

	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	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** 

**Matrix: Solid** 

Job ID: 890-2784-1 Client: Tetra Tech, Inc. 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

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 33465 08/31/22 23:19 **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 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	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 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

Lab Sample	ID: 890-2784-34
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**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

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-34

**Client Sample ID: SW-44 (4.5-8')** Date Collected: 08/18/22 00:00

Leach

Analysis

300.0

Date Received: 08/19/22 08:00

Soluble

Soluble

**Matrix: Solid** 

**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 8015 NM Analysis 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 32806 08/24/22 20:58 SM EET MID 1 DI Leach

1

Lab Sample ID: 890-2784-35

SMC

СН

Client Sample ID: SW-45 (0-8') Date Collected: 08/18/22 00:00

4.96 g

0 mL

32584

33169

50 mL

0 mL

08/21/22 19:35

08/29/22 14:49

**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	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	Туре	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

Client Sample ID: SW-47 (0-5') Lab Sample ID: 890-2784-37

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			4.99 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	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 21:41	SM	EET MID

Job ID: 890-2784-1 SDG: Lea County NM

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Lab Sample ID: 890-2784-37

Client Sample ID: SW-47 (0-5')
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
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

Lab Sample ID: 890-2784-38

ab Gample 1D. 030-2704-30

Matrix: Solid

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00

Client Sample ID: SW-48 (6-8')

	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	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')

Lab Sample ID: 890-2784-39

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			5.04 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')

Lab Sample ID: 890-2784-40

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			5.03 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

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**Client Sample ID: SW-54 (0-4.5')** 

Date Collected: 08/18/22 00:00 Date Received: 08/19/22 08:00 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
Total/NA	Prep	5035			5.08 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 06:00	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			10.01 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/24/22 23:29	AJ	EET MIC
Soluble	Leach	DI Leach			4.97 g	50 mL	32584	08/21/22 19:35	SMC	EET MIC
Soluble	Analysis	300.0		5	0 mL	0 mL	33169	08/29/22 16:23	CH	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	Туре	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	0: 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

Client Sample ID: SW-57 (6-8')

Lab Sample ID: 890-2784-44

Matrix: Solid

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	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

Lab Sample ID: 890-2784-45 Client Sample ID: SW-58 (6-8')

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	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		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

Lab Sample ID: 890-2784-47 Client Sample ID: SW-60 (0-13')

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	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

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**Matrix: Solid** 

**Matrix: Solid** 

#### Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 890-2784-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-60 (0-13')

Date Collected: 08/18/22 00:00

Lab Sample ID: 890-2784-47 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
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 **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			5.03 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')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Lab	Sam	pie	ID:	890-	2/	84-	49	

**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 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	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

Job ID: 890-2784-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc.

Lab Sample ID: 890-2784-51

Matrix: Solid

Matrix: Solid

Client Sample ID: SW-64 (8-10')

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 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	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 23:11	AJ	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 18:01	CH	EET MID

Client Sample ID: SW-65 (8-10') Lab Sample ID: 890-2784-52

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			5.00 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

Date

ient Sample ID: SW-66 (8-10')	Lab Sample ID: 890-2784-53
te Collected: 08/18/22 00:00	Matrix: Solid
te 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			5.05 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

	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	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

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**Matrix: Solid** 

Lab Sample ID: 890-2784-54

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	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			10.00 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
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 **Matrix: Solid** 

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			5.04 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 **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			5.03 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

Released to Imaging: 9/1/2023 3:31:23 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	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** 

9/1/2022

**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

	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

**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	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

## **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	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.	•	, , ,	.,	
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	-,,,	
9 ,		Matrix Solid	Analyte Total TPH		

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## **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

## **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	BH-189 (4.5')	Solid	08/18/22 00:00	08/19/22 08:00	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
890-2784-54	SW-67 (8-10')	Solid	08/18/22 00:00	08/19/22 08:00	8 - 10

## **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:	1/2	Relinguished by											( LABUSE )	ABU		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	4	Alidiysis no
y: Date: Time:	y: Date: Time:	AM122	y: Date: Time:	BH-169 (5')	ВН-168 (5')	ВН-167 (5')	Вн-166 (8')	BH-164 (9')	ВН-162 (8')	ВН-159 (8')	ВН-132 (8')	ВН-124 (8')	Вн-120 (8')		SAMPLE IDENTIFICATION			*tory: Eurofins Xenco	Permian Water Solutions - Dusty McInturff	". Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	Alialysis nequest of cliail of custody necord
Received by:	Received by:	("live 12	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 TI <b>M</b> E	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	•	
Date: Time:	Date: Time:	6	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub> ICE None	<u> </u>	MATRIX PRESERVATIVE METHOD		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Mdland, Texas 79705 Tel (432) 682-4559	OUL OF TRADE HEAA AALDS
Circl 7	Samp	800		×	×	×	×	×	×	×	×	×	×	# CONT FILTERI BTEX 80 TPH TX	ED (Y	ERS (/N) BTE	X 82600	3				AN		
T. O OOA	Sample Temperature	USE ONLY		×	×	×	×	×	×	×	×	×	×	TPH 80 PAH 82 Total Me TCLP Me	15M ( 70C tals A etals /	GRO Ag As E Ag As I S	DRO - ( Ba Cd Cr Ba Cd Cr	Pb Se	Hg			ANALYS 890-2784 Chain		
Special Report Limits or TRRP Report	Rush Charges Authorized	X STANDARD	줐											TCLP Se RCI GC/MS \ GC/MS S PCB's 8 NORM PLM (As	/ol. 8 Semi. 082 /	260B / Vol. 8 608	624	5			Custody	=		
s or TRRP Report	orized			×	×	×	×	×	×	×	×	×	×	Chloride Chloride	S Wate	ulfate er Che	TDS emistry (s	see att	ached I	ist)				9
														Hold			-							

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	Relinquished by:		Relinquish d by:	fant	Relinquished by:	BH-17	BH-17	ВН-17	ВН-17	BH-17	ВН-174 (6')	вн-173 (6')	Вн-172 (6')	BH-171 (5')	BH-170 (5')	( LABUSE )	LAB#			Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:		7	Analysis Request
	Date: Time:		Date: Time:	22/6/18	Date: Time:	BH-179 (4.5)	BH-178 (4.5')	BH-177 (4.5')	BH-176 (4.5')	BH-175 (4.5')	4 (6')	3 (6')	2 (6')	1 (5')	0 (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)201	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	I LIVE COLOR	VEAR: 2020	SAMPLING		Gampier Signature:	1	Project #:		Site Manager			
	Date: Time:		Date: Time:	BE-61.24	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	3	+	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Micland, Texas 79705  Tel (432) 682-4559	
(Circle) HAND DELIVERED	رُ	りつ	Sample Temperature	LAB COR ONLY		×	×	×	×	×	×	×	×	×	×	PAH 8	802 TX10 B015 82700	NER ) (Y/II 1B 05 (E M ( G	N) BTE Ext to	EX 82600 0 C35) - DRO - 0	ORO -				ANALYSIS R			
VERED FEDEX IIPS Tracking#	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH: Same Day 24 hr	N SIANOANO	REMARKS	×	×	×	×	×	×	×	×	×	×	TCLP TCLP RCI GC/MS GC/MS PCB'S NORN	Volat Semi S Vol S Sei 808 M	i Vola i Vola i 820 mi. V i 2 / 60	60B / ol. 8	/ 624 3270C/62		e Hg			REQUEST (Circle or Specify Method			Page
	RRP Report		nr 48 hr 72 hr													Chlori Gener Anion	ral W	/ater	_	emistry (	see at	tached	list)		No.)			2 01 6

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	Relinquished by:		Relinquisked by:	and and	Relinguished by:		IT.		m.		E					( LABUSE )	LAB#		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:		ᆏ	)	Analysis Rec
	Date: Time:			216/18	Date: Time:	BH-189 (4.5)	BH-188 (4.5)	BH-187 (4.5')	BH-186 (4.5')	BH-185 (4.5')	BH-184 (4.5')	BH-183 (4.5')	BH-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 Tecn, Inc.	Takua Taab Ina	Analysis Request of Chain of Custody Record
	Received by:		Received by:	- Comple	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		Call production		Project #:		Site Manager:				
	Date: Time:		V Date: Time:	PC-61-80	Date: Time:	×	×	×	×	×	×	×	×	×	×	WATER SOIL HCL HNO <sub>3</sub> ICE None	2	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Tel (432) 682-4559	Widand, Texas 79705	
(Circle) HAND DELIVERED	5	0,0	Sample Temperature	LAB USE ONLY		×	×	×	×	×		×	×	×	×	# CONT FILTERI BTEX 81 TPH TX TPH 80 PAH 82	ED (Y 021B 1005 (	RS '/N) BTE			MRO)			ANALYSIS				
FEDEX UPS	Special Repor	Rush Charges Authorized	rature RUSH: Same Day	×	REMARKS											Total Me TCLP Me TCLP Vo TCLP Se RCI GC/MS V	tals A etals / platiles emi Vo /ol. 8 Semi.	Ag As s platiles 260B / Vol. 8	Ba Cd Ci	Pb Se				S REQUEST				
Tracking #	Special Report Limits or TRRP Report	s Authorized	eDay 24 hr 48 hr 72 hr			×	×	×	×	×	×	×	×	×	×	NORM PLM (As Chloride Chloride General Anion/C	besto S Wate	s) ulfate er Che		see at	tached	list)	_	Method No.				Page 3 of
																Hold							_					6

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	Nomique ay.	Delinquished by	Relinquished by:	(Kal)	Relinquished by:	S	S	S	S	S	S	S	S	Ø	Ø	( LAB USE )	LAB#		Comments:	Table Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:		큐	)	Analysis Req
		Date: Time:	Date: Time:	A19/2	Date: Time:	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		retra rech, inc.	Tatua Tash Inc	Analysis Request of Chain of Custody Record
		Received by:	Received by:	()(DE)	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			f Sampler Signature:	Project #:		Site Manager:				
		Date: Time:	Date: Time:	たらら	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	Midland, Texas 79705	
(Circle) HAND DELIVERED		しな。	Sample Temperature		AD INCI ONI V		×	×	×	×	×	×	×		×	PAH 8 Total M TCLP N	RED (*) 8021B X1005 015M (*) 270C letals /	Y/N) BTI (Ext to	EX 82600 C C35) - DRO - ( Ba Cd Cr	ORO -	e Hg			ANALYSIS REQUES				
ED FEDEX UPS Tracking#	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH: Same Day 24 nr 46 nr		REMARKS:	×	×	×	×	×	×	×	×	×	×	PCB's NORM PLM (A Chlorid Chlorid	Vol. ( Semi. 8082 / sbeste e le S	3260B Vol. ( 608 os)	/ 624 3270C/62 TDS emistry (		ttached	list)		Cle or Specify Method No.)				Page
	it.		/2 nr	1												Hold												4 of 6

Analysis Reques

9/1/2022

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2784-1 SDG Number: Lea County NM

List Number: 1 Creator: Clifton, Cloe

List Source: Eurofins Carlsbad Login Number: 2784

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: 890-2784-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 08/22/22 08:49 AM

Login Number: 2784 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	

Released to Imaging: 9/1/2023 3:31:23 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: 890-2785-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: Kaiser SWD

For:

eurofins

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Attn: Clair Gonzales



Authorized for release by: 9/1/2022 12:08:19 PM

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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

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### **Definitions/Glossary**

Job ID: 890-2785-1 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** 

F1 MS and/or MSD recovery exceeds control limits. 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** 

Detection Limit (DoD/DOE) DΙ

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)

Method Detection Limit MDL ML Minimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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 RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

#### **Case Narrative**

Job ID: 890-2785-1 Client: Tetra Tech, Inc. 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

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.

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

Lab Sample ID: 890-2785-1 Matrix: Solid

Date Received: 08/19/22 08:00

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)	115		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 BTEX	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 12:38	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 14:48	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		08/22/22 13:39	08/23/22 04:59	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		08/22/22 13:39	08/23/22 04:59	1
									1
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	
Oll Range Organics (Over C28-C36)					mg/Kg				
Oll Range Organics (Over C28-C36)  Surrogate	%Recovery		Limits		mg/Kg		Prepared	Analyzed	Dil Fac
,					mg/Kg				Dil Fac
Oll Range Organics (Over C28-C36)  Surrogate  1-Chloroctane o-Terphenyl	<b>%Recovery</b> 107 96	Qualifier	Limits 70 - 130		mg/Kg		<b>Prepared</b> 08/22/22 13:39	Analyzed 08/23/22 04:59	
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane	%Recovery 107 96 omatography -	Qualifier	Limits 70 - 130	MDL		D	<b>Prepared</b> 08/22/22 13:39	Analyzed 08/23/22 04:59	Dil Fac

Client Sample ID: BH-154 (8')

Date Collected: 08/18/22 12:00

Lab Sample ID: 890-2785-2

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

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Job ID: 890-2785-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-154 (8')

Method: Total BTEX - Total BTEX Calculation

Date Collected: 08/18/22 12:00 Date Received: 08/19/22 08:00

Lab Sample ID: 890-2785-2

Analyzed

08/23/22 05:21

Prepared

08/22/22 13:39

Matrix: Solid

Analyte		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 O	rganics (DR	O) (GC)							

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Total TPH <50.0 U 50.0 08/23/22 14:48 mg/Kg

Method: 8015B NM - Diesel Range Organics (DRO) (GC) RL MDL Analyte Result Qualifier Unit D Prepared Dil Fac Analyzed <50.0 U 50.0 08/22/22 13:39 08/23/22 05:21 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.0 Diesel Range Organics (Over <50.0 U mg/Kg 08/22/22 13:39 08/23/22 05:21 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 08/22/22 13:39 08/23/22 05:21 mg/Kg

Limits

70 - 130

%Recovery

113

Qualifier

104 70 - 130 08/22/22 13:39 08/23/22 05:21 o-Terphenyl Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac

Chloride 88.9 5.03 mg/Kg 08/29/22 10:47 Client Sample ID: SW-41 (6-13') Lab Sample ID: 890-2785-3

Date Received: 08/19/22 08:00

Surrogate

1-Chlorooctane

Date Collected: 08/18/22 12:00 Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene < 0.0403 0.0403 mg/Kg 08/30/22 11:43 09/01/22 00:23 20 Toluene <0.0403 U 0.0403 08/30/22 11:43 09/01/22 00:23 20 mg/Kg 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 <0.0806 U 0.0806 08/30/22 11:43 09/01/22 00:23 20 Xylenes, Total mg/Kg Limits Dil Fac Surrogate Prepared Analyzed

70 - 130 08/30/22 11:43 4-Bromofluorobenzene (Surr) 113 09/01/22 00:23 20 08/30/22 11:43 1,4-Difluorobenzene (Surr) 93 70 - 130 09/01/22 00:23 20

**Method: Total BTEX - Total BTEX Calculation** Analyte MDL Unit Result Qualifier RLD Dil Fac Prepared Analyzed Total BTEX <0.0806 U 0.0806 mg/Kg 09/01/22 12:38

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Dil Fac Unit D Prepared Analyzed Total TPH <49.9 U 49.9 08/23/22 14:48 mg/Kg

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		08/22/22 13:39	08/23/22 05:42	1
	Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:39	08/23/22 05:42	1

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Dil Fac

%Recovery Qualifier

## **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

N	lethod: 8015B NM - Diesel Rang	e Organics (D	rganics (DRO) (GC) (Continued)						
Α	nalyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
C	II Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/22/22 13:39	08/23/22 05:42	1
s	urrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1	-Chlorooctane	109		70 - 130			08/22/22 13:39	08/23/22 05:42	1
0	-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
l	Chloride	707		4.99		mg/Kg			08/29/22 10:56	1

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### **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

				Percent Surrogate Reco
		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

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Client: Tetra Tech, Inc. Job ID: 890-2785-1 SDG: Lea County NM Project/Site: Kaiser SWD

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

	МВ	МВ							
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
Xylenes, 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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33353

	<b>Spike</b>	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 Qual	lifier 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	Control	Sample Dup
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Prep Type: Total/NA

Prep Batch: 33353

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09634		mg/Kg		96	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
m-Xylene & p-Xylene	0.200	0.1926		mg/Kg		96	70 - 130	10	35
o-Xylene	0.100	0.1063		mg/Kg		106	70 - 130	12	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	

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

**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 %Rec Limits 0.101 Ethylbenzene <0.00199 U 0.09276 92 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.202 0.1866 mg/Kg 92 70 - 130 0.101 o-Xylene <0.00199 U 0.1040 70 - 130 mg/Kg 103

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33353

**Matrix: Solid** 

Lab Sample ID: 880-18581-A-21-F MSD

**Analysis Batch: 33469** 

•									•		
	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

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

#### Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-32668/1-A

**Matrix: Solid** 

Analysis Batch: 32588

Client	Sample	ID: Me	thod	Blank
	_	_	_	

Prep Type: Total/NA

Prep Batch: 32668

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Gasoline Range Organics 50.0 08/22/22 13:39 08/22/22 21:31 <50.0 U mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 50.0 <50.0 U 08/22/22 13:39 08/22/22 21:31 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 08/22/22 13:39 08/22/22 21:31 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	08/22/22 13:3	9 08/22/22 21:31	1
o-Terphenyl	96		70 - 130	08/22/22 13:3	9 08/22/22 21:31	1

Lab Sample ID: LCS 880-32668/2-A

**Matrix: Solid** 

**Analysis Batch: 32588** 

Client Sample II	D: Lab Control Sample
	Prep Type: Total/NA

Prep Batch: 32668

	Sı	oike	LCS	LCS				%Rec	
Analyte	Ad	ded	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics		000	962.3		mg/Kg		96	70 - 130	
(GRO)-C6-C10									
Diesel Range Organics (Over	1	000	942.6		mg/Kg		94	70 - 130	
C10 C28)									

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)

LCS LCS

Sample Sample

Result Qualifier

Lab Sample ID: LCS 880-32668/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 32588

Prep Type: Total/NA

Prep Batch: 32668

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** 

**Analysis Batch: 32588** 

Prep Type: Total/NA Prep Batch: 32668

%Rec RPD Limits **RPD** Limit

Spike LCSD LCSD Analyte Added Result Qualifier Unit D %Rec 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

MS MS

Result Qualifier

**Matrix: Solid** 

**Analysis Batch: 32588** 

Prep Type: Total/NA

Prep Batch: 32668

Unit D %Rec Limits

Analyte Gasoline Range Organics <49.9 U F1 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)

Spike Added

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 117 70 - 130 o-Terphenyl 90

Lab Sample ID: 890-2781-A-1-F MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** 

Analysis Batch: 32588

Prep Type: Total/NA

Prep Batch: 32668

	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	998	1415	F1	mg/Kg		138	70 - 130	8	20
(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 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: 890-2785-1 Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32585/1-A

**Matrix: Solid** 

Analysis Batch: 33170

мв мв

MDL Unit Dil Fac 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

**Matrix: Solid** 

**Analysis Batch: 33170** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec 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 %Rec RPD Spike Analyte Added Result Qualifier Unit Limits RPD Limit Chloride 250 248.0 mg/Kg 90 - 110

Lab Sample ID: 890-2784-A-54-B MS

**Matrix: Solid** 

**Analysis Batch: 33170** 

Spike MS MS Sample Sample %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits 252 Chloride 215 478.7 105 90 - 110 mg/Kg

Lab Sample ID: 890-2784-A-54-C MSD

**Matrix: Solid** 

Analysis Batch: 33170

	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

### **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	

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### **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	
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

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Job ID: 890-2785-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-2785-1

Lab Sample ID: 890-2785-2

Matrix: Solid

Matrix: Solid

**Matrix: Solid** 

Client Sample ID: BH-110 (6')

Date Collected: 08/18/22 12:00 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	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')

Date Collected: 08/18/22 12:00

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	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	CH	EET MID

Client Sample ID: SW-41 (6-13')

Lab Sample ID: 890-2785-3 Date Collected: 08/18/22 12:00 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	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	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	, , ,		

### **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** 

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### **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

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	Relinquished by:	Tolling to to a by	Reling to by	Relinquished by:			60				( NBUSE )	LAB#		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:		귬	)	Analysis Req	
	Date: Time:		7 - 8/19/22	Date: Time:			SW-41 (6-13)	BH-154 (8)	BH-110 (8)	140 (B)		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	
OBIGINAL COBY	Received by:		Received by:	Received by:			8/18/2022	8/18/2022	0/18/2022		DATE TIME	YEAR: 2020	SAMPLING		campier oignature:		Project #:		Site Manager:					
	Date: Time:		8 19 2 2 Time:	Date: Time:			×			X	WATER SOIL HCL HNO <sub>3</sub> ICE None	₹	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Fax (432) 682-3946	Tel (432) 682-4559	Midland, Texas 79705	890-2785 C	
(Circle) HAND DELIVERED	7.0 -0.7 7. No. 007	Sample Temperature	880 LAB USE ONLY				×	士		×	TPH TX TPH 80 PAH 82 Total Me	ED ( 021B 1005 15M 70C	ERS Y/N) BTI G(Ext to	EX 8260	ORO - Pb Se	Hg			ANALYSIS REC				785 Chain of Custody	
RED FEDEX UPS Tracking#		narges Autho	RUSH: Same Day 24 hr 48	쭚			×		× >		PCB's 8 NORM PLM (As Chloride Chloride	Vol. Semi	Volatile: 8260B Vol. 8 Vol. 8 V608	7 624 3270C/62 TDS		tached	liet		REQUEST  (Circle or Specify Method No.)				Page	
	Report		48 hr 72 hr								Anion/C			emistry (	<sub>ज्</sub> रु वा	tavile0	not)						1 of1	

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-2785-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad Login Number: 2785 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	N/A	

Released to Imaging: 9/1/2023 3:31:23 PM

<6mm (1/4").

### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-2785-1 SDG Number: Lea County NM

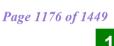
List Source: Eurofins Midland

List Creation: 08/22/22 08:49 AM

Login Number: 2785 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 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

Jessica.Kramer@et.eurofinsus.com

(432)704-5440

**Have a Question?** 

EOL

.....LINKS

**Review your project** results through

Received by OCD: 8/29/2023 3:58:56 PM

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 3:31:23 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.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-2791-1 SDG: Lea County NM

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### **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. U Indicates the analyte was analyzed for but not detected.

**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.

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### **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

	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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 Fac
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)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
						_	i iopaioa	Allalyzeu	DII Fac
Total TPH	921		49.9		mg/Kg	_ <u>-</u>		08/25/22 16:03	
Total TPH : Method: 8015B NM - Diesel Ran		RO) (GC)	49.9		mg/Kg	_ =			
	ge Organics (D	RO) (GC) Qualifier	49.9 <b>RL</b>	MDL			Prepared		1
Method: 8015B NM - Diesel Ran	ge Organics (D	Qualifier					<u> </u>	08/25/22 16:03	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	Qualifier	RL		Unit		Prepared	08/25/22 16:03  Analyzed	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D Result <49.9	Qualifier U	RL 49.9		Unit mg/Kg		Prepared 08/23/22 15:10	08/25/22 16:03  Analyzed  08/25/22 01:58	Dil Fac
Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <49.9	Qualifier U	RL 49.9		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	1 Dil Fac
Method: 8015B NM - Diesel Randanalyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	ge Organics (D Result <49.9	Qualifier U	RL 49.9 49.9 49.9		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 Face
Method: 8015B NM - Diesel Randalyte  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  921  <49.9  %Recovery	Qualifier U	RL 49.9 49.9 49.9 <i>Limits</i>		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 Face
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	ge Organics (D  Result  <49.9  921  <49.9  **Recovery  112  105	Qualifier  U  U  Qualifier	RL 49.9 49.9 49.9 Limits 70 - 130		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

0.0495

mg/Kg

6.36

Date Collected: 08/19/22 12:00

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

**Matrix: Solid** 

### **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**Client Sample ID: BH-190 (4.5')** 

Date Collected: 08/19/22 12:00

Lab Sample ID: 890-2791-2 Matrix: Solid

Date Received: 08/19/22 15:48

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil 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	234		49.9		mg/Kg			08/25/22 16:03	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	<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
(GRO)-C6-C10									
Diesel Range Organics (Over	234		49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				08/23/22 15:10	08/25/22 08:35	1
o-Terphenyl	113		70 - 130				08/23/22 15:10	08/25/22 08:35	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
monitor vital Amono, for one	g. upily								

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	
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
1,4-Difluorobenzene (Surr)  Method: Total BTEX - Total BT			70 - 130				08/31/22 14:40	09/01/22 18:49	:
Method: Total BTEX - Total BT Analyte	EX Calculation	Qualifier	70 - 130  RL 0.00402	MDL	Unit mg/Kg	<u>D</u>	08/31/22 14:40 Prepared	09/01/22 18:49  Analyzed  09/02/22 11:24	Dil Fac
·	EX Calculation Result <0.00402  ge Organics (DR	U	RL			<u>D</u>		Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX Method: 8015 NM - Diesel Ran	EX Calculation Result <0.00402  ge Organics (DR	U (GC)	RL		mg/Kg	<u> </u>	Prepared	Analyzed 09/02/22 11:24	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte	EX Calculation Result <0.00402  ge Organics (DRO Result 1800	O) (GC) Qualifier	RL		mg/Kg	<u> </u>	Prepared	Analyzed 09/02/22 11:24 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 <0.00402  ge Organics (DR) Result 1800  inge Organics (D	O) (GC) Qualifier	RL		mg/Kg  Unit mg/Kg	<u> </u>	Prepared	Analyzed 09/02/22 11:24 Analyzed	Dil Fac
Method: Total BTEX - Total BT Analyte Total BTEX  Method: 8015 NM - Diesel Ran Analyte Total TPH	EX Calculation Result <0.00402  ge Organics (DR) Result 1800  inge Organics (D	O) (GC) Qualifier  RO) (GC) Qualifier	RL 0.00402 RL 50.0	MDL	mg/Kg  Unit mg/Kg	<u></u>	Prepared Prepared	Analyzed 09/02/22 11:24  Analyzed 08/25/22 16:03	Dil Fac

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 - Soluble Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Chloride 25.2 08/24/22 15:49 249 mg/Kg

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** 

Method: 8021B - Volatile Orga	inic Compounds (	(GC)							
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 A-Diffuorobenzene (Surr)	103		70 130				08/31/22 14:40	00/01/22 10:00	1

=	<del>-</del>			-	
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
Г					

Method:	lotal B I EX	- Iotal BIEX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	ט	Prepared	Anaiyzed	DII Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/02/22 11:24	1

wethod: 8015 NW - Diesel Range Organic	<b>S</b> (	DKU	) (4	<b>3</b> C)
	_		_	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2050	49.9	mg/Kg			08/25/22 16:03	1

monious concentrating c	othour of the Property of Surios (Prop										
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											
Diesel Range Organics (Over	2050		49.9		mg/Kg		08/23/22 15:10	08/25/22 03:02	1		
C10-C28)											
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 03:02	1		

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	08/23/22 15:10	08/25/22 03:02	1
o-Terphenyl	95		70 - 130	08/23/22 15:10	08/25/22 03:02	1

Method: 300.0 - Anions	, Ion Chromato	graphy - 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

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

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
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

Client: Tetra Tech, Inc. Job ID: 890-2791-1 SDG: Lea County NM Project/Site: Kaiser SWD

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33466/5-A

**Matrix: Solid** Analysis Batch: 33557 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33466

	MB	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

мв мв

Surrogate	%Recovery Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78	70 - 130	08/31/22	2 14:40	09/01/22 18:00	1
1,4-Difluorobenzene (Surr)	116	70 - 130	08/31/22	2 14:40	09/01/22 18:00	1

Lab Sample ID: LCS 880-33466/1-A

Matrix: Solid

Analysis Batch: 33557

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33466

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1098		mg/Kg		110	70 - 130	
Toluene	0.100	0.1103		mg/Kg		110	70 - 130	
Ethylbenzene	0.100	0.1076		mg/Kg		108	70 - 130	
m-Xylene & p-Xylene	0.200	0.1975		mg/Kg		99	70 - 130	
o-Xylene	0.100	0.1037		mg/Kg		104	70 - 130	

LCS LCS

Surrogate	%Recovery Quali	ifier Limits
4-Bromofluorobenzene (Surr)	94	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: LCSD 880-33466/2-A

Matrix: Solid

Analysis Batch: 33557

**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	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	

### QC Sample Results

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

Analysis Batch: 33557

Prep Batch: 33466 Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit Analyte babbA Result Qualifier Unit Limits Benzene <0.00200 U 0.0994 0.09702 mg/Kg 98 70 - 130 4 35 0.07575 76 Toluene <0.00200 U 0.0994 mg/Kg 70 - 130 9 35 Ethylbenzene <0.00200 UF1 0.0994 0.05323 F1 54 70 - 130 11 35 mg/Kg 0.199 0.09324 F1 47 70 - 130 35 m-Xylene & p-Xylene <0.00399 UF1 mg/Kg 10 0.0994 <0.00200 U F1 0.05060 F1 51 70 - 130 12 o-Xylene mg/Kg

_		MSD	
Surrogate	%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 **Prep Type: Soluble Matrix: Solid** 

**Analysis Batch: 32797** 

١		MB	MB							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Į	Chloride	<5.00		5.00		mg/Kg			08/24/22 12:02	1

Lab Sample ID: LCS 880-32736/2-A Client Sample ID: Lab Control Sample Matrix: Solid **Prep Type: Soluble** 

**Analysis Batch: 32797** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Limits Unit %Rec Chloride 250 243.9 mg/Kg 98 90 - 110

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 %Rec Limits RPD Limit Analyte Unit D Chloride 250 243.8 98 90 - 110 20 mg/Kg

Released to Imaging: 9/1/2023 3:31:23 PM

### **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

### **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 Batch
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.

Job ID: 890-2791-1

Project/Site: Kaiser SWD

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

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	33466	08/31/22 14:40	MR	EET MID
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 MID
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 01:58	SM	EET MID
Soluble	Leach	DI Leach			5,05 g	50 mL	32736	08/23/22 09:11	KS	EET MID
Soluble	Analysis	300.0		1			32797	08/24/22 15:18	SMC	EET MID

**Client Sample ID: BH-190 (4.5')** Lab Sample ID: 890-2791-2

Date Collected: 08/19/22 12:00

Date Received: 08/19/22 15:48

	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')** 

Lab Sample ID: 890-2791-3 Date Collected: 08/19/22 12:00 **Matrix: Solid** Date Received: 08/19/22 15:48

	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

	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 19:09	EL	EET MID
Total/NA	Analysis	Total BTEX		1			33637	09/02/22 11:24	AJ	EET MID

**Eurofins Carlsbad** 

Lab Sample ID: 890-2791-4

**Matrix: Solid** 

### **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	Type	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 certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	•	, , ,	.,
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	-,,,
9 ,		Matrix Solid	Analyte Total TPH	

3

4

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4.6

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## **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

BH-193 (4.5')

890-2791-5

# **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

Solid

4

3

4

9

11

40

2

5

<u>+</u>

7

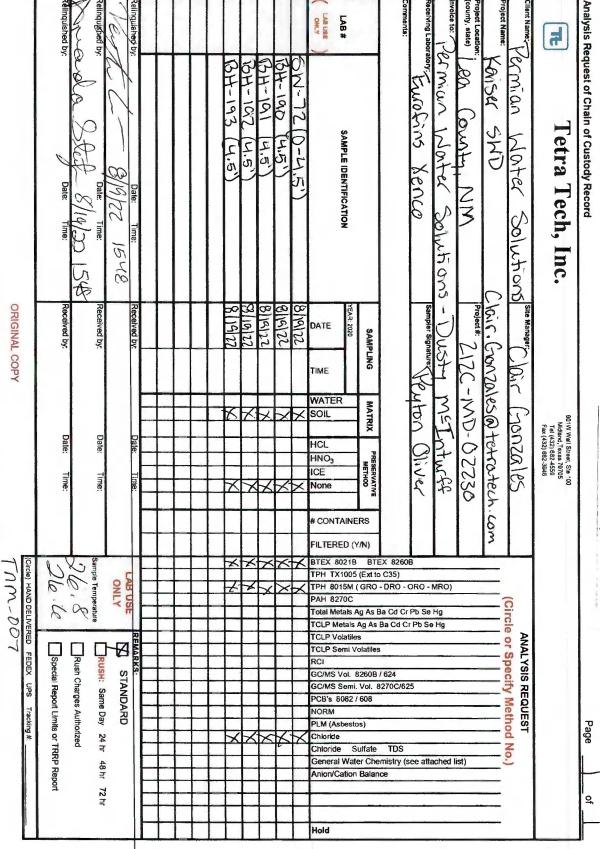
8

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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

List Source: Eurofins Carlsbad

Login Number: 2791 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: 890-2791-1

SDG Number: Lea County NM

List Source: Eurofins Midland

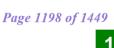
List Creation: 08/23/22 10:32 AM

Login Number: 2791 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").





# **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:

eurofins

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

.....LINKS

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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.

Laboratory Job ID: 890-3009-1

Project/Site: Kaiser SWD

SDG: Lea County NM

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### **Definitions/Glossary**

Job ID: 890-3009-1 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.

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**

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: 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 BTE)	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
: Method: 8015 NM - Diesel Range			RI	MDI	Unit	n	Prenared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range			RI	MDI	Unit	n	Prenared	Δnalvzed	Dil Fac
		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 16:01	Dil Fac
Method: 8015 NM - Diesel Range Analyte	Result   <50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	Result <50.0	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg			09/23/22 16:01	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	Result <50.0  Ge Organics (Dige Result	Qualifier U  RO) (GC) Qualifier U *1	50.0		mg/Kg		Prepared	09/23/22 16:01  Analyzed	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0  ge Organics (Dige Result <50.0)	Qualifier U  RO) (GC) Qualifier U *1	50.0 RL 50.0		mg/Kg  Unit mg/Kg		Prepared 09/21/22 08:32	09/23/22 16:01  Analyzed  09/23/22 04:27	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)	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 09/21/22 08:32 09/21/22 08:32	09/23/22 16:01  Analyzed 09/23/22 04:27 09/23/22 04:27	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   <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 09/21/22 08:32 09/21/22 08:32	09/23/22 16:01  Analyzed 09/23/22 04:27 09/23/22 04:27 09/23/22 04:27	Dil Fac  1  1  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) Oll Range Organics (Over C28-C36)  Surrogate	Result	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 09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 Prepared	09/23/22 16:01  Analyzed 09/23/22 04:27 09/23/22 04:27 09/23/22 04:27  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   <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 09/21/22 08:32 09/21/22 08:32 09/21/22 08:32  Prepared 09/21/22 08:32	09/23/22 16:01  Analyzed 09/23/22 04:27  09/23/22 04:27  Analyzed 09/23/22 04:27	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	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 09/21/22 08:32 09/21/22 08:32 09/21/22 08:32  Prepared 09/21/22 08:32	09/23/22 16:01  Analyzed 09/23/22 04:27  09/23/22 04:27  Analyzed 09/23/22 04:27	1 Dil Fac 1 Dil Fac 1

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	1

**Eurofins Carlsbad** 

Lab Sample ID: 890-3009-2

Matrix: Solid

2

3

7

9

4.6

Matrix: Solid

Lab Sample ID: 890-3009-2

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3009-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-186 (13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Analyte

Chloride

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	X 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	e Organics (DR	O) (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
Mothod: 9045P NM Discol Pone	ge Organice (D	RO) (GC)							
Method: 8015B NM - Diesel Rang									
Analyte		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 09/21/22 08:32	Analyzed 09/23/22 04:06	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier		MDL		<u>D</u>			Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.9	Qualifier U *1	49.9	MDL	mg/Kg	<u>D</u>	09/21/22 08:32	09/23/22 04:06	1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 84.3	Qualifier U *1	49.9	MDL	mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32	09/23/22 04:06	Dil Fac
	Result   <49.9     84.3   <49.9	Qualifier U *1	49.9 49.9 49.9	MDL	mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32	09/23/22 04:06 09/23/22 04:06 09/23/22 04:06	1 1

25.1

MDL Unit

mg/Kg

Prepared

Analyzed

09/23/22 22:58

Result Qualifier

320

# **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 Red
		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-Bromofluorobenz	ene (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)	
880-19424-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

OTPH = o-Terphenyl

Job ID: 890-3009-1 Client: Tetra Tech, Inc. 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

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09300		mg/Kg		93	70 - 130	
Toluene	0.100	0.08450		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.09159		mg/Kg		92	70 - 130	
m-Xylene & p-Xylene	0.200	0.1871		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.1192		mg/Kg		119	70 - 130	

Spike

Added

0.100

0.100

0.100

0.200

0.100

LCSD LCSD

0.08642

0.08244

0.09331

0.1962

0.1206

Result Qualifier

mg/Kg

mg/Kg

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** 

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 35744

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 35620

35

35

RPD %Rec Unit %Rec Limits Limit mg/Kg 86 70 - 130 35 mg/Kg 82 70 - 130 2 35 mg/Kg 93 70 - 130 2 35

70 - 130

70 - 130

98

121

LCSD LCSD

Surrogate 4-Bromofluorobenzene (Surr)	%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

MS MS Sample Sample Spike Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits <0.00201 U 0.101 96 Benzene 0.09638 mg/Kg 70 - 130 Toluene <0.00201 U 0.101 0.08691 mg/Kg 86 70 - 130

**Eurofins Carlsbad** 

Client: Tetra Tech, Inc.

Job ID: 890-3009-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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	
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

Lab Sample ID: 880-19424-A-41-F MSD Matrix: Solid

Analysis Batch: 35744

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.1013		mg/Kg		102	70 - 130	5	35
Toluene	<0.00201	U	0.0994	0.09069		mg/Kg		91	70 - 130	4	35
Ethylbenzene	<0.00201	U	0.0994	0.1024		mg/Kg		103	70 - 130	6	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.2076		mg/Kg		104	70 - 130	6	35
o-Xylene	<0.00201	U	0.0994	0.1207		mg/Kg		121	70 - 130	6	35

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

мв мв

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

Analyzed Dil Fac

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed

 Gasoline Range Organics
 <50.0</td>
 U
 50.0
 mg/Kg
 09/21/22 08:32
 09/22/22 19:31

 (GRO)-C6-C10
 (GRO)-C6-C10
 C
 C
 C
 C
 C

# **QC Sample Results**

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

MB MB

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/21/22 08:32	09/22/22 19:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 08:32	09/22/22 19:31	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				09/21/22 08:32	09/22/22 19:31	1
o-Terphenyl	103		70 - 130				09/21/22 08:32	09/22/22 19:31	1

Lab Sample ID: LCS 880-35	018/2-A						Client	Sample	ID: Lab Contro	ol Sampl
Matrix: Solid									Prep Type:	Total/N
Analysis Batch: 35120									Prep Bate	ch: 3501
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics			1000	1066		mg/Kg		107	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over			1000	1068		mg/Kg		107	70 - 130	
C10-C28)										
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane			70 - 130							
o-Terphenyl	105		70 - 130							

Lab Sample ID: LCSD 880-35018/3-A Matrix: Solid Analysis Batch: 35120				Client S	am	ple ID:	•	ol Sample Type: Total Batch:	tal/NA
	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

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Lab Sample ID: 880-19424-A Matrix: Solid Analysis Batch: 35120	-53-C MS							Client		e: Total/NA atch: 35018
	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 *1	996	826.0		mg/Kg		83	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	868.7		mg/Kg		87	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	85		70 - 130							

**Eurofins Carlsbad** 

70 - 130

o-Terphenyl

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

**Matrix: Solid** 

Analysis Batch: 35120

Prep Type: Total/NA Prep Batch: 35018

Sample Sample Spike MSD MSD RPD Result Qualifier RPD Limit Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U\*1 999 786.3 mg/Kg 79 70 - 130 5 20 (GRO)-C6-C10 999 872.5 Diesel Range Organics (Over <49.9 U mg/Kg 87 70 - 130 0

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
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

Analyte	Result	Qualifier	RL	MDL U	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	r	mg/Kg			09/23/22 22:29	1

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		mg/Kg		99	90 - 110	0	20	

Lab Sample ID: 890-3009-1 MS Client Sample ID: BH-185 (13') **Prep Type: Soluble** 

**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

## **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

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# **QC Association Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3009-1

Project/Site: Kaiser SWD

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

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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	Туре	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 MID
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 MID
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:** 

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	Pr	ogram	Identification Number	Expiration Date	
Texas		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 may	arrimalizada amaliztaa farri	
the agency does not of	• •	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for t	
,	• •	Matrix	ed by the governing authority. This list ma	ay include analytes for t	
the agency does not of	fer certification.	•	, , ,	ay include analytes for v	

## **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

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# 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

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	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:				ВН-186 (13')	ВН-185 (13')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tena ren, me	Tatro Tach Inc	Analysis Request of Chain of Custody Record
OBIGINAL CORV	Received by:	Received by:	Received by:				9/19/2022	9/19/2022	DATE	YEAR: 2020	SAMPLING		Oampier Oignature:		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 Fax (432) 682-3946	Wildland, Texas 79705	
(Circle) HAND DELIVERED	い う 立	7	A LAB USE ONLY	890-300			×	×	PAH 8: Total M TCLP N	270C etals olatile	Y/N)  BTE  (Ext to  (GRO  Ag As E  Ag As	DRO - Ba Cd Cr Ba Cd C	ORO - Pb Se	Hg			ANALYSIS REQUEST			
FEDEX UPS Tracking#	Special Report Limits or TRRP Report	RUSH: Same Day 24 III 40 III 72 III		890-3009 Chain of Custody			×	×	PCB's NORM PLM (A Chlorid Chlorid	Vol. 8 Semi. 8082 / sbeste e S	82608 / Vol. 8 / 608 os)	7624 270C/62 TDS emistry (		tached	list)		ST Specify Method No.)			Page 1 c
									Hold											9

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### **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3009-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 3009 List Number: 1 Creator: Clifton, Cloe

Containers are not broken or leaking.

Sample bottles are completely filled.

Sample Preservation Verified.

MS/MSDs

<6mm (1/4").

Sample collection date/times are provided.

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Appropriate sample containers are used.

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	

True

True

True

True

N/A

True

N/A

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**Eurofins Carlsbad** 

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### **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

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 3009

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	

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# **ANALYTICAL REPORT**

**America** 

**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:

eurofins

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

**Have a Question?** 

Received by OCD: 8/29/2023 3:58:56 PM

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 3:31:23 PM

.....LINKS

**Review your project** results through

EOL

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: 890-3010-1 SDG: Lea County NM

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### **Definitions/Glossary**

Client: Tetra Tech, Inc.

Job ID: 890-3010-1

Project/Site: Kaiser SWD

SDG: Lea County NM

### **Qualifiers**

GC	VOA
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.

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	Qualifier Description
Qualitier	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					

Dii Fac Diiulion Facioi

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: 890-3010-1

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.

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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 BTI	EX 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 Rang	ge 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 Ra	nge 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 Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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

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Matrix: Solid

Matrix: Solid

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

95

103

4770

Result Qualifier

Method: 300.0 - Anions, Ion Chromatography - Soluble

Job ID: 890-3010-1 SDG: Lea County NM

Lab Sample ID: 890-3010-2

09/22/22 11:26

09/22/22 11:26

Prepared

D

09/23/22 21:40

09/23/22 21:40

Analyzed

09/23/22 23:08

Client Sample ID: Trench-2 (5')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 5

1-Chlorooctane

o-Terphenyl

Analyte

Chloride

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		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 BTEX	( 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 Range	· Organics (DRC	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
Method: 8015B NM - Diesel Rang	ηe Organics (DI	RO) (GC)							
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<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	4
Diesei Range Organics (Over C10-C28)	<b>~49.9</b>	J	45.5		mg/rvg		JUIZZIZZ 11.ZO	03120122 21.4U	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 11:26	09/23/22 21:40	1

70 - 130

70 - 130

RL

50.4

MDL Unit

mg/Kg

Dil Fac

## **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 Limit
		BFB1	DFBZ1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
380-19417-A-1-E MS	Matrix Spike	109	105	
380-19417-A-1-F MSD	Matrix Spike Duplicate	112	100	
390-3010-1	Trench-1 (10')	196 S1+	82	
390-3010-2	Trench-2 (5')	116	104	
390-3015-A-1-E MS	Matrix Spike	101	94	
390-3015-A-1-F MSD	Matrix Spike Duplicate	108	107	
_CS 880-35625/1-A	Lab Control Sample	109	100	
_CS 880-35724/1-A	Lab Control Sample	76	73	
_CSD 880-35625/2-A	Lab Control Sample Dup	104	99	
_CSD 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	
MB 880-35724/5-A	Method Blank	100	76	
Surrogate Legend				
BFB = 4-Bromofluorobe	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)			
890-3010-1	Trench-1 (10')	110	102			
890-3010-2	Trench-2 (5')	95	103			
890-3010-2 MS	Trench-2 (5')	90	88			
890-3010-2 MSD	Trench-2 (5')	103	99			
LCS 880-35172/2-A	Lab Control Sample	99	105			
LCSD 880-35172/3-A	Lab Control Sample Dup	106	108			
MB 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

Lab Sample ID: LCS 880-35625/1-A

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 35815

Analysis Batch: 35815

**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

MB MB

Surrogate	%Recovery	Qualifier	Limits	Pre	epared	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

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 35625

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.06312 mg/Kg 63 70 - 130 Toluene 0.100 0.07231 mg/Kg 72 70 - 130 0.100 0.07030 70 Ethylbenzene mg/Kg 70 - 130 0.200 74 70 - 130 m-Xylene & p-Xylene 0.1471 mg/Kg 0.100 0.07531 70 - 130 o-Xylene mg/Kg 75

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

**Client Sample ID: Lab Control Sample 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

Lab Sample ID: LCSD 880-35625/2-A

**Matrix: Solid** 

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	

**Eurofins Carlsbad** 

Analysis Batch: 35815

## QC Sample Results

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	Qualifier	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

**Matrix: Solid** Analysis Batch: 35815

Lab Sample ID: 880-19417-A-1-F MSD

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.0990 Benzene <0.00201 U \*-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 35 14 0.198 0.2097 106 70 - 130 35 m-Xylene & p-Xylene <0.00402 U 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-Diffuorobenzene (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

мв мв

<0.00400 U

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** 

m-Xylene & p-Xylene

Analysis Batch: 35890

Client Sample ID: Method Blank

10/02/22 22:18

09/29/22 11:56

Prep Type: Total/NA

Prep Batch: 35692

Result Qualifier Dil Fac Analyte MDL Unit Prepared RL Analyzed Benzene <0.00200 U 0.00200 09/29/22 11:56 10/02/22 22:18 mg/Kg 10/02/22 22:18 Toluene <0.00200 U 0.00200 mg/Kg 09/29/22 11:56 Ethylbenzene <0.00200 U 0.00200 mg/Kg 09/29/22 11:56 10/02/22 22:18

0.00400

mg/Kg

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 **Matrix: Solid** 

Lab Sample ID: MB 880-35724/5-A

Analysis Batch: 35890

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 35692

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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

MD MD

мв мв

П		1110	11.0				
	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 Batch: 35724

**Matrix: Solid** Prep Type: Total/NA 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 Sample ID: Lab Contro	I Sample
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**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

Client Sample 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

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Matrix: Solid

Analysis Batch: 35890

Released to Imaging: 9/1/2023 3:31:23 PM

## QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

## 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 4-Bromofluorobenzene (Surr) 70 - 130 101 1,4-Difluorobenzene (Surr) 94 70 - 130

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

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

	WISD WISD	
Surrogate	%Recovery Qual	ifier Limits
4-Bromofluorobenzene (Surr)	108	70 - 130
1,4-Difluorobenzene (Surr)	107	70 - 130

MSD MSD

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35172/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 35220** 

	MB	MB						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/K	(g	09/22/22 11:26	09/23/22 20:35	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/K	(g	09/22/22 11:26	09/23/22 20:35	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/K	(g	09/22/22 11:26	09/23/22 20:35	1

	MB	MB	
Surrogate	%Recovery	Qualifier	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	09/22/22 11:2	6 09/23/22 20:35	1
o-Terphenyl	139	S1+	70 - 130	09/22/22 11:2	6 09/23/22 20:35	1

**Eurofins Carlsbad** 

Prep Batch: 35172

Job ID: 890-3010-1 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 880-35172/2-A

**Matrix: Solid** Analysis Batch: 35220 Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 35172

Prep Batch: 35172

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 960.3 mg/Kg 96 70 - 130 (GRO)-C6-C10 1000 89 Diesel Range Organics (Over 891.9 mg/Kg 70 - 130

C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	105		70 - 130

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-35172/3-A **Matrix: Solid** Prep Type: Total/NA

**Analysis Batch: 35220** 

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 960.5 0 Gasoline Range Organics mg/Kg 96 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 951.2 mg/Kg 95 70 - 130 6 20

C10-C28)

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 106 70 - 130 o-Terphenyl 108 70 - 130

Lab Sample ID: 890-3010-2 MS Client Sample ID: Trench-2 (5')

**Matrix: Solid** 

**Analysis Batch: 35220** 

Prep Type: Total/NA Prep Batch: 35172

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U 996 887.9 87 70 - 130mg/Kg (GRO)-C6-C10 <49.9 U 996 998.1 100 70 - 130 Diesel Range Organics (Over mg/Kg C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 90 70 - 130 88 70 - 130 o-Terphenyl

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

RPD

MSD MSD Sample Sample Spike %Rec Result Qualifier %Rec Limit Analyte Added Result Qualifier Limits RPD Unit D Gasoline Range Organics <49.9 U 999 1050 103 70 - 130 17 20 mg/Kg (GRO)-C6-C10 999 Diesel Range Organics (Over <49.9 U 1135 mg/Kg 114 70 - 13013 20 C10-C28)

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	103	70 - 130

Job ID: 890-3010-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3010-2 MSD

Analysis Batch: 35220

**Matrix: Solid** 

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 %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

Lab Sample ID: 890-3009-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**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		ma/Ka	_	103	90 - 110	

Lab Sample ID: 890-3009-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

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Analysis Batch: 35314

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Qualifier Limits RPD Limit Result Unit %Rec Chloride 1240 103 591 1873 90 - 110 20 mg/Kg

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

# **QC Association Summary**

Client: Tetra Tech, Inc. Job ID: 890-3010-1 Project/Site: Kaiser SWD SDG: Lea County NM

**GC VOA** 

Prei	o B	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

## **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

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	Type	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 MIC
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

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## **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	NI	ELAP	T104704400-22-24	06-30-23
The following analytes	ara inalizadad in thia ranart hi	it the leberatory is not contiffe	iad butba gavarning authority. This list was	
the agency does not of	. ,	at the laboratory is not certil	ied by the governing authority. This list ma	ay include analytes for t
,	. ,	Matrix	Analyte	ay include analytes for t
the agency does not of	fer certification.	•	, , ,	ay include analytes for v

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## **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** 

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## **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.    Permian Water Solutions   Ste Manager: Clair Gonzales@letratech.com	Relinquished by:	Relinquished by:	Relinguished by:					LAB#		Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name;	4
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)  Peyton Oliver  Perservan ver   Date:	Date:	Date:			Trench-2 (5')	Trench-1 (10')	SAMPLE IDENTIFICATION				Permian Water Solutions - Dusty McIntu			Permian Water Solutions	Tetra Tech, Inc	
# CONTAINERS  # CONTAINERS  # CONTAINERS  FILTERED (Y/N)    X	Recaived by:	Received by:	Received by:			9/19/2022	9/19/2022		SAMPLING				Project #:		Site Manager:	
# 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  TCLP Metals Ag As Ba Cd Cr Pb Se Hg		_	-1					HCL HNO <sub>3</sub>			Peyton Oliver		212C-MD-02230	Sonzales@tetratech.com	Clair Gonzales	Midland, Texas 79705 Tel (432) 682-4559 Fay (432) 682-1946
90 1 2 <del>2 2 2 2 2</del> 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2		Sample Temp	AB	890-3010 Chain			×	FILTERED BTEX 8021 TPH TX100 TPH 8015M PAH 82700 Total Metals TCLP Metal	NERS (Y/N)  1B BTI 05 (Ext to 0 GRO C S Ag As	EX 82600 o C35) - DRO - 0	ORO - I	Hg			<b>70</b>	

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## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3010-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 3010 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	

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<6mm (1/4").

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3010-1 SDG Number: Lea County NM

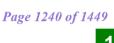
List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

Login Number: 3010 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	
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	



# **Environment Testing America**

# **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



Authorized for release by: 10/3/2022 6:54:20 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 3:31:23 PM

.....LINKS

**Review your project** results through

EOL

**Have a Question?** 

Received by OCD: 8/29/2023 3:58:56 PM

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.

This report has been electronically signed and authorized by the signatory. Electronic

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3011-1 SDG: Lea County NM

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## **Definitions/Glossary**

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

#### **Qualifiers**

GC	VOA
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.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

**Qualifier Description** 

#### **GC Semi VOA**

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Qualifier **Qualifier Description** S1+

Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

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)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

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 **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) **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.

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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 Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 06:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 06:49	1
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	1
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	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			RI	MDI	Unit	n	Prenared	Analyzed	Dil Fac
_			RI	MDI	Unit	n	Prenared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH		Qualifier	<b>RL</b>	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	Dil Fac
Analyte	Result   <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9  ge Organics (D	Qualifier U		MDL MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: 8015B NM - Diesel Ran	Result <49.9  ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9		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 <49.9  ge Organics (D Result	Qualifier U  RO) (GC) Qualifier U	49.9		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 <49.9  ge Organics (D 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
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  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
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 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 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   <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  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 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 Face 1 Dil Face 1
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   <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 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	

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	
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	

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Lab Sample ID: 890-3011-2

Matrix: Solid

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 Compou	unds (GC) (Continued)
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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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg		_	10/01/22 19:48	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			09/23/22 12:25	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		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)									
Oll 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 Chro	matography - 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	Volatile Organie	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

Method:	Total	RTFX	- Total	RTFX	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

Method: 8015 NM - Dies	el Range Organics (DRO)	(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

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**Matrix: Solid** 

Lab Sample ID: 890-3011-3

09/23/22 23:32

**Matrix: Solid** 

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

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

5.00

mg/Kg

Client Sample ID: H-4 (0-2') Lab Sample ID: 890-3011-4

57.3

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

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 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
Analyte Total BTEX	<0.00399	Qualifier U	0.00399	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 10/01/22 19:48	
Total BTEX  Method: 8015 NM - Diesel Range	<0.00399  e Organics (DR	U (GC)	0.00399		mg/Kg			10/01/22 19:48	Dil Fac
Total BTEX	<0.00399  e Organics (DR	O) (GC) Qualifier				<u>D</u>	Prepared		
Total BTEX  Method: 8015 NM - Diesel Range Analyte	<0.00399  c Organics (DR) Result <a href="#">&lt;49.9</a> <a href="#">ge Organics (DI)</a>	O) (GC) Qualifier	0.00399	MDL	mg/Kg			10/01/22 19:48  Analyzed	1
Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range	<0.00399  c Organics (DR) Result <a href="#">&lt;49.9</a> <a href="#">ge Organics (DI)</a>	U O) (GC) Qualifier U RO) (GC) Qualifier	0.00399 RL 49.9	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	10/01/22 19:48  Analyzed  09/23/22 12:25	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	<0.00399  e Organics (DR) Result <49.9  ge Organics (D) Result	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00399  RL 49.9	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 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  c Organics (DR) Result <49.9  ge Organics (D) Result <49.9	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00399  RL 49.9  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  Prepared  09/22/22 08:45	Analyzed 09/23/22 12:25  Analyzed 09/22/22 22:22	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 <49.9 ge Organics (D) Result <49.9 <49.9	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00399  RL 49.9  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  Prepared  09/22/22 08:45  09/22/22 08:45	Analyzed 09/23/22 12:25  Analyzed 09/22/22 22:22 09/22/22 22:22	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 <49.9 <49.9 <49.9	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00399  RL 49.9  RL 49.9  49.9  49.9	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u>D</u>	Prepared  Prepared  09/22/22 08:45  09/22/22 08:45	Analyzed 09/23/22 12:25  Analyzed 09/22/22 22:22 09/22/22 22:22	Dil Fac  Dil Fac  1  Dil Fac  1

**Eurofins Carlsbad** 

10/3/2022

Lab Sample ID: 890-3011-4

Client: Tetra Tech, Inc.

Job ID: 890-3011-1

Project/Site: Kaiser SWD

SDG: Lea County NM

Client Sample ID: H-4 (0-2')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

Method: 300.0 - Anions, Ion Chromatography - 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')

Date Collected: 09/19/22 00:00

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

Method: 8021B - Volatile Organic	: Compounds (	GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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	
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	
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	
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	
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 22:43	•
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:43	,
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	
o-Terphenyl	104		70 - 130				09/22/22 08:45	09/22/22 22:43	:
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
A L .d -	Pocult	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	112	IVIDE	Oilit	_	. ropurou	riidiyada	Dii i u

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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 Fa
Benzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	•
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)			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 BTEX	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	e Organics (DR		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range	e Organics (DR								
• •	e Organics (DR	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	<b>Analyzed</b> 09/23/22 12:25	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR) Result <50.0	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 <50.0	Qualifier U RO) (GC)	50.0		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 <50.0 ge Organics (DI Result	Qualifier U RO) (GC) Qualifier	50.0	MDL 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 Range Analyte Gasoline Range Organics	e Organics (DR Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		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	e Organics (DR Result <50.0 ge Organics (DI Result	Qualifier U  RO) (GC) Qualifier U	50.0		mg/Kg  Unit 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	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U  RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg	=	Prepared 09/22/22 08:45	09/23/22 12:25  Analyzed  09/22/22 23:05	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	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
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	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	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	e Organics (DR Result <50.0 ge Organics (Di Result <50.0 <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 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 <50.0 ge Organics (DR Result <50.0 <50.0 <80.0	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
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	e Organics (DR/Result < 50.0  ge Organics (D/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
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	e Organics (DR   Result   <50.0    ge Organics (D   Result   <50.0   <50.0   <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  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

Lab Sample ID: 890-3011-7

09/22/22 08:45 09/22/22 23:26

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 Or	ganic Compounds	(GC) (Continued)
Michigal COLID Volume Of	gaine compounds	(GG) (GG) (GG)

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

Mathod:	Total RTFY	- Total BTEX	Calculation
mictilou.	TOTAL DIEN	- IUIUI DI LA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg		_	10/01/22 19:48	1

Method: 8015 NM - Diesel Range Organics	IUKU	11661

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

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)									
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
	2/-								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

1-Chlorooctane	88	70 - 130	
o-Terphenyl	93	70 - 130	

o-Terphenyl	93	70 - 130	09/22/22 08:45	09/22/22 23:26	1
Method: 300.0 - Anions, Ion Chromatograp	hy - Soluble				

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

Mothod: 9021D	Volatile Organie	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

		()							
Analyte	Result	Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	n	ng/Kg		09/28/22 14:59	10/01/22 10:04	1
Toluene	<0.00200	U *-	0.00200	n	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Ethylbenzene	<0.00200	U	0.00200	n	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	n	ng/Kg		09/28/22 14:59	10/01/22 10:04	1
o-Xylene	<0.00200	U	0.00200	n	mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Xylenes, Total	<0.00401	U	0.00401	n	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 RTF	Y - Total R	TFX Calculatio	n

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

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

Matrix: Solid

Lab Sample ID: 890-3011-8

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

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		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)									
OII 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
Chloride	267		4.99		ma/Ka			09/24/22 00:07	1

Client Sample ID: BH-192 (8') Lab Sample ID: 890-3011-9

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	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		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 - 130				09/22/22 08:45	09/22/22 23:47	1

Client Sample ID: BH-192 (8')

Date Collected: 09/19/22 00:00

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1

SDG: Lea County NM

Lab Sample ID: 890-3011-9

Matrix: Solid

**Matrix: Solid** 

Date Received: 09/20/22 10:22 Sample Depth: 8

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Dil Fac Analyte RL MDL Unit D Prepared Analyzed 4.99 09/24/22 00:12 Chloride 249 mg/Kg

Client Sample ID: BH-193 (8') Lab Sample ID: 890-3011-10

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	<0.00201	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	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 10:57	
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 10:57	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	123		70 - 130				09/28/22 14:59	10/01/22 10:57	
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:59	10/01/22 10:57	
Method: Total BTEX - Total BTEX	X 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 Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
•	•	, ,		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	
Analyte	Result 64.0	Qualifier		MDL		<u>D</u>	Prepared		Dil Fa
Analyte Total TPH	Result 64.0	Qualifier		MDL	mg/Kg	<u>D</u>	Prepared Prepared		
Analyte Total TPH  Method: 8015B NM - Diesel Rang	Result 64.0	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg			09/23/22 12:25	
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 64.0  ge Organics (D	Qualifier  RO) (GC)  Qualifier	50.0		mg/Kg		Prepared	09/23/22 12:25  Analyzed	Dil Fa
Analyte Total TPH  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 64.0  ge Organics (Di Result <50.0	Qualifier  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  09/23/22 01:56	Dil Fa
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 09/22/22 08:45 09/22/22 08:45	09/23/22 12:25  Analyzed 09/23/22 01:56 09/23/22 01:56	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)	Result	Qualifier  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 01:56 09/23/22 01:56	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	Qualifier  RO) (GC) Qualifier 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 09/23/22 01:56 09/23/22 01:56 09/23/22 01:56 Analyzed	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 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 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 01:56  09/23/22 01:56  Analyzed 09/23/22 01:56	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 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 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 01:56  09/23/22 01:56  Analyzed 09/23/22 01:56	Dil Fa

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 Fa
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	
Toluene	< 0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 12:42	
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 12:42	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130				09/28/22 14:59	10/01/22 12:42	
1,4-Difluorobenzene (Surr)	92		70 - 130				09/28/22 14:59	10/01/22 12:42	
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 Rang	ge Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	986		49.9		mg/Kg			09/23/22 12:25	
Method: 8015B NM - Diesel Rai	nge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	
Diesel Range Organics (Over	817		49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	
Oll Range Organics (Over C28-C36)	169		49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	106		70 - 130				09/22/22 08:45	09/23/22 02:40	
o-Terphenyl	117		70 - 130				09/22/22 08:45	09/23/22 02:40	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Client Sample ID: BH-195 (8')

Date Collected: 09/19/22 00:00

Lab Sample ID: 890-3011-12

Matrix: Solid

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

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Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

Lab Sample ID: 890-3011-12

Matrix: Solid

Client Sample ID: BH-195 (8') Date Collected: 09/19/22 00:00

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
1,4-Difluorobenzene (Surr)	9	S1-	70 - 130			09/28/22 14:59	10/01/22 13:08	1
Method: Total BTEX - Total BTEX	Calculation Result	Qualifier	RL	MDL Unit	D	Prepared	Analvzed	Dil Fac

Total BTEX	<0.00397 U	0.00397	mg/Kg	<u> </u>	10/01/22 19:48	1
Method: 8015 NM - Diesel Range O	Organics (DRO) (GC)					

	Analyte	Result	Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
	Total TPH	<49.9	U	49.9	r	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	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 00:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 00:09	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 00:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Method: 300.0 - Anions, Ion Chromatograph	ny - Soluble				
o-Terphenyl	94	70 - 130	09/22/22 08:45	09/23/22 00:09	1
1-Chlorooctane	87	70 - 130	09/22/22 08:45	09/23/22 00:09	1

Method: 300.0 - Anions, ion Chron	natograpny - i	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.5		5.05		mg/Kg			09/24/22 00:36	1

**Client Sample ID: BH-196 (4.5')** Lab Sample ID: 890-3011-13 Date Collected: 09/19/22 00:00 Matrix: Solid Date Received: 09/20/22 10:22

Sample Depth: 4.5

Analyte

Total TPH

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 BT	EX 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

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Analyzed

09/23/22 12:25

Prepared

RL

49.8

MDL Unit

mg/Kg

Result Qualifier

<49.8 U

Dil Fac

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	1
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
Total TPH	96.5		50.0		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	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 03:01	1
Diesel Range Organics (Over C10-C28)	96.5		50.0		mg/Kg		09/22/22 08:45	09/23/22 03:01	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 03:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				09/22/22 08:45	09/23/22 03:01	1
o-Terphenyl	111		70 - 130				09/22/22 08:45	09/23/22 03:01	1

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Job ID: 890-3011-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-197 (4.5')** Lab Sample ID: 890-3011-14

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 4.5

Method: 300.0 - Anions, Ion Chromatography - 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')** 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 BTE	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	•		DI	MDI	Unit	D	Drawarad	Amalumad	Dil Fa
Analyte Total TPH		Qualifier	RL	MDL			Prepared	Analyzed	
Total IPH	<49.8	U	49.8		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	<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
	88		70 - 130				09/22/22 08:45	09/23/22 01:13	
1-Chlorooctane							09/22/22 08:45	09/23/22 01:13	
	95		70 - 130				03/22/22 00.40	09/23/22 01.13	
1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro		Soluble	70 - 130				03/22/22 00:40	09/23/22 01.13	
o-Terphenyl	omatography -	Soluble Qualifier	70 <sub>-</sub> 130	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-3011-16

## **Client Sample Results**

Job ID: 890-3011-1 Client: Tetra Tech, Inc. 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	1 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')** 

Method: 8021B - Volatile Organic Compounds (GC)

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** 

Result Qualifier Analyte 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 Toluene <0.0201 U\*-0.0201 mg/Kg 09/28/22 14:59 10/01/22 16:10 Ethylbenzene 0.0529 0.0201 mg/Kg 09/28/22 14:59 10/01/22 16:10 0.0402 09/28/22 14:59 10/01/22 16:10 0.116 mg/Kg m-Xylene & p-Xylene <0.0201 U 0.0201 09/28/22 14:59 10/01/22 16:10 o-Xylene mg/Kg 0.0402 09/28/22 14:59 10/01/22 16:10 **Xylenes, Total** 0.116 mg/Kg

%Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 4-Bromofluorobenzene (Surr) 135 S1+ 70 - 130 09/28/22 14:59 10/01/22 16:10 10

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 3:31:23 PM

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## **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

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery Qualifie	er Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87	70 - 130	09/28/22 14:59	10/01/22 16:10	10

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.169	0.0402	mg/Kg			10/01/22 19:48	1

ı	Method: 8015	NM - Diesel Ran	anice Organics	(DRO) (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

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 03:23	1
Diesel Range Organics (Over C10-C28)	2020		50.0		mg/Kg		09/22/22 08:45	09/23/22 03:23	1
Oll Range Organics (Over C28-C36)	267		50.0		mg/Kg		09/22/22 08:45	09/23/22 03:23	1

Surrogate	%Recovery (	Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89	70 - 13	09/22/22 08:45	09/23/22 03:23	1
o-Terphenyl	90	70 - 13	0 09/22/22 08:45	09/23/22 03:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Chloride	3220		25.1		mg/Kg				09/23/22 19:57	5

**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

Matrix: Solid

	Method:	8021B -	<b>Volatile</b>	Organic	Compounds	(GC)	
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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: Tot	al RTFY -	Total R1	rfy Ca	dculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Total BTEX	1.78		0.0399		mg/Kg				10/01/22 19:48	1

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## **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

**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

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 BT Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/22 19:48	1
Total BTEX  Method: 8015 NM - Diesel Ran			0.00398		mg/Kg			10/01/22 19:48	1
	ge Organics (DR		0.00398	MDL	mg/Kg Unit		Prepared	10/01/22 19:48  Analyzed	Dil Fac
Method: 8015 NM - Diesel Ran	ge Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Ran Analyte	ge Organics (DR Result <49.9	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH	ge Organics (DR Result 49.9 nge Organics (D	O) (GC) Qualifier	RL		Unit	D	Prepared Prepared	Analyzed	1
Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Ra Analyte  Gasoline Range Organics	ge Organics (DR Result 49.9 nge Organics (D	Qualifier U  RO) (GC) Qualifier	<b>RL</b> 49.9		Unit mg/Kg	_		Analyzed 09/23/22 12:25	1
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Ra Analyte  Gasoline Range Organics (GRO)-C6-C10	ge Organics (DR Result <49.9  nge Organics (D Result <49.9	Qualifier U  RO) (GC) Qualifier U	RL 49.9 RL 49.9		Unit mg/Kg  Unit mg/Kg	_	Prepared 09/23/22 11:03	Analyzed 09/23/22 12:25  Analyzed 09/24/22 11:43	Dil Fac
Method: 8015 NM - Diesel Rang Analyte Total TPH  Method: 8015B NM - Diesel Ra Analyte  Gasoline Range Organics	ge Organics (DR Result <49.9 nge Organics (D Result	Qualifier U  RO) (GC) Qualifier U	RL		Unit mg/Kg	_	Prepared	Analyzed 09/23/22 12:25	1

**Matrix: Solid** 

Lab Sample ID: 890-3011-19

Lab Sample ID: 890-3011-20

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD 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

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 - Soluble Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride 3130 25.0 mg/Kg 09/23/22 20:16

Client Sample ID: BH-203 (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 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 BTEX	X 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	•
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH			49.9	WIDE	mg/Kg		Trepareu	09/23/22 12:25	Dilla
-	140.0	Ü	40.0		mg/rtg			00/20/22 12.20	
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	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	,
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	
							Prepared	Analyzed	
Surrogate	%Recovery	Qualifier	Limits					Analyzea	Dil Fa
Surrogate 1-Chlorooctane	%Recovery 117	Qualifier	<i>Limits</i> 70 - 130				09/23/22 11:03	09/24/22 12:48	
1-Chlorooctane		Qualifier							
Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	117 110		70 - 130				09/23/22 11:03	09/24/22 12:48	Dil Fa
1-Chlorooctane o-Terphenyl	117 110 omatography -		70 - 130	MDL	Unit	<u>D</u>	09/23/22 11:03	09/24/22 12:48	

## **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

**Client Sample ID: BH-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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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	1
1,4-Difluorobenzene (Surr)	96		70 - 130				09/28/22 16:17	10/01/22 22:31	1
- Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.239		0.0399		mg/Kg			10/01/22 19:48	
Method: 8015 NM - Diesel Rang	e Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	857		50.0		mg/Kg			09/23/22 12:25	
Method: 8015B NM - Diesel Ran	ige Organics (D	RO) (GC)							
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	
(GRO)-C6-C10									
Diesel Range Organics (Over	739		50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	
C10-C28)	440		50.0				00/00/00 44-00	00/04/00 05:44	
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	
o-Terphenyl	94		70 - 130				09/22/22 11:26	09/24/22 05:14	
Method: 300.0 - Anions, Ion Chi	romatography -	Soluble							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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)

Welliou. 002 ID - Volalile Organ	ne 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
	****	•							

# Client Sample Results

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD 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

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Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 155 S1+ 70 - 130 09/29/22 16:18 10/03/22 19:15 100 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 84 70 - 130 09/29/22 16:18 10/03/22 19:15 100

**Method: Total BTEX - Total BTEX Calculation** 

Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 0.399 10/01/22 19:48 **Total BTEX** 30.8 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac **Total TPH** 3640 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 49.9 09/22/22 11:26 **Gasoline Range Organics** 582 mg/Kg 09/24/22 04:09 (GRO)-C6-C10 **Diesel Range Organics (Over** 49.9 09/22/22 11:26 09/24/22 04:09 2690 mg/Kg C10-C28) **Oll Range Organics (Over** 372 49.9 mg/Kg 09/22/22 11:26 09/24/22 04:09 C28-C36)

Qualifier Limits Prepared Dil Fac Surrogate %Recovery Analyzed 09/22/22 11:26 1-Chlorooctane 120 70 - 130 09/24/22 04:09 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 RL MDL Unit Prepared Analyzed Dil Fac 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 Organic Compounds (GC)

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		09/28/22 16:17	10/01/22 23:12	10
Ethylbenzene	0.415		0.0199		mg/Kg		09/28/22 16:17	10/01/22 23:12	10
m-Xylene & p-Xylene	1.12		0.0398		mg/Kg		09/28/22 16:17	10/01/22 23:12	10
o-Xylene	0.709		0.0199		mg/Kg		09/28/22 16:17	10/01/22 23:12	10
Xylenes, Total	1.83		0.0398		mg/Kg		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

Analyte

**Method: Total BTEX - Total BTEX Calculation** 

Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac 0.0398 10/01/22 19:48 **Total BTEX** 2.24 mg/Kg

# **Client Sample Results**

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

**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 Rar	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					Unit	D	B	Amalumad	Dil Faa
Analyte Total BTEX		Qualifier U		MDL	mg/Kg		Prepared	Analyzed 10/01/22 19:48	Dil Fac
Total BTEX  Method: 8015 NM - Diesel Range	<0.00403  e Organics (DR0	U (GC)	0.00403		mg/Kg			10/01/22 19:48	1
Total BTEX Method: 8015 NM - Diesel Range Analyte	<0.00403  e Organics (DR) Result	O) (GC) Qualifier	0.00403		mg/Kg	<u>D</u>	Prepared	10/01/22 19:48  Analyzed	1
Total BTEX  Method: 8015 NM - Diesel Range	<0.00403 e Organics (DR) Result <50.0 ge Organics (DI)	U O) (GC) Qualifier U	0.00403	MDL	mg/Kg			10/01/22 19:48	1 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	<0.00403 e Organics (DR) Result <50.0 ge Organics (DI)	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
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	<0.00403 e Organics (DR) Result <50.0 ge Organics (DI) Result <50.0	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 Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH  Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	<0.00403 e Organics (DR) Result <50.0 ge Organics (DI) Result	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

Matrix: Solid

Lab Sample ID: 890-3011-24

Lab Sample ID: 890-3011-25

Client: Tetra Tech, Inc.

Job ID: 890-3011-1
Project/Site: Kaiser SWD

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

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 Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	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 Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/28/22 16:17	10/01/22 22:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 22:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/28/22 16:17	10/01/22 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				09/28/22 16:17	10/01/22 22:11	1
1,4-Difluorobenzene (Surr)	105		70 - 130				09/28/22 16:17	10/01/22 22:11	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			10/01/22 19:48	1
Method: 8015 NM - Diesel Range	•					_			
Analyte		Qualifier	RL	MDL		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	, ,	, , ,							
Analyte		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 05:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:36	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 05:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/22/22 11:26	09/24/22 05:36	1
o-Terphenyl	115		70 - 130				09/22/22 11:26	09/24/22 05:36	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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')

Lab Sample ID: 890-3011-27

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** 

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Matrix: Solid

Lab Sample ID: 890-3011-27

Lab Sample ID: 890-3011-28

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

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					
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac

4-Bromofluorobenzene (Surr) 70 - 130 108 09/28/22 16:17 10/02/22 01:42 1,4-Difluorobenzene (Surr) 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	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg		•	10/01/22 19:48	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result Qua	lifier 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 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		09/21/22 15:33	09/22/22 03:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/21/22 15:33	09/22/22 03:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/21/22 15:33	09/22/22 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/21/22 15:33	09/22/22 03:11	1
o-Terphenyl	123		70 - 130	09/21/22 15:33	09/22/22 03:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	394	5.02		mg/Kg			09/23/22 21:05	1

Client Sample ID: SW-74 (8-13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

Method: 8021B - Volatile Organic Compounds (GC)			
	Mothod: 9021D	Volatile Organie	Compounde (CC)

nic Compounds (	(GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00199	U *-	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
108		70 - 130				09/28/22 16:17	10/02/22 02:03	1
99		70 - 130				09/28/22 16:17	10/02/22 02:03	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

Mothod:	Total	RTFY	- Total	RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka			10/01/22 19:48	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			09/23/22 12:25	1

Job ID: 890-3011-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: SW-74 (8-13')

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

Lab Sample ID: 890-3011-28 **Matrix: Solid** 

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit Dil Fac D Prepared Analyzed <50.0 U 50.0 09/21/22 15:33 09/22/22 03:32 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.0 Diesel Range Organics (Over <50.0 U mg/Kg 09/21/22 15:33 09/22/22 03:32 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 %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 70 - 130 09/21/22 15:33 09/22/22 03:32 1-Chlorooctane 121 o-Terphenyl 132 S1+ 70 - 130 09/21/22 15:33 09/22/22 03:32 Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride 1800 25.2 mg/Kg 09/23/22 21:20

**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** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U *-	0.0199		mg/Kg		09/28/22 16:17	10/02/22 04:26	10
Toluene	<0.0199	U	0.0199		mg/Kg		09/28/22 16:17	10/02/22 04:26	10
Ethylbenzene	0.390		0.0199		mg/Kg		09/28/22 16:17	10/02/22 04:26	10
m-Xylene & p-Xylene	2.35		0.0398		mg/Kg		09/28/22 16:17	10/02/22 04:26	10
o-Xylene	0.839		0.0199		mg/Kg		09/28/22 16:17	10/02/22 04:26	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)	74		70 - 130				09/28/22 16:17	10/02/22 04:26	10
Method: Total BTEX - Total BTE	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	3.58		0.0398		mg/Kg			10/01/22 19:48	1
Method: 8015 NM - Diesel Rang	je Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1340		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	174		49.9		mg/Kg		09/21/22 15:33	09/22/22 03:53	1
Diesel Range Organics (Over	1020		49.9		mg/Kg		09/21/22 15:33	09/22/22 03:53	1
C10-C28)									
Oll Range Organics (Over C28-C36)	142		49.9		mg/Kg		09/21/22 15:33	09/22/22 03:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				09/21/22 15:33	09/22/22 03:53	1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

**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: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	228		4.99		mg/Kg			09/23/22 21:25	1	

**Client Sample ID: SW-76 (0-4.5')** 

**Method: Total BTEX - Total BTEX Calculation** 

Analyte

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22 Sample Depth: 0 - 4.5

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

Lab Sample ID: 890-3011-30

Analyzed

**Matrix: Solid** 

Method: 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <0.00201 U\*-Benzene 0.00201 09/28/22 16:17 10/02/22 02:23 mg/Kg Toluene <0.00201 U 0.00201 09/28/22 16:17 10/02/22 02:23 mg/Kg 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 09/28/22 16:17 10/02/22 02:23 mg/Kg 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 Fac 70 - 130 09/28/22 16:17 10/02/22 02:23 4-Bromofluorobenzene (Surr) 110 1,4-Difluorobenzene (Surr) 95 70 - 130 09/28/22 16:17 10/02/22 02:23

Total BTEX <0.00402 U 10/01/22 19:48 0.00402 mg/Kg Method: 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier MDL Unit Analyte RLD Prepared Analyzed Dil Fac 50.0 09/23/22 12:25 **Total TPH** 60.1 mg/Kg Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL MDL Unit Analyte D Prepared Dil Fac Analyzed

RL

MDL Unit

D

Prepared

Gasoline Range Organics	<50.0	U	50.0	mg/Kg	09/21/22 15:33	09/22/22 04:14	1
(GRO)-C6-C10							
Diesel Range Organics (Over	60.1		50.0	mg/Kg	09/21/22 15:33	09/22/22 04:14	1
C10-C28)							
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	09/21/22 15:33	09/22/22 04:14	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130		09/21/22 15:33	09/22/22 04:14	1
o-Terphenyl	114		70 - 130		09/21/22 15:33	09/22/22 04:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	3960		49.6		mg/Kg			09/23/22 21:39	10	

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Released to Imaging: 9/1/2023 3:31:23 PM

Dil Fac

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	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	<b>RL</b> 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/23/22 12:25	Dil Fac
Method: 8015B NM - Diesel Rang		RO) (GC)			3 3				
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/21/22 15:33	09/22/22 04:35	1
Diesel Range Organics (Over C10-C28)	81.7		49.9		mg/Kg		09/21/22 15:33	09/22/22 04:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/21/22 15:33	09/22/22 04:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				09/21/22 15:33	09/22/22 04:35	1
o-Terphenyl	113		70 - 130				09/21/22 15:33	09/22/22 04:35	1
Method: 300.0 - Anions, Ion Chro									
Analyte Chloride	Result 3710	Qualifier	RL 24.8	MDL	Unit mg/Kg	D	Prepared	Analyzed 09/23/22 21:44	Dil Fac

# **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

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	
890-3011-1	H-1 (0-2')	110	95	
890-3011-1 MS	H-1 (0-2')	108	90	
890-3011-1 MSD	H-1 (0-2')	119	97	
890-3011-2	H-2 (0-2')	125	99	
890-3011-3	H-3 (0-2')	113	96	
890-3011-4	H-4 (0-2')	113	91	
890-3011-5	H-5 (0-2')	116	95	
890-3011-6	H-6 (0-2')	118	95	
890-3011-7	H-7 (0-2')	122	88	
890-3011-8	BH-191 (8')	113	90	
890-3011-9	BH-192 (8')	123	99	
890-3011-10	BH-193 (8')	123	91	
890-3011-11	BH-194 (8')	118	92	
890-3011-12	BH-195 (8')	120	9 S1-	
890-3011-13	BH-196 (4.5')	122	90	
890-3011-14	BH-197 (4.5')	126	91	
890-3011-15	BH-198 (4.5')	121	94	
390-3011-16	BH-199 (4.5')	126	93	
390-3011-17	BH-200 (4.5')	135 S1+	87	
390-3011-18	BH-201 (4.5')	230 S1+	98	
390-3011-19	BH-202 (4.5')	126	94	
390-3011-20	BH-203 (4.5')	120	92	
890-3011-21	BH-204 (4.5')	789 S1+	96	
890-3011-22	BH-205 (4.5')	155 S1+	84	
390-3011-23	BH-206 (4.5')	126	65 S1-	
890-3011-24	BH-207 (4.5')	117	104	
390-3011-25	SW-62 (8-13')	112	105	
890-3011-26	SW-72 (0-8')	108	96	
890-3011-27	SW-73 (6-13')	108	98	
390-3011-28	SW-74 (8-13')	108	99	
890-3011-29	SW-75 (0-4.5')	137 S1+	74	
890-3011-30	SW-76 (0-4.5')	110	95	
890-3011-31	SW-77 (0-4.5')	108	101	
390-3011-31 390-3015-A-1-E MS	Matrix Spike	101	94	
390-3015-A-1-E MS 390-3015-A-1-F MSD	Matrix Spike Duplicate	108	107	
LCS 880-35621/1-A	Lab Control Sample	110	99	
LCS 880-35625/1-A	Lab Control Sample	109	100	
	Lab Control Sample	76		
LCS 880-35724/1-A LCSD 880-35621/2-A	•		73	
	Lab Control Sample Dup	106	90	
LCSD 880-35625/2-A	Lab Control Sample Dup	104	99	
LCSD 880-35724/2-A	Lab Control Sample Dup	128	123	
MB 880-35621/5-A	Method Blank	76 101	89 114	
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	
MB 880-35720/5-A	Method Blank	70	92	
MB 880-35724/5-A	Method Blank	100	76	

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# **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)

-				Doroont Surrogate Becovery (Accordance 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-Terphenyl				

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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

Lab Sample ID: LCSD 880-35621/2-A

Matrix: Solid

**Matrix: Solid** 

Analysis Batch: 35814

Analysis Batch: 35814

**Matrix: Solid** Analysis Batch: 35814 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35621

	IVID	IVID							
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	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 06:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 06:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 06:24	1

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MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	09/28/22 14:5	9 10/01/22 06:24	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/28/22 14:5	9 10/01/22 06:24	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35621

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07727		mg/Kg		77	70 - 130	
Toluene	0.100	0.06855	*_	mg/Kg		69	70 - 130	
Ethylbenzene	0.100	0.07924		mg/Kg		79	70 - 130	
m-Xylene & p-Xylene	0.200	0.1579		mg/Kg		79	70 - 130	
o-Xylene	0.100	0.08291		mg/Kg		83	70 - 130	

LCS LCS

Surrogate	%Recovery Quality	fier Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 35621

	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
o-Xylene	0.100	0.08282		mg/Kg		83	70 - 130	0	35

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** 

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	
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	

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10/3/2022

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

Prep Batch: 35625

		IVID	IVID							
Analyte		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	e	<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
Ethylber	nzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
m-Xylen	ie & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 16:17	10/01/22 20:00	1
o-Xylene	e	<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

MB MB

MD MD

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

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-3011-1 SDG: Lea County NM

Prep Batch: 35625

# Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-35625/1-A

Matrix: Solid

Analysis Batch: 35815

Prep Batch: 35625

Spike LCS LCS

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	
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

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Matrix: Solid
Analysis Batch: 35815

	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

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Matrix: Solid Prep Type: Total/NA Analysis Batch: 35815 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	
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

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 35815 Prep 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

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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: 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

Surrogate	%Recovery Qu	alifier 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

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 09/28/22 16:25 10/01/22 06:46 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 mg/Kg 09/28/22 16:25 10/01/22 06:46 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 <0.00400 U 0.00400 Xylenes, Total mg/Kg 09/28/22 16:25 10/01/22 06:46

MB MB

Surrogate	%Recovery Qualifi	er 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

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**Matrix: Solid** 

Analysis Batch: 35814

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35720

	MB	MB							
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
•									

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: MB 880-35720/5-A

**Matrix: Solid** 

Analysis Batch: 35814

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35720

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	09/29/22 15:53	09/30/22 16:57	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/29/22 15:53	09/30/22 16:57	1

Lab Sample ID: MB 880-35724/5-A

**Matrix: Solid** 

Analysis Batch: 35890

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 35724

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 09/29/22 16:18 Benzene <0.00200 U 0.00200 10/03/22 08:58 mg/Kg Toluene <0.00200 U 0.00200 mg/Kg 09/29/22 16:18 10/03/22 08:58 Ethylbenzene <0.00200 U 0.00200 mg/Kg 09/29/22 16:18 10/03/22 08:58 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 09/29/22 16:18 10/03/22 08:58 o-Xylene <0.00200 U 0.00200 mg/Kg 09/29/22 16:18 10/03/22 08:58 Xylenes, Total <0.00400 U 0.00400 mg/Kg 09/29/22 16:18 10/03/22 08:58

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

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**Matrix: Solid** 

Analysis Batch: 35890

Client Sample 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

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

Job ID: 890-3011-1

Prep Batch: 35724

LCSD LCSD

%Recovery Qualifier Surrogate Limits 1,4-Difluorobenzene (Surr) 123 70 - 130

Client Sample ID: Matrix Spike Lab Sample ID: 890-3015-A-1-E MS

**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	
	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
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00200	U *+ *1	0.0990	0.09916		mg/Kg		100	70 - 130	9	35
<0.00200	U *+ *1	0.0990	0.1009		mg/Kg		102	70 - 130	5	35
<0.00200	U *+ *1	0.0990	0.08894		mg/Kg		90	70 - 130	5	35
<0.00401	U *+ *1	0.198	0.1820		mg/Kg		92	70 - 130	4	35
<0.00200	U *+ *1	0.0990	0.09773		mg/Kg		99	70 - 130	4	35
	Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00401	Sample Sample  Result Qualifier  <0.00200 U *+ *1  <0.00200 U *+ *1  <0.00200 U *+ *1  <0.00401 U *+ *1  <0.00200 U *+ *1	Result         Qualifier         Added           <0.00200	Result         Qualifier         Added         Result           <0.00200	Result         Qualifier         Added         Result         Qualifier           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits           <0.00200	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           <0.00200

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

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**Matrix: Solid** 

Analysis Batch: 35007

Client Sample ID: Method Blank **Prep Type: Total/NA** 

Prep Batch: 35103

	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		09/21/22 15:33	09/21/22 19:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/21/22 15:33	09/21/22 19:44	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/21/22 15:33	09/21/22 19:44	1

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

Analysis Batch: 35007

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)

Lab Sample ID: LCS 880-35103/2-A Client
Matrix: Solid

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35103

Spike LCS LCS Analyte babbA Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 1038 mg/Kg 104 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 978.2 98 70 - 130 mg/Kg C10-C28)

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 91
 70 - 130

 o-Terphenyl
 99
 70 - 130

Lab Sample ID: LCSD 880-35103/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 35007 Prep Batch: 35103

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 946.6 Gasoline Range Organics mg/Kg 95 70 - 130 9 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1014 mg/Kg 101 70 - 130 4 20 C10-C28)

 Surrogate
 %Recovery
 Qualifier
 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 <49.9 U 996 Gasoline Range Organics 962.8 94 70 - 130 mg/Kg (GRO)-C6-C10 996 1097 108 70 - 130 Diesel Range Organics (Over <49.9 LI mg/Kg C10-C28)

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 97
 70 - 130

 o-Terphenyl
 102
 70 - 130

Lab Sample ID: 880-19485-A-21-G MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 35007 Prep Batch: 35103

	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	912.2		mg/Kg		89	70 - 130	5	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.9	U	999	1095		mg/Kg		108	70 - 130	0	20	
C10-C28)												

MSD MSD

Surrogate %Recovery Qualifier Limits
1-Chlorooctane 97 70 - 130

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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

Lab Sample ID: MB 880-35130/1-A

**Matrix: Solid** 

**Matrix: Solid** 

**Analysis Batch: 35007** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35103

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 101 70 - 130

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35130

Analysis Batch: 35122 мв мв

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	09/22/22 19:31	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 19:31	1
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	1

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

**Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

**Analysis Batch: 35122** 

Lab Sample ID: LCS 880-35130/2-A

Prep Type: Total/NA Prep Batch: 35130

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 914.4 mg/Kg 91 70 - 130 (GRO)-C6-C10 70 - 130 Diesel Range Organics (Over 1000 844.8 mg/Kg 84 C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	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** 

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)										

C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	100	70 _ 130
o-Terphenvl	103	70 - 130

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)

Lab Sample ID: 890-3011-

**Matrix: Solid** 

Analysis Batch: 35122

1-1 MS	Client Sample ID: H-1 (0-2')
	Prep Type: Total/NA
	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										
Diesel Range Organics (Over	<49.9	U	996	1069		mg/Kg		107	70 - 130	
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 Client Sample ID: H-1 (0-2') Prep Type: Total/NA

Matrix: Solid

**Analysis Batch: 35122** 

_	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	927.6		mg/Kg		91	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1052		mg/Kg		105	70 - 130	2	20

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 96 70 - 130 o-Terphenyl 93 70 - 130

Lab Sample ID: MB 880-35172/1-A

Matrix: Soli

**Analysis Ba** 

IE ID: MB 880-351/2/1-A	Client Sample ID: Method Blank
lid	Prep Type: Total/NA
Batch: 35220	Prep Batch: 35172
MB MB	

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   U	<50.0 U 50.0 <50.0 U 50.0	<50.0 U 50.0 <50.0	<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	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 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Diesel Range Organics (Over

Analysis Batch: 35220							Prep	Batch: 35	5172
	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)

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70 - 130

Prep Batch: 35130

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)

LCS LCS

Lab Sample ID: LCS 880-35172/2-A

**Matrix: Solid** 

Analysis Batch: 35220

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 35172

%Recovery Qualifier

Surrogate Limits 1-Chlorooctane 99 70 - 130 o-Terphenyl 105 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35172

Lab Sample ID: LCSD 880-35172/3-A **Matrix: Solid** 

Analysis Batch: 35220

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	960.5		mg/Kg		96	70 - 130	0	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	951.2		mg/Kg		95	70 - 130	6	20	
C10-C28)										

LCSD LCSD

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 Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 35220** Prep Batch: 35172 Sample Sample Spike MS MS

									,
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	<49.9	U	996	998.1		mg/Kg		100	70 - 130

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 Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 35220

	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-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	99		70 - 130

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Prep Batch: 35172

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

MR MR

124

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

	IVID	IVID							
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
	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	

70 - 130

Lab Sample ID: LCS 880-35262/2-A

**Matrix: Solid** 

Analysis Batch: 35322

Client Sample ID: Lab Control Sample

09/24/22 10:38

09/23/22 11:03

Prep Type: Total/NA Prep Batch: 35262

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits 887.2 Gasoline Range Organics 1000 89 70 - 130 mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over 1002 mg/Kg 100 70 - 130

C10-C28)

o-Terphenyl

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 107 70 - 130 o-Terphenyl 96 70 - 130

Lab Sample ID: LCSD 880-35262/3-A

**Matrix: Solid** 

Analysis Batch: 35322

Client Sample ID: Lab Control Sample Dup

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

**Matrix: Solid** 

**Analysis Batch: 35322** 

**Client Sample ID: BH-202 (4.5')** 

Prep Type: Total/NA

Prep Batch: 35262

н											
l		Sample	Sample	Spike	MS	MS				%Rec	
l	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
l	Gasoline Range Organics	<49.9	U	996	861.2	-	mg/Kg		86	70 - 130	
l	(GRO)-C6-C10										
l	Diesel Range Organics (Over	<49.9	U	996	965.0		mg/Kg		92	70 - 130	
1	C10-C28)										

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)

MS MS

Lab Sample ID: 890-3011-19 MS

**Matrix: Solid** 

Analysis Batch: 35322

Client Sample ID: BH-202 (4.5')

Prep Type: Total/NA

Prep Batch: 35262

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** 

Analysis Batch: 35322

Prep Type: Total/NA

Prep Batch: 35262

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <49.9 U 999 892.1 89 70 - 13020 Gasoline Range Organics mg/Kg 4 (GRO)-C6-C10 Diesel Range Organics (Over 999 971.0 93 <49.9 U mg/Kg 70 - 13020 C10-C28)

> MSD MSD %Recovery Qualifier

> > мв мв

Surrogate 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

**Matrix: Solid** 

Analysis Batch: 35313

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Limits

90 - 110

**Prep Type: Soluble** 

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

Matrix: Solid

**Analysis Batch: 35313** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 246.5 mg/Kg 90 - 110

Lab Sample ID: LCSD 880-35024/3-A

Released to Imaging: 9/1/2023 3:31:23 PM

Matrix: Solid			Prep Type: So	oluble
Analysis Batch: 35313				
	Spike	LCSD LCSD	%Rec	RPD

Result Qualifier

247.9

Unit

mg/Kg

Lab Sample ID: 890-3011-17 MS Client Sample ID: BH-200 (4.5')

**Matrix: Solid** 

Analyte

Chloride

**Analysis Batch: 35313** 

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 1260 Chloride 3220 4518 mg/Kg 104 90 - 110

Added

250

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Client Sample ID: Lab Control Sample Dup

%Rec

99

**RPD** 

**Prep Type: Soluble** 

Limit

20

**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 Analyte RL

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** 

**Matrix: Solid** 

Analysis Batch: 35314

LCS LCS 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 **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 35314** 

Spike LCSD LCSD %Rec 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')

**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** 

**Analysis Batch: 35314** 

Released to Imaging: 9/1/2023 3:31:23 PM

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

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RPD

**Prep Type: Soluble** 

**Prep Type: Soluble** 

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 Batc
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 Batch
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	
390-3011-28	SW-74 (8-13')	Total/NA	Solid	5035	
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	5035	
390-3011-30	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	
_CSD 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.

Project/Site: Kaiser SWD

Job ID: 890-3011-1

SDG: Lea County NM

## **GC VOA**

<b>Prep</b>	<b>Batc</b>	h: 35	720
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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

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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

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0/2/2022

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

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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 Batc
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	
890-3011-5	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	
890-3011-9	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	
890-3011-13	BH-196 (4.5')	Soluble	Solid	DI Leach	
890-3011-14	BH-197 (4.5')	Soluble	Solid	DI Leach	
890-3011-15	BH-198 (4.5')	Soluble	Solid	DI Leach	
890-3011-16	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	
890-3011-7 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 Batcl
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	
890-3011-28	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	
390-3011-17 MSD	BH-200 (4.5')	Soluble	Solid	DI Leach	
390-3011-27 MS	SW-73 (6-13')	Soluble	Solid	DI Leach	
390-3011-27 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

Date Received: 09/20/22 10:22

Job ID: 890-3011-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: H-1 (0-2') Lab Sample ID: 890-3011-1 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 5035 Total/NA Prep 5.03 g 5 mL 35621 09/28/22 14:59 EL **EET MID** 8021B Total/NA Analysis 1 5 mL 5 mL 35814 10/01/22 06:49 ΑJ **EET MID** Total/NA Analysis Total BTEX 35879 10/01/22 19:48 ΑJ **EET MID** 8015 NM 35274 09/23/22 12:25 Total/NA Analysis 1 SM **EET MID** 8015NM Prep Total/NA 10.02 g 35130 09/22/22 08:45 EET MID Prep 10 mL DM Total/NA Analysis 8015B NM 1 uL 1 uL 35122 09/22/22 20:34 SM **EET MID** Soluble DI Leach 5.01 g 50 mL 35023 09/21/22 10:05 SMC Leach **EET MID** Soluble Analysis 300.0 35314 09/23/22 23:13 СН **EET MID** 

Client Sample ID: H-2 (0-2') Lab Sample ID: 890-3011-2

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

Lab Sample ID: 890-3011-3 Client Sample ID: H-3 (0-2') 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	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

Lab Sample ID: 890-3011-4 Client Sample ID: H-4 (0-2') Date Collected: 09/19/22 00:00 **Matrix: Solid** 

Date Received: 09/20/22 10:22

Released to Imaging: 9/1/2023 3:31:23 PM

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

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: H-4 (0-2')

Date Received: 09/20/22 10:22

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	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 22:22	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 23:37	СН	EET MID

Lab Sample ID: 890-3011-5 Client Sample ID: H-5 (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			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	Туре	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	Type	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

Job ID: 890-3011-1

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

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
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') Lab Sample ID: 890-3011-8

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 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 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

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**Matrix: Solid** 

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 Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 5.03 g 5 mL 35621 09/28/22 14:59 EL **EET MID** 8021B Total/NA Analysis 1 5 mL 5 mL 35814 10/01/22 12:42 ΑJ **EET MID** Total/NA Analysis Total BTEX 35879 10/01/22 19:48 ΑJ **EET MID** Total/NA 8015 NM 35274 09/23/22 12:25 **EET MID** Analysis 1 SM Total/NA 8015NM Prep 35130 09/22/22 08:45 EET MID Prep 10.02 g 10 mL DM Total/NA Analysis 8015B NM 1 uL 1 uL 35122 09/23/22 02:40 SM **EET MID** Soluble DI Leach 5 g 50 mL 35023 09/21/22 10:05 SMC EET MID Leach Soluble Analysis 300.0 35314 09/24/22 00:31 СН **EET MID** 

Client Sample ID: BH-195 (8') Lab Sample ID: 890-3011-12

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			5.04 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 13:08	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 00:09	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	35023	09/21/22 10:05	SMC	EET MIC
Soluble	Analysis	300.0		1			35314	09/24/22 00:36	CH	EET MID

**Client Sample ID: BH-196 (4.5')** Lab Sample ID: 890-3011-13

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			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

Lab Sample ID: 890-3011-14 **Client Sample ID: BH-197 (4.5')** 

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

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			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

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Released to Imaging: 9/1/2023 3:31:23 PM

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

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 Lab Sample ID: 890-3011-14

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			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

Lab Sample ID: 890-3011-15 Client Sample ID: BH-198 (4.5')

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			4.96 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 14:26	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 01:13	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		5			35314	09/24/22 00:51	CH	EET MID

**Client Sample ID: BH-199 (4.5')** Lab Sample ID: 890-3011-16 **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	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 14:52	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

Lab Sample ID: 890-3011-17 Client Sample ID: BH-200 (4.5')

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			4.98 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

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**Matrix: Solid** 

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 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 Date Received: 09/20/22 10:22 **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	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 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			5.03 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 MID
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 MID
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 **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			5.04 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

Job ID: 890-3011-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc.

Lab Sample ID: 890-3011-21

**Matrix: Solid** 

**Client Sample ID: BH-204 (4.5')** 

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		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

**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 5035 Total/NA Prep 5.01 g 5 mL 35724 09/29/22 16:18 MNR EET MID 8021B Total/NA 5 mL 35890 10/03/22 19:15 **EET MID** Analysis 100 5 mL 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 Prep 8015NM Prep 10.02 g 35172 10 mL 09/22/22 11:26 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 35220 09/24/22 04:09 SM **EET MID** Soluble 35024 09/22/22 11:54 Leach DI Leach 5 g 50 mL SMC **EET MID** Soluble Analysis 300.0 5 35313 09/23/22 20:41 СН **EET MID** 

Client Sample ID: BH-206 (4.5')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Lab Sample ID: 890-3011-23

**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	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

- Thanyon	· ·	33720722 23110 311 221 11115
Client Sample ID: BH-207 (4.5')		Lab Sample ID: 890-3011-24
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			4.96 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

Job ID: 890-3011-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Client Sample ID: BH-207 (4.5') Lab Sample ID: 890-3011-24 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 8015 NM 35274 Analysis 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 uL 1 uL 35220 09/24/22 03:26 SM EET MID 5.03 g 35024 09/22/22 11:54 SMC Soluble Leach DI Leach 50 mL **EET MID** 300.0 35313 09/23/22 20:51 Soluble Analysis 10 СН **EET MID** 

Client Sample ID: SW-62 (8-13') Lab Sample ID: 890-3011-25

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	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

Client Sample ID: SW-73 (6-13') Lab Sample ID: 890-3011-27

Date Collected: 09/19/22 00:00 Date Received: 09/20/22 10:22

Released to Imaging: 9/1/2023 3:31:23 PM

	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	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** 

**Matrix: Solid** 

**Matrix: Solid** 

Client: Tetra Tech, Inc. Job ID: 890-3011-1 Project/Site: Kaiser SWD SDG: Lea County NM

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** 

	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 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

Lab Sample ID: 890-3011-29 **Client Sample ID: SW-75 (0-4.5')** 

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	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	Analysis	8021B		10	5 mL	5 mL	35815	10/02/22 04:26	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	35103	09/21/22 15:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35007	09/22/22 03:53	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 21:25	CH	EET MID

**Client Sample ID: SW-76 (0-4.5')** Lab Sample ID: 890-3011-30

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			4.97 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** 

**Matrix: Solid** 

### 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	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		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** 

Released to Imaging: 9/1/2023 3:31:23 PM

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# **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	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 by		and because the analysis of the same of the same	
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for
,	• '	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: 890-3011-1

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** 

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## **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

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09/20/22 10:22 0 - 4.5

09/19/22 00:00

ORIGINAL COPY

Relinguished by:		Relinguished by:										CAB USE	LAB #		Comments:	Receiving Laboratory:	Invoice to:	(county, state)	Project Name:	Client Name:	4
Date: Time:	22	3H-193 (8')	вн-192 (8)	BH-191 (8')	H-7 (0-2')	н-6 (0-2')	H-5 (0-2')	H-4 (0-2')	н з (0-2')	H-2 (0-2')	H-1 (0-2')		SAMPLE IDENTIFICATION			tory: Eurofins Xenco	Permian Water Solutions -	Lea County, NM	Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.
Received by:	The Control	9/19/2022 Re <b>gs</b> ived 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	DATE TIME	YEAR: 2020	SAMPLING		Sampler Signarure:	1	Project #:		Site Manager	c.
Date: Time:	2)	Date:			×	×	×	×	×	×	×	WATE SOIL HCL HNO <sub>3</sub> ICE None	R	MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	sonzales@tetratech.com	Clair Gonzales	Mdand, Texas 79705 Tel (432) 882-4559 Fax (432) 682-3846
					×	×	×	×	×	×	×	FILTER BTEX 8 TPH TX TPH 80	RED (18021B (1005 (15M (	(/N) BTE	C35)		MRO)			ANALY:	
RUSH: Same Day 24 hr 48 hr	X STANDARD		< ×	×	×	×	×	×	×	×	×	Total MM TCLP M TCLP V TCLP S RCI GC/MS GC/MS PCB's i NORM PLM (A Chloride General	vol. 8 Semi. 8082 / sbesto	Ag As s solatiles Vol. 8 608 os)	Ba Cd Cl 6 6 6 6 6 6 7 6 6 7 6 7 6 7 7 7 7 7 7	r Pb Se	e Hg	list)	890-3011 Chain of Custody		
	Time: Received by: Date: Time: Sample Temperature RUSH: Same Day 24 hr 48 hr 72	Time: Received by: Date: Time: Sample Temperature Received by: Received by: Date: Time: Sample Temperature	Time: Sample Temperature Sample Temperature Sample Temperature Sample Temperature Sample Temperature Sample Temperature Sample Temperature Sample Temperature Received by:	9/19/2022   X   X   X   X   X   X   X   X   X	Sy19/2022   X   X   X   X   X   X   X   X   X	9/19/2022   X	9/19/2022   X	9/19/2022   X	9/19/2022   X	9/19/2022   X	9/19/2022	9/19/2022 X X X X X X X X X X X X X X X X X X	9/19/2022   Time:   WATE	Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   Part   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# CONTAINERS  # CONTAINERS  FILTERED (Y/N)
# CONTAINERS    FILTERED (Y/N)
TCLP Volatiles  TCLP Semi Volatiles
Chloride Sulfate TDS  General Water Chemistry (see attached list)

	Relinquished by:		Relinquished by:	There	Relinquished by:	SW:	.ws	SW.	SW.	SW.	.WS	вн.	Вн∹	BH.	ВН	( LABUSE )	LAB #		Comments:	Receiving Laboratory:		invoice to:	Project Location: (county, state)	Project Name:		Oliont Name	4		Analysis Reque
	Date: Time:		Date: Time:	L gleder	Date: Time:	SW-76 (0-4.5)	SW-75 (0-4.5')	SW-74 (8-13')	SW-73 (6-13')	SW-72 (0-8')	SW-62 (8-13')	BH-207 (4.5')	BH-206 (4.5')	BH-205 (4.5')	BH-204 (4.5')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff		Lea County, NM	Kaiser SWD	Permian Water Solutions		ICHA ICH IIC	Totro Toch Inc	Analysis Request of Chain of Custody Record
	Received by:		Received by:	Melit	Received 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					Project #:	<u>Clair.</u> (		Site Manager			
	Date: Time:		Date: Time:	7 9.30.22	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	Midland, Texas 79705	
(Circle) HAND DELIVERED FEDEX UPS Tracking #	Special Report Limits or TRRP Report	Rush Charges Authorized	Sample Temperature		) X	×	×	×	×	×	×	×		×	×	PAH 8 Total M TCLP N TCLP S RCI GC/MS GC/MS PCB'S NORM PLM (A	RED (*) 8021B X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X1005 X100	BTI G (Ext to GRO) Ag As Ag As es colorable: 82608 Vol. 668	EX 8260 0 C35) - DRO - I Ba Cd Cr Ba Cd C	ORO - Pb Se r Pb S	Hg				(Circle or Specify Method				1 age
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Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Tech, Inc.  Tetra Analysis Requested  Calif Gonzales@letralech.com  Page Manager  Calif Gonzales@letralech.com  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  Sampler Synature.  Peyton Oliver  Permian Water Solutions - Dusty Mointurff  ANALYSIS Recuested Circle Octor  Oliver  Permian Water Solutions - Dusty Mointurff  ANALYSIS Recuested Circle Octor  Permian Water Solutions - Dusty Mointurff  ANALYSIS Recuested Circle Octor  Permian Water Solutions - Dusty Mointurff  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  Permian Water Solutions - Dusty Mointurff  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor  ANALYSIS Recuested Circle Octor	Relinquished by:	Relinguished by:	Relinguished by:				LABUSE )			Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	급	
Sampler Signature:  Peyton Oliver  Sampler Signature:  Peyton Oliver  Preservanve  WATER  X SOIL  HUNO3  BIEX 82368  ANALYSIS REQUEST  Clair Gonzales @learatech.com  Preservanve  WATER  X SOIL  HUNO3  WETHOD  Date: Time:  Sampler Signature:  Peyton Oliver  Preservanve  WETER 2222  TIME  BIEX 8268B  TOTH TX1005 (Ext to C35)  X THH 8015M (GRO - DRO - ORO - MRO)  PAH 8270C  Total Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Metals Ag As Ba Cd Cr Pb Se Hg  TCLP Volatiles  TCLP Semi Volatiles  TCLP Semi Volatiles  TCLP Semi Volatiles  TCLP Semi Volatiles	Date:	Date:	Date: 9/20/12			SW-77 (0-4.5')	SAMPLE IDENTIFICATION				Permian Water Solutions - Dusty McIntu		Kaiser SWD	Permian Water Solutions	Tetra Tech, Inc.	
# CONTAINERS  # CONTAINERS  FILTERED (Y/N)    Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend   Warrend	Received by:	Received by:	Received by:			9/19/2022		SAMPLING YEAR: 2020		Sampler Signature:		Project #:	<u>Clair.</u>	Site Manager:	·	
# CONTAINERS    # CONTAINERS			2				WATER SOIL HCL HNO <sub>3</sub>			Peyton Oliver		212C-MD-02230	Gonzales@tetratech.com	Clair Gonzales	Wildland, Texas 79705 Tet (432) 682-4559 Fay (432) 682-3946	901W Wall Street, See 100
B N PLM (Asbestos)	(Circle) HAND DELIVERED FEDEX UPS Tracking #:		LAB USE ONLY X				FILTEREI BTEX 802 TPH TX10 TPH 8015 PAH 8270 Total Meta TCLP Meta TCLP Sen RCI GC/MS Vo GC/MS Se PCB's 800 NORM	D (Y/N) 21B BT 005 (Ext 1) 005 (Ext 1) 006 (Ext 2) 007 (Ext 2) 008 Ag As 008 Ag As 009 Ag As 009 Ag Ag 009 Ag Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 009 Ag 0	o C35) - DRO - Ba Cd C Ba Cd C	ORO - I r Pb Se Cr Pb Se	Hg			REQUEST (Circle or Specify		

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### **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").

Released to Imaging: 9/1/2023 3:31:23 PM

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3011-1 SDG Number: Lea County NM

Liet Source: Eurofine Midland

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 <6mm (1/4").	N/A	

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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:

.....LINKS

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**Have a Question?** 

www.eurofinsus.com/Env

Released to Imaging: 9/1/2023 3:31:23 PM

Visit us at:

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

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## **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** 

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

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.

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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	•	. , ,	•	MDI	Unit	Ъ	Dranarad	Analyzad	Dil Ess
Analyte	Result	ics (DRO) ( Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result 74.9	Qualifier	<b>RL</b> 50.0	MDL	Unit mg/Kg	D	Prepared	Analyzed 11/14/22 14:30	Dil Fac
Analyte	Result 74.9	Qualifier nics (DRO)	RL 50.0		mg/Kg	<u>D</u>	Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result 74.9  sel Range Orga Result	Qualifier  nics (DRO) Qualifier	70.0 (GC)		mg/Kg	<u>D</u>	Prepared	11/14/22 14:30 Analyzed	1
Analyte Total TPH  Method: SW846 8015B NM - Die	Result 74.9	Qualifier  nics (DRO) Qualifier	RL 50.0		mg/Kg	_ =		11/14/22 14:30	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result 74.9  sel Range Orga Result	Qualifier  nics (DRO) Qualifier	70.0 (GC)		mg/Kg	_ =	Prepared	11/14/22 14:30 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 74.9  Sel Range Orga Result < 50.0	Qualifier  nics (DRO)  Qualifier  U	RL 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
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 74.9  sel Range Orga Result < 50.0  74.9	Qualifier  nics (DRO)  Qualifier  U	RL 50.0 (GC) RL 50.0 50.0		mg/Kg  Unit mg/Kg  mg/Kg	_ =	Prepared 11/09/22 15:38	Analyzed 11/11/22 13:54 11/11/22 13:54	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   74.9	Qualifier  nics (DRO) Qualifier U	RL 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	1 Dil Fac
Analyte Total TPH  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	Result   74.9	Qualifier  nics (DRO) Qualifier U	RL		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
Analyte Total TPH  Method: SW846 8015B NM - Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	Result   74.9	Qualifier  nics (DRO) Qualifier  U	RL 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
Analyte Total TPH  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 1-Chlorooctane o-Terphenyl	Result   74.9	Qualifier  nics (DRO) Qualifier  U	RL 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 1

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

Matrix: Solid

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Lab Sample ID: 890-3411-2

Lab Sample ID: 890-3411-3

**Matrix: Solid** 

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 - Volatile	Organic Compoun	nds (GC) (Continued)
modification of the country	, organic compoun	

Surrogate	%Recovery Qua	ıalifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114	70 - 130	11/09/22 15:36	11/12/22 22:35	1

#### Method: TAL SOP Total BTEX - Total BTEX Calculation

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/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 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
Oll 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	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102	70 - 130	11/09/22 15:38	11/11/22 14:16	1
o-Terphenyl	109	70 - 130	11/09/22 15:38	11/11/22 14:16	1

### 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

Method: SW846 8021I	Ł – Volatilo Organic Co	ampounde (CC)
INICITION. SANOHO OUZ II	<b>3 - V</b> UIALIIE OLUALIIC CL	Jilibuullus (GC)

Welliou. Syvo40 002 ID - Volat	ne Organic Comp		)						
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	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	<50.0	U	50.0	mg/Kg			11/14/22 14:30	1

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Lab Sample ID: 890-3411-3

11/12/22 01:47

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	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)									
Oll 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	s, ion Chromato	grapny - So	oluble						
Analyte	Docult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

25.0

mg/Kg

Client Sample ID: BH-205 (10') Lab Sample ID: 890-3411-4 Date Collected: 11/07/22 00:00 **Matrix: Solid** 

2010

Date Received: 11/07/22 14:58

Chloride

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
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
T L L DTEV	<0.00399								
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/14/22 16:13	1
•					mg/Kg			11/14/22 16:13	1
iotal BTEX : 	el Range Organ			MDL	mg/Kg Unit	D	Prepared	11/14/22 16:13  Analyzed	1 Dil Fac
: Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (C	GC)	MDL		<u>D</u>	Prepared		·
Method: SW846 8015 NM - Diese Analyte Total TPH	Result <50.0	ics (DRO) (Control of the Control of	GC) RL 50.0	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result <50.0 sel Range Organ	ics (DRO) (Control of the Control of	GC) RL 50.0	MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <50.0 sel Range Organ	ics (DRO) ( Qualifier U nics (DRO) Qualifier	GC)  RL  50.0		Unit mg/Kg			Analyzed 11/14/22 14:30	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte	el Range Organ Result <50.0 sel Range Orga Result	ics (DRO) ( Qualifier U nics (DRO) Qualifier	GC)  RL  50.0		Unit mg/Kg Unit		Prepared	Analyzed 11/14/22 14:30 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result <50.0 sel Range Orga Result	ics (DRO) (( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0		Unit mg/Kg Unit		Prepared	Analyzed 11/14/22 14:30 Analyzed	Dil Fac
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)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0	ics (DRO) (( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL  50.0  50.0		Unit mg/Kg  Unit mg/Kg mg/Kg		Prepared 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
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <50.0 sel Range Orga Result <50.0	ics (DRO) (( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL  50.0		Unit mg/Kg  Unit mg/Kg		Prepared 11/09/22 15:38	Analyzed 11/14/22 14:30  Analyzed 11/11/22 14:59	Dil Fac  Dil Fac  1
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)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0 <80.0 %Recovery	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	GC)  RL 50.0  (GC)  RL 50.0  50.0  50.0  Limits		Unit 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  11/14/22 14:30  Analyzed  11/11/22 14:59  11/11/22 14:59  Analyzed	Dil Fac  Dil Fac  1
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)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0 <50.0	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	GC) RL 50.0  (GC) RL 50.0  50.0  50.0		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  Dil Fac  1  1  1

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-3411-1 SDG: Lea County NM

Client Sample ID: BH-205 (10')

Lab Sample ID: 890-3411-4

Matrix: Solid

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - So	oluble						
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')

Date Collected: 11/07/22 00:00

Lab Sample ID: 890-3411-5

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	<0.00201	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

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 F	Range Organ	ics (DRO) ((	3C)						

motion of the contracting of games (510)										
	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	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 <sub>-</sub> 130				11/09/22 15:38	11/11/22 15:21	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2290		25.2		mg/Kg			11/12/22 02:01	5

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Lab Sample ID: 890-3411-6

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	INIDE	mg/Kg	=	Tropurcu	11/14/22 14:30	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	<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	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	
Surrogate 1-Chlorooctane	%Recovery	Qualifier					Prepared 11/09/22 15:38	Analyzed 11/11/22 15:43	Dil Fac
		Qualifier							Dil Fac
1-Chlorooctane o-Terphenyl	94		70 - 130 70 - 130				11/09/22 15:38	11/11/22 15:43	Dil Fac
1-Chlorooctane	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	1

Lab Sample ID: 890-3411-7

Matrix: Solid

Released to Imaging: 9/1/2023 3:31:23 PM

Client: Tetra Tech, Inc.
Project/Site: Kaiser SWD

Job ID: 890-3411-1 SDG: Lea County NM

Client Sample ID: BH-209 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Sample Depth: 10

Lab Sample ID: 890-3411-7

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 1,4-Diffuorobenzene (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</td>
 U
 0.00398
 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
 <50.0</td>
 U
 50.0
 mg/Kg
 11/14/22 14:30
 1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

**MDL** Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac <50.0 U 50.0 mg/Kg 11/11/22 16:26 Gasoline Range Organics 11/09/22 15:38 (GRO)-C6-C10 <50.0 U 50.0 11/09/22 15:38 11/11/22 16:26 Diesel Range Organics (Over mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/09/22 15:38 11/11/22 16:26

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 117 70 - 130 11/09/22 15:38 11/11/22 16:26 o-Terphenyl 124 70 - 130 11/09/22 15:38 11/11/22 16:26

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

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 0.00200 mg/Kg 11/09/22 15:36 11/13/22 00:40 0.00200 11/09/22 15:36 11/13/22 00:40 mg/Kg **Toluene** 0.0775 0.00200 11/09/22 15:36 11/13/22 00:40 Ethylbenzene 0.0695 mg/Kg 0.00399 11/13/22 00:40 11/09/22 15:36 m-Xylene & p-Xylene mg/Kg 0.135 o-Xylene 0.0758 0.00200 mg/Kg 11/09/22 15:36 11/13/22 00:40 0.00399 mg/Kg 11/09/22 15:36 11/13/22 00:40 **Xylenes, Total** 0.211

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed S1+ 70 - 130 4-Bromofluorobenzene (Surr) 134 11/09/22 15:36 11/13/22 00:40 1,4-Difluorobenzene (Surr) 99 70 - 130 11/09/22 15:36 11/13/22 00:40

Method: TAL SOP Total BTEX - Total BTEX Calculation

 Analyte
 Result Total BTEX
 Qualifier
 RL MDL Unit
 D Prepared
 Analyzed 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)

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Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-210 (10')

Client Sample ID: BH-211 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 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** 

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Analyzed Dil Fac Unit D Prepared 50.0 11/09/22 15:38 11/11/22 16:48 **Gasoline Range Organics** 61.9 mg/Kg (GRO)-C6-C10 50.0 11/11/22 16:48 **Diesel Range Organics (Over** mg/Kg 11/09/22 15:38 2130 C10-C28) **Oll Range Organics (Over** 237 50.0 mg/Kg 11/09/22 15:38 11/11/22 16:48 C28-C36) Qualifier Surrogate %Recovery Limits Prepared Analyzed Dil Fac 1-Chlorooctane 108 70 - 130 11/09/22 15:38 11/11/22 16:48 o-Terphenyl 111 70 - 130 11/09/22 15:38 11/11/22 16:48

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble MDL Unit Dil Fac Result Qualifier Prepared RLD Analyzed Chloride 2270 25.0 11/12/22 02:37 mg/Kg

Lab Sample ID: 890-3411-9

**Matrix: Solid** 

Method: SW846 8021B - Volatile Organic Compounds (GC)

	ame ergaine eemp	o organio compoundo (co)							
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 15:30	11/13/22 01:00	1
1,4-Difluorobenzene (Surr)	115		70 - 130	11/09/22 15:30	5 11/13/22 01:00	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

Method: SW846 8015	NM - Diesel	Range C	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 14:30	1

١	Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics	<50.0	U	50.0	mg/K	g	11/09/22 15:38	11/11/22 17:09	1
١	(GRO)-C6-C10								
	Diesel Range Organics (Over	<50.0	U	50.0	mg/K	g	11/09/22 15:38	11/11/22 17:09	1
١	C10-C28)								
ı	OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/K	g	11/09/22 15:38	11/11/22 17:09	1
١									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	11/09/22 15:38	11/11/22 17:09	1
o-Terphenyl	129		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, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2230		24.9		mg/Kg			11/12/22 02:44	5

Lab Sample ID: 890-3411-10 Client Sample ID: BH-212 (10')

Date Collected: 11/07/22 00:00 Matrix: Solid

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	
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	
m-Xylene & p-Xylene	0.0209		0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:21	
o-Xylene	0.0186		0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	
Xylenes, Total	0.0395		0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:21	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 01:21	
1,4-Difluorobenzene (Surr)	101		70 - 130				11/09/22 15:36	11/13/22 01:21	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	ulation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0395		0.00398		mg/Kg			11/14/22 16:13	•
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)						
Analyte	Result	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	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	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:32	1
Diesel Range Organics (Over C10-C28)	228		50.0		mg/Kg		11/09/22 15:38	11/11/22 17:32	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:32	
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-Terphenyl	102		70 - 130				11/09/22 15:38	11/11/22 17:32	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

## **Client Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

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 Sample Depth: 4 - 10 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3411-11

Matrix: Solid

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

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Factor

 4-Bromofluorobenzene (Surr)
 104
 70 - 130
 11/09/22 15:36
 11/13/22 02:45
 1

 1,4-Diffluorobenzene (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</td>
 U
 0.00401
 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 Factor

 Total TPH
 <50.0</td>
 U
 50.0
 mg/Kg
 11/14/22 14:30
 1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL MDI Unit D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 11/09/22 15:38 11/11/22 17:54 mg/Kg (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 11/09/22 15:38 11/11/22 17:54 Oll Range Organics (Over C28-C36) <50.0 U mg/Kg

Dil Fac %Recovery Qualifier Limits Prepared Analyzed Surrogate 1-Chlorooctane 92 70 - 130 11/09/22 15:38 11/11/22 17:54 o-Terphenyl 98 70 - 130 11/09/22 15:38 11/11/22 17:54

 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 14500
 F1
 100
 mg/Kg
 11/12/22 02:58
 20

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

Method: SW846 8021B - Volatile Organic Compounds (GC) Result Qualifier MDL Unit Analyte RL D Prepared Analyzed Dil Fac Benzene <0.00201 U 0.00201 mg/Kg 11/09/22 15:36 11/13/22 03:05 Toluene <0.00201 U 0.00201 mg/Kg 11/09/22 15:36 11/13/22 03:05 Ethylbenzene <0.00201 U 0.00201 mg/Kg 11/09/22 15:36 11/13/22 03:05 m-Xylene & p-Xylene <0.00402 U 0.00402 11/09/22 15:36 11/13/22 03:05 mg/Kg 0.00201 o-Xylene <0.00201 U mg/Kg 11/09/22 15:36 11/13/22 03:05 Xylenes, Total <0.00402 U 0.00402 mg/Kg 11/09/22 15:36 11/13/22 03:05 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 11/09/22 15:36 11/13/22 03:05 4-Bromofluorobenzene (Surr) 112

## **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



Lab Sample ID: 890-3411-12

Matrix: Solid

4

6

7

9

11

13

Method: SW846 8021B - Volatile Organic Compounds (GC) (Conti	nued)

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 - Total BTEX Calculation

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 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 14:30	1

### Method: SW846 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		11/09/22 15:38	11/11/22 18:15	1
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

Surrogate	/ortecovery	Quanner	Lillits	rrepareu	Allalyzeu	ווט
1-Chlorooctane	111		70 - 130	11/09/22 15:38	11/11/22 18:15	
o-Terphenyl	121		70 - 130	11/09/22 15:38	11/11/22 18:15	

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15800		250		mg/Kg			11/12/22 03:20	50

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 REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3411-13

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

mothod. Offoro COLID Tolat	ne erganne eemp	ounus (CC)	,						
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: TAI	SOP Total BTFX	- Total RTFX	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

### 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 14:30	1

Project/Site: Kaiser SWD

Client: Tetra Tech, Inc. Job ID: 890-3411-1 SDG: Lea County NM

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

**REMOVED FROM ANALYSIS TABLE** 

Result Qualifier

Lab Sample ID: 890-3411-13

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:37	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:37	1
C10-C28)									
OII 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 <sub>-</sub> 130				11/09/22 15:38	11/11/22 18:37	1

11/12/22 03:27 24.8 Chloride 1120 mg/Kg **Client Sample ID: SW-80 (4.5-10')** 

RL

MDL Unit

D

Prepared

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Analyte

Sample Depth: 4.5 - 10

Lab Sample ID: 890-3411-14

Analyzed

**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 03:47	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
Analyte Total BTEX	<0.00398		0.00398	MDL	mg/Kg	<u>D</u>	Prepared	Analyzed 11/14/22 16:13	1
Total BTEX  Method: SW846 8015 NM - Diese	<0.00398	ics (DRO) (	0.00398 GC)		mg/Kg			11/14/22 16:13	1
Total BTEX  Method: SW846 8015 NM - Diese Analyte	<0.00398	U	0.00398	MDL	mg/Kg	<u>D</u>	Prepared		Dil Fac  Dil Fac
Total BTEX	<0.00398 el Range Organ Result 263 sel Range Orga	ics (DRO) ((Qualifier	0.00398  GC)  RL  50.0		mg/Kg  Unit mg/Kg			11/14/22 16:13  Analyzed	1
Total BTEX  Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese	<0.00398 el Range Organ Result 263 sel Range Orga	ics (DRO) ((Qualifier DRO) Qualifier Qualifier	0.00398  GC)  RL  50.0  (GC)	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	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 Analyte Gasoline Range Organics	<0.00398 el Range Organ Result 263 sel Range Orga Result	ics (DRO) ((Qualifier DRO) Qualifier Qualifier	0.00398  GC)  RL  50.0  (GC)  RL	MDL	mg/Kg  Unit mg/Kg  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 (GRO)-C6-C10 Diesel Range Organics (Over	<0.00398 el Range Organ Result 263 sel Range Orga Result <50.0	ics (DRO) ((Qualifier DRO) Qualifier U	0.00398  RL 50.0  (GC) RL 50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u>D</u>	Prepared  Prepared  11/09/22 15:38	Analyzed 11/11/22 16:13  Analyzed 11/11/22 14:30  Analyzed 11/11/22 18:59	Dil Fac 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)	<0.00398 el Range Organ Result 263 sel Range Orga Result <50.0 263	ics (DRO) ((Qualifier DRO) Qualifier U	0.00398  RL 50.0  (GC)  RL 50.0  50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg mg/Kg	<u>D</u>	Prepared  Prepared  11/09/22 15:38	Analyzed 11/14/22 16:13  Analyzed 11/14/22 14:30  Analyzed 11/11/22 18:59 11/11/22 18:59	Dil Fac  Dil Fac  1  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)	<0.00398 el Range Organ Result 263 Result <50.0 <50.0	ics (DRO) ((Qualifier DRO) Qualifier U	0.00398  RL 50.0  (GC)  RL 50.0  50.0  50.0	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg mg/Kg	<u>D</u>	Prepared  11/09/22 15:38  11/09/22 15:38	Analyzed 11/14/22 16:13  Analyzed 11/14/22 14:30  Analyzed 11/11/22 18:59 11/11/22 18:59 11/11/22 18:59	Dil Fac  Dil Fac  1  Dil Fac  1

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, I	on Chromato	graphy - S	oluble						
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')

Date Collected: 11/07/22 00:00

Lab Sample ID: 890-3411-15

Matrix: Solid

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	<0.00200	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 - 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	Result 192	Qualifier	•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/14/22 14:30	Dil Fac
	192		RL 49.9	MDL		<u>D</u>	Prepared		
Total TPH  Method: SW846 8015B NM - Dies	192 sel Range Orga		RL 49.9	MDL	mg/Kg	<u>D</u> 	Prepared Prepared		
Total TPH  Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	192 sel Range Orga	nics (DRO) Qualifier	RL 49.9 (GC)		mg/Kg	_ =		11/14/22 14:30	1
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	192 sel Range Orga Result	nics (DRO) Qualifier	RL 49.9 (GC)		mg/Kg	_ =	Prepared	11/14/22 14:30  Analyzed	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga Result <49.9	nics (DRO) Qualifier U	RL 49.9  (GC) RL 49.9		mg/Kg  Unit mg/Kg	_ =	Prepared 11/09/22 15:38	11/14/22 14:30  Analyzed  11/11/22 19:21	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Orga Result <49.9	nics (DRO) Qualifier U	RL 49.9  (GC) RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	_ =	Prepared 11/09/22 15:38 11/09/22 15:38	11/14/22 14:30  Analyzed  11/11/22 19:21  11/11/22 19:21	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)	192 sel Range Orga Result <49.9 49.9	nics (DRO) Qualifier U	RL 49.9  (GC) RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg	_ =	Prepared 11/09/22 15:38 11/09/22 15:38	Analyzed 11/11/22 19:21 11/11/22 19:21 11/11/22 19:21	Dil Face  1  1  Dil Face
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	192 sel Range Orga Result <49.9 192 <49.9 %Recovery	nics (DRO) Qualifier U	RL 49.9  (GC) RL 49.9  49.9  49.9  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 19:21 11/11/22 19:21 11/11/22 19:21 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	192 sel Range Orga Result <49.9 192 <49.9 %Recovery 95 101	Qualifier  U  Qualifier	RL 49.9  (GC)  RL 49.9  49.9  49.9  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 19:21 11/11/22 19:21 11/11/22 19:21 Analyzed 11/11/22 19:21	1 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	192 sel Range Orga Result <49.9 192 <49.9 %Recovery 95 101 s, Ion Chromato	Qualifier  U  Qualifier	RL 49.9  (GC)  RL 49.9  49.9  49.9  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 19:21 11/11/22 19:21 11/11/22 19:21 Analyzed 11/11/22 19:21	Dil Fac

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 - 1	Total BTEX Cal	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	• •	ics (DRO) (C	GC) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	216		49.8		mg/Kg			11/14/22 14:30	1
- Method: SW846 8015B NM - Dies									
meniou. Syvono ou isb ivivi - Die.	sel Range Orga	nics (DRO)	(GC)						
		nics (DRO) Qualifier	(GC)	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier	• •	MDL	Unit mg/Kg	<u>D</u>	Prepared 11/09/22 15:38	Analyzed 11/11/22 19:43	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier	RL	MDL		<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result   <49.8	Qualifier U	RL 49.8	MDL	mg/Kg	<u>D</u>	11/09/22 15:38	11/11/22 19:43	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.8 216	Qualifier U	49.8 49.8	MDL	mg/Kg	<u>D</u>	11/09/22 15:38 11/09/22 15:38	11/11/22 19:43	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result  <49.8 216 <49.8	Qualifier U	RL 49.8 49.8 49.8	MDL	mg/Kg	<u>D</u>	11/09/22 15:38 11/09/22 15:38 11/09/22 15:38	11/11/22 19:43 11/11/22 19:43 11/11/22 19:43	1 1 1 Dil Fac
Analyte  Gasoline Range Organics (GRO)-C6-C10  Diesel Range Organics (Over C10-C28)  Oll Range Organics (Over C28-C36)	Result	Qualifier U	49.8 49.8 49.8 <i>Limits</i>	MDL	mg/Kg	<u> </u>	11/09/22 15:38 11/09/22 15:38 11/09/22 15:38 Prepared	11/11/22 19:43 11/11/22 19:43 11/11/22 19:43 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	RL 49.8 49.8 49.8 Limits 70 - 130 70 - 130	MDL	mg/Kg	<u>D</u>	11/09/22 15:38 11/09/22 15:38 11/09/22 15:38 Prepared 11/09/22 15:38	11/11/22 19:43 11/11/22 19:43 11/11/22 19:43 Analyzed 11/11/22 19:43	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	RL 49.8 49.8 49.8 Limits 70 - 130 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	11/09/22 15:38 11/09/22 15:38 11/09/22 15:38 Prepared 11/09/22 15:38	11/11/22 19:43 11/11/22 19:43 11/11/22 19:43 Analyzed 11/11/22 19:43	1

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

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	

Lab Sample ID: 890-3411-17

**Matrix: Solid** 

## **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



Lab Sample ID: 890-3411-17

Matrix: Solid

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Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 04:49	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte		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 - Diese	l Range Organ	ics (DRO) (	GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9		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	<49.9	U *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
C10-C28)	:40.0		40.0		11.7		44/40/00 00 40	44/44/00 40 00	
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 - 130				11/10/22 08:48	11/11/22 18:00	1
Method: MCAWW 300.0 - Anions	. Ion Chromato	ography - Se	oluble						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	714	-	4.96		mg/Kg			11/12/22 04:09	

# **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)
		1001	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	

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# **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	
_CS 880-39141/2-A	Lab Control Sample	104	116	
LCS 880-39172/2-A	Lab Control Sample	94	97	
LCSD 880-39141/3-A	Lab Control Sample Dup	104	116	
LCSD 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+	
Surrogate Legend				

1CO = 1-Chlorooctane OTPH = o-Terphenyl

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

**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

	<b>Spike</b>	LCS	LUS				%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: 890-3411-1 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	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	

4-Bromofluorobenzene (Surr)

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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Lab Sample ID: 890-3411-1 MS Client Sample ID: BH-200 (10') **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 39369 Prep Batch: 39140 Sample Sample Snike MS MS

	Campic	Campic	Opino	1410	1110				701100	
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 %Recovery Qualifier Limits Surrogate

70 - 130

1,4-Difluorobenzene (Surr) 70 - 130 102 Lab Sample ID: 890-3411-1 MSD Client Sample ID: BH-200 (10')

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 39369 Prep Batch: 39140

Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit Analyte babbA 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 35 U mg/Kg m-Xylene & p-Xylene <0.00401 U 0.200 0.1625 mg/Kg 81 70 - 130 11 35 0.0998 70 - 130 <0.00200 U 0.09115 91 11

o-Xylene mg/Kg MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 95

136 S1+

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** Prep Type: Total/NA

o-Terphenyl

**Analysis Batch: 39275** Prep Batch: 39141 мв мв

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte <50.0 U 50.0 11/09/22 15:38 11/11/22 09:13 Gasoline Range Organics mg/Kg (GRO)-C6-C10 11/11/22 09:13 Diesel Range Organics (Over <50.0 U 50.0 11/09/22 15:38 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 11/11/22 09:13 mg/Kg 11/09/22 15:38

MB MB Limits %Recovery Qualifier Prepared Analyzed Dil Fac Surrogate 1-Chlorooctane 121 70 - 130 11/09/22 15:38 11/11/22 09:13

70 - 130

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
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	971.0		mg/Kg		97	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	884.0		mg/Kg		88	70 - 130
C10-C28)							

**Eurofins Carlsbad** 

11/11/22 09:13

11/09/22 15:38

## QC Sample Results

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)

LCS LCS %Recovery Qualifier

104

116

Lab Sample ID: LCS 880-39141/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

1-Chlorooctane

Surrogate

o-Terphenyl

**Analysis Batch: 39275** 

Prep Type: Total/NA

Prep Batch: 39141

Lab Sample ID: LCSD 880-39141/3-A Client Sample ID: Lab Control Sample Dup

Limits

70 - 130

70 - 130

**Matrix: Solid** Prep Type: Total/NA

Prep Batch: 39141

Analysis Batch: 39275 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1108 111 70 - 13013 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 910.3 91 mg/Kg 70 - 1303 20 C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: 880-21336-A-28-D MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 39275** 

Prep Type: Total/NA

Prep Batch: 39141

Prep Batch: 39141

70 - 130

20

20

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	182		997	969.9		mg/Kg		79	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	1820	F1	997	2679		mg/Kg		86	70 - 130	
C10-C28)										

	MS M		
Surrogate	%Recovery Q	ualifier	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** Prep Type: Total/NA

Analysis Batch: 39275

MSD MSD %Rec RPD Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Gasoline Range Organics 182 999 1151 97 mg/Kg 70 - 130 17

2326 F1

mg/Kg

999

(GRO)-C6-C10 Diesel Range Organics (Over

C10-C28) MSD MSD

1820 F1

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 84 70 - 130 o-Terphenyl 80 70 - 130

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)

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

	MB	MB							
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)									
Oll 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

LCS LCS Spike Analyte Added Result Qualifier Unit D %Rec Limits 70 - 130 Gasoline Range Organics 1000 815.5 mg/Kg 82 (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 II	D: Lab Control	Sample Dup
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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 Qual	ifier 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

MS MS Sample Sample Spike %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Gasoline Range Organics 55.1 997 1007 mg/Kg 95 70 - 130 (GRO)-C6-C10 <50.0 U 997 861.7 70 - 130 Diesel Range Organics (Over mg/Kg

C10-C28)

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	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 890-3402-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 39269									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 (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

## 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

		MID						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	-
Chloride	<5.00	U	5.00	ma/Ka			11/12/22 00:57	

MR MR

Lab Sample ID: LCS 880-39128/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

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** 

**Analysis Batch: 39334** 

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	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** 

Analysis Batch: 39334

/ <b>,</b>	Sample Sample	Spike	MS	MS				%Rec	
Analyte	Result Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2280 F1	1260	3520		mg/Kg		98	90 - 110	

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 3:31:23 PM

**Prep Type: Soluble** 

Dil Fac

**Prep Type: Soluble** 

**Prep Type: Soluble** 

## 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

Chloride

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	2280	F1	1260	3707	F1	mg/Kg		113	90 - 110	5	20	

Lab Sample ID: 890-3411-11 MS Client Sample ID: SW-75 (4-10') **Matrix: Solid** 

**Prep Type: Soluble** 

Analysis Batch: 39334 Sample Sample Spike MS MS %Rec

5010

Result Qualifier Added Limits Analyte Result Qualifier Unit D %Rec

Lab Sample ID: 890-3411-11 MSD Client Sample ID: SW-75 (4-10')

**Matrix: Solid Prep Type: Soluble** 

21010 F1

mg/Kg

130

90 - 110

Analysis Batch: 39334

Sample Sample Spike MSD MSD

14500 F1

%Rec RPD Analyte Result Qualifier Added Result Qualifier Unit Limits **RPD** Limit Chloride 14500 F1 5010 20560 F1 121 90 - 110 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 Batch
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
890-3411-4	BH-205 (10')	Total/NA	Solid	8021B	39140
890-3411-5	BH-206 (10')	Total/NA	Solid	8021B	39140
890-3411-6	BH-208 (10')	Total/NA	Solid	8021B	39140
890-3411-7	BH-209 (10')	Total/NA	Solid	8021B	39140
890-3411-8	BH-210 (10')	Total/NA	Solid	8021B	39140
890-3411-9	BH-211 (10')	Total/NA	Solid	8021B	39140
890-3411-10	BH-212 (10')	Total/NA	Solid	8021B	39140
890-3411-11	SW-75 (4-10')	Total/NA	Solid	8021B	39140
890-3411-12	SW-78 (4-10')	Total/NA	Solid	8021B	39140
890-3411-13	SW-79 (4-10')	Total/NA	Solid	8021B	39140
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8021B	39140
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8021B	39140
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8021B	39140
890-3411-17	SW-83 (4-10)	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
890-3411-1 MS	BH-200 (10')	Total/NA	Solid	8021B	39140
890-3411-1 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	

Job ID: 890-3411-1 Client: Tetra Tech, Inc. 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	

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
390-3411-2	BH-201 (10')	Total/NA	Solid	8015B NM	39141
390-3411-3	BH-204 (10')	Total/NA	Solid	8015B NM	39141
890-3411-4	BH-205 (10')	Total/NA	Solid	8015B NM	39141
390-3411-5	BH-206 (10')	Total/NA	Solid	8015B NM	39141
390-3411-6	BH-208 (10')	Total/NA	Solid	8015B NM	39141
390-3411-7	BH-209 (10')	Total/NA	Solid	8015B NM	39141
390-3411-8	BH-210 (10')	Total/NA	Solid	8015B NM	39141
390-3411-9	BH-211 (10')	Total/NA	Solid	8015B NM	39141
390-3411-10	BH-212 (10')	Total/NA	Solid	8015B NM	39141
890-3411-11	SW-75 (4-10')	Total/NA	Solid	8015B NM	39141
390-3411-12	SW-78 (4-10')	Total/NA	Solid	8015B NM	39141
390-3411-13	SW-79 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8015B NM	39141
390-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8015B NM	39141
390-3411-16	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
_CSD 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
890-3411-1	BH-200 (10')	Total/NA	Solid	8015 NM	
890-3411-2	BH-201 (10')	Total/NA	Solid	8015 NM	
890-3411-3	BH-204 (10')	Total/NA	Solid	8015 NM	
390-3411-4	BH-205 (10')	Total/NA	Solid	8015 NM	
890-3411-5	BH-206 (10')	Total/NA	Solid	8015 NM	
890-3411-6	BH-208 (10')	Total/NA	Solid	8015 NM	
890-3411-7	BH-209 (10')	Total/NA	Solid	8015 NM	
390-3411-8	BH-210 (10')	Total/NA	Solid	8015 NM	
890-3411-9	BH-211 (10')	Total/NA	Solid	8015 NM	
890-3411-10	BH-212 (10')	Total/NA	Solid	8015 NM	
390-3411-11	SW-75 (4-10')	Total/NA	Solid	8015 NM	
890-3411-12	SW-78 (4-10')	Total/NA	Solid	8015 NM	
890-3411-13	SW-79 (4-10')	Total/NA	Solid	8015 NM	
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8015 NM	
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8015 NM	
390-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8015 NM	
890-3411-17	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 Batch
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

**Eurofins Carlsbad** 

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Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-200 (10') Lab Sample ID: 890-3411-1

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			4.99 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') Lab Sample ID: 890-3411-2

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

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 39140 11/09/22 15:36 MNR EET MID Total/NA 8021B 5 mL 39369 11/12/22 22:35 **EET MID** Analysis 1 5 mL MNR Total/NA Total BTEX 39551 11/14/22 16:13 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 39406 11/14/22 14:30 SM **EET MID** Total/NA 39141 11/09/22 15:38 Prep 8015NM Prep 10.01 g 10 mL DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 39275 11/11/22 14:16 SM **EET MID** 11/09/22 15:08 Soluble 5.04 g KS Leach DI Leach 50 mL 39128 **EET MID** Soluble Analysis 300.0 10 39334 11/12/22 01:40 СН **EET MID** 

Client Sample ID: BH-204 (10') Lab Sample ID: 890-3411-3 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 MIC
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 MIC
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

Lab Sample ID: 890-3411-4 Client Sample ID: BH-205 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

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			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** 

**Matrix: Solid** 

Released to Imaging: 9/1/2023 3:31:23 PM

**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') Lab Sample ID: 890-3411-4

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	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 14:59	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		5			39334	11/12/22 01:54	CH	EET MID

Lab Sample ID: 890-3411-5 Client Sample ID: BH-206 (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			4.98 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 **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			5.02 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

Lab Sample ID: 890-3411-7 Client Sample ID: BH-209 (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			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** 

Job ID: 890-3411-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Client Sample ID: BH-209 (10')

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Lab Sample ID: 890-3411-7

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			5.04 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 Date Received: 11/07/22 14:58

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Туре Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 5035 5.01 g 39140 11/09/22 15:36 MNR EET MID Prep 5 mL Total/NA 8021B 5 mL 5 mL 39369 11/13/22 00:40 MNR Analysis 1 **EET MID** Total/NA Total BTEX 39551 11/14/22 16:13 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 39406 11/14/22 14:30 SM **EET MID** Total/NA 11/09/22 15:38 EET MID Prep 8015NM Prep 10.01 g 10 mL 39141 DM 8015B NM 1 uL 39275 11/11/22 16:48 **EET MID** Total/NA Analysis 1 uL SM Soluble DI Leach 5 g 50 mL 39128 11/09/22 15:08 KS **EET MID** Leach 300.0 Analysis 5 39334 11/12/22 02:37 СН **EET MID** Soluble

Client Sample ID: BH-211 (10') Lab Sample ID: 890-3411-9

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	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 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 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			5.03 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** 

Client: Tetra Tech, Inc.

Job ID: 890-3411-1

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

11/09/22 15:08

11/12/22 03:20

KS

СН

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 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')

Date Collected: 11/07/22 00:00

Lab Sample ID: 890-3411-12

Matrix: Solid

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.97 g 5 mL 39140 11/09/22 15:36 MNR EET MID Total/NA 8021B 5 mL 39369 11/13/22 03:05 **EET MID** Analysis 1 5 mL MNR Total/NA Total BTEX 39551 11/14/22 16:13 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 39406 11/14/22 14:30 SM **EET MID** Total/NA 39141 11/09/22 15:38 Prep 8015NM Prep 10.02 g 10 mL DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 39275 11/11/22 18:15 SM **EET MID** 

Client Sample ID: SW-79 (4-10')

Lab Sample ID: 890-3411-13

50

5.01 g

50 mL

39128

39334

Date Collected: 11/07/22 00:00 Date Received: 11/07/22 14:58

Leach

Analysis

DI Leach

300.0

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			5.02 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	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 03:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID

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**Matrix: Solid** 

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EET MID

**EET MID** 

**Matrix: Solid** 

bad

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

Lab Sample ID: 890-3411-14

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			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	СН	EET MID

**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 14:58

	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	11/13/22 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

	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

Lab Sample ID: 890-3411-17 Client Sample ID: SW-83 (4-10)

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			4.95 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

**Eurofins Carlsbad** 

Analysis

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	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

1

39334

11/12/22 04:09

СН

#### **Laboratory References:**

Soluble

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

300.0

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4.0

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# **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	<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	, , ,	

## **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** 

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## **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
890-3411-17	SW-83 (4-10)	Solid	11/07/22 00:00	11/07/22 14:58	4 - 10

Tetra Tech, Inc.	Tetra Tech, Inc.	Tetra Tech, Inc.	Tetra Tech, Inc.	Tetra Tech, Inc.	Tetra Tech, Inc.
Sampler Signature:   Peyton Oliver	Sampler Signature:   Peyton Oliver	Sampler Signature:   Peyton Oliver	Clair Gonzales   Project #   Clair Gonzales   Payton Oliver	Clair Gonzales   Project #   Clair Gonzales   Payton Oliver	Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Samplu   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Gonzales   Clair Go
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ORIGINAL COPY

균	Tetra Tech, Inc.		SOTW WA Midland, Ti Tel (432)	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 682-4559																		
			Fax	Fax (432) 682-3946																		
Client Name:	Permian Water Solutions	Site Manager:	Clair Gonzales	zales		A	ANALYSIS			ST	n				<del>,</del>	2	2	-				
Project Name:	Kaiser SWD	Clair	Clair.Gonzales@tetratech.com	ratech.com						9	0					5		<u> </u>		-		
Project Location: (county, state)	Lea County, NM	Project #:	2120-	212C-MD-02230													iet)	SI)				
Invoice to:	Permian Water Solutions - Dusty McInturff						RO)	1g	Hg		+						oched I	ioned II				
Receiving Laboratory:		Sampler Signature:	Peytor	Peyton Oliver			RO - N	b Se l	Pb Se								00 2#	च्ट वार्				
Comments:								a Cd Cr F	la Cd Cr		624					TDE	TDS					
		SAMPLING	MATRIX	PRESERVATIVE METHOD				g As B		olatiles	260D /				s)	ulfata	ulfate		oaian			
g k	SAMPLE IDENTIFICATION	YEAR: 2020					5M (			mi Vo	/ol 9:	_	-		besto				auon			
LABUSE ONLY		DATE	WATER SOIL	HCL HNO <sub>3</sub> ICE None	# CONT	BTEX 80	TPH 801	PAH 827 Total Me	TCLP Me	TCLP Se	RCI GC/MS V	GC/MS S	PCB's 8	NORM	PLM (Asi	Chloride	Chloride General	General Anion/C	AHION/C			
NS	SW-75 (4-10')	11/7/2022	×	×		×	×				_	_				×	-	-	-	-	-	1
SV	SW-78 (4-10')	11/7/2022	×	×		×	×		-		-	-				×	-	-	+	+	+	
SV	SW-79 (4-10')	11/7/2022	×	×		×	×				_				L	×	-	+	-	-	-	1
NS	SW-80 (4.5-10')	11/7/2022	×	×		×	×				-	$\vdash$				×	-	+	+	-	+	
SV	SW-81 (4.5-10')	11/7/2022	×	×		×	×		-			+	T			×	1-	+	+	-	+	1
SV	SW-82 (4.5-10')	11/7/2022	×	×		×	×		-		$\vdash$	-			L	×	+	+	+-	+	+-	
SV	SW-83 (4-10')	11/7/2022	×	×		×	×		+		+	+	1			<u>×</u>	+	+	+	+	+	1
									-			-					-	-	-	-	-	1
																_		-	-	-	-	
Relinquished by:	Date: Time:	Received by:		Date: Time:		Σ	AB USE	ONLY	-	REMARKS:	S SS	ATA	STANDARD	\RC								
Relinquished by:	Date: Time:	Received by:		Date: Time:		Samp	Sample Temperature	erature			RUSH: Same Day	Ξ.	àame	9 Da		24 hr	48	8 hr		72 hr	i	
Relinquished by:	Black 11/120 1458	Received by:		Date: Time:		-1	2	-			Rush Charges Authorized Special Report Limits or TRRP Report	ial R	epor	t Lin	horiz iits o	F Fed	<del>Ã</del>	Rep	ğ			
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## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3411-1 SDG Number: Lea County NM

Login Number: 3411 List Number: 1 Creator: Clifton, Cloe List Source: Eurofins Carlsbad

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

Login Number: 3411 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	
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	

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**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

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## **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** 

MCL

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" 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.

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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 -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399		mg/Kg			11/14/22 16:13	1
		ics (DRO) ( Qualifier	GC)	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/14/22 09:30	Dil Fac
Analyte Total TPH	Result   <49.9	Qualifier U	<b>RL</b> 49.9	MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die	Result <49.9 seel Range Orga	Qualifier U	<b>RL</b> 49.9			<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	Result <49.9 seel Range Orga	Qualifier U	RL 49.9		mg/Kg			11/14/22 09:30	1
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 sel Range Orga Result	Qualifier U unics (DRO) Qualifier U *1	RL 49.9 (GC)		mg/Kg		Prepared	11/14/22 09:30 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9  Result <49.9  Result <49.9	Qualifier U unics (DRO) Qualifier U *1	(GC) RL 49.9		mg/Kg  Unit mg/Kg		Prepared 11/10/22 08:48	11/14/22 09:30  Analyzed  11/11/22 18:21	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U unics (DRO) Qualifier U *1 U	RL 49.9  (GC)  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/10/22 08:48 11/10/22 08:48	11/14/22 09:30  Analyzed  11/11/22 18:21  11/11/22 18:21	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U unics (DRO) Qualifier U *1 U	RL 49.9  (GC) RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/10/22 08:48 11/10/22 08:48 11/10/22 08:48	Analyzed 11/11/22 18:21 11/11/22 18:21 11/11/22 18:21	Dil Face 1 1 1 Dil Face
Analyte Total TPH  Method: SW846 8015B NM - Die 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 unics (DRO) Qualifier U *1 U	RL 49.9  (GC)  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/10/22 08:48 11/10/22 08:48 11/10/22 08:48 Prepared	Analyzed 11/11/22 18:21 11/11/22 18:21 11/11/22 18:21 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die 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  unics (DRO) Qualifier U *1 U  Qualifier	RL 49.9  (GC)  RL 49.9  49.9  49.9  Limits  70 - 130  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/10/22 08:48 11/10/22 08:48 11/10/22 08:48  Prepared 11/10/22 08:48	Analyzed 11/11/22 18:21 11/11/22 18:21 11/11/22 18:21 Analyzed 11/11/22 18:21	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  unics (DRO) Qualifier U *1 U  Qualifier	RL 49.9  (GC)  RL 49.9  49.9  49.9  Limits  70 - 130  70 - 130	MDL	mg/Kg  Unit mg/Kg  mg/Kg		Prepared 11/10/22 08:48 11/10/22 08:48 11/10/22 08:48  Prepared 11/10/22 08:48	Analyzed 11/11/22 18:21 11/11/22 18:21 11/11/22 18:21 Analyzed 11/11/22 18:21	Dil Face  1  Dil Face 1  Dil Face 1  Dil Face 1  Dil Face

## **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 Recovery (Acceptance Limits)
		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				

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)	
390-3402-A-1-G MS	Matrix Spike	86	79	
390-3402-A-1-H MSD	Matrix Spike Duplicate	82	73	
390-3412-1	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+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

**Eurofins Carlsbad** 

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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	MR							
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

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepare	d ,	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/09/22 1	5:36 11/	12/22 21:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 1	5:36 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 0.100 0.08894 89 Ethylbenzene mg/Kg 70 - 130 0.200 0.1685 84 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09351 70 - 130 o-Xylene 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** 

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	

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

Lab Sample ID: 890-3411-A-1-E MSD

**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 %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 o-Xylene <0.00200 U 0.0996 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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39140

**Matrix: Solid** Analysis Batch: 39369 Sample Sample Spike MSD MSD Result Qualifier Analyte babbA Result Qualifier Unit

RPD %Rec RPD Limit Limits 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 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 91 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

**Matrix: Solid** 

Analysis Batch: 39269

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 39172

	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		11/10/22 08:48	11/11/22 09:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
Oll 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 Added Analyte Result Qualifier Unit %Rec Limits 1000 815.5 82 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 846.7 mg/Kg 85 70 - 130 C10-C28)

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3412-1 SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

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

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

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 - 130 21 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
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				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	55.1	*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)										

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 86 o-Terphenyl 79 70 - 130

Lab Sample ID: 890-3402-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 39269

**Matrix: Solid** 

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
C10-C28)											

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	73		70 - 130

**Eurofins Carlsbad** 

Released to Imaging: 9/1/2023 3:31:23 PM

Client: Tetra Tech, Inc.

Job ID: 890-3412-1

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

Lab Sample ID: LCS 880-39128/2-A

Client Sample ID: Method Blank

**Prep Type: Soluble** 

Analysis Batch: 39334

**Matrix: Solid** 

**Matrix: Solid** 

Project/Site: Kaiser SWD

MB MB

Analyte	Result	Qualifier	RL	MDL Ur	nit D	)	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00	mo	a/Ka			11/12/22 00:57	1	

**Client Sample ID: Lab Control Sample** 

**Prep Type: Soluble** 

Analysis Batch: 39334

Spike LCS LCS %Rec Added Result Qualifier Analyte 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 Limits **RPD** Limit Chloride 250 268.7 107 90 - 110 mg/Kg

Lab Sample ID: 890-3411-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 39334** 

	Sample	Sample	Spike		MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2280	F1	1260	3520		mg/Kg		98	90 - 110	

Lab Sample ID: 890-3411-A-1-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	D	%Rec	Limits	RPD	Limit
Chloride	2280	F1	1260	3707	F1	mg/Kg		113	90 - 110	5	20

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** 

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Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Job ID: 890-3412-1

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

Eurofins Carlsbad

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## **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		rogram	Identification Number	Expiration Date	
Texas	NI	ELAP	T104704400-22-24	06-30-23	
The following analytes the agency does not of		ut the laboratory is not certifi	ed by the governing authority. This list ma	y include analytes for whic	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid Total TPH			
Total BTEX		Solid	Total BTEX		

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# **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

**Eurofins Carlsbad** 

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# **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'

	Relinquished by:	Relinquismed by:	Time	Relinguished by:					( LAB USE )	- 0 t		Comments:	Receiving Laboratory:	invoice to:	Project Location: (county, state)	Project Name:	Client Name:	ā		Analysis Re	
	/ Date: Time:	24 Stut 11/7/22 1458	22/1/11	Date: Time:			H-9 (5)	L 0 /5")		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	1 001 11 1 00119 11100	Tetra Tech Inc	Analysis Request of Chain of Custody Record	
ORIGINAL COPY	Received by:	Necewood by.		Received by:			720211111		DATE TIME	YEAR: 2020	SAMPLING		oampier oignature.		Project #:	<u>Clair.</u>	Site Manager.				
Ž.	Date: Time:	Care. IIIIe		Date: Time:				ν .	WATER SOIL HCL HNO <sub>3</sub> ICE None		MATRIX PRESERVATIVE		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 682-4559 Fax (432) 682-3946	Middland, Texas 79705	1	
Ō							>		# CONT/ FILTERE BTEX 80	D (	ERS (/N)	EX 8260	В							890-3412 Chain of Custody	
(Circle) HAND DELIVERED FEDEX UPS Tracking #	Special Rep	Rush Charges Authorized	RUSH: Same Day 24 hr 48 hr 72 h	REMARKS					TPH TX1 TPH 801 PAH 827 Total Met TCLP Me TCLP Vol TCLP Se: RCI GC/MS V GC/MS S PCB's 80 NORM PLM (Ast Chloride General Anion/Ca	1005 5M (OC als / tals latile mi V	(Ext to GRO Ag As I Ag As Solatiles 3260B Vol. 8 608	D C35) - DRO - G Ba Cd Cr Ba Cd C S / 624 B270C/62  TDS emistry (	ORO - Pb Se r Pb Se	Hg ≘ Hg	list)		ANALYSIS REQUEST (Circle or Specify Method No.)			Page 1	
			ੜ						Hold							_				<u>으</u> ,	

## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3412-1

SDG Number: Lea County NM

List Source: Eurofins Carlsbad

List Source: Eurofin
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	

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## **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3412-1 SDG Number: Lea County NM

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 3412

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	

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Released to Imaging: 9/1/2023 3:31:23 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

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### **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	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.
n	Listed under the "D" column to designate that the result is reported on a dry weight has

%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.

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Matrix: Solid

Lab Sample ID: 890-3413-1

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 Cal	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte		ics (DRO) ( Qualifier	GC) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result <50.0		— RL 50.0	MDL	mg/Kg	D	Prepared	Analyzed 11/14/22 09:30	Dil Fac
: 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	<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
1-Chlorooctane	90		70 - 130				11/10/22 08:48	11/11/22 18:41	1
			70 - 130				11/10/22 08:48	11/11/22 18:41	
o-Terphenyl -	87		70-700						7
Method: MCAWW 300.0 - Anions	s, Ion Chromato		oluble						·
	s, Ion Chromato	ography - So Qualifier		MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/12/22 04:24	Dil Fac

# **Surrogate Summary**

Job ID: 890-3413-1 Client: Tetra Tech, Inc. 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	
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	
890-3413-1	H-8 (5')	110	109	
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				

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	
890-3413-1	H-8 (5')	90	87	
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

Client: Tetra Tech, Inc. Job ID: 890-3413-1 SDG: 212C-MD-02230 Project/Site: Kaiser SWD

## 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
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s									

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepai	red	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

	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 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	Client Sam	ple ID: Lab	Control	Sample Dup
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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	

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Job ID: 890-3413-1 SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 %Rec Limits Ethylbenzene <0.00200 U 0.0996 0.07882 79 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00401 U 0.199 0.1462 mg/Kg 73 70 - 130 0.0996 0.08198 o-Xylene <0.00200 U 82 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	77	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39140

Lab Sample ID: 890-3411-A-1-E MSD **Matrix: Solid Analysis Batch: 39369** 

i many one Battern coole											
	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		

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

	IND	14.15							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
Oll 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

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepa	red	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	4

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)								

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)

LCS LCS

Lab Sample ID: LCS 880-39172/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 39269

Prep Type: Total/NA

Prep Batch: 39172

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** Prep Type: Total/NA

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 Client Sample ID: Matrix Spike

**Matrix: Solid** 

Prep Type: Total/NA **Analysis Batch: 39269** 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 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 o-Terphenyl 79 70 - 130

Lab Sample ID: 890-3402-A-1-H MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 39269

Prep Batch: 39172 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 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

### **QC Sample Results**

Client: Tetra Tech, Inc.

Job ID: 890-3413-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

Matrix: Solid

Analysis Batch: 39334

MB MB

 Analyte
 Result Chloride
 Qualifier
 RL Unit
 MDL mg/Kg
 Unit
 D mg/Kg
 Prepared Prepared Til/12/22 00:57
 Dil Fac Til/12/22 00:57

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-11-B MS

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

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	

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# **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

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### **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: 890-3413-1Project/Site: Kaiser SWDSDG: 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	
Гехаѕ		ELAP	06-30-23		
The following analytes	are included in this report by		and because the analysis of the same of the same		
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for	
,	• '	Matrix	ed by the governing authority. This list ma	ay include analytes for	
the agency does not of	fer certification.	•	, , ,	ay include analytes for	

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# **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** 

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# **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'

	Reinquished by:	Anse -al	Relinquished by:	Relinquished by:				н-8 (5')	( LABUSE )	LAB#			Comments:	Receiving Laboratory:	(county, state)	Project Name:	Client Name:	7		Analysis Request
	Vate: Ilme:	00	Date: Time:	11/7/22 ime:				')		SAMPLE IDENTIFICATION			Eurofins Xenco	Permian Water Solutions - Dusty McInturff	Lea County, NM	Kaiser SWD	Permian Water Solutions	1611 4 16611, 1116.	Totro Tach 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			
	Date:		Date: Tir	Carle:	-			×	HCL HNO <sub>3</sub> ICE		MATRIX		Peyton Oliver		212C-MD-02230	Clair.Gonzales@tetratech.com	Clair Gonzales	Tel (432) 682-4559 Fax (432) 682-3946	Midland, Texas 79705	890
(C)	i.	a.	Time: Sai					×	# CON FILTE BTEX	ITAIN RED	IERS (Y/N)	EX 826	60B							890-3413 Chain of Custody
(Circle) HAND DELIVERED F	73 -007	(a)	Sample Temperature	LAB USE ONLY X				×	TPH 8 PAH 8 Total N	015M 0270C Metals Metals Volatil	S Ag As S Ag As	to C35) - DRO - Ba Cd (	ORO ORO Or Pb S	e Hg			ANALYSIS REQUEST			dy
FEDEX UPS Tracking #:	Special Report Limits or TRRP Report	Rush Charges Authorized	RUSH: Same Day 24	STANDARD				×	GC/MS GC/MS PCB's NORM PLM (/	S Vol. S Sem 8082	82606 ni. Vol. 2 / 608		525				T or Specify Method			Page
	TRRP Report	ă.	24 hr 48 hr 72 hr						Chlori	de al Wa	-	nemistry		ittached	l list)		od No.)			e1 of
								士	Hold											_

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# **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

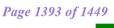
Creator: Rodriguez, Leticia

Login Number: 3413

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").





# **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:

💸 eurofins

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.



Received by OCD: 8/29/2023 3:58:56 PM

.....LINKS

**Review your project** results through EOL

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/1/2023 3:31:23 PM

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3414-1 SDG: 212C-MD-02230

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### Definitions/Glossary

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

2

#### **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**

\*1 LCS/LCSD RPD exceeds control limits.
S1+ Surrogate recovery exceeds control limits, high biased.

**Qualifier Description** 

U Indicates the analyte was analyzed for but not detected.

7

#### HPLC/IC Qualifier

Qualifier

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

9

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

15

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

13

DER Duplicate Error Ratio (normalized absolute difference)

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)

LOQ Limit of Quantitation (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: 890-3414-1

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.

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### **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** 

4

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)	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 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 16:13
 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</td>
 U
 49.9
 mg/Kg
 11/14/22 09:30
 1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte 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) OII Range Organics (Over C28-C36) <49.9 U 49 9 11/10/22 08:48 11/11/22 14:04 mg/Kg Limits Prepared Dil Fac Surrogate %Recovery Qualifier Analyzed 70 - 130 11/10/22 08:48 1-Chlorooctane 90 11/11/22 14:04

 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

70 - 130

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'

o-Terphenyl

REMOVED FROM ANALYSIS TABLE

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

Solid

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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 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 16:19	1
Method: SW846 8015 NM - Dies	sel Range Organ	ics (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
iotal IFII	101		00.0		5 5				
• ***		nics (DRO)			5 5				
Method: SW846 8015B NM - Di Analyte	esel Range Orga	inics (DRO) Qualifier		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015B NM - Di	esel Range Orga	Qualifier	(GC)	MDL		<u>D</u>	Prepared 11/10/22 08:48	Analyzed 11/11/22 13:43	Dil Fac
Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	esel Range Orga Result	Qualifier	(GC)	MDL	Unit	<u>D</u>			Dil Fac
Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	esel Range Orga Result <50.0	Qualifier	(GC) RL 50.0	MDL	Unit mg/Kg	<u>D</u>	11/10/22 08:48	11/11/22 13:43	Dil Fac
Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	esel Range Orga Result <50.0 54.3	Qualifier	(GC) RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/10/22 08:48	11/11/22 13:43	Dil Fac 1 1
Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over	esel Range Orga Result <50.0 54.3	Qualifier U *1	(GC) RL 50.0	MDL	Unit mg/Kg mg/Kg	<u>D</u>	11/10/22 08:48	11/11/22 13:43	Dil Fac
Method: SW846 8015B NM - Di Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	esel Range Orga    Result	Qualifier U *1	(GC)  RL  50.0  50.0  50.0	MDL	Unit mg/Kg mg/Kg	<u> </u>	11/10/22 08:48 11/10/22 08:48 11/10/22 08:48	11/11/22 13:43 11/11/22 13:43 11/11/22 13:43	1

Client Sample ID: SW-79 (0-4')

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:58

Sample Depth: 0-4'

Analyte

Chloride

REMOVED FROM ANALYSIS TABLE

Result Qualifier

3500

Lab Sample ID: 890-3414-3

Analyzed

11/12/22 04:15

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 16:01	11/14/22 14:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 16:01	11/14/22 14:09	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 16:01	11/14/22 14:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				11/09/22 16:01	11/14/22 14:09	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/09/22 16:01	11/14/22 14:09	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 16:19	1

RL

24.9

MDL Unit

mg/Kg

D

Prepared

Job ID: 890-3414-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: 212C-MD-02230

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 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

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier MDL Analyzed Dil Fac RL Unit Prepared <49.9 U \*1 49.9 11/10/22 08:48 11/11/22 14:26 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 49.9 11/10/22 08:48 11/11/22 14:26 mg/Kg 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 Limits Dil Fac Surrogate 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, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed 25.2 11/12/22 04:20 Chloride 1520 F1 mg/Kg

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'									
– Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC	)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:29	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:29	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 16:01	11/14/22 14:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 16:01	11/14/22 14:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 16:01	11/14/22 14:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				11/09/22 16:01	11/14/22 14:29	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/09/22 16:01	11/14/22 14:29	1
- Method: TAL SOP Total BTEX	- Total BTEX Cale	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg	<u></u>		11/14/22 16:19	1
- Method: SW846 8015 NM - Die	esel 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 09:30	1
- Method: SW846 8015B NM - D	iesel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		11/10/22 08:48	11/11/22 14:47	1

**Eurofins Carlsbad** 

11/11/22 14:47

11/11/22 14:47

11/10/22 08:48

11/10/22 08:48

50.0

50.0

mg/Kg

mg/Kg

<50.0 U

<50.0 U

(GRO)-C6-C10

C10-C28)

Diesel Range Organics (Over

OII Range Organics (Over C28-C36)

# **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, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2340		25.1		mg/Kg			11/12/22 04:35	5	

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# **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

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           890-3414-1         SW-75 (0-4')         118         114           890-3414-2         SW-78 (0-4')         97         106           890-3414-2 MS         SW-78 (0-4')         111         97           890-3414-2 MSD         SW-78 (0-4')         105         106           890-3414-3         SW-79 (0-4')         106         100           890-3414-4         SW-83 (0-4')         99         100
890-3411-A-1-D MS       Matrix Spike       77       102         890-3411-A-1-E MSD       Matrix Spike Duplicate       95       96         890-3414-1       SW-75 (0-4')       118       114         890-3414-2       SW-78 (0-4')       97       106         890-3414-2 MS       SW-78 (0-4')       111       97         890-3414-2 MSD       SW-78 (0-4')       105       106         890-3414-3       SW-79 (0-4')       106       100
890-3411-A-1-E MSD Matrix Spike Duplicate 95 96 890-3414-1 SW-75 (0-4') 118 114 890-3414-2 SW-78 (0-4') 97 106 890-3414-2 MS SW-78 (0-4') 111 97 890-3414-2 MSD SW-78 (0-4') 105 106 890-3414-3 SW-79 (0-4') 106 100
890-3414-1 SW-75 (0-4') 118 114 890-3414-2 SW-78 (0-4') 97 106 890-3414-2 MS SW-78 (0-4') 111 97 890-3414-2 MSD SW-78 (0-4') 105 106 890-3414-3 SW-79 (0-4') 106 100
890-3414-2     SW-78 (0-4')     97     106       890-3414-2 MS     SW-78 (0-4')     111     97       890-3414-2 MSD     SW-78 (0-4')     105     106       890-3414-3     SW-79 (0-4')     106     100
890-3414-2 MS SW-78 (0-4') 111 97 890-3414-2 MSD SW-78 (0-4') 105 106 890-3414-3 SW-79 (0-4') 106 100
890-3414-2 MSD SW-78 (0-4') 105 106 890-3414-3 SW-79 (0-4') 106 100
890-3414-3 SW-79 (0-4') 106 100
` '
890-3414-4 SW-83 (0-4') 99 100
LCS 880-39140/1-A Lab Control Sample 81 100
LCS 880-39148/1-A Lab Control Sample 97 103
LCSD 880-39140/2-A Lab Control Sample Dup 77 104
LCSD 880-39148/2-A Lab Control Sample Dup 105 110
MB 880-39140/5-A Method Blank 89 100
MB 880-39148/5-A Method Blank 81 106
Surrogate Legend

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	
890-3414-2	SW-78 (0-4')	92	94	
890-3414-3	SW-79 (0-4')	100	107	
890-3414-4	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

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid

**Matrix: Solid** 

Analysis Batch: 39369

Analysis Batch: 39369

Client	Sample	ID:	Method	Blank

Prep Type: Total/NA

Prep Batch: 39140

	МВ	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	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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39140

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 0.100 0.08894 Ethylbenzene mg/Kg 89 70 - 130 0.200 0.1685 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09351 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	81		70 - 130		
1,4-Difluorobenzene (Surr)	100		70 - 130		

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 39369

Lab Sample ID: LCSD 880-39140/2-A

	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-Xvlene	0.100	0.09589		ma/Ka		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 San	nple 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** 

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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: 890-3411-A-1-D MS

Lab Sample ID: 890-3411-A-1-E MSD

**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 %Rec Limits Ethylbenzene <0.00200 U 0.0996 0.07882 79 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00401 U 0.199 0.1462 mg/Kg 73 70 - 130 0.0996 o-Xylene <0.00200 U 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 <sub>-</sub> 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

**Matrix: Solid** Analysis Batch: 39369 Prep Batch: 39140

Sample Sample Spike MSD MSD RPD Result Qualifier Result Qualifier RPD Limit Analyte Added Unit %Rec Limits 0.0998 Benzene <0.00200 U 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 0.200 0.1625 70 - 130 35 m-Xylene & p-Xylene <0.00401 U mg/Kg 81 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

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 Qι	ualifier 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

1,4-Difluorobenzene (Surr)

4-Bromofluorobenzene (Surr)

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: LCS 880-39148/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 39393 Prep Batch: 39148

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
o-Xylene	0.100	0.08684		mg/Kg	_	87	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

110

111

97

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				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
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
o-Xylene	0.100	0.1033		mg/Kg		103	70 - 130	17	35

Surrogate %Recovery Qualifier Limits	LCSD LCSD	LCSD LCSD
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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 Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits <0.00201 U 0.100 Benzene 0.08043 mg/Kg 80 70 - 130 Toluene <0.00201 U 0.100 0.08943 mg/Kg 70 - 130

Surrogate	%Recovery	Qualifier	Limits				
	MS	MS					
o-Xylene	<0.00201	U F1	0.100	0.07599	mg/Kg	75	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1547	mg/Kg	77	70 - 130
Ethylbenzene	<0.00201	U F1	0.100	0.08382	mg/Kg	84	70 - 130

70 - 130

70 - 130

1,4-Difluorobenzene (Surr) Lab Sample ID: 890-3414-2 MSD Client Sample ID: SW-78 (0-4')

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 39393** Prep Batch: 39148

	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

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: 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

Surrogate	%Recovery	Qualifier	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 мв

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
	***	***							
	Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Analyte         Result           Gasoline Range Organics         <50.0           (GRO)-C6-C10            Diesel Range Organics (Over C10-C28)         <50.0           Oll Range Organics (Over C28-C36)         <50.0	Gasoline Range Organics <50.0 U (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U C10-C28)	Analyte         Result         Qualifier         RL           Gasoline Range Organics         <50.0         U         50.0           (GRO)-C6-C10         (GRO)-C6-C10         U         50.0           Diesel Range Organics (Over C28-C36)         <50.0         U         50.0           C10-C28)         Oll Range Organics (Over C28-C36)         <50.0         U         50.0	Analyte         Result         Qualifier         RL         MDL           Gasoline Range Organics         <50.0         U         50.0           (GRO)-C6-C10         U         50.0           Diesel Range Organics (Over         <50.0         U         50.0           C10-C28)         Oll Range Organics (Over C28-C36)         <50.0         U         50.0	Analyte         Result         Qualifier         RL         MDL         Unit           Gasoline Range Organics         <50.0         U         50.0         mg/Kg           (GRO)-C6-C10         V         50.0         mg/Kg           Diesel Range Organics (Over         <50.0         U         50.0         mg/Kg           C10-C28)         OII Range Organics (Over C28-C36)         <50.0         U         50.0         mg/Kg	Analyte         Result         Qualifier         RL         MDL         Unit         D           Gasoline Range Organics         <50.0         U         50.0         mg/Kg           (GRO)-C6-C10         Diesel Range Organics (Over         <50.0         U         50.0         mg/Kg           C10-C28)         Oll Range Organics (Over C28-C36)         <50.0         U         50.0         mg/Kg	Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared           Gasoline Range Organics         <50.0         U         50.0         mg/Kg         11/10/22 08:48           (GRO)-C6-C10         Diesel Range Organics (Over         <50.0         U         50.0         mg/Kg         11/10/22 08:48           C10-C28)         Oll Range Organics (Over C28-C36)         <50.0         U         50.0         mg/Kg         11/10/22 08:48	Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Gasoline Range Organics         <50.0         U         50.0         mg/Kg         11/10/22 08:48         11/11/22 09:30           (GRO)-C6-C10         Diesel Range Organics (Over         <50.0         U         50.0         mg/Kg         11/10/22 08:48         11/11/22 09:30           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

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

Released to Imaging: 9/1/2023 3:31:23 PM

**Matrix: Solid** Analysis Batch: 39269 **Client Sample ID: Lab Control Sample Dup** 

	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 Qual	ifier Limits
1-Chlorooctane	107	70 - 130
o-Terphenyl	109	70 - 130

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Prep Type: Total/NA Prep Batch: 39172

Client Sample ID: Matrix Spike

70 - 130

Client Sample ID: Matrix Spike Duplicate

70 - 130

84

77

Prep Type: Total/NA

Prep Type: Total/NA

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**Prep Type: Soluble** 

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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)

<50.0 U

<50.0 U

Lab Sample ID: 890-3402-A-1-G MS

Diesel Range Organics (Over

**Matrix: Solid** 

**Analysis Batch: 39269** Prep Batch: 39172 Sample Sample Spike MS MS Result Qualifier Analyte Added Result Qualifier D %Rec Limits Unit Gasoline Range Organics 55.1 \*1 997 1007 mg/Kg 95 70 - 130 (GRO)-C6-C10

997

861.7

796.8

mg/Kg

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** Prep Batch: 39172 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

999

Diesel Range Organics (Over 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

Result Qualifier MDL Unit Analyte 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 Matrix: Solid **Prep Type: Soluble** 

Analysis Batch: 39335

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier %Rec Limits RPD Limit Unit D Chloride 250 104 258.9 mg/Kg 90 \_ 110 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') **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 39335

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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 RPD Result Qualifier Added Limits %Rec

Result Qualifier Limit Analyte Unit 1260 Chloride 1520 F1 3027 F1 mg/Kg 120 90 - 110 5

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 Batch
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	

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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	- Prep Batch
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

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Client: Tetra Tech, Inc.

Job ID: 890-3414-1

Project/Site: Kaiser SWD

SDG: 212C-MD-02230

**HPLC/IC** (Continued)

**Analysis Batch: 39335 (Continued)** 

1	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1	890-3414-3 MSD	SW-79 (0-4')	Soluble	Solid	300.0	39126

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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

Lab Sample ID: 890-3414-1

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			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

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			4.97 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 **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	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	Type	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** 

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Matrix: Solid

**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')

Lab Sample ID: 890-3414-4 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	Type	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 06-30-23	
Texas	NE	ELAP	T104704400-22-24		
The following analytes	are included in this report, but	t the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for	
the agency does not of	• '	t the laboratory is not certain	ed by the governing authority. This list his	ay include analytes for	
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# **Method Summary**

Client: Tetra Tech, Inc.

Job ID: 890-3414-1

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

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# 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

# **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'

	Relinquished by:	7.	Relinquished by	The state of										( LABUSE )	D JU III:		Comments:	Receiving Exporatory.	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	굺	Analysis Re	
	/ Date:	224 LOK 11 100 1458		11/1/22	Dale: Time:					SW-83 (0-4')	SW-79 (0-4')	SW-78 (0-4')	SW-75 (0-4')		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:		Deceived by:					11/7/2022	11/7/2022	11/7/2022	11/7/2022	DATE	YEAR: 2020	SAMPLING		C C C C C C C C C C C C C C C C C C C	Constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of th	Project #:		Site Manager			
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# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc. Job Number: 890-3414-1

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	

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# **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 <6mm (1/4").	N/A	

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**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 3:31:23 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

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Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of

Client: Tetra Tech, Inc.

Project/Site: Kaiser SWD

Laboratory Job ID: 890-3652-1 SDG: Lea County NM

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# **Definitions/Glossary**

Job ID: 890-3652-1 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. U 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** 

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

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: 890-3652-1

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.

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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

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)			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: 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			12/27/22 09:32	1
- Method: SW846 8015 NM - Die	esel Range Organ	ics (DRO) (	GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/19/22 15:23	

	Method: SW846 8015B NM - Diese	el Range Orga	nics (DRO)	(GC)						
١	Analyte	Result	Qualifier	RL	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)									
	OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:01	1
	Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	1-Chlorooctane	86		70 - 130				12/16/22 09:37	12/18/22 19:01	1
l	o-Terphenyl	80		70 - 130				12/16/22 09:37	12/18/22 19:01	1
Į	o-Terphenyl	80		70 - 130				12/16/22 09:37	12/18/22 19:01	1

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - S	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	699		5.00		mg/Kg			12/23/22 21:57	1

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

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	al BTEX Calc	ulation							
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 - Diesel Range Organics (DRO) (GC)

Result Qualifier Analyte RLMDL Unit Prepared Analyzed Dil Fac

Total TPH 	<50.0	U	50.0		mg/Kg			12/19/22 15:23	1
– Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:23	-
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:23	•
C10-C28)									
Oll 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 Fa
1-Chlorooctane	110		70 - 130				12/16/22 09:37	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 Prepared Analyte Result Qualifier MDL Unit RL D Analyzed 1020 5.04 Chloride mg/Kg 12/23/22 22:24

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

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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
1,4-Difluorobenzene (Surr)  Method: TAL SOP Total BTEX	99 - Total BTEX Cald	culation	70 - 130				12/22/22 12:14	12/27/22 02:56	1
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald	Qualifier	70 - 130  RL 0.00399	MDL	Unit ma/Ka	<u>D</u>	12/22/22 12:14 Prepared	12/27/22 02:56  Analyzed  12/27/22 09:32	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die	- Total BTEX Calc Result <	Qualifier U	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 Calc Result <0.00399 sel Range Organ Result	Qualifier U ics (DRO) (Qualifier	RL 0.00399		mg/Kg	<u>D</u>		Analyzed 12/27/22 09:32 Analyzed	Dil Fac
·	- Total BTEX Calc Result <	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 TPH	- Total BTEX Calc Result <0.00399 sel 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  Method: SW846 8015B NM - Die	- Total BTEX Calc Result <0.00399 sel 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 BTEX Calc Result <0.00399 sel 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

Job ID: 890-3652-1 SDG: Lea County NM

Project/Site: Kaiser SWD

Date Received: 12/14/22 12:37

Client: Tetra Tech, Inc.

Lab Sample ID: 890-3652-3

Client Sample ID: SW-75 (4-10')

Date Collected: 12/14/22 12:00

Lab Sample ID: SW-75 (4-10')

Matrix: Solid

Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC) (Continue	ed)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil 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

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 - Soluble
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

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

Lab Sample ID: 890-3652-4

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 04:00	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)			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
Method: TAL SOP Total BTEX Analyte		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 - Die	sel 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 - D	iesel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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	1
(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	1
o-Terphenyl	126		70 - 130				12/15/22 15:21	12/18/22 07:12	1

 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 931
 5.05
 mg/Kg
 12/23/22 22:41
 1

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Client: Tetra Tech, Inc. Job ID: 890-3652-1 Project/Site: Kaiser SWD SDG: Lea County NM

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 -	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
			•			_			
Method: SW846 8015 NM - Diese Analyte		ics (DRO) (	GC)	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
		Qualifier	•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 12/19/22 15:35	
Analyte Total TPH	Result   <49.9	Qualifier U	RL 49.9	MDL		<u>D</u>	Prepared		
Analyte Total TPH  Method: SW846 8015B NM - Die	Result <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH  Method: SW846 8015B NM - Die: Analyte	Result <49.9	Qualifier Unics (DRO) Qualifier	RL 49.9		mg/Kg			12/19/22 15:35	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9  Sel Range Orga Result <49.9	Qualifier U  nics (DRO) Qualifier U	(GC) RL 49.9		mg/Kg  Unit mg/Kg		Prepared	12/19/22 15:35  Analyzed 12/18/22 07:34	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9  sel Range Orga Result	Qualifier U  nics (DRO) Qualifier U	(GC)		mg/Kg		Prepared	12/19/22 15:35  Analyzed	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  nics (DRO) Qualifier U	RL 49.9  (GC)  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/15/22 15:21 12/15/22 15:21	12/19/22 15:35  Analyzed 12/18/22 07:34 12/18/22 07:34	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9  Sel Range Orga Result <49.9	Qualifier U  nics (DRO) Qualifier U	(GC) RL 49.9		mg/Kg  Unit mg/Kg		Prepared 12/15/22 15:21	12/19/22 15:35  Analyzed 12/18/22 07:34	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 49.9  (GC)  RL 49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/15/22 15:21 12/15/22 15:21	12/19/22 15:35  Analyzed 12/18/22 07:34 12/18/22 07:34	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 49.9  (GC)  RL 49.9  49.9  49.9		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/15/22 15:21 12/15/22 15:21 12/15/22 15:21	12/19/22 15:35  Analyzed 12/18/22 07:34 12/18/22 07:34 12/18/22 07:34	1 Dil Fac
Analyte	Result   <49.9	Qualifier U  nics (DRO) Qualifier U  U	RL 49.9  (GC)  RL 49.9  49.9  49.9  Limits		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 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 Total TPH  Method: SW846 8015B NM - Die 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  nics (DRO) Qualifier U  U  Qualifier	RL 49.9  (GC)  RL 49.9  49.9  49.9  Limits  70 - 130  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg		Prepared 12/15/22 15:21 12/15/22 15:21 12/15/22 15:21  Prepared 12/15/22 15:21	12/19/22 15:35  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 Total TPH  Method: SW846 8015B NM - Die 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  nics (DRO) Qualifier U  U  Qualifier	RL 49.9  (GC)  RL 49.9  49.9  49.9  Limits  70 - 130  70 - 130		mg/Kg  Unit mg/Kg  mg/Kg  mg/Kg		Prepared 12/15/22 15:21 12/15/22 15:21 12/15/22 15:21  Prepared 12/15/22 15:21	12/19/22 15:35  Analyzed 12/18/22 07:34  12/18/22 07:34  12/18/22 07:34  Analyzed 12/18/22 07:34	1 Dil Fac

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')

Lab Sample ID: 890-3652-6 Date Collected: 12/14/22 12:00

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	I Range Organ	ics (DRO) (	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9		mg/Kg			12/19/22 15:35	
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
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	
- 	Ion Chromato	ography - Se	oluble						
Method: MCAWW 300 0 - Anions									
Method: MCAWW 300.0 - Anions Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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# **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	
	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

Client: Tetra Tech, Inc. Job ID: 890-3652-1 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

MB MB

Surrogate	%Recovery	Qualifier	Limits	1	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

Analysis Batch: 42596

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42514

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/26/22 23:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/26/22 23:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/26/22 23:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/22/22 12:14	12/26/22 23:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/26/22 23:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/22/22 12:14	12/26/22 23:30	1

мв мв

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

Lab Sample ID: LCS 880-42514/1-A

**Matrix: Solid** 

Analysis Batch: 42596

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 42514

	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	
m-Xylene & p-Xylene	0.200	0.1924		mg/Kg		96	70 - 130	
o-Xvlene	0.100	0.09703		ma/Ka		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

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**Matrix: Solid** 

Analysis Batch: 42596

Client Sample ID: Lab Control Sample 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

o-Xylene

3

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

Matrix: Solid

Analysis Batch: 42596

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42514

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit D Toluene 0.100 0.09288 70 - 130 35 mg/Kg 93 2 Ethylbenzene 0.100 0.08850 mg/Kg 89 70 - 130 2 35 0.200 0.1984 99 70 - 130 35 m-Xylene & p-Xylene mg/Kg 3

0.1003

mg/Kg

100

70 - 130

0.100

 Surrogate
 %Recovery 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

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits U 0.08976 Benzene <0.00201 0.100 mg/Kg 90 70 - 130 Toluene <0.00201 0.100 0.07517 75 70 - 130 U F1 mg/Kg Ethylbenzene < 0.00201 UF1 0.100 0.05923 F1 mg/Kg 59 70 - 130 0.200 66 70 - 130 m-Xylene & p-Xylene <0.00402 UF1 0.1329 F1 mg/Kg o-Xylene <0.00201 UF1 0.100 0.06702 F1 mg/Kg 67 70 - 130

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 114
 70 - 130

 1,4-Difluorobenzene (Surr)
 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

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 99
 70 - 130

 1,4-Difluorobenzene (Surr)
 94
 70 - 130

### 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

MB MB

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
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 Prepared
 Analyzed
 Dil Fac

 Gasoline Range Organics
 <50.0</td>
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 50.0
 mg/Kg
 12/15/22 15:21
 12/17/22 22:54
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 (GRO)-C6-C10
 (GRO)-C6-C10
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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: MB 880-41942/1-A

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41942

INID	IVID							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0		mg/Kg		12/15/22 15:21	12/17/22 22:54	1
<50.0	U	50.0		mg/Kg		12/15/22 15:21	12/17/22 22:54	1
MB	MB							
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
126		70 - 130				12/15/22 15:21	12/17/22 22:54	1
142	S1+	70 - 130				12/15/22 15:21	12/17/22 22:54	1
	Result	Result   Qualifier   U	Result   Qualifier   RL	Result   Qualifier   RL   MDL	Result   Qualifier   RL   MDL   Unit   mg/Kg	Result   Qualifier   RL   MDL   Unit   D   mg/Kg	Result         Qualifier         RL         MDL         Unit         D         Prepared           <50.0	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           <50.0

_ Lab Sample ID: LCS 880-41 Matrix: Solid	942/2-A						Client	Sample	e ID: Lab Control S Prep Type: To	
Analysis Batch: 42078									Prep Batch:	41942
•			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics			1000	848.4		mg/Kg		85	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over			1000	1024		mg/Kg		102	70 - 130	
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				Clier	nt Sam	iple ID:	Lab Contro	ol Sampl	e Dup
Matrix: Solid							Prep 1	Type: To	tal/NA
Analysis Batch: 42078							Prep	Batch:	41942
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	831.8		mg/Kg		83	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	118		70 - 130

104

Matrix: Solid								Client	•	: Matrix Spike Type: Total/NA
Analysis Batch: 42078									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 C10-C28)	<50.0	U	999	1159		mg/Kg		114	70 - 130	
	MS	MS								
Surrogate %F	Recovery	Qualifier	Limits							
1-Chlorooctane	104		70 - 130							

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70 - 130

o-Terphenyl

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 C20)											

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** 

мв мв

Prep Type: Total/NA

Prep Batch: 42002

MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac <50.0 U 50.0 12/16/22 09:37 12/18/22 09:55 Gasoline Range Organics 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 50.0 OII Range Organics (Over C28-C36) <50.0 U 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	Unit	D	%Rec	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 1-Chlorooctane	%Recovery Qual	ifier Limits
1-Chlorooctane	82	70 - 130
o-Terphenyl	91	70 - 130

Lab Sample ID: LCSD 880-42002/3-A

**Matrix: Solid** 

Analysis Batch: 42108

<b>Client San</b>	iple ID: La	ab Contro	I Sample	Dup
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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)									

# QC Sample Results

Job ID: 890-3652-1 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 880-42002/3-A

Lab Sample ID: 890-3638-A-1-E MSD

**Matrix: Solid** 

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 <50.0 U 999 908.6 mg/Kg 91 70 - 130C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	72		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 42002

Sample Sample MSD MSD RPD Spike Result Qualifier Analyte Result Qualifier hahhA Unit %Rec I imits RPD Limit D 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** 

**Analysis Batch: 42334** 

**Prep Type: Soluble** 

MB MB

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 Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 42334

Spike LCS LCS %Rec Analyte Added Result Qualifier Limits Unit Chloride 250 268.3 mg/Kg 107 90 - 110

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Released to Imaging: 9/1/2023 3:31:23 PM

# QC Sample Results

Job ID: 890-3652-1 Client: Tetra Tech, Inc. Project/Site: Kaiser SWD SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-41931/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 42334

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 264.7 mg/Kg 106 90 - 110

Lab Sample ID: 890-3652-1 MS Client Sample ID: BH-210 (11') **Matrix: Solid** 

**Prep Type: Soluble** 

Analysis Batch: 42334

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits Chloride 699 250 928.1 mg/Kg 92 90 - 110

Lab Sample ID: 890-3652-1 MSD Client Sample ID: BH-210 (11')

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 42334

Sample Sample MSD MSD %Rec RPD Spike Result Qualifier Analyte Added Result Qualifier Unit Limits **RPD** Limit Chloride 699 250 961.0 105 90 - 110 20 mg/Kg

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	-
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	

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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	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Soluble	Solid	DI Leach	
890-3652-2	SW-75 (0-4')	Soluble	Solid	DI Leach	
890-3652-3	SW-75 (4-10')	Soluble	Solid	DI Leach	

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Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

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

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Job ID: 890-3652-1 SDG: Lea County NM

Client: Tetra Tech, Inc. Project/Site: Kaiser SWD

Lab Sample ID: 890-3652-1

Matrix: Solid

Client Sample ID: BH-210 (11')

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	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

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			5.03 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')

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	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 MID
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 MID
Soluble	Leach	DI Leach			4.97 g	50 mL	41931	12/15/22 14:24	KS	EET MID
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')** 

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	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

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Lab Sample ID: 890-3652-4

Page 21 of 30

**Matrix: Solid** 

Lab Sample ID: 890-3652-3

Matrix: Solid

**Matrix: Solid** 

Client: Tetra Tech, Inc.

Job ID: 890-3652-1

Project/Site: Kaiser SWD

SDG: Lea County NM

**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

**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			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')

Lab Sample ID: 890-3652-5

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 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 07:56	SM	EET MID
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

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# **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	NELAP		06-30-23	
The following analytes	are included in this report by	it the leberatory is not contiffi	iad butba gavarning authority. This list was		
the agency does not of	' '	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes for v	
,	' '	Matrix	Analyte	ay include analytes for v	
the agency does not of	fer certification.	•	, , ,	ay include analytes for v	

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# **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

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# **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

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**Analysis Request of Chain of Custody Record** 

Project Location: state)

Lea County, NN

Kaiser SWD

Permian Water Solutions

voice to:

eceiving Laboratory

**Eurofins Xenco** 

LAB USE LAB#

SAMPLE IDENTIFICATION

SW-76 (0-4.5')

SW-75 (4-10') SW-75 (0-4') BH-210 (11')

SW-83 (0-4") SW-79 (0-4') roject Name:

llent Name:

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Permian Water Solutions - Dusty McInturff fetra Tech, Inc. 14/22 Time: Time ORIGINAL COPY 12/14/2022 12/14/2022 Project #: 12/14/2022 12/14/2022 Received by Sampler Signature 12/14/2022 12/14/2022 eceived by EAR: 2020 DATE 2 SAMPLING Clair.Gonzales@tetratech.com TIME WATER Clair Gonzales MATRIX × × × SOIL 212C-MD-02230 Peyton Oliver 901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946 Date: HCL PRESERVATIVE METHOD HNO<sub>3</sub> × ICE ec/h/lci None 890-3652 Chain of Custody 123 # CONTAINERS FILTERED (Y/N) BTEX 8021B BTEX 8260B LAB USE ONLY Sample Temperature Circle) HAND DELIVERED FEDEX UPS R 101 TPH TX1005 (Ext to C35) 0.00 TAM-007  $\times \times$ × X TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Circle or Specify Method Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles **ANALYSIS REQUEST**  $\boxtimes$ TCLP Semi Volatiles RUSH: Same Day Special Report Limits or TRRP Repor Rush Charges Authorized RCI STANDARD GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM Page PLM (Asbestos) 24 hr ××  $\times \times \times \times$ Chloride Sulfate TDS Chloride 48 hr General Water Chemistry (see attached list) Anion/Cation Balance 72 hr 으 Hold

Phone. 575-988-3199 Fax: 575-988-3199

Carlsbad, NM 88220

1089 N Canal St

**Eurofins Carlsbad** 

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# **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 No. 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

1089 N Canal St **Eurofins Carlsbad** 

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# Chain of Custody Record

💸 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 × ×  $\times$ × × × × × × × 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	

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# **Login Sample Receipt Checklist**

Client: Tetra Tech, Inc.

Job Number: 890-3652-1 SDG Number: Lea County NM

List Source: Furofins Midland

List Source: Eurofins Midland List Creation: 12/15/22 11:29 AM

List Number: 2 Creator: Teel, Brianna

Login Number: 3652

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	

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<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 258939

### **CONDITIONS**

Operator:	OGRID:
Permian Water Solutions, LLC	373626
PO Box 2106	Action Number:
Midland, TX 79702	258939
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/1/2023