

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	nTO1502927174
District RP	1RP-3512
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	PERMIAN WATER SOLUTIONS, LLC	OGRID	373626
Contact Name	JENNI USHER	Contact Telephone	512-820-8772
Contact email	JENNI@PERMIANWS.COM	Incident # (assigned by OCD)	nCH1834760902, nOY1823336566, nOY1821950108, nCH1821239639, nOY1803834027, nOY1730058924, nKL1632848695, nJXK1616127644, nKJ1512041707, nTO1502927174, nPAC0531137785
Contact mailing address	PO BOX 2106, MIDLAND, TX 79702		

Location of Release Source

Latitude 32.48086 Longitude -103.42566  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	KAISER STATE SWD #009	Site Type	SALT WATER DISPOSAL
Date Release Discovered		API# (if applicable)	30-025-02538

Unit Letter	Section	Township	Range	County
F	13	21S	34E	LEA

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: )

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) UNKNOWN	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) UNKNOWN	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

C-141 FILED TO ADDRESS MULTIPLE HISTORICAL INCIDENTS AT THIS WELL.

State of New Mexico  
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	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.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? PLEASE SEE PREVIOUS C-141'S.	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>JENNI USHER</u>	Title: <u>REGULATORY ANALYST</u>
Signature: <u>Jenni Usher</u>	Date: <u>9/14/2021</u>
email: <u>JENNI@PERMIANWS.COM</u>	Telephone: <u>512-820-8772</u>
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____



Incident ID	nTO1502927174
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## 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> 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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Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The 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: JENNI USHER Title: REGULATORY ANALYST  
Signature: Jenni Usher Date: 9/21/2021  
email: JENNI@PERMIANWS.COM Telephone: 512-820-8772

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

REMEDATION 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.

State of New Mexico  
Oil Conservation Division

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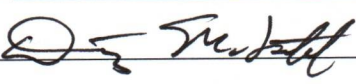
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

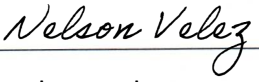
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff Title: Project Manager  
Signature:  Date: 5/5/23  
email: dmcinturff@dufrane.com Telephone: (432) 634-7865

**OCD Only**

Received by: Shelly Wells Date: 8/30/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:  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.



11. 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. Kaiser Incidents. 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 limited 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 remediation project required by this Order.

14. 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](mailto:Luke@abadieschill.com)

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



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

**NEW MEXICO OIL CONSERVATION DIVISION**



Adrienne Sandoval  
Director

Date: 2/17/2022

**PERMIAN WATER SOLUTIONS, LLC**



Josh Brooks  
President

Date: 1-28-2022

## 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 of 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 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 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, subsurface 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 of 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 of 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 analysis and chain-of-custody documentation are included in **Appendix D**. The water sample collected (MW-1) did not indicate 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-68, SW-69, SW-70, SW-71, SW-72, SW-75, SW-76, SW-77, SW-78, SW-79, and SW-83).

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



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

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

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



## Conclusions

Following remediation of the areas of impact, Tetra Tech conducted confirmation soil sampling of the area by collecting 5-point composite confirmation bottom hole and sidewall samples to ensure the impacted soil was fully removed. Approximately 48,000 cubic yards of impacted soil was removed and properly disposed of, and the area was backfilled with clean to surface grade material. The analytical results indicated all confirmation samples reported below the RRLs 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

A handwritten signature in black ink, appearing to read 'Ezequiel MorenoFlores'.

Ezequiel MorenoFlores,  
Geologist

A handwritten signature in black ink, appearing to read 'Brittany Long'.

Brittany Long,  
Project Manager

A handwritten signature in blue ink, appearing to read 'Clair Gonzales'.

Clair Gonzales, P.G,  
Senior Project Manager



## Figures

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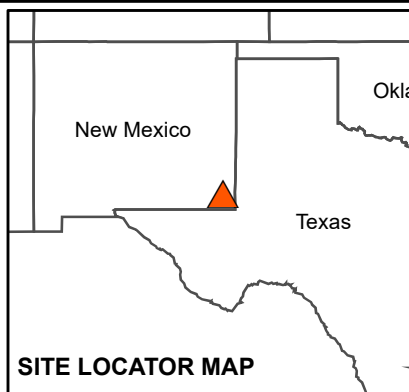
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NORTH



▲ SITE LOCATION

0 16,000 32,000  
Feet  
Approximate Scale



SITE LOCATOR MAP



FIGURE 1  
OVERVIEW MAP  
KAISER STATE SWD #9  
LEA COUNTY, NEW MEXICO  
32.480778°, -103.425919°

Project: 212C-MD-02230

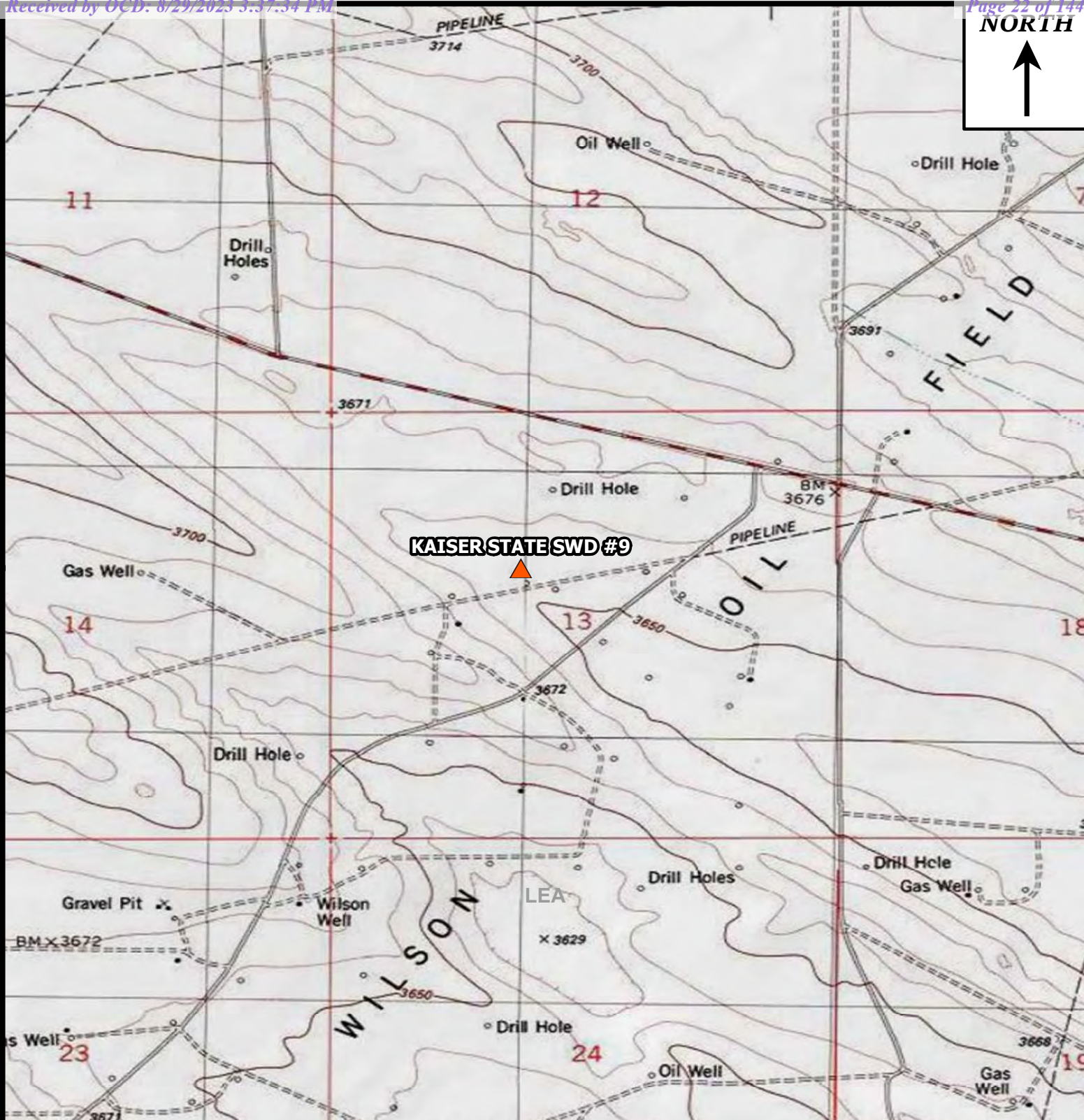
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Name: Figure 1 - Kaiser SWD 9





NORTH



▲ SITE LOCATION

0 1,100 2,200  
Approximate Scale  
Feet



SITE LOCATOR MAP



FIGURE 2  
TOPOGRAPHIC MAP  
KAISER STATE SWD #9  
LEA COUNTY, NEW MEXICO  
32.480778°, -103.425919°

Project: 212C-MD-02230

Date: 3/23/2023

Name: Figure 2 - Kaiser SWD 9





NORTH



SITE LOCATOR MAP

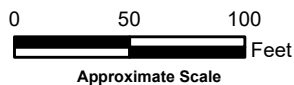


**Legend**

- BOREHOLE SAMPLE LOCATIONS



**FIGURE 3**  
**SITE ASSESSMENT MAP (2019)**  
**KAISER STATE SWD #9**  
**LEA COUNTY, NEW MEXICO**  
 32.480778°, -103.425919°



Project: 212C-MD-02230

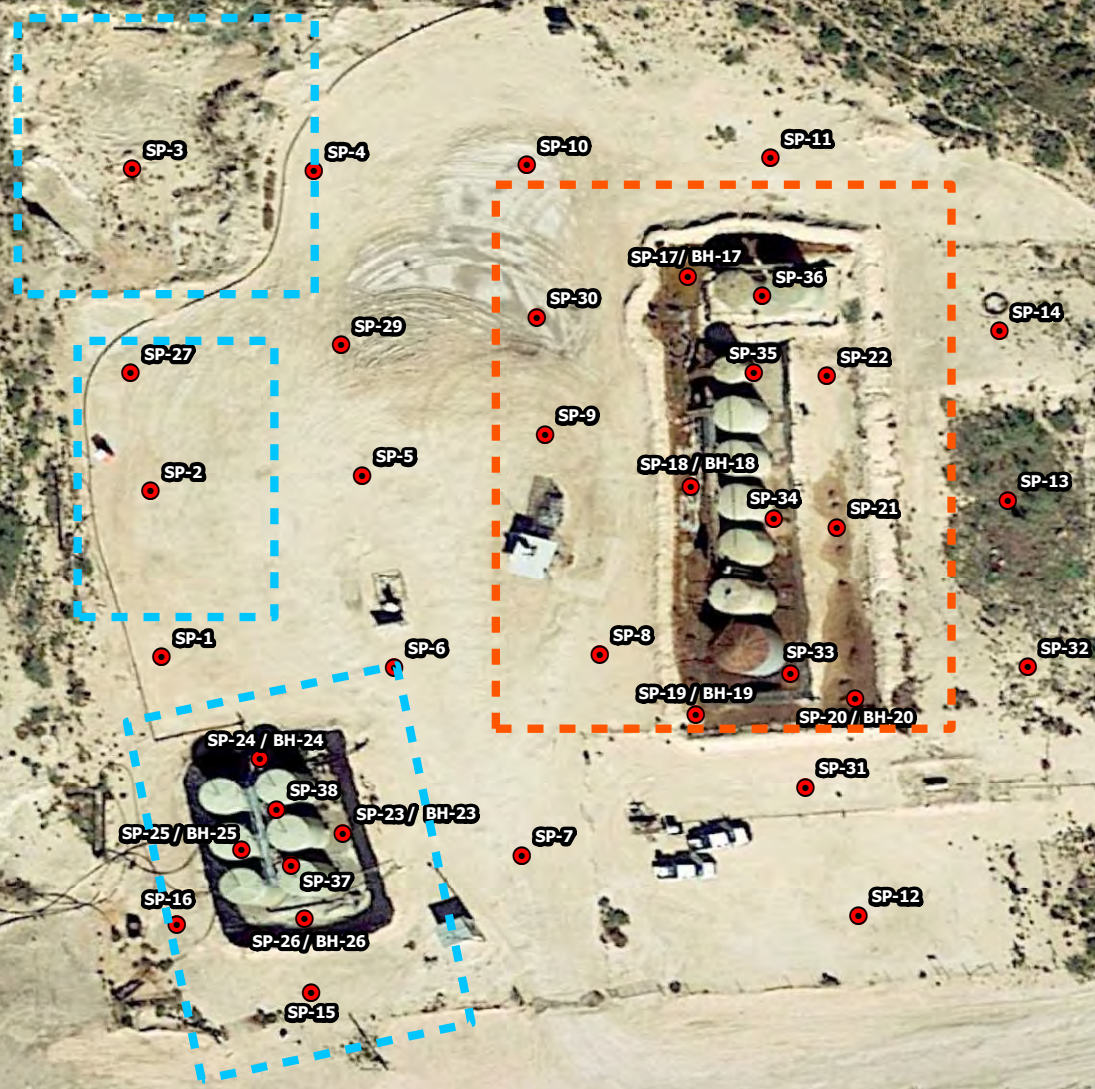
Date: 3/23/2023

Name: Figure 3 - Kaiser SWD 9





NORTH



Legend

- BOREHOLE SAMPLE LOCATIONS
- PHASE I OUTLINE
- PHASE II OUTLINE

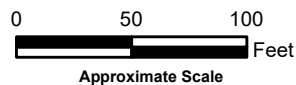


FIGURE 4  
PROPOSED PHASE I AND PHASE II  
KAISER STATE SWD #9  
LEA COUNTY, NEW MEXICO  
32.480778°, -103.425919°

Project: 212C-MD-02230

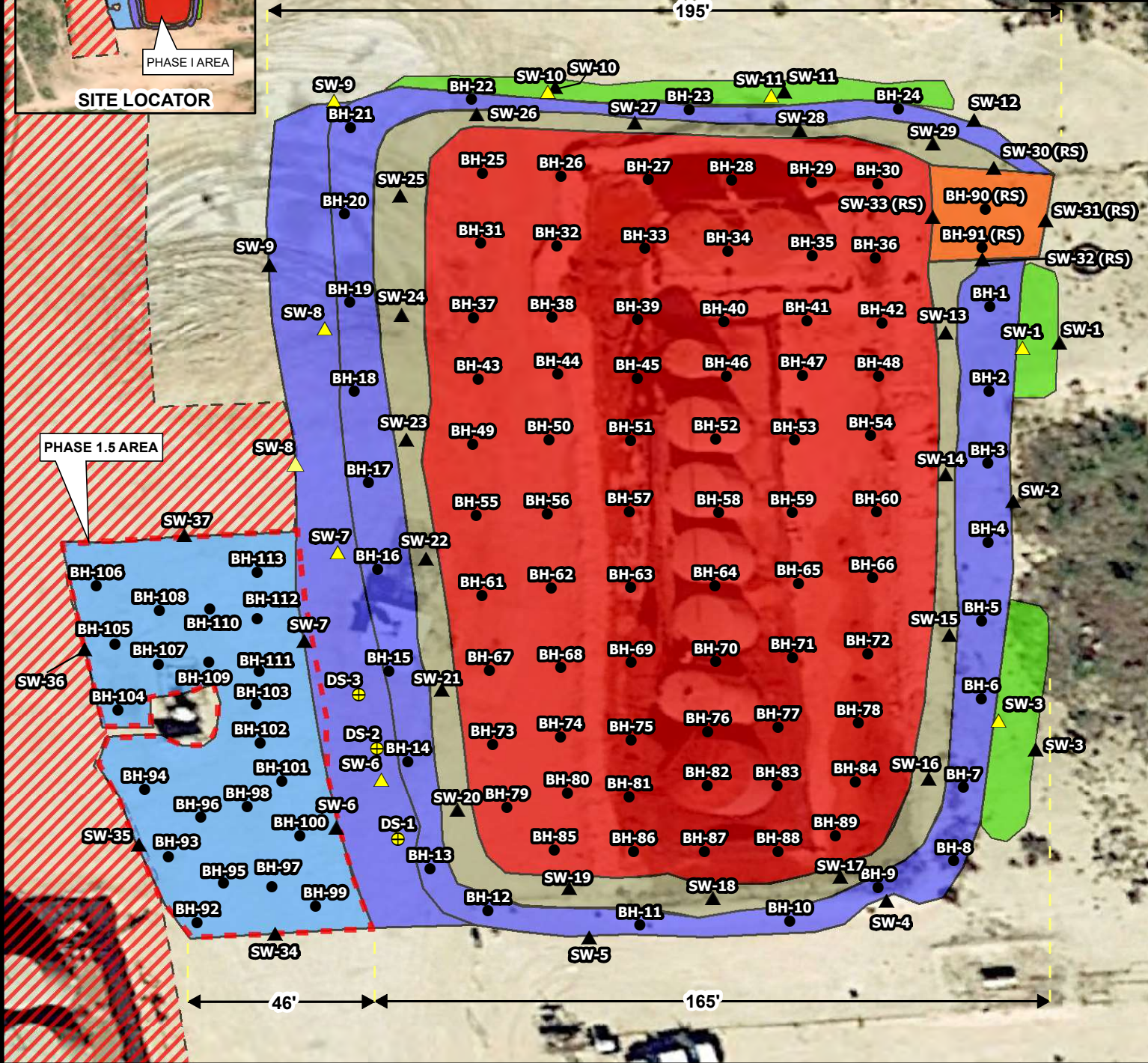
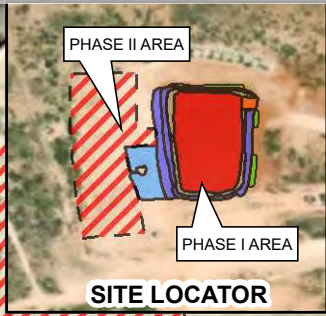
Date: 3/23/2023

Name: Figure 4 - Kaiser SWD 9





NORTH



Legend

- ▲ REMOVED SIDEWALLS
- ▲ SIDEWALL SAMPLE LOCATIONS
- BOTTOMHOLE SAMPLE LOCATIONS
- ⊕ DISCRETE SAMPLE LOCATIONS (REMOVED)
- PHASE 1.5 OUTLINE
- PHASE II AREA
- EXCAVATION INGRESS/EGRESS RAMP
- 4' DEPTH EXCAVATION
- 5' DEPTH EXCAVATION
- 6' DEPTH BENCHFLOOR
- 6'-15' SLOPE
- 15' DEPTH EXCAVATION

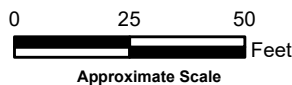


FIGURE 5  
PHASE I EXCAVATION  
DEPTH AND AREA MAP  
KAISER STATE SWD #9  
LEA COUNTY, NEW MEXICO  
32.480778°, -103.425919°

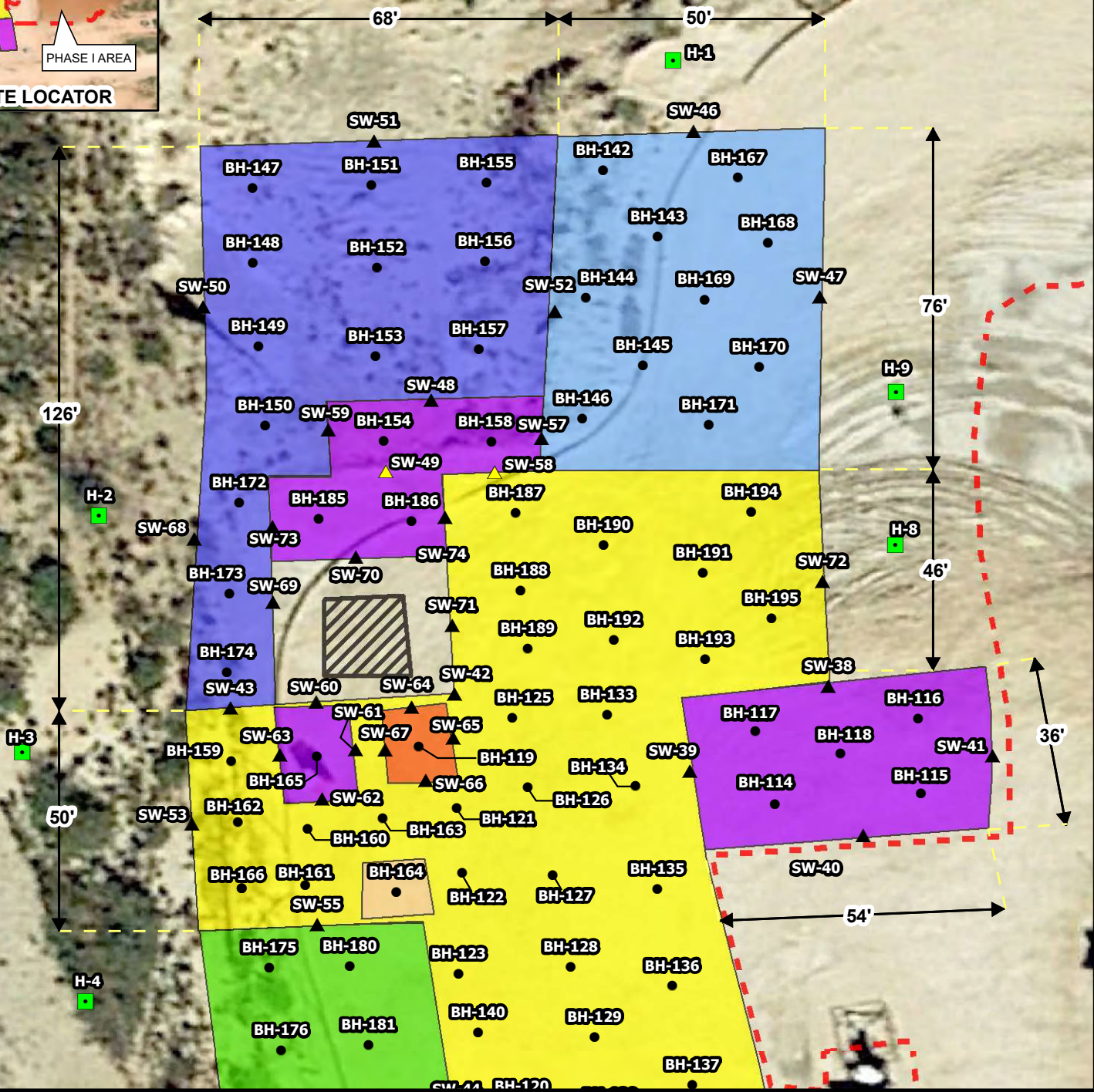
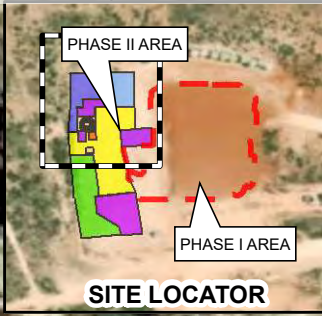
Project: 212C-MD-02230

Date: 3/27/2023

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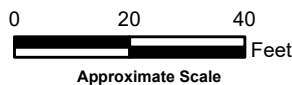






### Legend

- HORIZONTAL SAMPLE LOCATIONS
- ▲ SIDEWALL LOCATIONS
- ▲ REMOVED SIDEWALLS LOCATIONS
- BOTTOMHOLE SAMPLE LOCATIONS
- PHASE 1 OUTLINE
- 4.5' DEPTH EXCAVATION
- 5' DEPTH EXCAVATION
- 6' DEPTH EXCAVATION
- 8' DEPTH EXCAVATION
- 9' DEPTH EXCAVATION
- 10' DEPTH EXCAVATION
- 13' DEPTH EXCAVATION
- ▨ WELLHEAD EXCLUSION ZONE



**FIGURE 6A**  
**PHASE II EXCAVATION**  
**DEPTH AND AREA MAP**  
**KAISER STATE SWD #9**  
**LEA COUNTY, NEW MEXICO**  
 32.480778°, -103.425919°

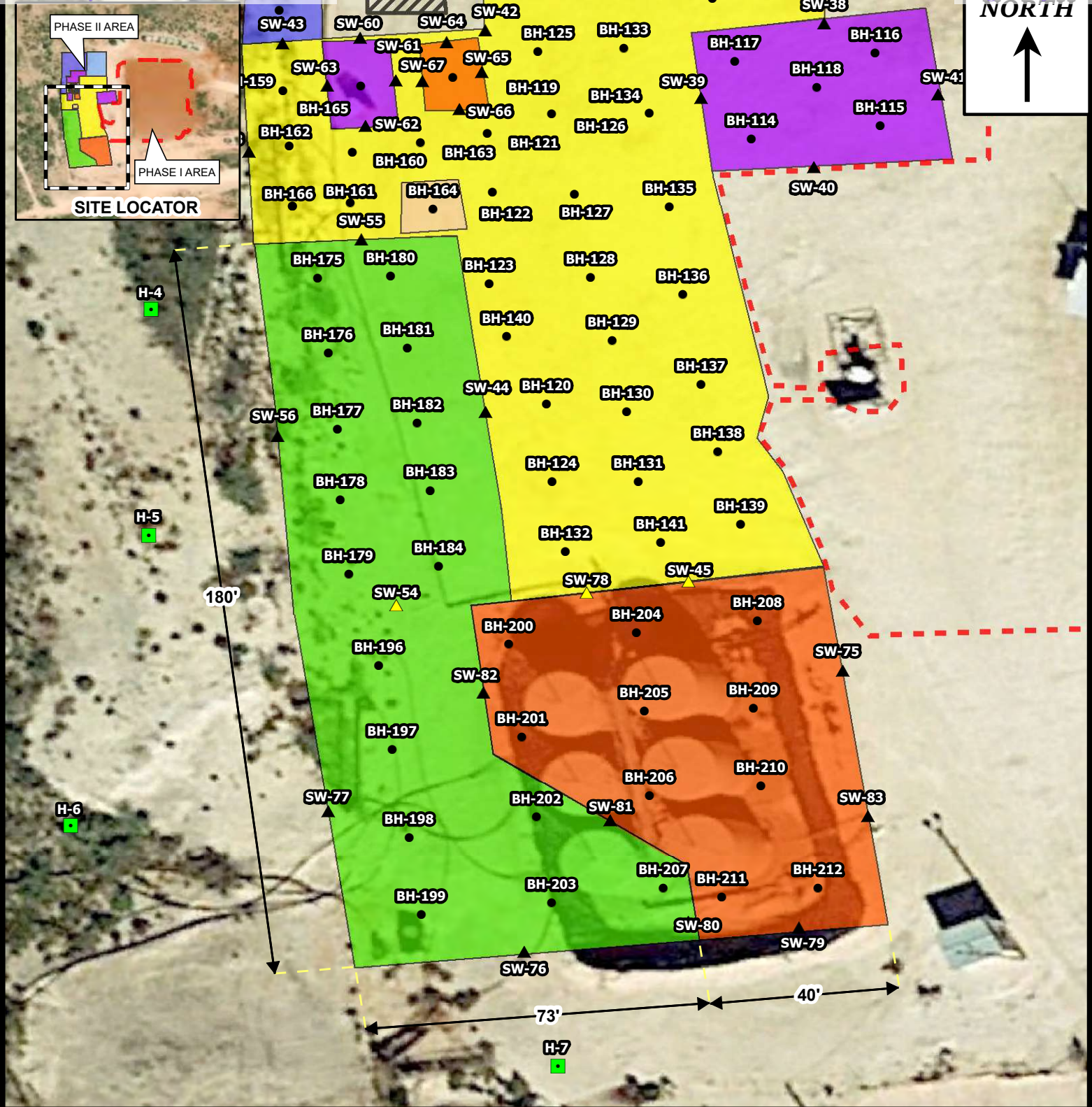
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Date: 3/27/2023

Name: Figure 6A - Kaiser SWD 9

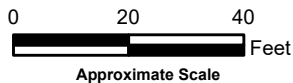






### Legend

- HORIZONTAL SAMPLE LOCATIONS
- ▲ SIDEWALL LOCATIONS
- ▲ REMOVED SIDEWALLS LOCATIONS
- BOTTOMHOLE SAMPLE LOCATIONS
- PHASE 1 OUTLINE
- 4.5' DEPTH EXCAVATION
- 5' DEPTH EXCAVATION
- 6' DEPTH EXCAVATION
- 8' DEPTH EXCAVATION
- 9' DEPTH EXCAVATION
- 10' DEPTH EXCAVATION
- 13' DEPTH EXCAVATION
- WELLHEAD EXCLUSION ZONE



**FIGURE 6B**  
**PHASE II EXCAVATION**  
**DEPTH AND AREA MAP**  
**KAISER STATE SWD #9**  
**LEA COUNTY, NEW MEXICO**  
 32.480778°, -103.425919°

Project: 212C-MD-02230

Date: 3/27/2023

Name: Figure 6B - Kaiser SWD 9





## Tables

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

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
BH-1	10/27/2021	6	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	689
BH-32	10/27/2021	15	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	833

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

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	3,300
BH-40	10/27/2021	15	X	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,190
BH-41	10/27/2021	15	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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**

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<50.0	346	176	522	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	4,070
BH-93	5/6/2022	5	X	-	<49.9	62.5	82.6	145	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	976
BH-94	5/6/2022	5	X	-	<50.0	247	165	412	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,770
BH-95	5/6/2022	5	X	-	<50.0	113	131	244	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,780
BH-96	5/6/2022	5	X	-	<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**

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
BH-97	5/6/2022	5	X	-	<49.9	97.6	140	238	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	5,290
BH-98	5/6/2022	5	X	-	<50.0	<50.0	102	102	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,090
BH-99	5/6/2022	5	X	-	<50.0	<50.0	73.6	73.6	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,860
BH-100	5/6/2022	5	X	-	<49.9	<49.9	56.8	56.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	5,050
BH-101	5/6/2022	5	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	X	-	<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	X	-	<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	X	-	<49.9	54.4	122	176	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	954
BH-106*	7/6/2022	6	X	-	<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	X	-	<50.0	169	169	338	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	1,530
BH-108*	7/6/2022	6	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	362	<50.0	<50.0	362	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	374
BH-113	5/6/2022	5	X	-	<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	X	-	<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	X	-	<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	X	-	<49.9	196	<49.9	196	0.0597	<0.0202	<0.0202	<0.0403	0.0597	76.8
BH-117	7/6/2022	10	X	-	<50.0	644	98.9	743	0.0553	<0.0199	<0.0199	<0.0398	0.0553	114
BH-118*	7/26/2022	13	X	-	<49.9	247	<49.9	247	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	263
BH-119*	7/26/2022	10	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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**

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
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	X	-	<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	X	-	<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	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	634
BH-134	7/7/2022	8	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,300
BH-135	7/7/2022	8	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<50.0	226	<50.0	226	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	501
BH-145	7/12/2022	5	X	-	<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	X	-	<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	X	-	<50.0	478	59.0	537	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	22.7
BH-148	7/12/2022	6	X	-	<49.9	138	52.3	190	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	6.69
BH-149	7/7/2022	6	X	-	<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	X	-	<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	X	-	<50.0	126	<50.0	126	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	21.9
BH-152	7/12/2022	6	X	-	<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	X	-	<49.9	117	<49.9	117	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	22.7
BH-154*	8/18/2022	8	X	-	<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	X	-	<50.0	111	<50.0	111	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	20.8
BH-156	7/12/2022	6	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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 Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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**

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
BH-182	8/18/2022	4.5	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<49.9	234	<49.9	234	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	686
BH-191*	9/19/2022	8	X	-	<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	X	-	<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	X	-	<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	X	-	<49.9	817	169	986	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	55.8
BH-195	9/19/2022	8	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	A	228	<50.0	228	<0.00199	<0.00199	<0.00199	0.0395	0.0395	2,970
SW-1*	12/23/2021	0-4	X	-	<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 Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
SW-2	10/25/2021	0-6	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	-	X	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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 Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<49.9	151	<49.9	151	<0.0404	<0.0404	<0.0404	<0.0808	<0.0808	448
SW-39	7/29/2022	0-13	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	-	X	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	X	-	<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	X	-	<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	X	-	<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	-	X	<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**

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
SW-50*	7/26/2022	0-6	X	-	<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	X	-	<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	X	-	<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	X	-	<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	-	X	<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	X	-	<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	X	-	<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	-	X	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	X	-	<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	-	X	<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	X	-	<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	X	-	<50.0	263	<50.0	263	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	8,690
SW-81	11/7/2022	4.5-10	X	-	<49.9	192	<49.9	192	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	8,120

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

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	ORO	Total						
SW-82	11/7/2022	4.5-10	X	-	<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	X	-	<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	-	X	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	1,310
DS-2	10/25/2021	3	-	X	1290	1,290	1290	1,290	<0.00200	<0.00200	<0.00200	<0.00401	<0.00399	7,010
DS-3	10/25/2021	2	-	X	<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	X	-	<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	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	20.1
H-3	9/19/2022	0-2	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	57.3
H-4	9/19/2022	0-2	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	27.5
H-5	9/19/2022	0-2	X	-	<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	X	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	23.1
H-7	9/19/2022	0-2	X	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	26.7
H-8	11/7/2022	5	X	-	<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	X	-	<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'

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

★ Samples for the areas where a variance to leave the remaining concentrations in place was approved by the NMOCD and NMSLO.



# Photographic Documentation

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Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**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.





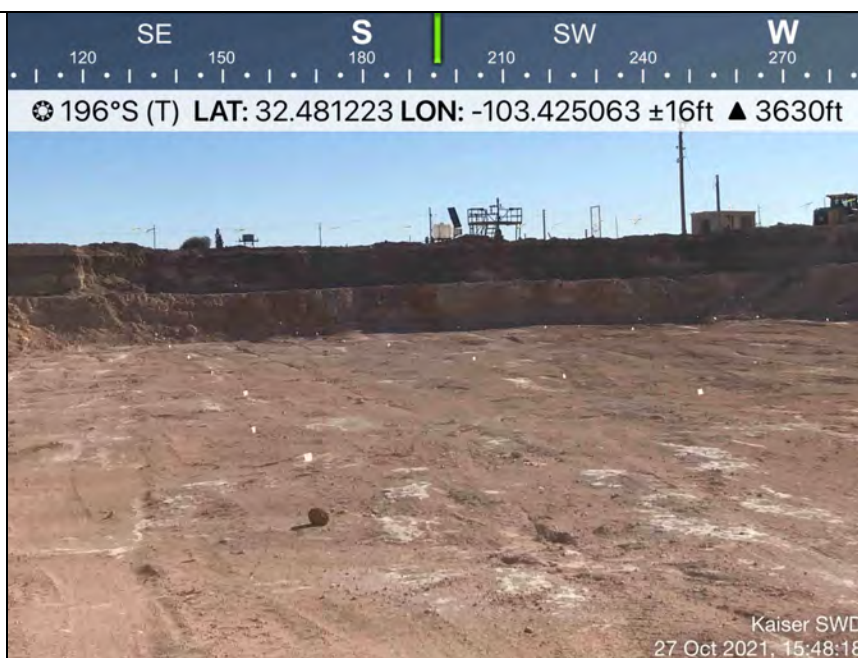
Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**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.





Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**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.



Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**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.





Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**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.



Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**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.





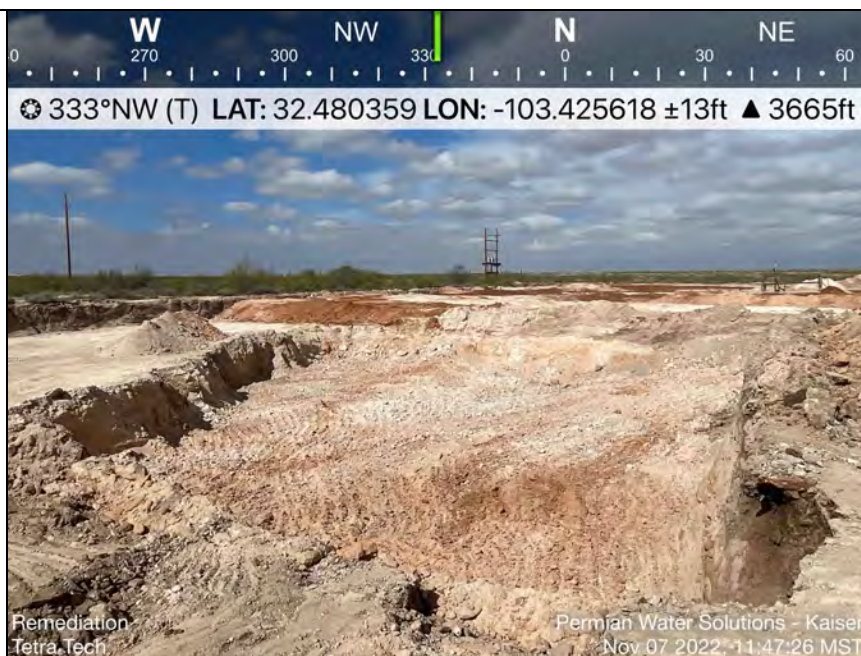
Photographic Documentation  
Kaiser State SWD  
Lea County, New Mexico  
Tetra Tech Project Number: 212C-MD-02230

**Photo: 13****Description:**

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

**Orientation:**

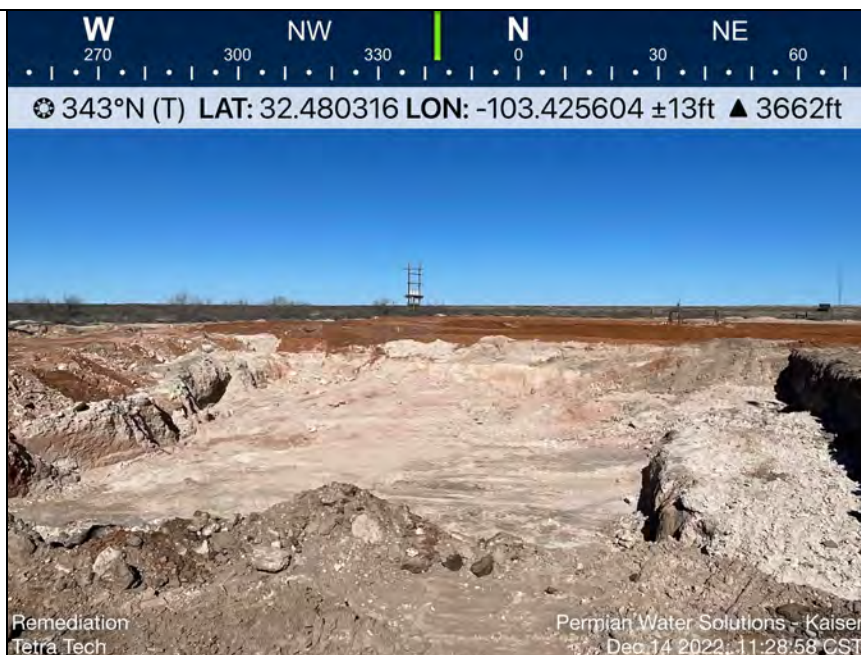
Looking northwest.

**Photo: 14****Description:**

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

**Orientation:**

Looking north.





## Appendix A

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### 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":

12

## OCD Permitting

- [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: ☐



Contact Details

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	Volume				Units
			Unk.	Released	Recovered	Lost	
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](#)
- [Materials](#)
- [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

State of New Mexico  
Oil Conservation Division

Incident ID	NPAC0531137785
District RP	
Facility ID	
Application ID	

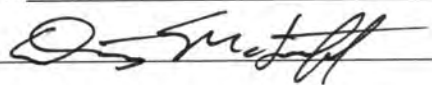
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturffTitle: Project ManagerSignature: Date: 5/5/23email: dmcinturff@durfrane.comTelephone: (432) 634-7865**OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011  
Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <b>Pyote Water Systems, LLC</b>	Contact <b>Jerry Burton Operations Manager for NM</b>
Address <b>400 W Illinois STE 950 Midland TX</b>	Telephone No. <b>432-448-4917</b>
Facility Name	Facility Type <b>Production Water</b>
Surface Owner <b>Pyote Water Systems, LLC</b>	Mineral Owner <b>Pyote</b> API No. <b>30-025-02538</b>

### LOCATION OF RELEASE

Unit Letter <b>F</b>	Section <b>13</b>	Township <b>25</b>	Range <b>34</b>	Feet from the <b>10 ft</b>	North/South Line <b>N/S</b>	Feet from the	East/West Line	County <b>LEA COUNTY</b>
				Latitude <b>32.4808551534055</b>		Longitude <b>-103.425630765566</b>		

### NATURE OF RELEASE

Type of Release <b>20 bbls production water</b>	Volume of Release <b>20 bbls</b>	Volume Recovered <b>20 bbls</b>
Source of Release <b>Vac truck</b>	Date and Hour of Occurrence <b>1/14/15</b>	Date and Hour of Discovery <b>1/14/15</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Jerry Burton NM OM</b>	
By Whom? <b>Jerry Burton</b>	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>none</b>	

If a Watercourse was Impacted, Describe Fully.\*


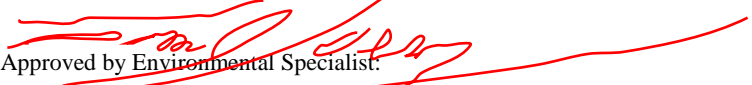
**none**

Describe Cause of Problem and Remedial Action Taken.\*

**Vac truck over filled the sumps~/ he failed to suck it out when they are instructed to do on each load. It is posted as well, at the sign in ticket area also**

Describe Area Affected and Cleanup Action Taken.\* **The clean up area or remediation took place on 1/16/15, cleaned up the area with backhoe, brought in caliche and the remediation is done. Load lines 3&4 been shut down for about 4 months, the access water is from all the rain back n September and October, than the snow we have had since than. Has not been dry enough to work on those lines. DUE TO MOTHER NATURE we have had a company go out several times to do this for loads line 3 & 4**

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.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Jerry Burton</b>	Approved by Environmental Specialist: 	
Title: <b>Operations Manager for NM</b>	Approval Date: <b>1/29/15</b>	Expiration Date: <b>3/29/15</b>
E-mail Address: <b>audra@pyotewatersystems.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>1-23-15</b> Phone: <b>432-448-4917</b>	<b>Site samples required. Deliniate and remediate as per NMOCD guides.</b>	<b>1RP-3512</b>

\* Attach Additional Sheets If Necessary

Submit final C-141 by 3

294873  
nTO1502927174

pTO1502927423



State of New Mexico  
Oil Conservation Division

Incident ID	nTO1502927174
District RP	1RP-3512
Facility ID	
Application ID	

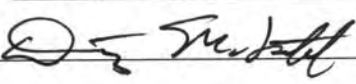
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

District I  
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State of New Mexico  
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Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <b>PYOTE WATER SYSTEMS, LLC</b>	Contact <b>Jerry Burton NM Operations Manager</b>
Address <b>400 W. Illinois Ste 900</b>	Telephone No. <b>432.448.4917 or 432.448.5323(Audra)</b>
Facility Name <b>Kaiser SWD</b>	Facility Type <b>SWD- production water DIDPOSAL</b>

Surface Owner <b>Pyote Water Systems, LLC</b>	Mineral Owner <b>Pyote Water Systems, LLC</b>	API No. <b>30-025-02538</b>
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#### LOCATION OF RELEASE

Unit Letter <b>F</b>	Section <b>13</b>	Township <b>21</b>	Range <b>34</b>	Feet from the 125 ft	North/South Line	Feet from the	East/West Line E/W	County <b>Lea COUNTY</b>
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Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

Type of Release; <b>production water</b>	Volume of Release <b>100BBLs</b>	Volume Recovered <b>100 BBLs</b>
Source of Release <b>Vac truck (unknown due to no camera's) hit load line 3</b>	Date and Hour of Occurrence <b>4/24/2015</b>	Date and Hour of Discovery <b>4/24/15 2:35 am</b>
Was Immediate Notice Given <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Jerry Burton</b>	
By Whom? <b>Unknown driver (575)-390-3836</b>	Date and HOUR; <b>4/24/2015 2:35 am</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <b>*** No***</b>	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

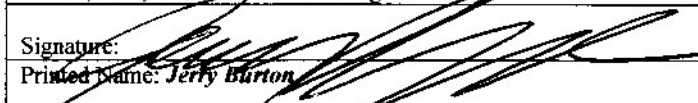

By OCD District 1 at 11:10 am, Apr 30, 2015

If a Watercourse was Impacted, Describe Fully.\*

**Describe Cause of Problem and Remedial Action Taken.\*** *unknown truck driver hit load line 3 caused a spill. We had an anonymous driver call us at 2:35 am (575)390-3836 in the morning, upon his arrival he noticed a large amount of water on the pad at the location, than noticed line 3 was had 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 Kenny repaired damages themselves, remedial work done by L&J services (backhoe) 2 vac trucks one from Big Buck Services and one from BT Services*

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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: <b>Jerry Burton</b>	Approved by Environmental Specialist: 	
Title: <b>NM Operations Manager for Pyote Water systems, LLC</b>	Approval Date: <b>04/30/2015</b>	Expiration Date: <b>07/30/2015</b>
E-mail Address: <b>jerry@pyotewatersystems.com or audra@pyotewatersystems.com</b>	Conditions of Approval: Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of remediation required.	
Date: <b>4/26/15</b> Phone: <b>432.448.4917</b>	Attached <input type="checkbox"/> 294873 IRP 3621	

\* Attach Additional Sheets If Necessary

pKJ1512042374  
nKJ1512041707



State of New Mexico  
Oil Conservation Division

Incident ID	nKJ1512041707
District RP	1RP-3621
Facility ID	
Application ID	

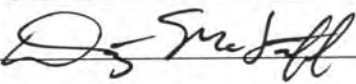
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

District I  
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

**RECEIVED**

By JKeyes at 7:43 am, Jun 09, 2016

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

**Release Notification and Corrective Action****OPERATOR**

Initial Report



Final Report

Name of Company	Pyote Water Systems, LLC	Contact	Jerry Burton
Address	400 W Illinois Ste 900 MIDLAND TX 79701	Telephone No.	432-448-4917
Facility Name	Kaiser Swd	Facility Type	production Water
Surface Owner	STATE	Mineral Owner	STATE
		API No.	30-025-02538

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21s	<del>24s</del> 34E					LEA COUNTY

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	Volume Recovered	1050 bbls
Source of Release	production water	Date and Hour of Occurrence	5-17-16	Date and Hour of Discovery	4 PM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? JERRY BURTON via telephone by driver			
By Whom?	UNKNOWN DRIVER	Date and Hour 5/17/16 4PM			
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. 1050 BLS			

If a Watercourse was Impacted, Describe Fully.\*

fire melted parts of the liner, water got under the liner

Describe Cause of Problem and Remedial Action Taken.\*

lightning hit load tanks and burned 6 500 bbl tanks less than 2 bbls breeched containment. called vac truck out to empty containment after the fire dept put out the fire .

Describe Area Affected and Cleanup Action Taken.\*

load side containment have clean up crew cleaning up and disposing of old tanks and cat walk to 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 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.

Signature: <i>Jerry Burton</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jerry Burton		Approved by Environmental Specialist: <i>Jamie Keyes</i>	
Title: NM Operations Mgr	Approval Date: 06/09/2016	Expiration Date: 08/09/2016	
E-mail Address: jerry@pyotewatersystems.com	Conditions of Approval: Discrete samples only. Delineate and remediate per NMOCD guidelines.		Attached <input type="checkbox"/> 1RP 4305
Date: 5-18-2016	Phone: 4324484917		

\* Attach Additional Sheets If Necessary

nJXX1616127644  
pJXX1616127747



Incident ID	nJXK16116127644
District RP	1RP-4305
Facility ID	
Application ID	

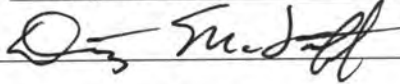
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



District I  
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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

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Cambrian Management, LTD.	Contact: Mike Anthony
Address: 415 W. Wall St. Suite 900	Telephone No. 432-631-4398
Facility Name: Kaiser SWD #9	Facility Type: SWD

Surface Owner: State	Mineral Owner: State	API No. 30-025-02538
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### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E	1980	North	1980	West	Lea

Latitude 32.4808578 Longitude -103.4256592

### NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: 0
Source of Release: Frac tanks	Date and Hour of Occurrence:	Date and Hour of Discovery:
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

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 south-southwest 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

Signature: <i>Mike Anthony</i>	Approved by Environmental Specialist: <i>Kristen Lynch</i>	
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	Please see attached Directive	Attached <input type="checkbox"/> 1RP 4525
Date: 11/15/16 Phone: 432-631-4398		

\* Attach Additional Sheets If Necessary

nKL1632848695  
pKL1632848917



Incident ID	nKL1632848695
District RP	1RP-4525
Facility ID	
Application ID	

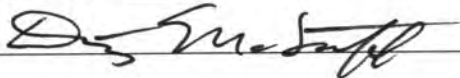
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

District I  
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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 April 3, 2017

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd.	Contact Mike Anthony
Address P.O. Box 272, Midland, TX 79702	Telephone No. (432)631-4398
Facility Name Kaiser State SWD	Facility Type Salt Water Disposal

Surface Owner State	Mineral Owner State	API No. 30-025-02538
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#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E					Lea

Latitude 32.48008578 Longitude -103.4256592 NAD83

#### NATURE OF RELEASE

Type of Release Produced Water & Crude Oil	Volume of Release 50 bbls	Volume Recovered 0 bbls
Source of Release Unknown	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/18/2017, 12:35 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

By Olivia Yu at 4:17 pm, Oct 27, 2017

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The cause of the release is undetermined and is currently under investigation. No remedial action has been taken at this point.

Describe Area Affected and Cleanup Action Taken.\*

The release was confined to the primary and secondary earthen containment berms surrounding the SWD battery. The affected area inside the berms measured approximately 7,200 sq. ft. Remediation of the impacted area will be conducted in accordance with NMOCD and NMSLO guidelines.

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.

Signature: <i>Denise Jones</i> Denise Jones- Regulatory Analyst	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Todd Roberson (as agent of Cambrian Mgmt.)	Approved by Environmental Specialist: <i>gy</i>	
Title: Owner	Approval Date: 10/27/2017	Expiration Date:
E-mail Address: todd@trinityoilfieldservices.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 10/23/2017 Phone: (575) 631-3129		

\* Attach Additional Sheets If Necessary

1RP-4855

nOY1730058924

pOY1730059151



Incident ID	nOY1730058924
District RP	1RP-4855
Facility ID	
Application ID	

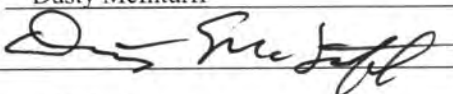
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised April 3, 2017

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd.	Contact Mike Anthony
Address P.O. Box 272, Midland, TX 79702	Telephone No. (432)631-4398
Facility Name Kaiser State SWD	Facility Type Salt Water Disposal
Surface Owner State	Mineral Owner State
API No. 30-025-02538	

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E					Lea

Latitude 32.48008578 Longitude -103.4256592 NAD83

### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 20 bbls	Volume Recovered 10 bbls
Source of Release Seal on pump	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 1/31/2018, 10:00 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

**RECEIVED**  
By Olivia Yu at 9:34 am, Feb 07, 2018

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*



The seal on a pump failed. A vacuum truck was utilized to recover free-standing liquid. The seal was repaired during initial response activities.

Describe Area Affected and Cleanup Action Taken.\*

The release was confined to the primary and secondary earthen containment berms surrounding the SWD battery. The affected area inside the berms measured approximately 5,000 sq. ft. The release commingled with an area that had been affected by a release on 10/18/2017 (see 1RP-4855). Remediation of the impacted area will be conducted in accordance with NMOCD and NMSLO guidelines.

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

Signature: 	Approved by Environmental Specialist: 	
Printed Name: Denise Jones	Approval Date: 2/7/2018	Expiration Date:
Title: Regulatory Analyst	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
E-mail Address: djones@cambrianmgmt.com	Date: 2/6/18	Phone: (432) 620-9181

\* Attach Additional Sheets If Necessary

1RP-4960

nOY1803834027

pOY1803834550



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


## Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised April 3, 2017

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

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd.	Contact Mike Anthony
Address PO Box 272, Midland TX 79702	Telephone No. 432-631-4398
Facility Name Kaiser State SWD	Facility Type SWD

Surface Owner State	Mineral Owner State	API No. 30-025-02538
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### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E					Lea

Latitude **32.4808578** Longitude **-103.4256592** NAD83

### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 150 bbls	Volume Recovered 150 bbls
Source of Release Wellhead	Date and Hour of Occurrence 06/20/2018	Date and Hour of Discovery 06/20/2018 10:00AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Nipple on wellhead broke off – nipple was replaced

Describe Area Affected and Cleanup Action Taken.\*

All water was contained to the caliche pad. All water was picked up. This was on top of a previous spill that was already reported and is in the process to be remediated.

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.

Signature:	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Denise Jones	Approved by Environmental Specialist: <i>EDT</i>	
Title: Regulatory Analyst	Approval Date: <b>7/31/2018</b>	Expiration Date:
E-mail Address: <a href="mailto:djones@cambrianmgmt.com">djones@cambrianmgmt.com</a>	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: 06/21/2018 Phone:	<b>See attached directive</b>	

**1RP-5139**

**pCH1821239860**

**nCH1821239639**



State of New Mexico  
Oil Conservation Division

Incident ID	nCH1821239639
District RP	1RP-5139
Facility ID	
Application ID	

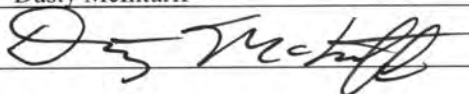
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or 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  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised April 3, 2017

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final 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	Mineral Owner	State	API No.	30-025-02538
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### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E	1980	North	1980	West	Lea

Latitude 32.480938 N Longitude -103.425227 NAD83

### NATURE OF RELEASE

Type of Release	Produced Water	Volume of Release	200 Bbls	Volume Recovered	200 Bbls
Source of Release	Valve	Date and Hour of Occurrence	08/06/2018	Date and Hour of Discovery	08/06/2018 10:00AM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Christina Hernandez		
By Whom?	Denise Jones	Date and Hour	08/06/2018 3:25 PM		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

**RECEIVED**

By Olivia Yu at 1:48 pm, Aug 07, 2018

Describe Cause of Problem and Remedial Action Taken.\*



Valve Malfunction/Power Failure

Sometimes when the transfer pump comes on while the injection pump is on, a fuse blows on high current. We are having an electrician look at turning up the voltage at the transformers to lower peak current.

Describe Area Affected and Cleanup Action Taken.\*

Only the area inside the berm which is lined with plastic was affected. All water was vacuumed up.

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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Denise Jones	Approved by Environmental Specialist: 	
Title: Regulatory Analyst	Approval Date: 8/7/2018	Expiration Date:
E-mail Address: djones@cambrianmgmt.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 08/06/2018	Phone: 432-620-9181	

\* Attach Additional Sheets If Necessary

nOY1821950108

pOY1821950272

1RP-5149

1) Please inspect liner in question. Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.  
2) At least one photo must demonstrate the entire facility is lined.



State of New Mexico  
Oil Conservation Division

Incident ID	nOY1821950108
District RP	1RP-5149
Facility ID	
Application ID	

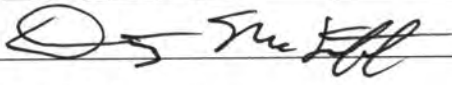
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or 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  
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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 April 3, 2017

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

## Release Notification and Corrective Action

### OPERATOR

X Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd	Contact Mr. Mike Anthony
Address PO Box 272, Midland, TX 79702	Telephone No. 432-631-4398
Facility Name Kaiser State SWD	Facility Type SWD

Surface Owner State	Mineral Owner State	API No. 30-025-02538
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### LOCATION OF RELEASE

Unit Letter F	Section 13	Township 21S	Range 34E	Feet from the 1980	North/South Line North	Feet from the 1980	East/West Line West	County Lea
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Latitude 32.480938 N Longitude -103.425227 NAD83

### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 500 Bbls	Volume Recovered 500 Bbls
Source of Release Unload Tanks	Date and Hour of Occurrence 08/17/2018 10:00AM	Date and Hour of Discovery 08/17/2018 11:00 AM
Was Immediate Notice Given? X Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu and other OCD member on location	
By Whom? Mike Anthony	Date and Hour 12:00 PM 08/17/2018	
Was a Watercourse Reached? <input type="checkbox"/> Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

**RECEIVED**

By Olivia Yu at 10:04 am, Aug 21, 2018

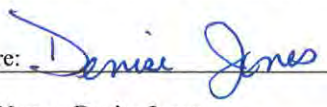

Describe Cause of Problem and Remedial Action Taken.\*

A valve did not close completely and the tanks ran over into a completely lined pit @ the unload tank area. The valve is being repaired or replaced as needed.

Describe Area Affected and Cleanup Action Taken.\*

The release was completely contained within a lined pit. All water was recovered. The pit liner and tanks will be washed after all water has been picked up.

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.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Denise Jones	Approved by Environmental Specialist: 	
Title: Regulatory Analyst	Approval Date: 8/21/2018	Expiration Date:
E-mail Address: djones@cambrianmgmt.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 08/17/2018 Phone: 432-620-9181	1) Inspect liner in question. Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids. 2) Dated photo documentation of liner.	

\* Attach Additional Sheets If Necessary

nOY1823336566

pOY1823336912

1RP-5163



Incident ID	nOY1823336566
District RP	1RP-5163
Facility ID	
Application ID	

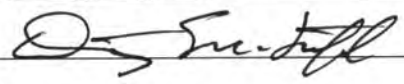
## Closure

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 sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

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

## Release Notification

### Responsible Party

Responsible Party <b>Permian Water Solutions, LLC</b>	OGRID <b>373626</b>
Contact Name <b>Dale Glosson</b>	Contact Telephone <b>432-894-3636</b>
Contact email <b>dale@permianws.com</b>	Incident # <b>NCH1834760902 KAISER STATE SWD</b>
Contact mailing address <b>PO Box 2106, Midland, TX 79702</b>	<b>@ 30-025-02538</b>

### Location of Release Source

Latitude **32.480938**Longitude **-103.425227**

(NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Kaiser State SWD</b>	Site Type <b>Salt Water Disposal</b>
Date Release Discovered <b>11/2/18</b>	API# (if applicable) <b>30-025-02538</b>

Unit Letter	Section	Township	Range	County
<b>F</b>	<b>13</b>	<b>21S</b>	<b>34E</b>	<b>Lea</b>

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) <b>20</b>	Volume Recovered (bbls) <b>16</b>
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release **Oil skim tank overflow; all fluids contained within containment berm**



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

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? <b>Yes, Dale Glosson called District I office @ 11:25 am on 11/2/18, was transferred to Christina Hernandez, Left voicemail and call back number. C. Hernandez called back later in the afternoon and the report was made.</b></p>	

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<p><input checked="" type="checkbox"/> The source of the release has been stopped.</p> <p><input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.</p> <p><input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.</p> <p><input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.</p>	<p>If all the actions described above have <u>not</u> been undertaken, explain why: <b>The hydrocarbon impacted soil is in process of being removed and stored on plastic liner, as well as covered with plastic liner to prevent rainwater from dispersing hydrocarbon contamination, pending soil sampling and site assessment.</b></p>
<p>Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.</p>	
<p>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.</p>	
<p>Printed Name: <u>Dale Glosson</u></p> <p>Signature: <u>[Signature]</u></p> <p>email: <u>dale@permianws.com</u></p>	<p>Title: <u>Operations Manager</u></p> <p>Date: <u>11/15/18</u></p> <p>Telephone: <u>432-894-3636</u></p>
<p><b>OCD Only</b></p> <div style="border: 2px solid black; padding: 10px; text-align: center; margin: 10px auto; width: fit-content;"> <p><b>RECEIVED</b></p> <p><b>By CHernandez at 4:56 pm, Dec 13, 2018</b></p> </div>	



State of New Mexico  
Oil Conservation Division

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.

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Dusty McInturff 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 responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or 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

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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](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Gonzales, Clair <Clair.Gonzales@tetrattech.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

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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@tetrattech.com](mailto:clair.gonzales@tetrattech.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

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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](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Gonzales, Clair <Clair.Gonzales@tetrattech.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

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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@tetrattech.com](mailto:clair.gonzales@tetrattech.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

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Clair,

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

Please include this approval in your Final C-141.

Thanks,

**Cory Smith** • Environmental Projects Supervisor  
Environmental Bureau Projects Group  
EMNRD - Oil Conservation Division  
5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113  
505.419.2687 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>  
**Sent:** Friday, September 30, 2022 1:21 PM  
**To:** Smith, Cory, EMNRD <[cory.smith@emnrd.nm.gov](mailto:cory.smith@emnrd.nm.gov)>  
**Cc:** Crosby, Faith <[fcrosby@slo.state.nm.us](mailto:fcrosby@slo.state.nm.us)>; Mann, Ryan <[rmann@slo.state.nm.us](mailto:rmann@slo.state.nm.us)>; 'Jenni Usher' <[jenni@permianws.com](mailto:jenni@permianws.com)>; Dusty McInturff <[dmcinturff@dufrane.com](mailto:dmcinturff@dufrane.com)>; Josh Brooks <[josh@permianws.com](mailto:josh@permianws.com)>  
**Subject:** [EXTERNAL] Permian Water Solutions - Kaiser SWD Variance Request

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Good Afternoon,

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

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



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

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

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

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

Thank you,

***Clair Gonzales,***

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

Phone: 432.687.8123 | Mobile 432.260.8634 | Fax:432.682.3946

[clair.gonzales@tetrattech.com](mailto:clair.gonzales@tetrattech.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

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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](mailto:Cory.Smith@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Gonzales, Clair <Clair.Gonzales@tetrattech.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@tetrattech.com](mailto:clair.gonzales@tetrattech.com)

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---

**From:** Smith, Cory, EMNRD <[cory.smith@emnrd.nm.gov](mailto:cory.smith@emnrd.nm.gov)>



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

**To:** Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>

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

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

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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](mailto:Cory.Smith@state.nm.us)

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

---

**From:** Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>

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

**To:** Smith, Cory, EMNRD <[cory.smith@emnrd.nm.gov](mailto:cory.smith@emnrd.nm.gov)>

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

Tetra Tech | Complex World, CLEAR SOLUTIONS™

901 West Wall Street, Ste 100 | Midland, TX 79701 | [www.tetrattech.com](http://www.tetrattech.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](#)  
[image002.png](#)

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

Jenni,

SW-76 Your variance is approved to leave 931 Chlorides  
SW-79 Your 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](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Crosby, Faith <[fcrosby@slo.state.nm.us](mailto:fcrosby@slo.state.nm.us)>  
**Sent:** Tuesday, January 10, 2023 2:35 PM  
**To:** Jenni Usher <[jenni@permianws.com](mailto:jenni@permianws.com)>; Mann, Ryan <[rmann@slo.state.nm.us](mailto:rmann@slo.state.nm.us)>; Gallegos, David <[dgallegos@slo.state.nm.us](mailto:dgallegos@slo.state.nm.us)>; Smith, Cory, EMNRD <[cory.smith@emnrd.nm.gov](mailto:cory.smith@emnrd.nm.gov)>; [dmcinturff@dufrane.com](mailto:dmcinturff@dufrane.com); Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>; Josh Brooks <[josh@permianws.com](mailto:josh@permianws.com)>  
**Subject:** [EXTERNAL] RE: PWS - Kaiser SWD Confirmation Sampling \_ Phase II\_UPDATE-12-29-2022

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

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

Best regards,

Faith Crosby  
Water Bureau Manager  
Oil, Gas, and Minerals Division  
Office 505.827.5849  
Fax 505-827-4739



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

[fcrosby@slo.state.nm.us](mailto:fcrosby@slo.state.nm.us)

.....  
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---

**From:** Jenni Usher <[jenni@permianws.com](mailto:jenni@permianws.com)>

**Sent:** Tuesday, January 10, 2023 1:58 PM

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

**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' <[fcrosby@slo.state.nm.us](mailto:fcrosby@slo.state.nm.us)>; 'Mann, Ryan' <[rmann@slo.state.nm.us](mailto:rmann@slo.state.nm.us)>; Gallegos, David <[dgallegos@slo.state.nm.us](mailto:dgallegos@slo.state.nm.us)>; Cory, EMNRD Smith <[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)>; [dmcinturff@dufrane.com](mailto:dmcinturff@dufrane.com) <[dmcinturff@dufrane.com](mailto:dmcinturff@dufrane.com)>; Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>; Josh Brooks <[josh@permianws.com](mailto:josh@permianws.com)>

**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](mailto:jenni@permianws.com)



## Appendix B

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Work Plan (2020)



**OPEN  
FOR  
BUSINESS**Agriculture  
Land Stewardship  
Renewable Energy  
Outdoor Recreation  
Oil, Gas and Minerals  
Business Development

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

The max TPH discovered was 34,860 mg/kg, max  $\text{Cl}^-$  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:
  - Floor samples to be taken in same location as previous samples.
  - 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  $\text{Cl}^-$  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 commencement injection for a period of 6 months. SLO will review activities for compliance with all environmental and easement requirements.



## Phase 1 Work Plan Tasks Site Map

### Kaiser State SWD #1

#### Phase 1 Work Plan Tasks:

- Site outline
- - - Phase 1 remediation area

1. Remove all equipment & debris on site.
2. Excavate Phase 1 remediation area to 15'.
  - a) Final samples to the following closure criteria:
    - 1,000 mg/kg TPH
    - 7,000 mg/kg Cl<sup>-</sup>
    - BTEX ND
3. 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 Cl<sup>-</sup>
    - \* STEL NO
4. 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 soil and water testing.\*\*\*



## SITE INFORMATION

### Report Type: Revised Work Plan

#### General Site Information:

Site:	Kaiser State SWD					
Company:	Permian Water Solutions					
Section, Township and Range	Unit F	Sec. 13	T 21S	R 34E		
Lease Number:	API No. 30-025-02538					
County:	Lea					
GPS:	32.48086			-103.42566		
Surface Owner:	State					
Directions:	From the intersection of HWY 176 and CR 32 (San Simon Rd) in rural Lea County, travel west on HWY 176 for approximately 0.25 miles, turn south onto lease road and continue for 0.25 miles to Y in the road, continue right for an additional 0.30 miles to the location on the north side of the lease road.					

<b>Release Data:</b>	<b>1RP-3512</b>	<b>1RP-3621</b>	<b>1RP-4305</b>
<b>Date Released:</b>	1/14/2015	4/24/2015	5/17/2016
<b>Type Release:</b>	Produced Water	Produced Water	Produced Water
<b>Source of Contamination:</b>	Vac Truck	Truck hit load line	Lightning Strike
<b>Fluid Released:</b>	20 bbls	100 bbls	1050 bbls
<b>Fluids Recovered:</b>	20 bbls	100 bbls	1050 bbls

<b>Release Data:</b>	<b>1RP-4525</b>	<b>1RP-4855</b>	<b>1RP-4960</b>
<b>Date Released:</b>	Unknown	10/18/2017	1/31/2018
<b>Type Release:</b>	Produced Water	Produced Water & Oil	Produced Water
<b>Source of Contamination:</b>	Frac Tanks	Unkown	Seal on Pump
<b>Fluid Released:</b>	Unknown	50 bbls	20 bbls
<b>Fluids Recovered:</b>	0 bbls	0 bbls water	10 bbls

<b>Release Data:</b>	<b>1RP-5139</b>	<b>1RP-5149</b>	<b>1RP-5163</b>
<b>Date Released:</b>	6/20/2018	8/6/2018	8/17/2018
<b>Type Release:</b>	Produced Water	Produced Water	Produced Water
<b>Source of Contamination:</b>	Wellhead	Valve	Unload Tanks
<b>Fluid Released:</b>	150 bbls	200 bbls	500 bbls
<b>Fluids Recovered:</b>	150 bbls	200 bbls	500 bbls

<b>Release Data:</b>	<b>1RP-5273</b>	
<b>Date Released:</b>	11/2/2018	
<b>Type Release:</b>	Oil	
<b>Source of Contamination:</b>	Tank Overflow	
<b>Fluid Released:</b>	20 bbls	
<b>Fluids Recovered:</b>	16 bbls	

#### Official Communication:

<b>Name:</b>	James Corbitt		Clair Gonzales
<b>Company:</b>	Permian Water Solutions		Tetra Tech
<b>Address:</b>	415 W. Wall St.		901 West Wall Street
	Suite 320		Suite 100
<b>City:</b>	Midland, TX 79701		Midland, Texas
<b>Phone number:</b>	(432) 305-4124		(432) 687-8110
<b>Fax:</b>			
<b>Email:</b>	<a href="mailto:james@permianws.com">james@permianws.com</a>		<a href="mailto:Clair.Gonzales@tetrattech.com">Clair.Gonzales@tetrattech.com</a>

#### Site Characterization

<b>Depth to Groundwater:</b>	Greater than 100'
<b>Karst Potential:</b>	Low

#### Recommended Remedial Action Levels (RRALs)

<b>Benzene</b>	<b>Total BTEX</b>	<b>TPH (GRO+DRO)</b>	<b>TPH (GRO+DRO+MRO)</b>	<b>Chlorides</b>
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.

Tetra Tech

4000 North Big Spring, Suite 401, Midland, TX 79705

Tel 432.682.4559 Fax 432.682.3946 [www.tetrattech.com](http://www.tetrattech.com)





- **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 malfunction. 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 malfunction, 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'

**TETRA TECH**

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

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

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety 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.

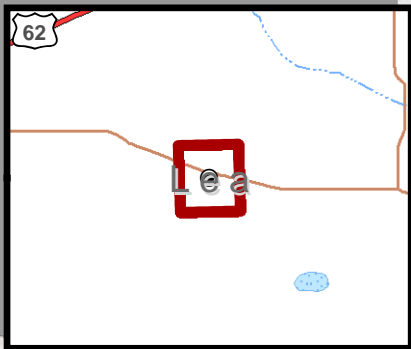
Respectfully submitted,  
TETRA TECH

Clair Gonzales, P.G.,  
Project Manager

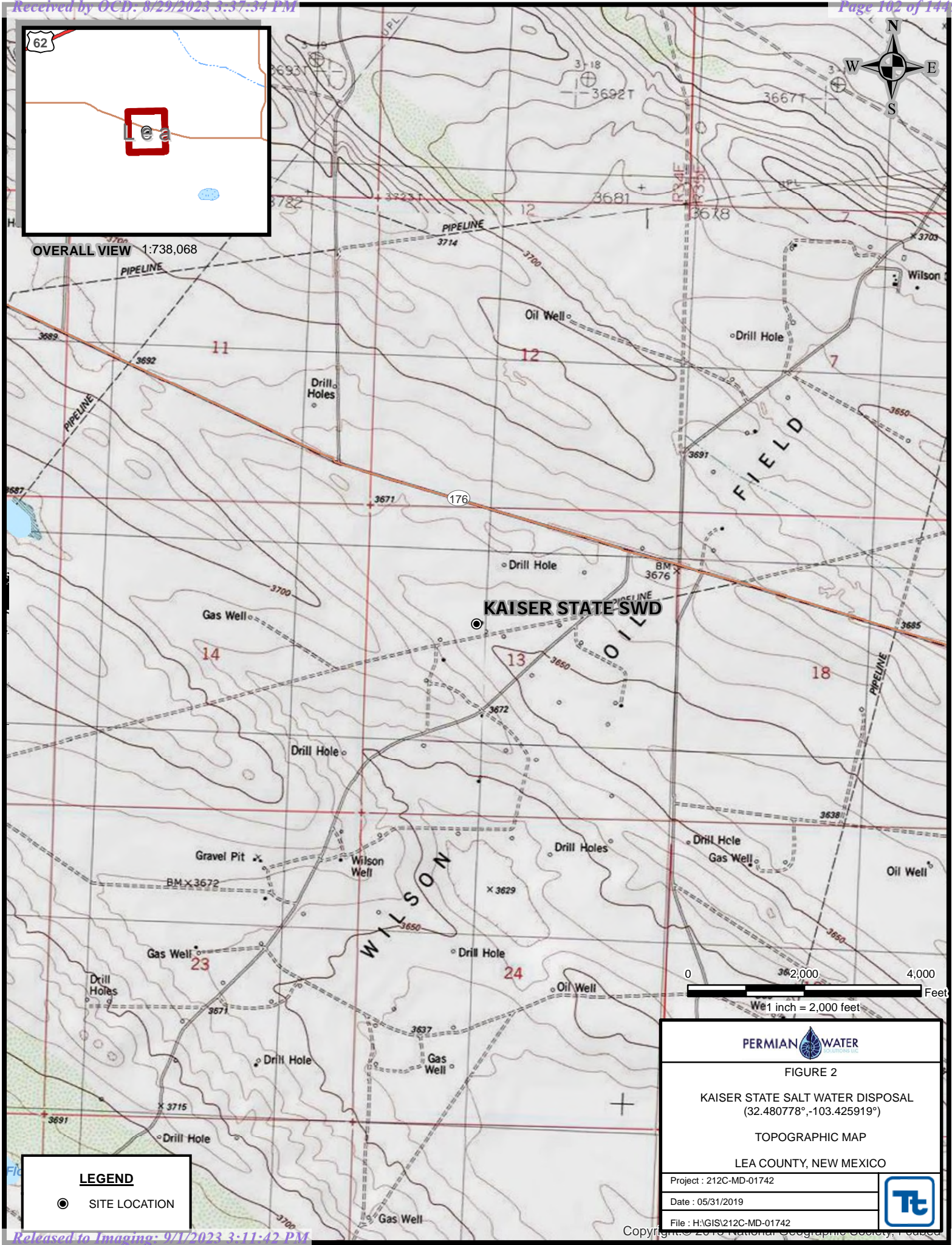
## Figures







OVERALL VIEW 1:738,068



**LEGEND**

● SITE LOCATION

**PERMIAN WATER**

**FIGURE 2**

**KAISER STATE SALT WATER DISPOSAL**  
(32.480778°,-103.425919°)

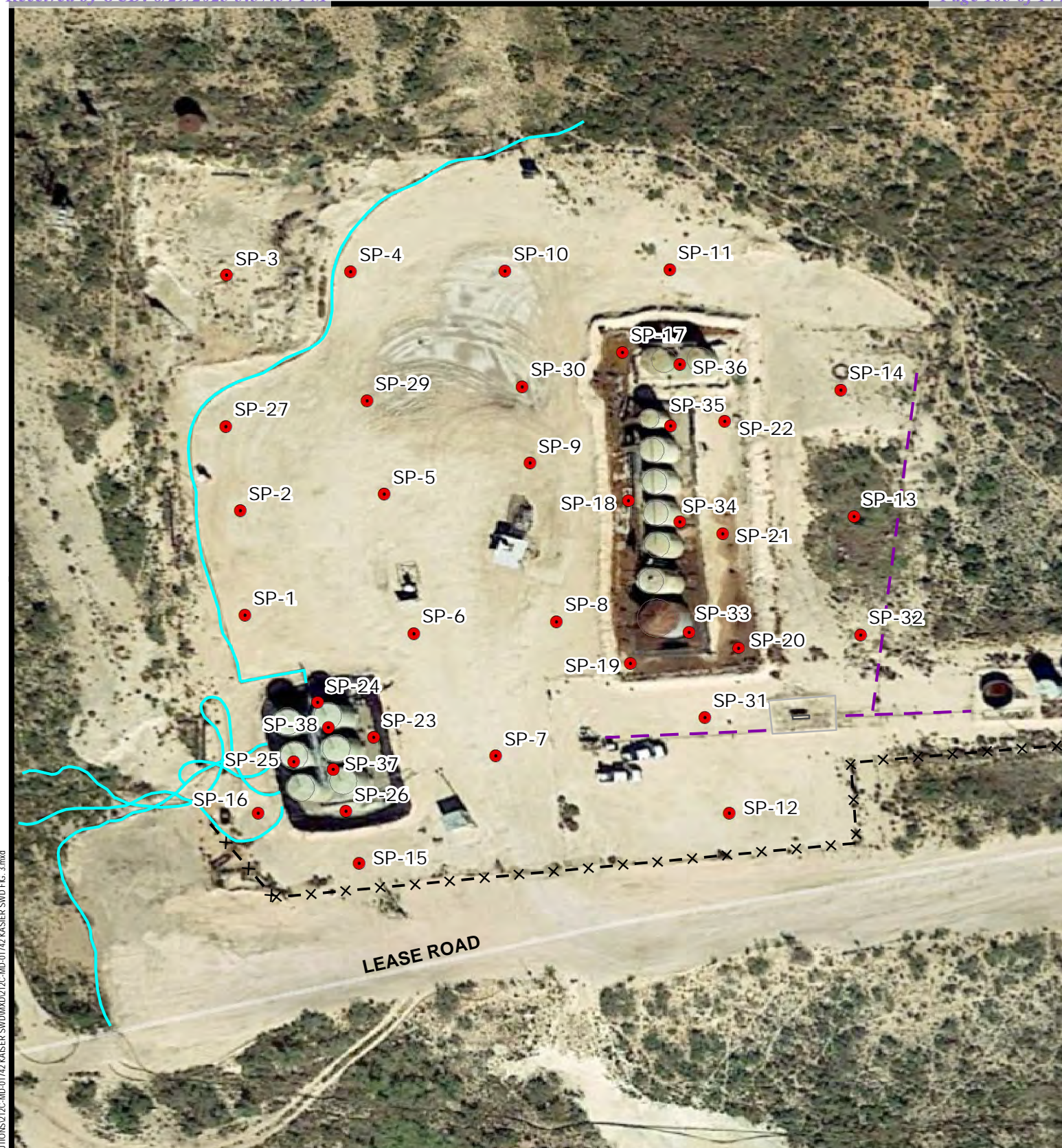
**TOPOGRAPHIC MAP**

**LEA COUNTY, NEW MEXICO**

Project : 212C-MD-01742
Date : 05/31/2019
File : H:\GIS\212C-MD-01742

**Tt**





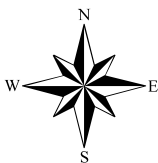
● SAMPLE LOCATIONS

— EXPOSED PIPELINE

— BURIED PIPELINE

X — X FENCELINE

□ EQUIPMENT



0 40 80

Approximate Scale in Feet

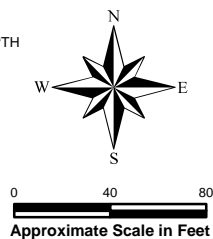
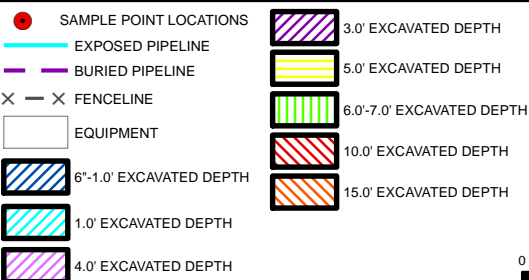
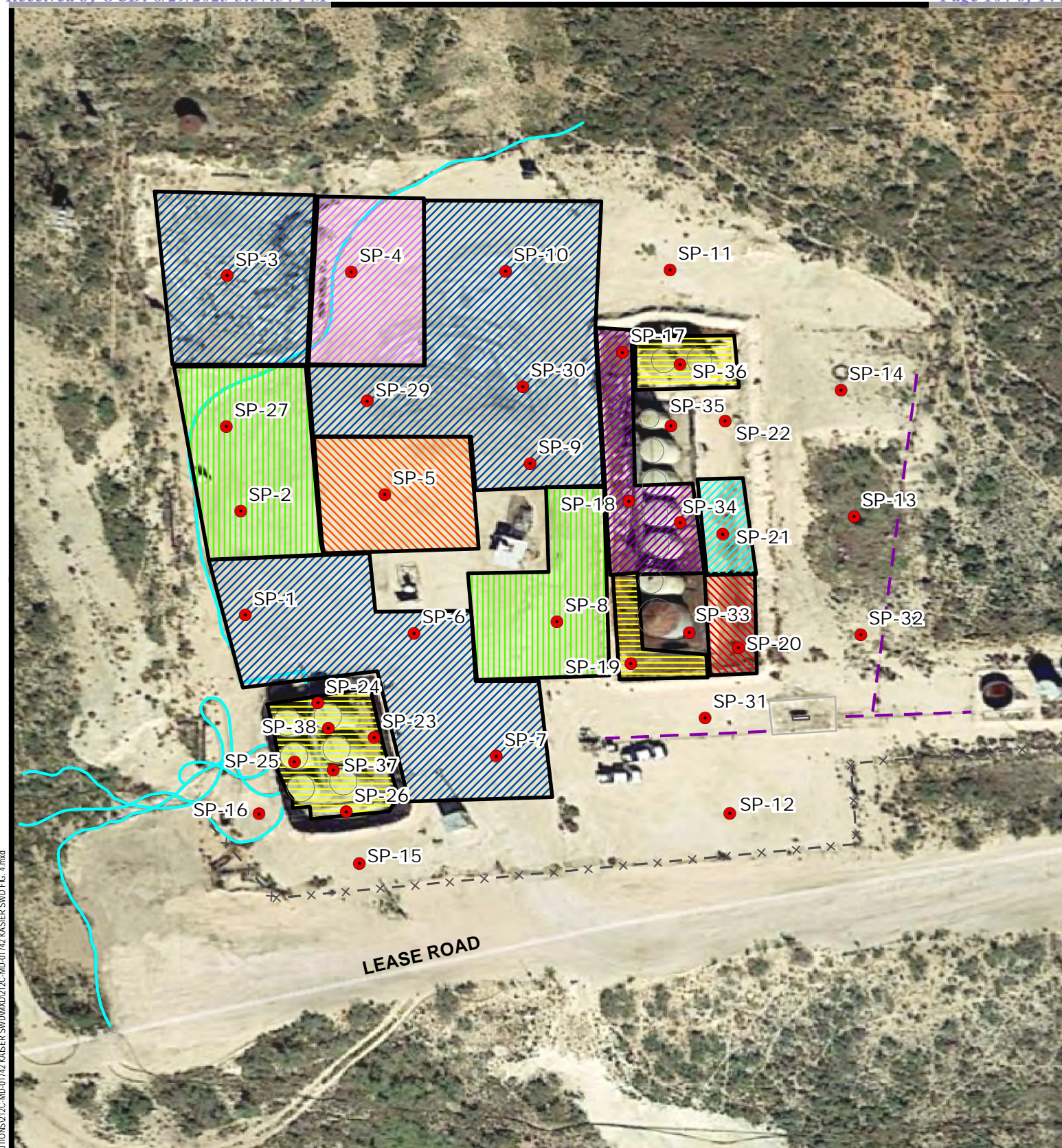
Source: "New Mexico". 32°28'50.80"N, 103°25'33.31"W. Google Earth.  
November 02, 2017. November 7, 2019.

SPILL ASSESSMENT MAP  
KAISER STATE SALT WATER DISPOSAL  
Property Located at coordinates 32.480778°,-103.425919°  
LEA COUNTY, NEW MEXICO



FIGURE  
3





EXCAVATED AREA & DEPTH MAP  
KAISER STATE SALT WATER DISPOSAL  
Property Located at coordinates 32.480778°,-103.425919°  
LEA COUNTY, NEW MEXICO



FIGURE  
4

## Tables



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

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

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

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

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

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



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

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
<b>SP-18</b> <b>Inside Berm</b>	5/7/2019	0-1	X		<b>1,950</b>	<b>8,290</b>	1,320	<b>11,560</b>	0.883	20.6	9.44	60.9	<b>91.8</b>	9,730
	"	2-3	X		177	<b>1,990</b>	506	<b>2,673</b>	<0.050	0.124	0.430	1.06	1.61	5,520
<b>BH-18</b>	10/21/2019	0-1	X		<251	<b>11,100</b>	1,640	<b>12,700</b>	<0.101	<0.101	0.196	0.965	1.16	7,190
	"	2-3	X		<b>444</b>	<b>6,210</b>	747	<b>7,400</b>	<0.100	0.279	0.594	1.73	2.61	6,180
	"	4-5	X		<49.9	183	<49.9	183	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	8,280
	"	6-7	X		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	5,540
	"	9-10	X		<50.3	<50.3	<50.3	<50.3	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	3,010
	"	14-15	X		<49.8	<49.8	<49.8	<49.8	<0.000984	<0.000984	<0.000984	<0.000984	<0.000984	1,610
	"	19-20	X		<50.0	<50.0	<50.0	<50.0	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	4,720
	"	24-25	X		<49.8	<49.8	<49.8	<49.8	<0.000986	<0.000986	<0.000986	0.00348	0.00348	2,630
	"	29-30	X		<49.7	<49.7	<49.7	<49.7	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,250
	"	34-35	X		<50.0	<50.0	<50.0	<50.0	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	1,120
	"	39-40	X		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	772
	"	44-45	X		<50.0	<50.0	<50.0	<50.0	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	633
	"	49-50	X		<49.9	<49.9	<49.9	<49.9	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	388
<b>SP-19</b> <b>Inside Berm</b>	5/8/2019	0-1	X		2,980	14,800	2,930	<b>20,710</b>	3.95	46.4	9.53	71.3	<b>131</b>	6,560
	"	2-3	X		64.8	786	176	<b>1,027</b>	<0.050	0.143	0.191	0.451	0.784	12,800
	5/13/2019	4-4.5	X		2,270	7,380	805	<b>10,455</b>	2.21	48.5	36.9	131	<b>219</b>	4,120
<b>BH-19</b>	10/22/2019	0-1	X		474	8,050	729	<b>9,250</b>	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	4,160
	"	2-3	X		97.5	2,900	253	<b>3,250</b>	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	9,700
	"	4-5	X		87.1	2,090	186	<b>2,360</b>	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	10,200
	"	6-7	X		<50.2	<50.2	<50.2	<50.2	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	7,660
	"	9-10	X		<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	X		<49.8	<49.8	<49.8	<49.8	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	11,500
	"	24-25	X		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	811
	"	29-30	X		<50.0	<50.0	<50.0	<50.0	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	502
	"	34-35	X		<49.8	<49.8	<49.8	<49.8	<0.000982	0.00182	<0.000982	<0.000982	0.00182	171
	"	39-40	X		<49.9	<49.9	<49.9	<49.9	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	495
<b>SP-20</b> <b>Inside Berm</b>	5/8/2019	0-1	X		3,520	25,300	6,040	<b>34,860</b>	<b>21.7</b>	80.8	17.3	61.2	<b>181</b>	2,520
	"	2-3	X		2,930	13,400	2,870	<b>19,200</b>	<b>15.3</b>	73.7	15.0	101	<b>205</b>	1,630
	5/13/2019	4-4.5	X		3,900	11,300	1,620	<b>16,820</b>	<b>15.3</b>	102	49.2	162	<b>329</b>	1,550
	"	5-5.5	X		4,390	11,300	1,390	<b>17,080</b>	<b>18.0</b>	120	56.6	153	<b>348</b>	1,600
<b>BH-20</b>	10/22/2019	0-1	X		302	3,560	339	<b>4,200</b>	0.00241	0.0227	0.0126	0.0558	0.0935	2,680
	"	2-3	X		821	4,840	396	<b>6,060</b>	0.5700	7.56	4.92	24.4	37.4	5,240
	"	4-5	X		1,270	4,990	395	<b>6,660</b>	2.00	22.2	13.0	51.7	<b>88.9</b>	2,300
	"	6-7	X		2,110	6,650	588	<b>9,350</b>	3.32	34.0	18.5	63.2	<b>119</b>	218
	"	9-10	X		388	2,710	189	<b>3,290</b>	<0.0998	2.33	3.07	10.7	16.1	988
	"	14-15	X		<50.2	365	<50.2	365	<0.00101	<0.00101	0.0126	0.0659	0.0785	3,800
	"	19-20	X		<50.3	326	57.1	385	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	1,350
	"	24-25	X		<50.1	62.8	<50.1	62.8	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	199
	"	29-30	X		<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 ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
<b>SP-21</b> <b>Inside Berm</b>	5/8/2019	0-1	X		993	10,500	2,100	<b>13,593</b>	0.0740	2.12	2.05	14.3	18.5	2,240
	"	2-3	X		10.6	445	109	565	<0.050	<0.050	<0.050	0.241	<0.300	1,100
	5/13/2019	4-4.5	X		<10.0	725	57.2	782	<0.050	0.076	<0.050	<0.150	<0.300	3,120
	"	5-5.5	X		<10.0	215	<10.0	215	<0.050	<0.050	<0.050	<0.150	<0.300	2,200
<b>SP-22</b> <b>Inside Berm</b>	5/8/2019	0-1	X		<10.0	64.0	52.9	117	<0.050	<0.050	<0.050	<0.150	<0.300	880
	"	2-3	X		<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	X		-	-	-	-	-	-	-	-	-	720
	"	4-4.5	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	848
<b>SP-23</b> <b>Inside Berm</b>	5/8/2019	0-1	X		593	12,800	2,390	<b>15,190</b>	<0.050	1.03	1.03	2.56	4.62	880
	5/14/2019	1-1.5	X		2,180	7,770	1,050	<b>11,000</b>	6.76	71.1	40.4	129	<b>247</b>	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	X		902	3,150	521	<b>4,573</b>	7.38	57.8	31.7	100	<b>197</b>	1,060
	"	4-4.5	X		2,760	9,000	1,170	<b>12,930</b>	14.2	112	50.7	150	<b>327</b>	2,760
<b>BH-23</b>	10/22/2019	0-1	X		407	3,250	258	<b>3,920</b>	0.0125	0.0446	0.0375	1.04	1.14	372
	"	2-3	X		664	3,060	209	<b>3,930</b>	0.0152	0.0333	0.0821	0.355	0.486	178
	"	4-5	X		1,050	4,150	338	<b>5,540</b>	0.394	0.374	0.232	1.02	2.02	55.9
	"	6-7	X		74.5	742	76.9	893	0.0108	0.307	0.400	1.02	1.73	39.2
	"	9-10	X		<49.9	<49.9	<49.9	<49.9	0.00949	0.0698	0.138	0.392	0.609	359
	"	14-15	X		63.9	672	78.3	814	0.00230	0.0821	0.128	0.491	0.703	3,960
	"	19-20	X		<50.2	<50.2	<50.2	<50.2	<0.000994	0.00456	0.00189	0.00794	0.0144	6,740
	"	24-25	X		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	3,200
	"	29-30	X		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	2,370
	"	34-35	X		<49.9	<49.9	<49.9	<49.9	<0.000994	<0.000994	<0.000994	<0.000994	<0.000994	1,330
	"	39-40	X		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	1,350
	"	44-45	X		<50.0	<50.0	<50.0	<50.0	<0.000986	<0.000986	<0.000986	<0.000986	<0.000986	941
	"	49-50	X		<50.1	<50.1	<50.1	<50.1	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	362
	"	54-55	X		<50.0	<50.0	<50.0	<50.0	0.00260	0.00806	0.00849	0.0294	0.0486	286
<b>SP-24 (Inside Berm)</b>	5/8/2019	0-1	X		595	11,000	2,060	<b>13,060</b>	1.49	12.1	2.69	16.2	32.5	1,060
<b>BH-24</b>	10/22/2019	0-1	X		561	4,810	411	<b>5,780</b>	0.00859	0.8070	1.32	5.05	7.19	598
	"	2-3	X		1,160	4,830	405	<b>6,400</b>	0.380	7.47	5.41	14.2	27.5	722
	"	4-5	X		92.8	827	119	1,040	0.0189	0.335	0.266	0.986	1.61	297
	"	6-7	X		<49.8	220	67	287	<0.000994	0.00366	0.00411	0.0128	0.0206	4,460
	"	9-10	X		<49.8	166	<49.8	166	<0.000998	0.00218	0.00766	0.0276	0.0374	3,530
	"	14-15	X		<49.8	289	<49.8	289	<0.000994	<0.000994	0.00849	0.0366	0.0451	598
	"	19-20	X		<50.2	227	<50.2	227	<0.00100	<0.00100	0.0109	0.0388	0.0497	581
	"	24-25	X		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	0.00563	0.00563	494
	"	29-30	X		<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 Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
<b>SP-25</b> <b>Inside Berm</b>	5/8/2019	0-1	X		2,440	12,100	1,690	<b>13,790</b>	9.63	68.7	35.1	79.0	<b>192</b>	4,880
	5/14/2019	1-1.5	X		1,610	5,200	944	<b>7,754</b>	2.14	32.7	25.7	64.9	<b>125</b>	4,320
	"	2-2.5	X		85.1	450	65.6	601	0.397	5.74	5.26	15.2	26.6	1,150
	"	3-3.5	X		18.9	150	19.0	188	0.052	0.729	0.825	2.42	4.03	2,440
	"	4-4.5	X		39.2	398	154	591	<0.050	0.313	0.430	1.23	1.97	2,960
	"	5-5.5	X		<10.0	552	242	794	<0.050	<0.050	0.098	0.234	0.332	1,360
<b>BH-25</b>	10/22/2019	0-1	X		<49.9	223	<49.9	223	0.0160	0.281	0.283	0.752	1.33	5,200
	"	2-3	X		1,220	3,730	289	<b>5,240</b>	0.6600	8.86	5.73	13.3	28.6	5,200
	"	4-5	X		1,140	3,820	303	<b>5,260</b>	6.40	58.6	38.6	90.0	<b>194</b>	4,510
	"	6-7	X		<50.1	<50.1	<50.1	<50.1	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	1,460
	"	9-10	X		<50.1	<50.1	55.7	55.7	<0.00102	<0.00102	<0.00102	0.0119	0.0119	1,470
	"	14-15	X		<50.1	<50.1	<50.1	<50.1	<0.00100	0.0374	0.0628	0.188	0.288	805
	"	19-20	X		<50.0	<50.0	<50.0	<50.0	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	563
	"	24-25	X		<50.2	58.9	<50.2	58.9	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	349
<b>SP-26 (Inside Berm)</b>	5/8/2019	0-1	X		1,090	12,200	2,020	<b>14,220</b>	<0.050	1.34	1.33	4.02	6.69	640
<b>BH-26</b>	10/22/2019	0-1	X		795	4,560	405	<b>5,760</b>	<000994	<000994	<000994	<000994	<000994	8,630
	"	2-3	X		1,050	4,040	288	<b>5,380</b>	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	11,500
	"	4-5	X		1,280	4,860	386	<b>6,530</b>	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	7,370
	"	6-7	X		<50.1	428	62.9	491	0.00825	0.0797	0.0637	0.203	0.355	5,300
	"	9-10	X		<50.2	383	77.7	461	0.0149	0.151	0.109	0.380	0.655	3,060
	"	14-15	X		<50.3	<50.3	<50.3	<50.3	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	3,080
	"	19-20	X		<50.1	<50.1	<50.1	<50.1	<0.00101	<0.00101	<0.00101	0.00130	0.00130	769
	"	24-25	X		<50.3	<50.3	<50.3	<50.3	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	529
	"	29-30	X		<50.3	<50.3	<50.3	<50.3	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	347
	"	34-35	X		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	325
<b>SP-27</b>	5/8/2019	0-1	X		<10.0	14.5	<10.0	15.0	<0.050	<0.050	<0.050	<0.150	<0.300	2,440
	"	2-3	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,340
	"	4-5	X		<10.0	938	244	<b>1,182</b>	<0.050	<0.050	<0.050	<0.150	<0.300	448
	"	6-7	X		<100	5,680	1,170	<b>6,850</b>	<0.050	0.0550	0.342	0.779	1.18	208
	"	9-10	X		<10.0	80.6	<10.0	81.0	<0.050	<0.050	<0.050	<0.150	<0.300	208
	"	14-15	X		<10.0	206	29.2	235	<0.050	<0.050	<0.050	<0.150	<0.300	272
	"	19-20	X		<10.0	93.2	12.9	106	<0.050	<0.050	<0.050	<0.150	<0.300	704
	"	24-25	X		<10.0	19.0	<10.0	19.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
	"	29-30	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
	"	34-35	X		-	-	-	-	-	-	-	-	-	112
	"	39-40	X		-	-	-	-	-	-	-	-	-	80.0



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**Permian Water Solutions**  
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**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
SP-29	5/8/2019	0-1	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,070
	"	2-3	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	560
	"	4-5	X		-	-	-	-	-	-	-	-	-	160
	"	6-7	X		-	-	-	-	-	-	-	-	-	48.0
SP-30	5/8/2019	0-1	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	5,120
	"	2-3	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,330
	"	4-5	X		-	-	-	-	-	-	-	-	-	1,490
	"	6-7	X		-	-	-	-	-	-	-	-	-	682
	"	9-10	X		-	-	-	-	-	-	-	-	-	704
	"	14-15	X		-	-	-	-	-	-	-	-	-	256
SP-31	5/8/2019	0-1	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
	"	2-3	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
	"	4-5	X		-	-	-	-	-	-	-	-	-	80.0
SP-32	5/8/2019	0-1	X		<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	X		-	-	-	-	-	-	-	-	-	832
BH-33	10/22/2019	0-1	X		<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	X		<50.1	<50.1	<50.1	<50.1	<0.000998	<0.000998	<0.000998	<0.000998	<0.000998	287
BH-34	10/21/2019	0-1	X		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	X		<50.2	165	55.9	221	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	112
	"	9-10	X		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	209
	"	14-15	X		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	480
	"	19-20	X		<50.1	<50.1	<50.1	<50.1	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	2,440
	"	24-25	X		<50.3	<50.3	<50.3	<50.3	<0.00100	<0.00100	<0.00100	0.0102	0.0102	2,260
	"	29-30	X		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	741
	"	34-35	X		<50.0	<50.0	<50.0	<50.0	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	805
	"	39-40	X		<50.2	<50.2	<50.2	<50.2	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	957

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

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

## Photos



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View Southwest – Area of SP-1



View South – Area of SP-2



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



View North – Area of SP-3



View West – Area of SP-4



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View South – Area of SP-5



View East – Area of SP-6



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



View East – Area of SP-7



View Northwest – Area of SP-8



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View Northwest – Area of SP-9



View West – Area of SP-10



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View South – Area of SP-11



View North – Area of SP-12



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View Northwest – Area of SP-13



View Southwest – Area of SP-14



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View West – Area of SP-15



View East – Area of SP-16



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View Northwest – Area of SP-17



View South – Area of SP-18



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View South – Area of SP-19



View South – Area of SP-20



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View North – Area of SP-21



View South – Area of SP-22



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View East – Area of SP-24



View North – Area of SP-25



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View West – Area of SP-26



View West – Area if SP-27



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



View North – Area of SP-29



View South – Area of SP-30



Permian Water Solutions  
Kaiser SWD  
Lea County, New Mexico



TETRA TECH



View North – Area of SP-31



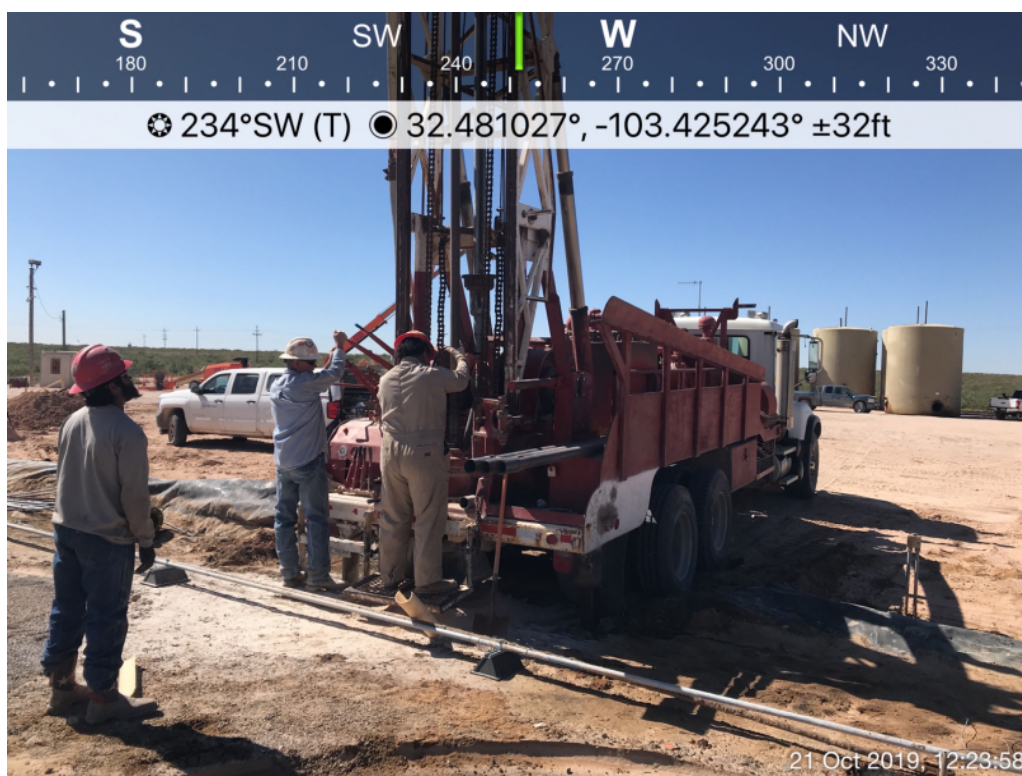
View North – Area of SP-32



Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



TETRA TECH



View Southwest – Area of BH-17



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



Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



TETRA TECH



View Southeast – Area of BH-20



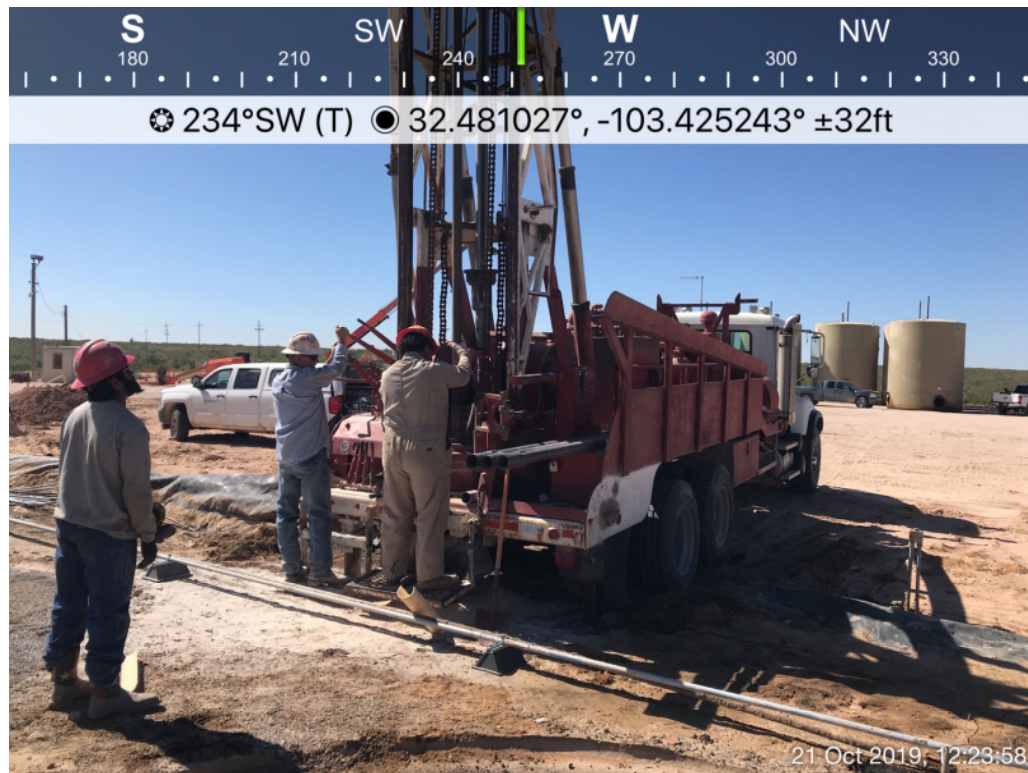
View Southwest – Areas of BH-23, BH-24, BH-25, and BH-26



Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



TETRA TECH



View Southwest – Area of BH-17



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



Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



TETRA TECH



View Southeast – Area of BH-20



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



Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



TETRA TECH



View South – Areas of BH-33 and BH-34



View South – Area of BH-35

Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



TETRA TECH



View Southeast – Area of BH-36



Permian Water Solutions  
Kaiser State SWD  
Lea County, New Mexico



View South – Areas SP-37 and SP-38



View North – Areas of SP-37 and SP-38



## Appendix A

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

Form C-141  
Revised August 8, 2011  
Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report


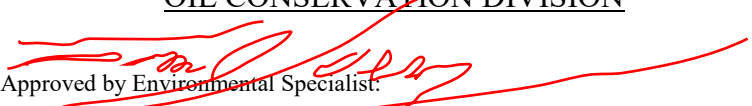
Name of Company <b>Pyote Water Systems, LLC</b>	Contact <b>Jerry Burton Operations Manager for NM</b>
Address <b>400 W Illinois STE 950 Midland TX</b>	Telephone No. <b>432-448-4917</b>
Facility Name	Facility Type <b>Production Water</b>
Surface Owner <b>Pyote Water Systems, LLC</b>	Mineral Owner <b>Pyote</b> API No. <b>30-025-02538</b>

### LOCATION OF RELEASE

Unit Letter <b>F</b>	Section <b>13</b>	Township <b>25</b>	Range <b>34</b>	Feet from the <b>10 ft</b>	North/South Line <b>N/S</b>	Feet from the	East/West Line	County <b>LEA COUNTY</b>
				Latitude <b>32.4808551534055</b>		Longitude <b>-103.425630765566</b>		

### NATURE OF RELEASE

Type of Release <b>20 bbls production water</b>	Volume of Release <b>20 bbls</b>	Volume Recovered <b>20 bbls</b>
Source of Release <b>Vac truck</b>	Date and Hour of Occurrence <b>1/14/15</b>	Date and Hour of Discovery <b>1/14/15</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Jerry Burton NM OM</b>	
By Whom? <b>Jerry Burton</b>	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>none</b>	
If a Watercourse was Impacted, Describe Fully.* <b>none</b>		
Describe Cause of Problem and Remedial Action Taken.* <b>Vac truck over filled the sumps~/ he failed to suck it out when they are instructed to do on each load. It is posted as well, at the sign in ticket area also</b>		
Describe Area Affected and Cleanup Action Taken.* <b>The clean up area or remediation took place on 1/16/15, cleaned up the area with backhoe, brought in caliche and the remediation is done. Load lines 3&amp;4 been shut down for about 4 months, the access water is from all the rain back n September and October, than the snow we have had since then. Has not been dry enough to work on those lines. DUE TO MOTHER NATURE we have had a company go out several times to do this for loads line 3 &amp; 4</b>		
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.		

Signature: 		OIL CONSERVATION DIVISION 	
Printed Name: <b>Jerry Burton</b>			
Title: <b>Operations Manager for NM</b>		Approval Date: <b>1/29/15</b>	Expiration Date: <b>3/29/15</b>
E-mail Address: <b>audra@pyotewatersystems.com</b>		Conditions of Approval:	
Date: <b>1-23-15</b>	Phone: <b>432-448-4917</b>	Attached <input type="checkbox"/> <b>Site samples required. Deliniate and remediate as per NMOCD guides. Submit final C-141 by 3</b>	
		<b>1RP-3512</b>	

\* Attach Additional Sheets If Necessary

294873

nTO1502927174

pTO1502927423

District I  
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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

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <b>PYOTE WATER SYSTEMS, LLC</b>	Contact <b>Jerry Burton NM Operations Manager</b>
Address <b>400 W. Illinois Ste 900</b>	Telephone No. <b>432.448.4917 or 432.448.5323(Audra)</b>
Facility Name <b>Kaiser SWD</b>	Facility Type <b>SWD- production water DIDPOSAL</b>

Surface Owner <b>Pyote Water Systems, LLC</b>	Mineral Owner <b>Pyote Water Systems, LLC</b>	API No. <b>30-025-02538</b>
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#### LOCATION OF RELEASE

Unit Letter <b>F</b>	Section <b>13</b>	Township <b>21</b>	Range <b>34</b>	Feet from the 125 ft	North/South Line	Feet from the	East/West Line E/W	County <b>Lea COUNTY</b>
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Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

Type of Release; <b>production water</b>	Volume of Release <b>100BBLs</b>	Volume Recovered <b>100 BBLs</b>
Source of Release <b>Vac truck (unknown due to no camera's) hit load line 3</b>	Date and Hour of Occurrence <b>4/24/2015</b>	Date and Hour of Discovery <b>4/24/15 2:35 am</b>
Was Immediate Notice Given <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Jerry Burton</b>	
By Whom? <b>Unknown driver (575)-390-3836</b>	Date and HOUR; <b>4/24/2015 2:35 am</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <b>*** No***</b>	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

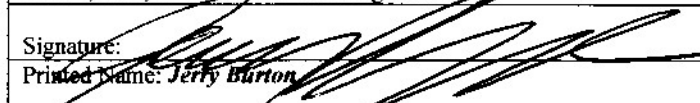

By OCD District 1 at 11:10 am, Apr 30, 2015

If a Watercourse was Impacted, Describe Fully.\*

**Describe Cause of Problem and Remedial Action Taken.\*** *unknown truck driver hit load line 3 caused a spill. We had an anonymous driver call us at 2:35 am (575)390-3836 in the morning, upon his arrival he noticed a large amount of water on the pad at the location, than noticed line 3 was had 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 Kenny repaired damages themselves, remedial work done by L&J services (backhoe) 2 vac trucks one from Big Buck Services and one from BT Services*

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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: <b>Jerry Burton</b>	Approved by Environmental Specialist: 	
Title: <b>NM Operations Manager for Pyote Water systems, LLC</b>	Approval Date: <b>04/30/2015</b>	Expiration Date: <b>07/30/2015</b>
E-mail Address: <b>jerry@pyotewatersystems.com or audra@pyotewatersystems.com</b>	Conditions of Approval: Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of remediation required.	
Date: <b>4/26/15</b> Phone: <b>432.448.4917</b>	Attached <input type="checkbox"/> 294873 IRP 3621	

\* Attach Additional Sheets If Necessary

pKJ1512042374  
nKJ1512041707



District I  
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

**RECEIVED**

By JKeyes at 7:43 am, Jun 09, 2016

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

**Release Notification and Corrective Action****OPERATOR**

Initial Report



Final Report

Name of Company	Pyote Water Systems, LLC	Contact	Jerry Burton
Address	400 W Illinois Ste 900 MIDLAND TX 79701	Telephone No.	432-448-4917
Facility Name	Kaiser Swd	Facility Type	production Water
Surface Owner	STATE	Mineral Owner	STATE
		API No.	30-025-02538

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21s	<del>24s</del> 34E					LEA COUNTY

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	Volume Recovered	1050 bbls
Source of Release	production water	Date and Hour of Occurrence	5-17-16	Date and Hour of Discovery	4 PM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? JERRY BURTON via telephone by driver			
By Whom?	UNKNOWN DRIVER	Date and Hour 5/17/16 4PM			
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. 1050 BLS			

If a Watercourse was Impacted, Describe Fully.\*

fire melted parts of the liner, water got under the liner

Describe Cause of Problem and Remedial Action Taken.\*

lightning hit load tanks and burned 6 500 bbl tanks less than 2 bbls breeched containment. called vac truck out to empty containment after the fire dept put out the fire .

Describe Area Affected and Cleanup Action Taken.\*

load side containment have clean up crew cleaning up and disposing of old tanks and cat walk to 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 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.

Signature: <i>Jerry Burton</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jerry Burton		Approved by Environmental Specialist: <i>Jamie Keyes</i>	
Title: NM Operations Mgr	Approval Date: 06/09/2016	Expiration Date: 08/09/2016	
E-mail Address: jerry@pyotewatersystems.com	Conditions of Approval: Discrete samples only. Delineate and remediate per NMOCD guidelines.		Attached <input type="checkbox"/> 1RP 4305
Date: 5-18-2016	Phone: 4324484917		

\* Attach Additional Sheets If Necessary

nJXX1616127644  
pJXX1616127747

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

Form C-141  
Revised August 8, 2011

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

## Release Notification and Corrective Action

### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Cambrian Management, LTD.	Contact: Mike Anthony
Address: 415 W. Wall St. Suite 900	Telephone No. 432-631-4398
Facility Name: Kaiser SWD #9	Facility Type: SWD

Surface Owner: State	Mineral Owner: State	API No. 30-025-02538
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### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E	1980	North	1980	West	Lea

Latitude 32.4808578 Longitude -103.4256592

### NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: 0
Source of Release: Frac tanks	Date and Hour of Occurrence:	Date and Hour of Discovery:
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

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 south-southwest 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

Signature: <i>Mike Anthony</i>	Approved by Environmental Specialist: <i>Kristen Lynch</i>	
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	Please see attached Directive	Attached <input type="checkbox"/> 1RP 4525
Date: 11/15/16 Phone: 432-631-4398		

\* Attach Additional Sheets If Necessary

nKL1632848695

pKL1632848917



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

Form C-141  
Revised April 3, 2017

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd.	Contact Mike Anthony
Address P.O. Box 272, Midland, TX 79702	Telephone No. (432)631-4398
Facility Name Kaiser State SWD	Facility Type Salt Water Disposal

Surface Owner State	Mineral Owner State	API No. 30-025-02538
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#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E					Lea

Latitude 32.48008578 Longitude -103.4256592 NAD83

#### NATURE OF RELEASE

Type of Release Produced Water & Crude Oil	Volume of Release 50 bbls	Volume Recovered 0 bbls
Source of Release Unknown	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/18/2017, 12:35 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

By Olivia Yu at 4:17 pm, Oct 27, 2017

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The cause of the release is undetermined and is currently under investigation. No remedial action has been taken at this point.

Describe Area Affected and Cleanup Action Taken.\*

The release was confined to the primary and secondary earthen containment berms surrounding the SWD battery. The affected area inside the berms measured approximately 7,200 sq. ft. Remediation of the impacted area will be conducted in accordance with NMOCD and NMSLO guidelines.

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.

Signature: <i>Denise Jones</i> Denise Jones- Regulatory Analyst	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Todd Roberson (as agent of Cambrian Mgmt.)	Approved by Environmental Specialist: <i>gy</i>	
Title: Owner	Approval Date: 10/27/2017	Expiration Date:
E-mail Address: todd@trinityoilfieldservices.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 10/23/2017 Phone: (575) 631-3129		

\* Attach Additional Sheets If Necessary

1RP-4855

nOY1730058924

pOY1730059151



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

Form C-141  
Revised April 3, 2017

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd.	Contact Mike Anthony
Address P.O. Box 272, Midland, TX 79702	Telephone No. (432)631-4398
Facility Name Kaiser State SWD	Facility Type Salt Water Disposal
Surface Owner State	Mineral Owner State
API No. 30-025-02538	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E					Lea

Latitude 32.48008578 Longitude -103.4256592 NAD83

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 20 bbls	Volume Recovered 10 bbls
Source of Release Seal on pump	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 1/31/2018, 10:00 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

**RECEIVED**  
By Olivia Yu at 9:34 am, Feb 07, 2018

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*



The seal on a pump failed. A vacuum truck was utilized to recover free-standing liquid. The seal was repaired during initial response activities.

Describe Area Affected and Cleanup Action Taken.\*

The release was confined to the primary and secondary earthen containment berms surrounding the SWD battery. The affected area inside the berms measured approximately 5,000 sq. ft. The release commingled with an area that had been affected by a release on 10/18/2017 (see 1RP-4855). Remediation of the impacted area will be conducted in accordance with NMOCD and NMSLO guidelines.

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

Signature: 	Approved by Environmental Specialist: 	
Printed Name: Denise Jones	Approval Date: 2/7/2018	Expiration Date:
Title: Regulatory Analyst	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
E-mail Address: djones@cambrianmgmt.com	Date: 2/6/18	Phone: (432) 620-9181

\* Attach Additional Sheets If Necessary

1RP-4960

nOY1803834027

pOY1803834550

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

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd.	Contact Mike Anthony
Address PO Box 272, Midland TX 79702	Telephone No. 432-631-4398
Facility Name Kaiser State SWD	Facility Type SWD

Surface Owner State	Mineral Owner State	API No. 30-025-02538
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### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	13	21S	34E					Lea

Latitude **32.4808578** Longitude **-103.4256592** NAD83

### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 150 bbls	Volume Recovered 150 bbls
Source of Release Wellhead	Date and Hour of Occurrence 06/20/2018	Date and Hour of Discovery 06/20/2018 10:00AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

Nipple on wellhead broke off – nipple was replaced

Describe Area Affected and Cleanup Action Taken.\*

All water was contained to the caliche pad. All water was picked up. This was on top of a previous spill that was already reported and is in the process to be remediated.

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.

Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Denise Jones	Approved by Environmental Specialist: <i>EDT</i>	
Title: Regulatory Analyst	Approval Date: <b>7/31/2018</b>	Expiration Date:
E-mail Address: <a href="mailto:djones@cambrianmgmt.com">djones@cambrianmgmt.com</a>	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: 06/21/2018 Phone:	<b>See attached directive</b>	

**1RP-5139**

**pCH1821239860**

**nCH1821239639**

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

Form C-141  
Revised April 3, 2017

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final 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	Mineral Owner State	API No. 30-025-02538
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#### LOCATION OF RELEASE

Unit Letter F	Section 13	Township 21S	Range 34E	Feet from the 1980	North/South Line North	Feet from the 1980	East/West Line West	County Lea
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Latitude 32.480938 N Longitude -103.425227 NAD83

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 200 Bbls	Volume Recovered 200 Bbls
Source of Release Valve	Date and Hour of Occurrence 08/06/2018	Date and Hour of Discovery 08/06/2018 10:00AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Christina Hernandez	
By Whom? Denise Jones	Date and Hour 08/06/2018 3:25 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

**RECEIVED**

By Olivia Yu at 1:48 pm, Aug 07, 2018

Describe Cause of Problem and Remedial Action Taken.\*



Valve Malfunction/Power Failure

Sometimes when the transfer pump comes on while the injection pump is on, a fuse blows on high current. We are having an electrician look at turning up the voltage at the transformers to lower peak current.

Describe Area Affected and Cleanup Action Taken.\*

Only the area inside the berm which is lined with plastic was affected. All water was vacuumed up.

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.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Denise Jones	Approved by Environmental Specialist: 	
Title: Regulatory Analyst	Approval Date: 8/7/2018	Expiration Date:
E-mail Address: djones@cambrianmgmt.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 08/06/2018 Phone: 432-620-9181	1) Please inspect liner in question. Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids. 2) At least one photo must demonstrate the entire facility is lined.	

\* Attach Additional Sheets If Necessary

nOY1821950108

pOY1821950272

1RP-5149



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

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

Form C-141  
Revised April 3, 2017

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

## Release Notification and Corrective Action

### OPERATOR

X Initial Report ☐ Final Report

Name of Company Cambrian Management, Ltd	Contact Mr. Mike Anthony
Address PO Box 272, Midland, TX 79702	Telephone No. 432-631-4398
Facility Name Kaiser State SWD	Facility Type SWD

Surface Owner State	Mineral Owner State	API No. 30-025-02538
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### LOCATION OF RELEASE

Unit Letter F	Section 13	Township 21S	Range 34E	Feet from the 1980	North/South Line North	Feet from the 1980	East/West Line West	County Lea
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Latitude 32.480938 N Longitude -103.425227 NAD83

### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 500 Bbls	Volume Recovered 500 Bbls
Source of Release Unload Tanks	Date and Hour of Occurrence 08/17/2018 10:00AM	Date and Hour of Discovery 08/17/2018 11:00 AM
Was Immediate Notice Given? X Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu and other OCD member on location	
By Whom? Mike Anthony	Date and Hour 12:00 PM 08/17/2018	
Was a Watercourse Reached? <input type="checkbox"/> Yes X No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

**RECEIVED**

By Olivia Yu at 10:04 am, Aug 21, 2018

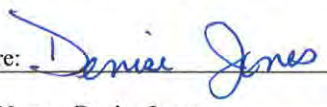

Describe Cause of Problem and Remedial Action Taken.\*

A valve did not close completely and the tanks ran over into a completely lined pit @ the unload tank area. The valve is being repaired or replaced as needed.

Describe Area Affected and Cleanup Action Taken.\*

The release was completely contained within a lined pit. All water was recovered. The pit liner and tanks will be washed after all water has been picked up.

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.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Denise Jones	Approved by Environmental Specialist: 	
Title: Regulatory Analyst	Approval Date: 8/21/2018	Expiration Date:
E-mail Address: djones@cambrianmgmt.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 08/17/2018 Phone: 432-620-9181	1) Inspect liner in question. Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids. 2) Dated photo documentation of liner.	

\* Attach Additional Sheets If Necessary

nOY1823336566

pOY1823336912

1RP-5163

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

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

## Release Notification

### Responsible Party

Responsible Party <b>Permian Water Solutions, LLC</b>	OGRID <b>373626</b>
Contact Name <b>Dale Glosson</b>	Contact Telephone <b>432-894-3636</b>
Contact email <b>dale@permianws.com</b>	Incident # <b>NCH1834760902 KAISER STATE SWD @ 30-025-02538</b>
Contact mailing address <b>PO Box 2106, Midland, TX 79702</b>	

### Location of Release Source

Latitude **32.480938**Longitude **-103.425227**

(NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Kaiser State SWD</b>	Site Type <b>Salt Water Disposal</b>
Date Release Discovered <b>11/2/18</b>	API# (if applicable) <b>30-025-02538</b>

Unit Letter	Section	Township	Range	County
<b>F</b>	<b>13</b>	<b>21S</b>	<b>34E</b>	<b>Lea</b>

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) <b>20</b>	Volume Recovered (bbls) <b>16</b>
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release **Oil skim tank overflow; all fluids contained within containment berm**







Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> 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.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The 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: \_\_\_\_\_

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Appendix B

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

**20 South      34 East**

6	5	4	125	3	2	1
7	8	9		10	11	12
18	17	128	16	15	14	13
19	20			22	23	24
30	29	28	27	26	25	
31	32	33	34	82	35	36

**20 South      35 East**

6	56	5	64	4	3	2	1
64		8	9	10	11		12
18	17	16	15	14			49
19	20	21	22	23	24		
30	29	28	27	26	25		
31	65	32	33	34	35	36	

**20 South      36 East**

6	5	4	3	2	1		
32	28			92	40		
7	8	9	10	11	12		
18	33	38		32	29		
34	17	16	15	14			
19	20	21	22	23	24		
30	29	28	27	26	106	25	
31	32	33	34	35	170	36	

**21 South      33 East**

6	5	4	3	2	79	1
7	8	9	10	11	150	12
18	17	16	15	14		13
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	180	34	35	36

**21 South      34 East**

6	5	4	95	3	2	1	
7	8	120	9	10	11	12	
18	17	16	15	14		13	
19	20	21	22	23	24		
30	29	28	135	27	26	25	
31	32	33	34	35	36		

**21 South      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		

**22 South      33 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		

**22 South      34 East**

6	5	4	3	2	1		
7	8	9	10	11	30	12	50
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 South      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)

**34** NMOCD - Groundwater Data

**121** Abandoned Waterwell (recently measured)



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

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

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">CP 00089</a>	O	CP	LE	2	1	13	21S	34E		647840	3594615	235		
<a href="#">CP 00092 POD1</a>		CP	LE	1	3	1	25	21S	34E	647479	3591694*	196		
<a href="#">CP 00489</a>		CP	LE				04	21S	34E	643274	3597749*	125	95	30
<a href="#">CP 00498</a>		CP	LE	2	4	08	21S	34E		642287	3595932*	145	120	25
<a href="#">CP 00571 POD1</a>		CP	LE	3	1	4	28	21S	34E	643499	3591063	170	135	35
<a href="#">CP 00583</a>		CP	LE		3	21	21S	34E		642944	3592518*	171	128	43
<a href="#">CP 00588 POD1</a>		CP	LE		3	2	33	21S	34E	643583	3589918*	89		
<a href="#">CP 00589 POD1</a>		CP	LE		3	2	33	21S	34E	643583	3589918*	84		
<a href="#">CP 00590 POD1</a>		CP	LE				01	21S	34E	648099	3597829*	79		
<a href="#">CP 00611</a>		CP	LE	2	1	06	21S	34E		639838	3598306*	118	112	6
<a href="#">CP 00791</a>		CP	LE	4	2	4	06	21S	34E	640754	3597413*	85	55	30
<a href="#">CP 01066 POD1</a>		CP	LE	4	3	2	28	21S	34E	643735	3591345	210	140	70
<a href="#">CP 01067 POD1</a>		CP	LE	1	3	4	28	21S	34E	643447	3591434	210	140	70
<a href="#">CP 01068 POD1</a>		CP	LE	4	1	4	28	21S	34E	643609	3591005	180	140	40
<a href="#">CP 01069 POD1</a>		CP	LE	2	1	4	28	21S	34E	643737	3591191	210	140	70
<a href="#">CP 01091 POD1</a>		CP	LE	3	3	2	28	21S	34E	643446	3591434	200	140	60
<a href="#">CP 01364 POD1</a>		CP	LE	4	2	3	16	21S	34E	643147	3594331	165	105	60
<a href="#">CP 01366 POD1</a>		CP	LE	4	4	1	16	21S	34E	643196	3594698	180	110	70
<a href="#">CP 01671 POD1</a>		CP	LE	2	4	1	16	21S	34E	643108	3594887	157		

Average Depth to Water: **120 feet**

Minimum Depth: **55 feet**

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.

5/28/19 10:29 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER





USGS Home  
Contact USGS  
Search USGS

## National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:


Groundwater

Geographic Area:

New Mexico

GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

### Search Results -- 1 sites found

site\_no list =

- 322824103253301

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

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

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°28'24", Longitude 103°25'33" NAD27

Land-surface elevation 3,650 feet above NAVD88

The depth of the well is 335 feet below land surface.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

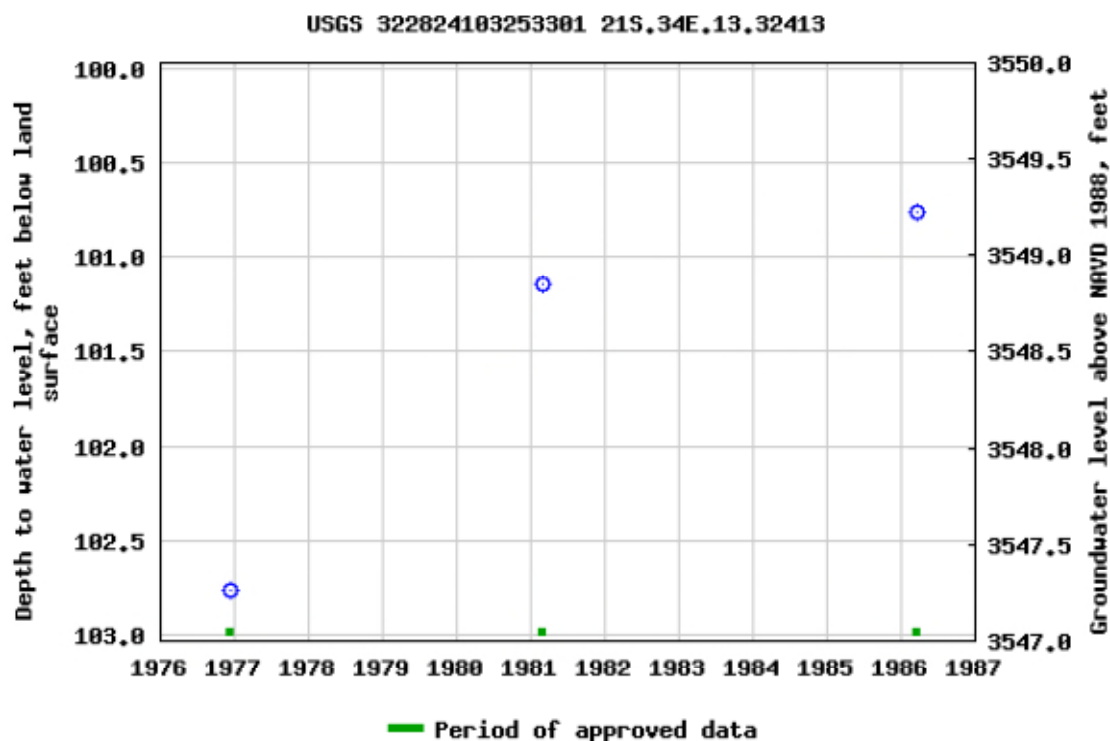
#### Output formats

[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.

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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title:** Groundwater for New Mexico: Water Levels

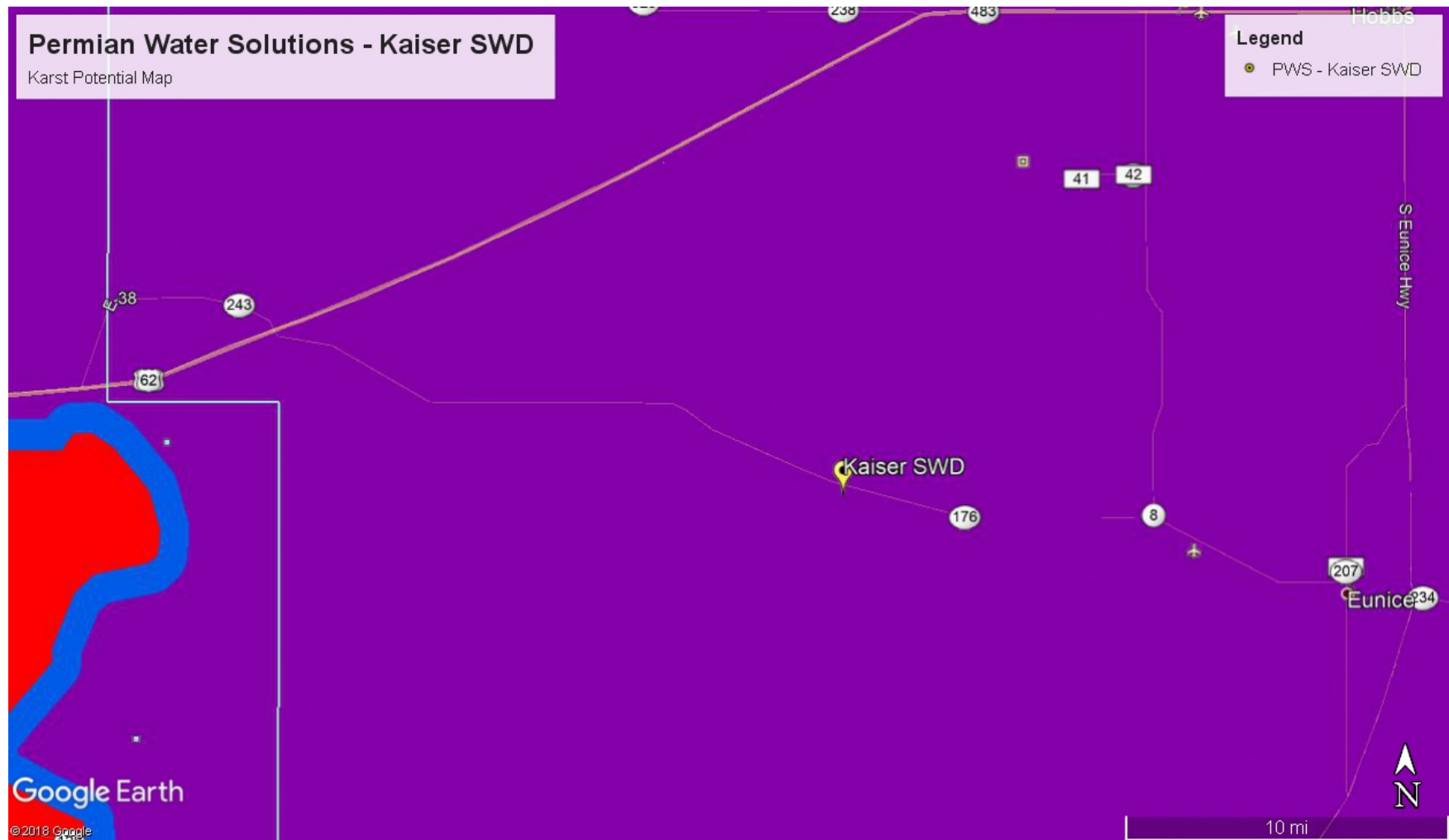
**URL:** <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



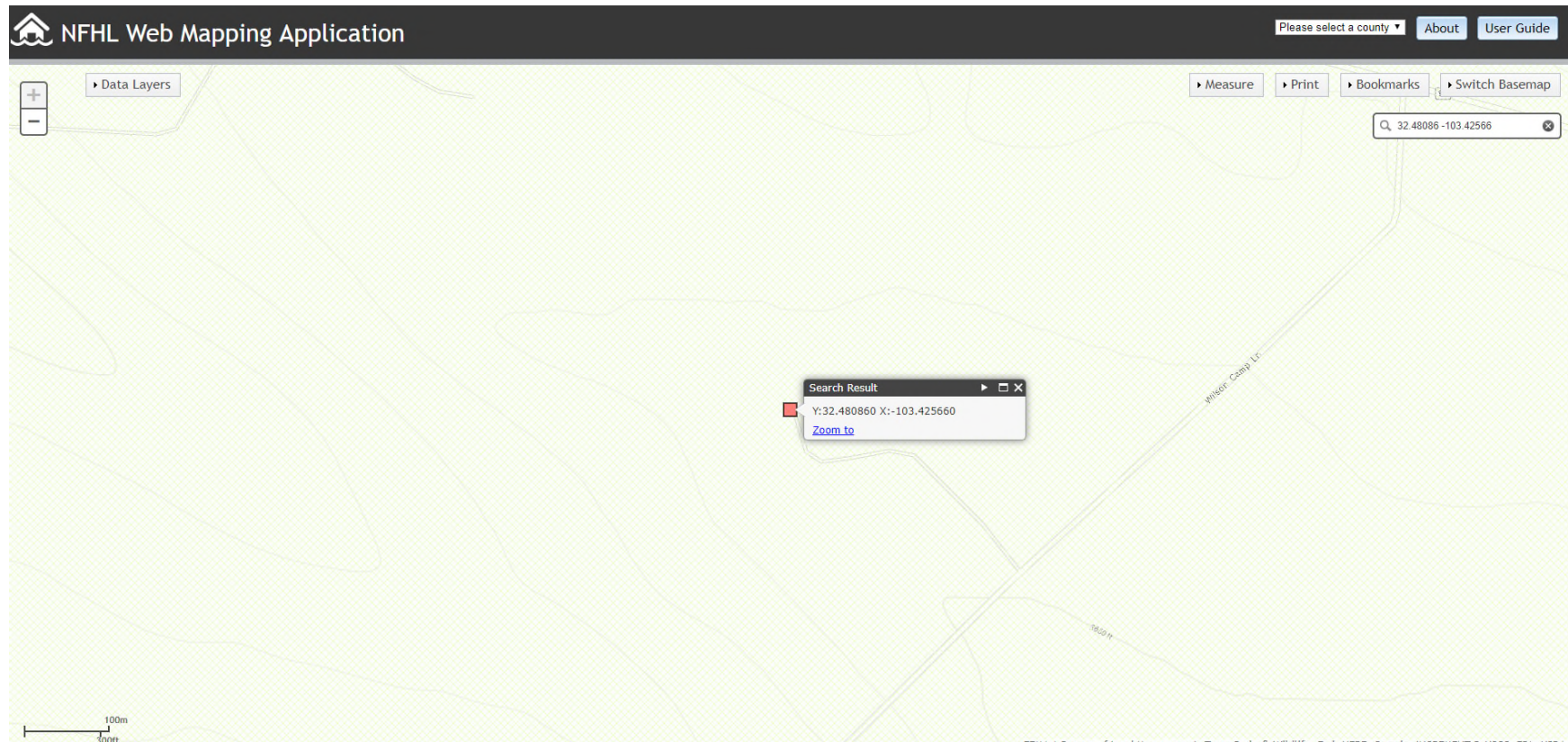
Page Contact Information: [New Mexico Water Data Maintainer](#)

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

1 0.95 nadww01







## Appendix C







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**Borehole ID:**  
BH-17

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.481227 -103.425306</u>
<b>Elevation :</b>	<u></u>

**Date :** Monday, October 21, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**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)
-------------	----	------------------	---------------------------------	----------------------------------

Soil Profile Data		Soil Profile Data	
0	Black/brown sand	50	
	Black/brown sand		
	Red sand and silt		
5	Red sand and silt	55	
10	Fine dry brown sand	60	
	Dense layer of caliche		
15	Caliche with pebbels	65	
20	Tan Sand with caliche	70	
	Dense layer of caliche		
25	White fine caliche	75	
	Brown sand		
30	Fine red sand		Comments: T.D 30'
35	Red Sand		
40			
45			
50			

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



**Borehole ID:**  
BH-18

**Soil Drilling Log with  
Field Testing Results**

**Project Name :** Kaiser St SWD  
**Project No. :** 212C-MD-01742  
**Location :** Lea Co, NM  
**Coordinates :** 32.480967 -103.425290  
**Elevation :**

**Date :** Monday, October 21, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
0		Black and brown sand / gravel		
		Black gravel		
5		tan and black gravel and sand		
		Dense layer of caliche		
10		tan caliche		
		Caliche layer	1,200	
20		Red brown sand		
		Dense layer of calchie		
25		Red brown sand	1,800	
30		Red brown sand	1,800	
35		Red brown sand	1,000	
40		Red brown sand	800	
45		Red brown sand	480	
50		Red brown sand	400	

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments: T.D 50'		

\* H.O. = Heavy Odor  
 \* H.S. = Heavy Staining

\* L.O. = Low Odor  
 \* L.S. = Low Staining



**Borehole ID:**  
BH-19

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	Kaiser St SWD
<b>Project No. :</b>	212C-MD-01742
<b>Location :</b>	Lea Co, NM
<b>Coordinates :</b>	32.480704 -103.425281
<b>Elevation :</b>	

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
0		Black brown sand with gravel		
5		Black brown sand with gravel		
10		tan sand with calcihe		
		Dense layer of caliche		
15		Caliche with tan sand		
20		Tan caliche with sand	>2000	
25		Red dry sand		
30		Red dry sand	242	
		Dense layer of caliche		
35		Red fine sand	142	
40		Red fine sand	313	
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments: T.D 40'		

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining





**Borehole ID:**  
BH-20

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	Kaiser St SWD
<b>Project No. :</b>	212C-MD-01742
<b>Location :</b>	Lea Co, NM
<b>Coordinates :</b>	32.480704 -103.425094
<b>Elevation :</b>	

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**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)
-------------	----	------------------	---------------------------------	----------------------------------

0	Black gravel and sand		
	Black gravel with sand		
5	grey gravel and tan sand		
	Tan sand and gravel		
10	Fine dry tan sand		
	Dense layer of clay		
15	Tan sand and gravel		
20	Tan sand and gravel	940	
25	Red fine sand	240	
	Dense layer of caliche		
30	Red sand fine	200	
35			
40			
45			
50			

[illegible]

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



**Borehole ID:**  
BH-23

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.4800551 -103.425712</u>
<b>Elevation :</b>	<u></u>

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**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)
-------------	----	------------------	---------------------------------	----------------------------------

0	Black gravel damp		
	black gravel damp		
5	tan sand / gravel		
10	Tan sand and gravel		
15	Caliche with tan sand		
	Dense layer of caliche		
20	Caliche sand tan	>2000	
25	Red sand dry		
30	Dry red sand		
35	Dry red sand		
40	Dry red sand	1,200	
45	Damp red sand	1,100	
50	Damp red sand	440	

50			
55	Damp red sand	400	
60			
65			
70			
75			
	Comments: T.D 55'		

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



**Borehole ID:**  
BH-24

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.480613 -103.425790</u>
<b>Elevation :</b>	

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
0		Black brown gravel		
		Tan black gravel and sand		
5		Tan sand dry		
		brown tan sand		
10		Brown tan sand		
15		Tan caliche with gravel		
20		Tan caliche with gravel	242	
25		Red sand with gravel	480	
30		Red sand	376	
35				
40				
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments: T.D 30'		

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



**Borehole ID:**  
BH-25

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.480517 -103.425836</u>
<b>Elevation :</b>	<u></u>

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**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)
-------------	----	------------------	---------------------------------	----------------------------------

0	Black gravel with sand		
	Black gravel		
5	Brown sand with black gravel		
	Brown sand		
10	Tan sand w/ caliche		
15	Caliche with tan sand		
	Dense layer of caliche		
20	Dry red sand	520	
	Dense layer of caliche		
25	Red dry sand	480	
30			
35			
40			
45			
50			

[illegible]

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining





**Borehole ID:**  
BH-26

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<b>Kaiser St SWD</b>
<b>Project No. :</b>	<b>212C-MD-01742</b>
<b>Location :</b>	<b>Lea Co, NM</b>
<b>Coordinates :</b>	<b>32.480445 -103.425753</b>
<b>Elevation :</b>	

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
0		Black and brown sand		
		Black and brown sand		
5		Black sand and gravel		
		Tan sand		
10		Tan sand		
15		Tan sand with caliche		
20		Tan sand with caliche	800	
		Soft caliche		
25		Red sand	699	
30		Red sand	500	
35		Red sand	480	
40				
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments: T.D 35'		

- \* H.O. = Heavy Odor
- \* H.S. = Heavy Staining

- \* L.O. = Low Odor
- \* L.S. = Low Staining



**Borehole ID:**  
BH-33

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.480752 -103.425214</u>
<b>Elevation :</b>	

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
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Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
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0	Black gravel with sand		
	Black gravel and sand		
5	Brown sand with clay		
10	Dry brown sand		
15	Dry red sand	400	
20	Red sand with gravel	280	
25			
30			
35			
40			
45			
50			

[illegible]

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



**Borehole ID:**  
BH-34

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.480939 -103.425204</u>
<b>Elevation :</b>	<u></u>

**Date :** Tuesday, October 22, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
0		Black and brown sand		
		Black and brown gravel and sand		
5		Dry brown sand and clay		
		Dry brown sand		
10		Dry red sand		
15		Dry red sand		
20		Dense layer of caliche	1,600	
25		Caliche cobbles		
30		Dry red sand		
35		Dry red sand	540	
40		Dry red sand	400	
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments: T.D 40'		

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



**Borehole ID:**  
BH-35

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.481099 -103.425226</u>
<b>Elevation :</b>	

**Date :** Monday, October 21, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
0		Black and brown gravel and sand		
		Black and brown gravel and sand		
5		Brown and tand sand		
10		brown sand and caliche		
15		Brown sand		
20		Dense layer of calciche		
25		Red sand		
30		Red sand		
35		Red sand with caliche pebbles		
40				
		Very dense kayer of calcihe		
45		Very dense kayer of calciche		
50		Red Sand		

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments: T.D 50'		

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining





**Borehole ID:**  
BH-36

## Soil Drilling Log with Field Testing Results

<b>Project Name :</b>	<u>Kaiser St SWD</u>
<b>Project No. :</b>	<u>212C-MD-01742</u>
<b>Location :</b>	<u>Lea Co, NM</u>
<b>Coordinates :</b>	<u>32.481235 -103.425211</u>
<b>Elevation :</b>	

**Date :** Monday, October 21, 2019  
**Sampler :** Conner Moehring  
**Driller :** Scarborough Drilling  
**Method :** Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	PID
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Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------------	----------------------------------

0	Black and brown gravel and sand		
	Brown tan gravel		
5	Tan caliche	7,260	
	Dense layer of caliche		
10	Brown tan sand	1,620	
15	Brown/tan sand	460	
20	Fine tan sand	600	
25			
30			
35			
40			
45			
50			

[illegible]

\* H.O. = Heavy Odor  
\* H.S. = Heavy Staining

\* L.O. = Low Odor  
\* L.S. = Low Staining



## Appendix C

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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: August 19, 2020 - 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@tetrattech.com	Tetrattech

## 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 Tetrach, 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.

Commissioning:

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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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@tetrattech.com	Tetrattech
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 Tetrattech 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/Tetrattech requests the data the SLO is looking at for the previous samples/spills and the updated minutes from July 28, 2021 meeting that Faith circulated.

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

**Adjourn:** at 9:07 am

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

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

## MEMORANDUM

Subject: Kaiser State #9 **Phase 2 Remediation Work Plan**

**Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - 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 Cl<sup>-</sup>
    - \* BTEX ND
4. 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 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: August 19, 2020 – 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
David Gallegos			
Dusty McInturff		<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetrattech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetrattech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetrattech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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. Tetrattech'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. Tetratex 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 if 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/Tetratex 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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetrattech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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. Tetrattech 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 Isaiah, 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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*



## Progress Meeting #7 Template

**Project:** Kaiser State #9**Contract:** SW-330**Today Date:** 09/08/2021**Meeting Time:** 8:03 am, Wednesday September 8, 2021**Place:** Go To Meeting call in invite, 1 (872) 240-3412, access code 945-975-053**Next Meeting Date and Time:** 8:00 am, September 15, 2021

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetrattech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Cory Smith	505/419-2687	<a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>	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. Tetrattech 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. Tetrtech 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/Tetrtech to perform sampling. Dusty conservatively estimates they are about 55% there.

Cory/OCD has reviewed the Tetrtech 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. Tetrtech 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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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. Tetrattech 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

\*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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:Cory.Smith@state.nm.us">Cory.Smith@state.nm.us</a>	NM Oil Conservation Division
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions

## Review Previous Meeting Minutes:

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

## Assign Follow Up Tasks For Incomplete Old Business:

There are no outstanding RFI's.

## Safety:

## Site Observations:

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

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

Corrective Action Log: Faith will keep this.

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

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

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

### **Prior Week Performance:**

Dusty said they are in 'dirt hauling mode' now. There was heavy rain last Thursday-Friday with a shower over the weekend that shut the site down. They started hauling again yesterday since the site has dried out. Hauling is the current focus, but they'll get back to excavating soon hopefully. The road construction at 176 is still hit or miss with delaying truck traffic. It just depends on if you catch the through traffic when pulling out on to the road. Otherwise, you will wait a bit. The same section of road is still under construction as was last week.

The DCP agreement has not been formalized yet. Dusty sent Kayla with DCP an email request last week for something on their letterhead with more site details listed but he hasn't received anything back or heard anything back yet. He will reach back out to them by the end of this week. Faith asked how long the process of pressuring the line down may take. Dusty estimates 2-3 weeks depending on the depth of line and amount to excavate around it. Plus, they'll need to get Tetra Tech down in the hole and complete testing. Cory suggested to expedite the lab results and hopefully get results back in 1-2 days.

Weather Delays: Heavy rain on Thursday September 30 – Friday October 1. Another small shower over the weekend kept site from drying out until yesterday, Tuesday October 5.

### **Two Week Look Ahead:**

Continue hauling dirt off and then they will finish the last bit of excavation work and clean the hole up for safe sampling by Tetra Tech.

Cory asked for more details on excavation – how many cubic yards, how many trucks, what type of trucks, time to landfill and back? Dusty said they have about 10-11,000 cubic yards left, and they consistently have six (6) belly dump trucks with 18 cubic yards capacity. It takes about 1 hour and 20 minutes to reach the landfill. Each truck takes about six (6) loads a day. It is estimated that it will take about 15 days to haul off the remaining 10,000 cubic yards, assuming there are no delays due to things out of our control (weather, labor).

Cory mentioned ways to expedite the process – more trucks, expedited lab results, hauling clean dirt in when trucks come back. Dusty acknowledged all of this and mentioned the trucks and labor sourcing has been an issue since the beginning of this project and is an issue in general in the oilfield as business has picked back up for everyone. It's been tough to secure since it must be contracted out.

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

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

Unforeseen Conditions or Problems: Road construction at 176 is still ongoing at this location causing slight trucking delays.

Critical Path Considerations: Nothing new.

Commissioning:

Special Inspections:

Payment Schedule:

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

1. Phase 1 closeout tasks
  - a. Cory and Faith would like current site photos of the status of excavation with date and time-stamps. Dusty will obtain and email these to everyone.
2. Phase 2 workplan, issued by separate email on 07/23/2021
  - a. Cory will respond to Jenni's email that was sent to Emily Hernandez asking about the process and timeline for reporting spills to the OCD and incident numbers being assigned that are searchable to the public. The Matador/San Mateo flowline burst discovered on September 14 still has not shown up online. Faith is going to ask Ryan if he's received more information from them. We're uncertain of the amount and material that was released. Dusty will resend photos to Cory and Faith he took in the field. Cory said incident numbers are generated instantly online when an operator submits the notification of release. These are required to be called in within 24 hours if the amount exceeds 50 bbls liquid/500 mcf, reaches a waterway, causes a fire or injury. They must be submitted in writing within 14 days if the amount is 5 bbls liquid/50 mcf. It is possible paper filings mailed to field offices may take longer to be entered into the system, especially with teleworking from Covid. Cory said ultimately it is a self-reporting 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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzalez	432/260-8634	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	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 put in writing DCP's agreement to; 1. allow excavation around their line, and 2. accept the responsibility for any damages.

Weather Delays: No rain delays. It's getting chillier outside.

### Two Week Look Ahead:

Continue hauling dirt off and then they will finish the last bit of excavation work and clean the hole up for safe sampling by Tetra Tech. They've scheduled Tetra Tech to begin testing on Monday, October 25. Clair said they're aiming for five (5) days of testing with two people on location. The samples will not be expedited at the lab. They'll turn in samples at the end of each day to avoid overwhelming the lab. It should be a standard 5-day turnaround.

Cory asked for more details on excavation – how many samples, how are they marking, and reminded them to email 2-day notification to OCD and SLO. Clair said 200 samples and for every 400 square feet they'll collect a 5 point composite sample. She noted they will pin flag the corners of the sample location versus the center, per Cory's suggestion.

Cory asked for the status of field photos. Dusty will take them today while he's on location and email to OCD and SLO.

Dusty confirmed that the truck situation is still the same; they're doing what they can with what they can find. The road construction has opened up both lanes. Equipment is staged on location so work is not completed, but it is not active at the moment in front of our lease road egress.

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

Unforeseen Conditions or Problems:

Critical Path Considerations: Nothing with Phase 1. Jenni is still working on the Phase 2 issues.

Commissioning:

Special Inspections:

Payment Schedule:

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

1. Phase 1 closeout tasks
  - a. Cory, Faith and Ryan would still like current site photos of the status of excavation with date and timestamps. Dusty will obtain and email these to everyone.
  - b. Continue excavation so sampling can take place.

Assign Follow Up Tasks For New Business:

Dusty will continue to follow up with DCP to obtain something from them relieving liability while working around their line. He will also send current photos of the status of Phase 1 excavation to OCD and SLO.

Jenni needs to circulate last week's meeting #11 minutes for 48 hr review to all.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday October 20, 2021

Adjourn: 8:16 am

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

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

## MEMORANDUM

Subject: Kaiser State #9 **Phase 2 Remediation Work Plan**

**Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Josh Brooks	617/584-2889	<a href="mailto:josh@permianws.com">josh@permianws.com</a>	Permian Water Solutions

## 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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Josh Brooks	617/584-2889	<a href="mailto:josh@permianws.com">josh@permianws.com</a>	Permian Water Solutions
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division

## Review Previous Meeting Minutes:

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

## Assign Follow Up Tasks For Incomplete Old Business:

A letter from DCP relieving Permian and Dufrane from damage/financial liability has been received. They did not address cutting the line and rerouting during excavation. A field rep, Chase Guy, and field supervisor, Claudia Dabney, were listed on the letter. Dusty will reach out to them about cutting the line. A DCP field rep will be on location during excavation; it may be determined in the field that cutting the line is acceptable once they see what is going on.



Safety:

Site Observations:

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

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

Corrective Action Log: Faith will keep this.

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

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

### **Collaborative section**

Schedule: [contractor supply Gantt Chart]

#### **Prior Week Performance:**

Tetra Tech completed field sampling Thursday afternoon and completed notes and mapping on Friday. So far there have not been any lab results received. Tetra Tech does not anticipate needing to go back on site this week. They took 167 samples. They didn't field screen all the samples, but they did spot-check them. A couple of spots looked questionable along the South side. The lab called Clair/Tetra Tech to let them know they were backlogged and would not meet the standard turnaround time. She asked for preliminary samples to be sent as they have them.

Dufrane continued to haul off bad dirt and monitor the sampling process. He will continue to haul off bad dirt and bring clean dirt in while awaiting lab results.

Cory/OCD joined call and explained his statement from the #14 minutes that remediation in the rocks/etc would be dependent on the delineation data that would be required. He said that liquid in soil versus rock moves differently. OCD requires operators to delineate and see what's in the rock. Sometimes they let them leave it and sometimes they do not. So lab results are key. Cory thought most samples looked like they were pretty clean except the SW corner.

Faith/SLO asked how the OCD handles situations with remediation when it's right against another lease. Cory/OCD said he'd need to check but based on his field observations it was not likely Centennial's. Aerials show the Centennial site has been set up the same way for a long time. The wellhead is close but it's not likely the contamination source. More delineation data would be needed, sampling in high-low pattern to show contamination pattern to try to prove contamination source.

Weather Delays: None.

#### **Two Week Look Ahead:**

Hopefully soil samples are clean, and they can start backfilling with clean dirt and hauling off bad dirt. The plan is that if samples are clean, they'll backfill from the North end to the South end. Truck traffic will continue in a large circle hauling out bad dirt, hauling in clean dirt.

Clair will circulate results when received. She'll include a kmz file with a field map with slopes and everything needed to understand the sample locations.

Cory/OCD said they reached out to Matador about the pipeline burst that we let them know about last month. They said it was 5 bbls, so not required to report. OCD will keep on it; they had a large release in Carlsbad they've been working on. Dusty is glad Cory came out to the field to lay eyes on everything out there.

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

Unforeseen Conditions or Problems:

Critical Path Considerations: Just need to figure out the South side and working around the DCP line soon.

Commissioning:

Special Inspections:

Payment Schedule:

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

1. Phase 1 closeout tasks
  - a. Wait for lab results to determine next steps. Hopefully we'll have some by the end of this week, early next week.

Assign Follow Up Tasks For New Business:

Dusty will continue to follow up with DCP to see if they'll allow Dufrane to cut the line during excavation.

Jenni has sent the purple area summary for review internally. She asked Clair/Tetra Tech for assistance. Hopefully it will be ready to submit to SLO by the end of this week.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday November 10, 2021

Adjourn: 8:34 am

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

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

## MEMORANDUM

Subject: Kaiser State #9 **Phase 2 Remediation Work Plan**

**Remediation Plan Requirements:**

Phase 1 closeout must be completed including:

- Installation of Test Well #2
  - Determination of source of groundwater contamination;
  - Development of abatement program with monitoring and recovery wells and reporting program.
- Phase 1 Final Report
  - 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 within 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	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. 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\*\*\*

## 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division

## Review Previous Meeting Minutes:

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

## Assign Follow Up Tasks For Incomplete Old Business:

A letter from DCP relieving Permian and Dufrane from damage/financial liability has been received and forwarded to the SLO. Dusty has not heard back from Steven Wynn since they spoke last week about the cost estimate for cutting and rerouting the line during excavation. Faith/SLO said they may have to issue a letter to DCP that they would be responsible for contamination under the line because it is in the area that SLO wants PWS to dig.

Cory/OCD checked with his coworker Chad on the status of the Matador line burst. He said Matador is awaiting sample results for closure. They were asked to submit a release notification to get something in the OCD system. Faith/SLO asked for the OCD to share the sample results upon receipt.

Safety:

Site Observations:

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

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

Corrective Action Log: Faith will keep this.

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

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

## **Collaborative section**

Schedule: [contractor supply Gantt Chart]

### **Prior Week Performance:**

Similar to last week, Dusty said more dirt was hauled off and clean dirt was brought in. They've been on autopilot with this while the soil sample results come in.

Soil sample results discussion – Ryan/SLO said most results were below the 7,000 mg/kg chloride and 1,000 mg/kg TPH threshold. There was some contamination in the SW corner they'd like to see removed. SLO is unsure if it's a safety issue to dig out 10' safely around DS-2, DS-3 and SW-6, NE side and SW side. SLO also wants removal on the way out at SW-01 on the NE side by the ramp. They asked how clearly the DCP line was marked in the field. Dusty said he's asked them to come out to mark it with wooden stakes instead of flags so it's easier to see but they have not done this yet. Ryan will try to get a hold of Kayla or Claudia with DCP to see if SLO can expedite getting the line marked because they'd like to see 10' excavation and backfilling started this week. They want 10' removed entirely, not sampled.

Cory/OCD comments on soil samples – none of the sidewall (SW) samples meet OCD threshold because they're over 6,000 mg/kg in the top 4'. He'd like a background area sample for comparison to see how salty the soils are in that part of New Mexico. Clair can try to grab a sample upgradient. He's OK with backfilling boreholes to 6'. For the SW corner, he'd recommend digging 4' out and it should be safer for OSHA and benching is not required. The top 4' are an issue for him since they exceed 6,000 mg/kg chlorides. He's wondering if 10' off the sidewalls with delineation holes will give us a 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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*





## 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	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 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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Josh Brooks	617/584-2889	<a href="mailto:josh@permianws.com">josh@permianws.com</a>	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\*\*\*



## 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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\*\*\*

## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*



## 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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\*\*\*

## 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 within 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*



## 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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/Tetrach 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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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/Tetrach 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 roughly 1,500-3,000 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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time: 8:00 am, March 16, 2022**

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, March 23, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM Oil Conservation Division
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*



## Progress Meeting #30 Template

**Project:** Kaiser State #9**Contract:** SW-330**Today Date:** 3/23/2022**Meeting Time:** 8:04 am, Wednesday March 23, 2022**Place: Zoom** <https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, March 30, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Clair Gonzales
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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 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\*\*\*

## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, April 13, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	NM OCD
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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 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  $\frac{3}{4}$  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 contaminants 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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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** <https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, April 20, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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 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\*\*\*



## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, May 4, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Cory Smith	505/419-2687	<a href="mailto:cory.smith@state.nm.us">cory.smith@state.nm.us</a>	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 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\*\*\*

## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, May 18, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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:**

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\*\*\*

## 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, June 1, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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:**

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\*\*\*



## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, June 15, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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:**

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\*\*\*

## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time: 8:00 am, June 13, 2022**

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, June 27, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	NM Oil Conservation Division
Daniel Gallegos		<a href="mailto:dgallegos@slo.state.nm.us">dgallegos@slo.state.nm.us</a>	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 than 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 arials 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.



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. 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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*



## Progress Meeting #39 Template

**Project:** Kaiser State #9**Contract:** SW-330**Today Date:** 7/27/2022**Meeting Time:** 8:04 am, Wednesday July 27, 2022**Place: Zoom** <https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, August 3, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil and water testing.\*\*\*





## Progress Meeting #40 Template

**Project:** Kaiser State #9**Contract:** SW-330**Today Date:** 8/3/2022**Meeting Time:** 8:01 am, Wednesday August 3, 2022**Place: Zoom** <https://us02web.zoom.us/j/81803325780?pwd=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, August 17, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Daniel Gallegos		<a href="mailto:dgallegos@slo.state.nm.us">dgallegos@slo.state.nm.us</a>	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

\*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
  - 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, August 31, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, September 14, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	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
  - 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time: 8:00 am, September 28, 2022**

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, October 12, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	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.

Unforeseen Conditions or Problems:

Critical Path Considerations: Keeping 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. 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\*\*\*

## 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, October 26, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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 his 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\*\*\*



## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, November 9, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	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\*\*\*

## 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time: 8:00 am, December 7, 2022**

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	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\*\*\*

## 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, December 21, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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.

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.

Verify Date and Time of Next Meeting: 8:00 am, Wednesday, December 21, 2022

Adjourn: 8:14 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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** 8:00 am, January 4, 2022

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	Dufrane Construction
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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\*\*\*

## 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

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: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Jenni Usher	512/820-8772	<a href="mailto:jenni@permianws.com">jenni@permianws.com</a>	Permian Water Solutions LLC
Dusty McInturff	617/584-2889	<a href="mailto:dmcinturff@dufrane.com">dmcinturff@dufrane.com</a>	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
  - 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 within 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 Cl<sup>-</sup>
    - STEL N/D
4. 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 soil 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=eS9GbDNhWHcyUmc5WXh2cEZLYW1ZZz09>

Meeting ID: 818 0332 5780 Passcode: 998322

**Next Meeting Date and Time:** NONE

## SUMMARY

1. Notice To Proceed Issued: August 19, 2020 - 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	<a href="mailto:fcrosby@slo.state.nm.us">fcrosby@slo.state.nm.us</a>	NM State Land Office
Ryan Mann	575/392-8736	<a href="mailto:rmann@slo.state.nm.us">rmann@slo.state.nm.us</a>	NM State Land Office
Clair Gonzales	432/687-8123	<a href="mailto:Clair.gonzales@tetrattech.com">Clair.gonzales@tetrattech.com</a>	Tetra Tech
Cory Smith	505/419-2687	<a href="mailto:Cory.smith@state.nm.us">Cory.smith@state.nm.us</a>	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

\*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
  - 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 within 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 Cl<sup>-</sup>
    - STEL NDL
4. 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 soil and water testing.\*\*\*





## Appendix D

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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

A handwritten signature in black ink that reads "Jessica Kramer".

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

Jessica Kramer, Project Manager  
(432)704-5440  
[jessica.kramer@eurofinset.com](mailto:jessica.kramer@eurofinset.com)

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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: PWS-Kaiser

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

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

## 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
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.

## General Chemistry

Qualifier	Qualifier Description
H	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.
α	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

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## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

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### Job ID: 880-5572-1

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Laboratory: Eurofins Xenco, Midland

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#### Narrative

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#### 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.

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### Job ID: 880-5572-2

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Laboratory: Eurofins Xenco, Midland

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#### Narrative

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#### Job Narrative 880-5572-2

#### Comments

No additional comments.

#### Receipt

The sample was received on 8/30/2021 2:38 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.6° C.

#### General Chemistry

Method SM 2540C: The following sample was run outside of holding time at client's request: MW-1 (880-5572-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

Client Sample ID: MW-1

Lab Sample ID: 880-5572-1

Date Collected: 08/27/21 13:35

Matrix: Water

Date Received: 08/30/21 14:38

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	1
Toluene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			09/01/21 22:06	1
o-Xylene	<0.00200	U	0.00200		mg/L			09/01/21 22:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			09/01/21 22:06	1
Total BTEX	<0.00400	U	0.00400		mg/L			09/01/21 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130		09/01/21 22:06	1
1,4-Difluorobenzene (Surr)	106		70 - 130		09/01/21 22:06	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	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	1
Diesel Range Organics (Over C10-C28)	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	1
Oil Range Organics (Over C28-C36)	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	1
Total TPH	<4.66	U	4.66		mg/L		09/03/21 16:21	09/04/21 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/03/21 16:21	09/04/21 23:09	1
o-Terphenyl	115		70 - 130	09/03/21 16:21	09/04/21 23:09	1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3570		25.0		mg/L			08/31/21 16:14	50

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	9590	H	500		mg/L			09/10/21 15:13	1

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# Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

Job ID: 880-5572-1  
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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Matrix: Water

Analysis Batch: 7266

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09753		mg/L		98	70 - 130
Toluene	0.100	0.09995		mg/L		100	70 - 130
Ethylbenzene	0.100	0.1071		mg/L		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2108		mg/L		105	70 - 130
o-Xylene	0.100	0.1044		mg/L		104	70 - 130

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

Lab Sample ID: LCSD 880-7266/62

Matrix: Water

Analysis Batch: 7266

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

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

Surrogate	LCSD %Recovery	LCSD 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

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.1110		mg/L		111	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

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

Lab Sample ID: 880-5572-1 MS

Matrix: Water

Analysis Batch: 7266

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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

Lab Sample ID: 880-5572-1 MSD

Matrix: Water

Analysis Batch: 7266

Client Sample ID: MW-1

Prep Type: Total/NA

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

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

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

Matrix: Water

Analysis Batch: 7266

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7274

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

Job ID: 880-5572-1  
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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.69	U	4.69		mg/L		09/03/21 16:21	09/04/21 21:03	1
Diesel Range Organics (Over C10-C28)	<4.69	U	4.69		mg/L		09/03/21 16:21	09/04/21 21:03	1
Oil 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	93.8	93.19		mg/L		99	75 - 125
Diesel Range Organics (Over C10-C28)	93.8	103.9		mg/L		111	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	126		70 - 130

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

Matrix: Water

Analysis Batch: 7537

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7525

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	93.8	92.23		mg/L		98	75 - 125	1	20
Diesel Range Organics (Over C10-C28)	93.8	104.2		mg/L		111	75 - 125	0	20

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

Lab Sample ID: 890-1210-J-1-A MS

Matrix: Water

Analysis Batch: 7537

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

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

Lab Sample ID: 890-1210-J-1-A MS

Matrix: Water

Analysis Batch: 7537

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7525

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

Lab Sample ID: 890-1210-J-1-B MSD

Matrix: Water

Analysis Batch: 7537

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<4.53	U	91.5	85.40		mg/L		93	75 - 125	11	20
Diesel Range Organics (Over C10-C28)	<4.53	U	91.5	99.28		mg/L		109	75 - 125	10	20

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7318/3

Matrix: Water

Analysis Batch: 7318

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			08/31/21 15:24	1

Lab Sample ID: LCS 880-7318/4

Matrix: Water

Analysis Batch: 7318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	26.14		mg/L		105	90 - 110

Lab Sample ID: LCSD 880-7318/5

Matrix: Water

Analysis Batch: 7318

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	25.0	25.60		mg/L		102	90 - 110	2	20

Lab Sample ID: 880-5594-A-1 MS

Matrix: Water

Analysis Batch: 7318

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.96		25.0	34.47		mg/L		98	90 - 110

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## QC Sample Results

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

Matrix: Water

Analysis Batch: 7318

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Matrix: Water

Analysis Batch: 7774

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0		mg/L			09/10/21 15:13	1

Lab Sample ID: LCS 880-7774/2

Matrix: Water

Analysis Batch: 7774

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	990.0		mg/L		99	80 - 120

Lab Sample ID: LCSD 880-7774/3

Matrix: Water

Analysis Batch: 7774

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	1000	980.0		mg/L		98	80 - 120	1	10

Lab Sample ID: 880-5572-1 DU

Matrix: Water

Analysis Batch: 7774

Client Sample ID: MW-1

Prep Type: Total/NA

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

Eurofins Xenco, Midland

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

Job ID: 880-5572-1  
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	7274
MB 880-7266/66	Method Blank	Total/NA	Water	8021B	
MB 880-7274/5-A	Method Blank	Total/NA	Water	8021B	
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 Batch
880-5572-1	MW-1	Total/NA	Water	8015NM Aq Prep	7525
MB 880-7525/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 880-7525/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 880-7525/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	
890-1210-J-1-A MS	Matrix Spike	Total/NA	Water	8015NM Aq Prep	
890-1210-J-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015NM Aq Prep	

## Analysis Batch: 7537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5572-1	MW-1	Total/NA	Water	8015B NM	7525
MB 880-7525/1-A	Method Blank	Total/NA	Water	8015B NM	7525
LCS 880-7525/2-A	Lab Control Sample	Total/NA	Water	8015B NM	7525
LCSD 880-7525/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	7525
890-1210-J-1-A MS	Matrix Spike	Total/NA	Water	8015B NM	7525
890-1210-J-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B NM	7525

## HPLC/IC

## Analysis Batch: 7318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5572-1	MW-1	Total/NA	Water	300.0	7318
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	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5572-1	MW-1	Total/NA	Water	SM 2540C	7774
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	

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

Client Sample ID: MW-1  
Date Collected: 08/27/21 13:35  
Date Received: 08/30/21 14:38

Lab Sample ID: 880-5572-1  
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	CH	XEN MID
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	7774	09/10/21 15:13	SC	XEN MID

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Aq Prep	Water	Total TPH
8021B		Water	Total BTEX



## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: PWS-Kaiser

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

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN MID
5030B	Purge and Trap	SW846	XEN MID
8015NM Aq Prep	Microextraction	SW846	XEN MID

### Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

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

Eurofins Xenco, Midland

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 13:35	08/30/21 14:38

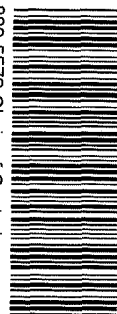
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## Environment Testing

Houston, TX (281) 240-4200, Dallas, TX (214) 9  
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) 5

880-5572 Chain of Custody



5572

www.xenco.com Page 1 of 1

Work Order Comments

Project Manager	Clair Gonzales		Bill to (if different)	
Company Name	Tetra Tech		Company Name	
Address	901 W Wall St A 180		Address	
City State ZIP	Midland, TX 79701		City State ZIP	
Phone	432-270-8581	Email	Clair.Gonzales@tetra-tech.com	

Work Order Comments				
Program	UST/PST <input type="checkbox"/>	PRP <input type="checkbox"/>	Brownfields <input type="checkbox"/>	RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:				
Reporting	Level II <input type="checkbox"/>	Level III <input type="checkbox"/>	PST/UST <input type="checkbox"/>	TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EPD <input type="checkbox"/>	Adapt <input type="checkbox"/>	Other	

[illegible]

Total 2007 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO <sub>2</sub>	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TC1P	5PLP	6010	8RCRA	5b	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U												
<p>Notices: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xerco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xerco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xerco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xerco, but not analyzed. These terms will be enforced unless previously negotiated.</p>																																	
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<p>Hg 1631 / 245 1.7/470 / 7471</p>																																	

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-5572-1

SDG Number: New Mexico

Login Number: 5572

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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 <6mm (1/4").	True	





## 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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:  
11/8/2021 11:57:43 AM

Jessica Kramer, Project Manager  
(432)704-5440  
[jessica.kramer@eurofinset.com](mailto:jessica.kramer@eurofinset.com)

#### LINKS

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results through  
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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.*

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

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

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## Definitions/Glossary

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

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

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

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

Job ID: 890-1501-1  
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.



## Client Sample Results

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

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

Client Sample ID: DS-1 (2)

Lab Sample ID: 890-1501-1

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 2

## Method: 8021B - Volatile 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 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 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/03/21 08:46	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		11/01/21 14:48	11/02/21 22:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/01/21 14:48	11/02/21 22:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/01/21 14:48	11/02/21 22:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	11/01/21 14:48	11/02/21 22:52	1
o-Terphenyl	109		70 - 130	11/01/21 14:48	11/02/21 22:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1310		4.98		mg/Kg			11/07/21 02:32	1

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

## 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 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

## Client Sample Results

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

Job ID: 890-1501-1  
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

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

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 BTEX 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1290		250		mg/Kg			11/03/21 08:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		11/01/21 14:48	11/02/21 23:14	5
Diesel Range Organics (Over C10-C28)	1290		250		mg/Kg		11/01/21 14:48	11/02/21 23:14	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		11/01/21 14:48	11/02/21 23:14	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/01/21 14:48	11/02/21 23:14	5
o-Terphenyl	94		70 - 130				11/01/21 14:48	11/02/21 23:14	5

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

Lab Sample ID: 890-1501-3

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 2

## 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 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 BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1980		250		mg/Kg			11/03/21 08:46	1

Eurofins Xenco, Carlsbad

Client Sample Results

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

Job ID: 890-1501-1  
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

Lab Sample ID: 890-1501-3  
Matrix: Solid

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	<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	
OII 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 Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7820		49.5		mg/Kg			11/07/21 02:47	10	

## Surrogate Summary

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

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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+
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			



## QC Sample Results

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

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

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

Lab Sample ID: MB 880-11059/5-A

Matrix: Solid

Analysis Batch: 11027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11059

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: 880-7749-A-1-C MS

Matrix: Solid

Analysis Batch: 11027

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 11059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	71		70 - 130

Lab Sample ID: 880-7749-A-1-E MSD

Matrix: Solid

Analysis Batch: 11027

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U F2 F1	0.0996	0.05940	F2 F1	mg/Kg		59	70 - 130	52	35
Toluene	<0.00202	U F2 F1	0.0996	0.04594	F2 F1	mg/Kg		46	70 - 130	153	35
Ethylbenzene	<0.00202	U F2 F1	0.0996	0.03657	F2 F1	mg/Kg		37	70 - 130	57	35
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.199	0.07219	F2 F1	mg/Kg		36	70 - 130	58	35
o-Xylene	<0.00202	U F2 F1	0.0996	0.04080	F2 F1	mg/Kg		41	70 - 130	51	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

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

Lab Sample ID: MB 880-11158/1-A

Matrix: Solid

Analysis Batch: 11193

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11158

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/01/21 14:48	11/02/21 20:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	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

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

Matrix: Solid

Analysis Batch: 11193

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11158

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

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

Matrix: Solid

Analysis Batch: 11193

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11158

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

Lab Sample ID: LCSD 880-11158/3-A

Matrix: Solid

Analysis Batch: 11193

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11158

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

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

Lab Sample ID: 890-1495-A-1-H MS

Matrix: Solid

Analysis Batch: 11193

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 11158

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1026		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	964.5		mg/Kg		95	70 - 130

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

Lab Sample ID: 890-1495-A-1-I MSD

Matrix: Solid

Analysis Batch: 11193

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 11158

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1156		mg/Kg		116	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	975.7		mg/Kg		95	70 - 130	1	20

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

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

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/07/21 01:48	1

Lab Sample ID: LCS 880-11233/2-A

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	229.5		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-11233/3-A

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	233.0		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 880-7551-A-2-E MS

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	17400	F1	12500	35790	F1	mg/Kg		148	90 - 110

Lab Sample ID: 880-7551-A-2-F MSD

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17400	F1	12500	35360	F1	mg/Kg		144	90 - 110	1	20

Eurofins Xenco, Carlsbad



## QC Association Summary

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

Job ID: 890-1501-1  
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	
890-1501-2	DS-2 (3)	Total/NA	Solid	5035	
890-1501-3	DS-3 (2)	Total/NA	Solid	5035	
MB 880-11059/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11059/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11059/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-7749-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-7749-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 11149

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

## GC Semi VOA

## Prep Batch: 11158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	8015NM Prep	
890-1501-2	DS-2 (3)	Total/NA	Solid	8015NM Prep	
890-1501-3	DS-3 (2)	Total/NA	Solid	8015NM Prep	
MB 880-11158/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11158/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11158/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1495-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1495-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 11193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1501-1	DS-1 (2)	Total/NA	Solid	8015B NM	11158
890-1501-2	DS-2 (3)	Total/NA	Solid	8015B NM	11158
890-1501-3	DS-3 (2)	Total/NA	Solid	8015B NM	11158
MB 880-11158/1-A	Method Blank	Total/NA	Solid	8015B NM	11158
LCS 880-11158/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11158
LCSD 880-11158/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11158
890-1495-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	11158
890-1495-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	11158

Eurofins Xenco, Carlsbad

## 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	DS-1 (2)	Soluble	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

## Lab Chronicle

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

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

Client Sample ID: DS-1 (2)

Lab Sample ID: 890-1501-1

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11059	11/01/21 10:32	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11027	11/01/21 22:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11149	11/03/21 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11344	11/03/21 08:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11158	11/01/21 14:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11193	11/02/21 22:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		1			11381	11/07/21 02:32	CH	XEN MID

Client Sample ID: DS-2 (3)

Lab Sample ID: 890-1501-2

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11059	11/01/21 10:32	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11027	11/01/21 22:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11149	11/03/21 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11344	11/03/21 08:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11158	11/01/21 14:48	DM	XEN MID
Total/NA	Analysis	8015B NM		5			11193	11/02/21 23:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		20			11381	11/07/21 02:39	CH	XEN MID

Client Sample ID: DS-3 (2)

Lab Sample ID: 890-1501-3

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 MID
Total/NA	Analysis	Total BTEX		1			11149	11/03/21 12:38	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11344	11/03/21 08:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11158	11/01/21 14:48	DM	XEN MID
Total/NA	Analysis	8015B NM		5			11193	11/02/21 23:37	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

Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

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

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

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Request of Custody Record



Tetra Tech, Inc.

901 W. Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 692-4559  
Fax (432) 692-3946



890-1501 Chain of Custody

Page 1 of 1

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: 212C-MD-02230	
Project Location: Lea County, New Mexico		Project #: 212C-MD-02230	
Invoice to: Dusty McInturf - Permian Water Solutions		Sampler Signature: Ezequiel Moreno	
Receiving Laboratory: Eurofins Xenco		Comments:	
LAB #		SAMPLE IDENTIFICATION	
LAB USE ONLY		YEAR: 2020	
DATE		TIME	
WATER		MATRIX	
SOIL		PRESERVATIVE METHOD	
HCL		HNO <sub>3</sub>	
ICE		None	
# CONTAINERS		FILTERED (Y/N)	
BTEX 8021B BTEX 8260B		TPH TX1005 (Ext to C35)	
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	
TCLP Volatiles		TCLP Semi Volatiles	
RCI		GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625		PCB's 8082 / 608	
NORM		PLM (Asbestos)	
Chloride		Chloride Sulfate TDS	
General Water Chemistry (see attached list)		Anion/Cation Balance	
Hold			
Relinquished by: <i>Frieda M...</i>		Date: 10/29/21 Time: 12:45	
Relinquished by: <i>Clair Gonzales</i>		Date: 10-29-21 Time: 1245	
Relinquished by:		Date: Time:	
Relinquished by:		Date: Time:	
LAB USE ONLY		REMARKS:	
Sample Temperature		<input checked="" type="checkbox"/> STANDARD	
2.4		<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr	
2.2		<input type="checkbox"/> Rush Charges Authorized	
		<input type="checkbox"/> Special Report Limits or TRRP Report	

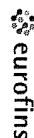
ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Eurofins Xenco, Carlsbad

1089 N Canal St  
Carlsbad NM 88220  
Phone. 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



## Environment Testing America

[illegible]



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-1501-1

SDG Number: Lea County NM

Login Number: 1501

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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.	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: 890-1501-1

SDG Number: Lea County NM

Login Number: 1501

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 11/01/21 08:46 AM

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6/2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



## 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

A handwritten signature in black ink that reads "Jessica Kramer".

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

Jessica Kramer, Project Manager  
(432)704-5440  
[jessica.kramer@eurofinset.com](mailto:jessica.kramer@eurofinset.com)

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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

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

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## Definitions/Glossary

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

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

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
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.

## GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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 Xenco, Carlsbad



## Case Narrative

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

Job ID: 890-1770-1  
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.

## Client Sample Results

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

Job ID: 890-1770-1  
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

## 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		12/29/21 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

## 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			01/03/22 14:33	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 F1	49.9		mg/Kg		12/29/21 15:34	12/31/21 21:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		12/29/21 15:34	12/31/21 21:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 21:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	12/29/21 15:34	12/31/21 21:44	1
o-Terphenyl	113		70 - 130	12/29/21 15:34	12/31/21 21:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	287	F1	4.99		mg/Kg			01/03/22 17:31	1

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 Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/29/21 14:29	12/30/21 20:50	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/29/21 14:29	12/30/21 20:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	12/29/21 14:29	12/30/21 20:50	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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 Compounds (GC) (Continued)

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 BTEX	<0.00399	U	0.00399		mg/Kg			01/04/22 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1

## 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	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
Oil 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
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

Matrix: Solid

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 - 130	12/29/21 14:29	12/30/21 21:10	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/04/22 15:22	1

## 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			01/04/22 15:21	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

Job ID: 890-1770-1  
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

## 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		12/29/21 15:34	12/31/21 23:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	12/31/21 23:06	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4800		49.8		mg/Kg			01/03/22 17:31	10

Client Sample ID: SW-7

Lab Sample ID: 890-1770-4

Date Collected: 12/23/21 00:00

Matrix: Solid

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		12/29/21 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 (DRO) (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 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		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
Oil 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2400		50.0		mg/Kg			01/03/22 17:39	10

## Client Sample ID: SW-8

## Lab Sample ID: 890-1770-5

Date Collected: 12/23/21 00:00

Matrix: Solid

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	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/29/21 14:29	12/30/21 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				12/29/21 14:29	12/30/21 21:51	1
1,4-Difluorobenzene (Surr)	89		70 - 130				12/29/21 14:29	12/30/21 21:51	1

## Method: Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1

## 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	12/31/21 23:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 23:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				12/29/21 15:34	12/31/21 23:48	1
o-Terphenyl	116		70 - 130				12/29/21 15:34	12/31/21 23:48	1

## Method: 300.0 - Anions, Ion 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

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: SW-9

Lab Sample ID: 890-1770-6

Date Collected: 12/23/21 00:00

Matrix: Solid

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	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/29/21 14:29	12/30/21 22:12	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/29/21 14:29	12/30/21 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	12/29/21 14:29	12/30/21 22:12	1
1,4-Difluorobenzene (Surr)	75		70 - 130	12/29/21 14:29	12/30/21 22:12	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			01/04/22 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1

## 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 00:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	01/01/22 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	12/29/21 15:34	01/01/22 00:09	1
o-Terphenyl	108		70 - 130	12/29/21 15:34	01/01/22 00:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	380		5.01		mg/Kg			12/31/21 10:57	1

Client Sample ID: SW-10

Lab Sample ID: 890-1770-7

Date Collected: 12/23/21 00:00

Matrix: Solid

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	<0.00201	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

## Client Sample Results

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

Job ID: 890-1770-1  
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

Date Received: 12/28/21 10:30

Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	123		70 - 130	12/29/21 14:29	12/30/21 22:32	1

## Method: Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/04/22 15:21	1

## 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
Oil 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
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

Matrix: Solid

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		mg/Kg			01/04/22 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/04/22 15:21	1

Eurofins Xenco, Carlsbad

Client Sample Results

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

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

Client Sample ID: SW-11  
Date Collected: 12/23/21 00:00  
Date Received: 12/28/21 10:30  
Sample Depth: 0 - 4

Lab Sample ID: 890-1770-8  
Matrix: Solid

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		12/29/21 15:34	01/01/22 00:50	1	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/29/21 15:34	01/01/22 00:50	1	
OII 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 Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	348		5.03		mg/Kg			12/31/21 11:14	1	

## Surrogate Summary

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

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-9746-A-1-B MS	Matrix Spike	124	79
880-9746-A-1-C MSD	Matrix Spike Duplicate	116	92
880-9746-A-6-G MS	Matrix Spike	127	111
880-9746-A-6-H MSD	Matrix Spike Duplicate	127	106
890-1770-1	SW-1	122	79
890-1770-2	SW-3	131 S1+	104
890-1770-3	SW-6	124	104
890-1770-4	SW-7	128	90
890-1770-5	SW-8	129	89
890-1770-6	SW-9	126	75
890-1770-7	SW-10	167 S1+	123
890-1770-8	SW-11	156 S1+	89
LCS 880-15736/1-A	Lab Control Sample	144 S1+	110
LCS 880-15812/1-A	Lab Control Sample	121	0 S1-
LCSD 880-15736/2-A	Lab Control Sample Dup	109	99
LCSD 880-15812/2-A	Lab Control Sample Dup	143 S1+	117
MB 880-15736/5-A	Method Blank	103	105
MB 880-15812/5-A	Method Blank	90	87
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1770-1	SW-1	98	113
890-1770-1 MS	SW-1	86	87
890-1770-1 MSD	SW-1	87	88
890-1770-2	SW-3	101	116
890-1770-3	SW-6	90	101
890-1770-4	SW-7	93	108
890-1770-5	SW-8	100	116
890-1770-6	SW-9	92	108
890-1770-7	SW-10	97	113
890-1770-8	SW-11	95	109
LCS 880-15746/2-A	Lab Control Sample	112	108
LCSD 880-15746/3-A	Lab Control Sample Dup	100	96
MB 880-15746/1-A	Method Blank	108	132 S1+
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	12/29/21 14:29	12/30/21 14:42	1
1,4-Difluorobenzene (Surr)	105		70 - 130	12/29/21 14:29	12/30/21 14:42	1

Lab Sample ID: LCS 880-15736/1-A

Matrix: Solid

Analysis Batch: 15788

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-15736/2-A

Matrix: Solid

Analysis Batch: 15788

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15736

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-9746-A-1-B MS

Matrix: Solid

Analysis Batch: 15788

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15736

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.101	0.05309	F1	mg/Kg		53	70 - 130
Toluene	<0.00200	U F1	0.101	0.06625	F1	mg/Kg		66	70 - 130

Eurofins Xenco, Carlsbad



## QC Sample Results

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: 880-9746-A-1-B MS

Matrix: Solid

Analysis Batch: 15788

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15736

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U	0.101	0.07124		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.1407		mg/Kg		70	70 - 130
o-Xylene	<0.00200	U	0.101	0.07366		mg/Kg		73	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	79		70 - 130

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

Matrix: Solid

Analysis Batch: 15788

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15736

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.05242	F1	mg/Kg		52	70 - 130	1	35
Toluene	<0.00200	U F1	0.100	0.06213	F1	mg/Kg		62	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.100	0.07132		mg/Kg		71	70 - 130	0	35
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1372	F1	mg/Kg		69	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.07030		mg/Kg		70	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: MB 880-15812/5-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15812

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Eurofins Xenco, Carlsbad

## QC Sample Results

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15812

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	0.100	0.07679		mg/Kg		77	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	0	S1-	70 - 130

Lab Sample ID: LCSD 880-15812/2-A

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15812

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07182		mg/Kg		72	70 - 130	26	35
Toluene	0.100	0.08616		mg/Kg		86	70 - 130	3	35
Ethylbenzene	0.100	0.08216		mg/Kg		82	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1660		mg/Kg		83	70 - 130	3	35
o-Xylene	0.100	0.08149		mg/Kg		81	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD 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

Matrix: Solid

Analysis Batch: 15844

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U F1	0.0994	0.06266	F1	mg/Kg		63	70 - 130
Toluene	<0.00202	U F2 F1	0.0994	0.06389	F1	mg/Kg		64	70 - 130
Ethylbenzene	<0.00202	U F1	0.0994	0.06876	F1	mg/Kg		69	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1390		mg/Kg		70	70 - 130
o-Xylene	<0.00202	U F1	0.0994	0.06885	F1	mg/Kg		69	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Eurofins Xenco, Carlsbad

## QC Sample Results

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: 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	Qualifier	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

	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		12/29/21 15:34	12/31/21 20:42	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 20:42	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/21 15:34	12/31/21 20:42	1	
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							
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	941.7		mg/Kg		94		70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1152		mg/Kg		115		70 - 130		
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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15746

	Spike	LCSD	LCSD							
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	888.9		mg/Kg		89		70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1107		mg/Kg		111		70 - 130	4	20
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	100		70 - 130							
o-Terphenyl	96		70 - 130							

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: 890-1770-1 MS

Matrix: Solid

Analysis Batch: 15825

Client Sample ID: SW-1

Prep Type: Total/NA

Prep Batch: 15746

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	484.2	F1	mg/Kg		46	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	996	456.9	F1	mg/Kg		46	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	86		70 - 130								
o-Terphenyl	87		70 - 130								

Lab Sample ID: 890-1770-1 MSD

Matrix: Solid

Analysis Batch: 15825

Client Sample ID: SW-1

Prep Type: Total/NA

Prep Batch: 15746

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	495.1	F1	mg/Kg		47	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	467.3	F1	mg/Kg		47	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	87		70 - 130								
o-Terphenyl	88		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15755/1-A

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/31/21 07:03	1

Lab Sample ID: LCS 880-15755/2-A

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

Lab Sample ID: LCSD 880-15755/3-A

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	253.3		mg/Kg		101	90 - 110	1	20

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-9745-A-1-B MS

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	274		2500	2976		mg/Kg		108	90 - 110		

Lab Sample ID: 880-9745-A-1-C MSD

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

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

Lab Sample ID: 880-9747-A-3-D MS

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	<5.04	U	252	262.9		mg/Kg		103	90 - 110		

Lab Sample ID: 880-9747-A-3-E MSD

Matrix: Solid

Analysis Batch: 15821

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

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

Lab Sample ID: MB 880-15803/1-A

Matrix: Solid

Analysis Batch: 15920

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 15920

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	245.5		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-15803/3-A

Matrix: Solid

Analysis Batch: 15920

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

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

Lab Sample ID: 890-1770-1 MS

Matrix: Solid

Analysis Batch: 15920

Client Sample ID: SW-1

Prep Type: Soluble

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

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QC Sample Results

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

Job ID: 890-1770-1  
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	Limits	
Chloride	287	F1	250	505.3	F1	mg/Kg		88	90 - 110	4	20	

## QC Association Summary

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

Job ID: 890-1770-1  
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.  
Project/Site: Kaiser SWD

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

## GC VOA (Continued)

## Analysis Batch: 16004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-4	SW-7	Total/NA	Solid	Total BTEX	
890-1770-5	SW-8	Total/NA	Solid	Total BTEX	
890-1770-6	SW-9	Total/NA	Solid	Total BTEX	
890-1770-7	SW-10	Total/NA	Solid	Total BTEX	
890-1770-8	SW-11	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 15746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8015NM Prep	
890-1770-2	SW-3	Total/NA	Solid	8015NM Prep	
890-1770-3	SW-6	Total/NA	Solid	8015NM Prep	
890-1770-4	SW-7	Total/NA	Solid	8015NM Prep	
890-1770-5	SW-8	Total/NA	Solid	8015NM Prep	
890-1770-6	SW-9	Total/NA	Solid	8015NM Prep	
890-1770-7	SW-10	Total/NA	Solid	8015NM Prep	
890-1770-8	SW-11	Total/NA	Solid	8015NM Prep	
MB 880-15746/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15746/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15746/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1770-1 MS	SW-1	Total/NA	Solid	8015NM Prep	
890-1770-1 MSD	SW-1	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 15825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8015B NM	15746
890-1770-2	SW-3	Total/NA	Solid	8015B NM	15746
890-1770-3	SW-6	Total/NA	Solid	8015B NM	15746
890-1770-4	SW-7	Total/NA	Solid	8015B NM	15746
890-1770-5	SW-8	Total/NA	Solid	8015B NM	15746
890-1770-6	SW-9	Total/NA	Solid	8015B NM	15746
890-1770-7	SW-10	Total/NA	Solid	8015B NM	15746
890-1770-8	SW-11	Total/NA	Solid	8015B NM	15746
MB 880-15746/1-A	Method Blank	Total/NA	Solid	8015B NM	15746
LCS 880-15746/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15746
LCSD 880-15746/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15746
890-1770-1 MS	SW-1	Total/NA	Solid	8015B NM	15746
890-1770-1 MSD	SW-1	Total/NA	Solid	8015B NM	15746

## Analysis Batch: 15912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Total/NA	Solid	8015 NM	
890-1770-2	SW-3	Total/NA	Solid	8015 NM	
890-1770-3	SW-6	Total/NA	Solid	8015 NM	
890-1770-4	SW-7	Total/NA	Solid	8015 NM	
890-1770-5	SW-8	Total/NA	Solid	8015 NM	
890-1770-6	SW-9	Total/NA	Solid	8015 NM	
890-1770-7	SW-10	Total/NA	Solid	8015 NM	
890-1770-8	SW-11	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

## QC Association Summary

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

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

## HPLC/IC

## Leach Batch: 15755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-3	SW-6	Soluble	Solid	DI Leach	
890-1770-4	SW-7	Soluble	Solid	DI Leach	
890-1770-5	SW-8	Soluble	Solid	DI Leach	
890-1770-6	SW-9	Soluble	Solid	DI Leach	
890-1770-7	SW-10	Soluble	Solid	DI Leach	
890-1770-8	SW-11	Soluble	Solid	DI Leach	
MB 880-15755/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15755/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15755/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9745-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9745-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-9747-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9747-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Leach Batch: 15803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Soluble	Solid	DI Leach	
890-1770-2	SW-3	Soluble	Solid	DI Leach	
MB 880-15803/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15803/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15803/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1770-1 MS	SW-1	Soluble	Solid	DI Leach	
890-1770-1 MSD	SW-1	Soluble	Solid	DI Leach	

## Analysis Batch: 15821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-3	SW-6	Soluble	Solid	300.0	15755
890-1770-4	SW-7	Soluble	Solid	300.0	15755
890-1770-5	SW-8	Soluble	Solid	300.0	15755
890-1770-6	SW-9	Soluble	Solid	300.0	15755
890-1770-7	SW-10	Soluble	Solid	300.0	15755
890-1770-8	SW-11	Soluble	Solid	300.0	15755
MB 880-15755/1-A	Method Blank	Soluble	Solid	300.0	15755
LCS 880-15755/2-A	Lab Control Sample	Soluble	Solid	300.0	15755
LCSD 880-15755/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15755
880-9745-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	15755
880-9745-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15755
880-9747-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	15755
880-9747-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15755

## Analysis Batch: 15920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1770-1	SW-1	Soluble	Solid	300.0	15803
890-1770-2	SW-3	Soluble	Solid	300.0	15803
MB 880-15803/1-A	Method Blank	Soluble	Solid	300.0	15803
LCS 880-15803/2-A	Lab Control Sample	Soluble	Solid	300.0	15803
LCSD 880-15803/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15803
890-1770-1 MS	SW-1	Soluble	Solid	300.0	15803
890-1770-1 MSD	SW-1	Soluble	Solid	300.0	15803

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

Job ID: 890-1770-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/28/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 21:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	12/31/21 23:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		10			15821	01/03/22 17:31	CH	XEN MID

## Client Sample ID: SW-7

## Lab Sample ID: 890-1770-4

Date Collected: 12/23/21 00:00

Matrix: Solid

Date Received: 12/28/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 21:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

## 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	12/31/21 23:27	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		10			15821	01/03/22 17:39	CH	XEN MID

## Client Sample ID: SW-8

## Lab Sample ID: 890-1770-5

Date Collected: 12/23/21 00:00

Matrix: Solid

Date Received: 12/28/21 10:30

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	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

Matrix: Solid

Date Received: 12/28/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	15736	12/29/21 14:29	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15788	12/30/21 22:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			16004	01/04/22 15:22	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	15746	12/29/21 15:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15825	01/01/22 00:09	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	15755	12/29/21 16:19	CA	XEN MID
Soluble	Analysis	300.0		1			15821	12/31/21 10:57	CH	XEN MID

## Client Sample ID: SW-10

## Lab Sample ID: 890-1770-7

Date Collected: 12/23/21 00:00

Matrix: Solid

Date Received: 12/28/21 10:30

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	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	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 00:30	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: SW-10  
Date Collected: 12/23/21 00:00  
Date Received: 12/28/21 10:30

Lab Sample ID: 890-1770-7  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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  
Date Collected: 12/23/21 00:00  
Date Received: 12/28/21 10:30

Lab Sample ID: 890-1770-8  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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.  
Project/Site: Kaiser SWD

Job ID: 890-1770-1  
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	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## 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

## Sample Summary

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

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

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



Analysis Request of Chain of Custody Record



Tetra Tech, Inc.



890-1770 Chain of Custody

Page 1 of 1

Client Name:		Permian Water Solutions		Site Manager:		Clair Gonzales	
Project Name:		Kaiser SWD		Project #:		212C-MD-02230	
Project Location: (county, state)		Lea County, New Mexico		Project #:		212C-MD-02230	
Invoice to:		Dusty McInturf - Permian Water Solutions		Sampler Signature:		Ezequiel Moreno	
Receiving Laboratory:		Eurofins Xenco		Sampler Signature:		Ezequiel Moreno	
Comments:							
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD	
		YEAR: 2020					
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>
				ICE	None		
				# CONTAINERS			
				FILTERED (Y/N)			
	SW-1 (0-4)	12/23/2021		X		X	
	SW-3 (0-4)	12/23/2021		X		X	
	SW-6 (0-4)	12/23/2021		X		X	
	SW-7 (0-4)	12/23/2021		X		X	
	SW-8 (0-4)	12/23/2021		X		X	
	SW-9 (0-4)	12/23/2021		X		X	
	SW-10 (0-4)	12/23/2021		X		X	
	SW-11 (0-4)	12/23/2021		X		X	
Relinquished by:		Date:	Time:	Received by:		Date:	Time:
E. McNamee		12.28.21		Clair Gonzales		12.28.21	1030
Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Relinquished by:		Date:	Time:	Received by:		Date:	Time:

ORIGINAL COPY

LAB USE ONLY	REMARKS:	BTEX 8021B BTEX 8260B	
		TPH TX1005 (Ext to C35)	
Sample Temperature	2.9	TPH 8015M ( GRO - DRO - ORO - MRO)	
		PAH 8270C	
2.0	STANDARD	Total Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
RUSH: Same Day 24 hr 48 hr 72 hr	Special Report Limits or TRRP Report	TCLP Volatiles	
		TCLP Semi Volatiles	
Rush Charges Authorized		RCI	
		GC/MS Vol. 8260B / 624	
		GC/MS Semi. Vol. 8270C/625	
		PCB's 8082 / 608	
		NORM	
		PLM (Asbestos)	
		Chloride	
		Chloride Sulfate TDS	
		General Water Chemistry (see attached list)	
		Anion/Cation Balance	
		Hold	

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-1770-1

SDG Number: Lea County New Mexico

Login Number: 1770

List Number: 1

List Source: Eurofins Xenco, Carlsbad

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: 890-1770-1

SDG Number: Lea County New Mexico

Login Number: 1770

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland

List Creation: 12/29/21 11:05 AM

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 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

A handwritten signature in black ink that reads "Jessica Kramer".

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

Jessica Kramer, Project Manager  
(432)704-5440  
[jessica.kramer@eurofinset.com](mailto:jessica.kramer@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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

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

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## Definitions/Glossary

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

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

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
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.

## 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

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Eurofins Xenco, Carlsbad

Definitions/Glossary

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

Job ID: 890-1502-1  
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.  
Project/Site: Kaiser SWD

Job ID: 890-1502-1  
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.

## Case Narrative

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

Job ID: 890-1502-1  
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.

Case Narrative

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

Job ID: 890-1502-1  
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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## Client Sample Results

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

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

Client Sample ID: BH-1 (6)

Lab Sample ID: 890-1502-1

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

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	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	11/01/21 11:05	11/03/21 00:47	1
1,4-Difluorobenzene (Surr)	73		70 - 130	11/01/21 11:05	11/03/21 00:47	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			11/08/21 17:11	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 - 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 F1 F2	49.9		mg/Kg		11/02/21 11:44	11/03/21 11:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 11:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 11:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	11/02/21 11:44	11/03/21 11:42	1
o-Terphenyl	118		70 - 130	11/02/21 11:44	11/03/21 11:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1680		25.0		mg/Kg			11/06/21 06:01	5

Client Sample ID: BH-2 (6)

Lab Sample ID: 890-1502-2

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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

## Client Sample Results

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

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

Client Sample ID: BH-2 (6)

Lab Sample ID: 890-1502-2

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

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

## 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 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
Oil 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
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	

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	235		5.04		mg/Kg			11/06/21 06:09	1

Client Sample ID: BH-3 (6)

Lab Sample ID: 890-1502-3

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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: 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 (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-3 (6)

## Lab Sample ID: 890-1502-3

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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		11/02/21 11:44	11/03/21 13:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 13:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				11/02/21 11:44	11/03/21 13:03	1
o-Terphenyl	117		70 - 130				11/02/21 11:44	11/03/21 13:03	1

## Method: 300.0 - Anions, Ion Chromatography - 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

## Client Sample ID: BH-4 (6)

## Lab Sample ID: 890-1502-4

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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 (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

## 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		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
Oil 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

## Client Sample Results

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

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

## Client Sample ID: BH-4 (6)

## Lab Sample ID: 890-1502-4

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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)

## Lab Sample ID: 890-1502-5

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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		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 BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/08/21 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 13:43	1
Diesel Range Organics (Over C10-C28)	51.5		49.8		mg/Kg		11/02/21 11:44	11/03/21 13:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/02/21 11:44	11/03/21 13:43	1
o-Terphenyl	117		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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 6

## 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 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 BTEX 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 (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

## 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		11/02/21 11:44	11/03/21 14:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 14:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	11/02/21 11:44	11/03/21 14:03	1
o-Terphenyl	123		70 - 130	11/02/21 11:44	11/03/21 14:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	534		4.95		mg/Kg			11/07/21 05:52	1

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

Sample Depth: 6

## 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 11:05	11/03/21 02:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 02:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	11/01/21 11:05	11/03/21 02:50	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: BH-7 (6)

Lab Sample ID: 890-1502-7

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

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

## 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			11/08/21 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 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
Oil 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
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

## Method: 300.0 - Anions, Ion 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)

Lab Sample ID: 890-1502-8

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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		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

## 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 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

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## Client Sample Results

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

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

## 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

Sample Depth: 6

## 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		11/02/21 11:44	11/03/21 14:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 14:43	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1990		24.9		mg/Kg			11/07/21 06:07	5

## 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: 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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 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
Oil 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 - 130				11/02/21 11:44	11/03/21 15:03	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-9 (6)

## Lab Sample ID: 890-1502-9

Date Collected: 10/27/21 00:00

Matrix: Solid

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	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

Matrix: Solid

Date Received: 10/29/21 12:45

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		11/01/21 11:05	11/03/21 03:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 03:51	1
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 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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1500		24.9		mg/Kg			11/07/21 06:36	5

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## Client Sample Results

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

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

Client Sample ID: BH-11 (6)

Lab Sample ID: 890-1502-11

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	11/02/21 11:44	11/03/21 16:02	1
o-Terphenyl	123		70 - 130	11/02/21 11:44	11/03/21 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1330		4.95		mg/Kg			11/07/21 06:44	1

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

Sample Depth: 6

## 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 11:05	11/03/21 05:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 05:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 05:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130	11/01/21 11:05	11/03/21 05:34	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 6

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

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

## 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/02/21 11:44	11/03/21 16:22	1
o-Terphenyl	112		70 - 130				11/02/21 11:44	11/03/21 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1170		4.95		mg/Kg			11/07/21 06:51	1

Client Sample ID: BH-13 (6)

Lab Sample ID: 890-1502-13

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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

## 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 (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

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

## Client Sample ID: BH-13 (6)

## Lab Sample ID: 890-1502-13

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 16:42	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1370		25.2		mg/Kg			11/07/21 14:10	5

## 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

Sample Depth: 6

## 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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 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
Oil 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
o-Terphenyl	113		70 - 130				11/02/21 11:44	11/03/21 17:02	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

Sample Depth: 6

## Method: 300.0 - Anions, Ion Chromatography - 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

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 11:05	11/03/21 06:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 11:05	11/03/21 06:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130				11/01/21 11:05	11/03/21 06:35	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/01/21 11:05	11/03/21 06:35	1

## Method: 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 (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

## 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		11/02/21 11:44	11/03/21 17:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 17:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				11/02/21 11:44	11/03/21 17:22	1
o-Terphenyl	123		70 - 130				11/02/21 11:44	11/03/21 17:22	1

## Method: 300.0 - Anions, Ion 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 6

## 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		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	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	11/01/21 11:05	11/03/21 06:55	1
1,4-Difluorobenzene (Surr)	82		70 - 130	11/01/21 11:05	11/03/21 06:55	1

## Method: Total BTEX - Total BTEX Calculation

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

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

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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 17:42	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 17:42	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 11:44	11/03/21 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	11/02/21 11:44	11/03/21 17:42	1
o-Terphenyl	113		70 - 130	11/02/21 11:44	11/03/21 17:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3560		25.1		mg/Kg			11/07/21 07:35	5

Client Sample ID: BH-17 (6)

Lab Sample ID: 890-1502-17

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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

## Client Sample Results

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

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

Client Sample ID: BH-17 (6)

Lab Sample ID: 890-1502-17

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

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

## 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:03	1
Oil 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
1-Chlorooctane	102		70 - 130				11/02/21 11:44	11/03/21 18:03	1
o-Terphenyl	113		70 - 130				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
Chloride	3350		25.3		mg/Kg			11/07/21 07:43	5

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

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		11/01/21 11:05	11/03/21 07:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 11:05	11/03/21 07:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 11:05	11/03/21 07:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	11/01/21 11:05	11/03/21 07:36	1
1,4-Difluorobenzene (Surr)	98		70 - 130	11/01/21 11:05	11/03/21 07:36	1

## Method: 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 (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 11:44	11/03/21 18:22	1
Oil 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 Chromatography - 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)

Lab Sample ID: 890-1502-19

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 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
Oil 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 - 130				11/02/21 11:44	11/03/21 18:42	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

## Client Sample ID: BH-19 (6)

Lab Sample ID: 890-1502-19

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## Method: 300.0 - Anions, Ion Chromatography - 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

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 11:05	11/03/21 08:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 11:05	11/03/21 08:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				11/01/21 11:05	11/03/21 08:17	1
1,4-Difluorobenzene (Surr)	94		70 - 130				11/01/21 11:05	11/03/21 08:17	1

## 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 (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 Organics (DRO) (GC)

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

## 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-21 (6)

Lab Sample ID: 890-1502-21

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

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 Calculation

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

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

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 11:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 11:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	11/02/21 14:45	11/03/21 11:27	1
o-Terphenyl	123		70 - 130	11/02/21 14:45	11/03/21 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	169		5.00		mg/Kg			11/07/21 08:27	1

Client Sample ID: BH-22 (6)

Lab Sample ID: 890-1502-22

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 12:05	11/02/21 18:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 18:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	11/01/21 12:05	11/02/21 18:35	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-22 (6)

Lab Sample ID: 890-1502-22

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## Method: 8021B - Volatile Organic 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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 12:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 12:32	1
Oil 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
1-Chlorooctane	103		70 - 130				11/02/21 14:45	11/03/21 12:32	1
o-Terphenyl	117		70 - 130				11/02/21 14:45	11/03/21 12:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1220		4.96		mg/Kg			11/07/21 08:35	1

Client Sample ID: BH-23 (6)

Lab Sample ID: 890-1502-23

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 12:05	11/02/21 18:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 18:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/02/21 18:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/01/21 12:05	11/02/21 18:56	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/01/21 12:05	11/02/21 18:56	1

## Method: Total 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 (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

Sample Depth: 6

## 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		11/02/21 14:45	11/03/21 12:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 12:53	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		5.05		mg/Kg			11/07/21 08:42	1

## Client Sample ID: BH-24 (6)

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

## 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 12:05	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 (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

## 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		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
Oil 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 - 130				11/02/21 14:45	11/03/21 13:14	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

## 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

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/02/21 19:37	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/02/21 19:37	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/02/21 19:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				11/01/21 12:05	11/02/21 19:37	1
1,4-Difluorobenzene (Surr)	97		70 - 130				11/01/21 12:05	11/02/21 19:37	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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 13:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 13:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/02/21 14:45	11/03/21 13:36	1
o-Terphenyl	122		70 - 130				11/02/21 14:45	11/03/21 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	447	F1	4.99		mg/Kg			11/07/21 09:49	1

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## Client Sample Results

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

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

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

Sample Depth: 15

## 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		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	1

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 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

## 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

## 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		11/02/21 14:45	11/03/21 13:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 13:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	11/02/21 14:45	11/03/21 13:57	1
o-Terphenyl	119		70 - 130	11/02/21 14:45	11/03/21 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1450		25.2		mg/Kg			11/07/21 10:11	5

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 (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 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)	112		70 - 130	11/01/21 12:05	11/02/21 20:17	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

Job ID: 890-1502-1  
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 (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	11/01/21 12:05	11/02/21 20:17	1

## Method: Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 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
Oil 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
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, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	372		4.98		mg/Kg			11/07/21 10:18	1

Client Sample ID: BH-28 (15)

Lab Sample ID: 890-1502-28

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:05	11/02/21 20:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:05	11/02/21 20:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:05	11/02/21 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	11/01/21 12:05	11/02/21 20:38	1
1,4-Difluorobenzene (Surr)	104		70 - 130	11/01/21 12:05	11/02/21 20:38	1

## Method: Total 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 (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

Sample Depth: 15

## 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		11/02/21 14:45	11/03/21 14:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 14:39	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		4.95		mg/Kg			11/07/21 10:26	1

## Client Sample ID: BH-29 (15)

## Lab Sample ID: 890-1502-29

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00202	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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 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
Oil 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-29 (15)

## Lab Sample ID: 890-1502-29

Date Collected: 10/27/21 00:00

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	139		4.97		mg/Kg			11/07/21 10:33	1

## Client Sample ID: BH-30 (15)

## Lab Sample ID: 890-1502-30

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00201	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

## 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 15:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 15:21	1
Oil 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-Terphenyl	136	S1+	70 - 130				11/02/21 14:45	11/03/21 15:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		5.00		mg/Kg			11/07/21 10:56	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-31 (15)

Lab Sample ID: 890-1502-31

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:05	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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	11/02/21 14:45	11/03/21 16:03	1
o-Terphenyl	123		70 - 130	11/02/21 14:45	11/03/21 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	689		4.99		mg/Kg			11/07/21 11:03	1

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

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 12:05	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	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

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

Sample Depth: 15

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

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 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			11/05/21 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130				11/02/21 14:45	11/03/21 16:24	1
o-Terphenyl	150	S1+	70 - 130				11/02/21 14:45	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	833		5.00		mg/Kg			11/07/21 11:10	1

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

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 12:05	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

## 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 (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

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## Client Sample Results

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

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

## 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

Sample Depth: 15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 16:46	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	504		5.01		mg/Kg			11/07/21 11:18	1

## Client Sample ID: BH-34 (15)

## Lab Sample ID: 890-1502-34

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				11/01/21 12:05	11/03/21 00:09	1
1,4-Difluorobenzene (Surr)	100		70 - 130				11/01/21 12:05	11/03/21 00:09	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/09/21 10:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 17:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 17:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130				11/02/21 14:45	11/03/21 17:07	1
o-Terphenyl	152	S1+	70 - 130				11/02/21 14:45	11/03/21 17:07	1

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## Client Sample Results

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

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

## Client Sample ID: BH-34 (15)

Lab Sample ID: 890-1502-34

Date Collected: 10/27/21 00:00

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	140		4.98		mg/Kg			11/07/21 11:25	1

## 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

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 12:05	11/03/21 00:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:05	11/03/21 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				11/01/21 12:05	11/03/21 00:29	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:05	11/03/21 00:29	1

## Method: Total BTEX - Total BTEX Calculation

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

## Method: 8015 NM - Diesel Range Organics (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

## 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		11/02/21 14:45	11/03/21 17:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 17:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/02/21 14:45	11/03/21 17:28	1
o-Terphenyl	132	S1+	70 - 130				11/02/21 14:45	11/03/21 17:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	333	F1	5.05		mg/Kg			11/07/21 11:33	1

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## Client Sample Results

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

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

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

Sample Depth: 15

## 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		11/01/21 12:05	11/03/21 00:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:05	11/03/21 00:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:05	11/03/21 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	11/01/21 12:05	11/03/21 00:49	1
1,4-Difluorobenzene (Surr)	109		70 - 130	11/01/21 12:05	11/03/21 00:49	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		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	<49.8	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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 17:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 17:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	11/02/21 14:45	11/03/21 17:49	1
o-Terphenyl	110		70 - 130	11/02/21 14:45	11/03/21 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	286		4.99		mg/Kg			11/07/21 11:55	1

Client Sample ID: BH-37 (15)

Lab Sample ID: 890-1502-37

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00201	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)	117		70 - 130	11/01/21 12:05	11/03/21 01:10	1

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## Client Sample Results

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

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

Client Sample ID: BH-37 (15)

Lab Sample ID: 890-1502-37

Date Collected: 10/27/21 00:00

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)	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	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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:11	1
Oil 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				11/02/21 14:45	11/03/21 18:11	1
o-Terphenyl	112		70 - 130				11/02/21 14:45	11/03/21 18:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4260		24.8		mg/Kg			11/07/21 12:02	5

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

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 12:05	11/03/21 01:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 01:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/03/21 01:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	11/01/21 12:05	11/03/21 01:30	1
1,4-Difluorobenzene (Surr)	118		70 - 130	11/01/21 12:05	11/03/21 01:30	1

## Method: Total BTEX - Total BTEX Calculation

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

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

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

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## Client Sample Results

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

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

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

Sample Depth: 15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				11/02/21 14:45	11/03/21 18:32	1
o-Terphenyl	117		70 - 130				11/02/21 14:45	11/03/21 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2030		24.9		mg/Kg			11/07/21 12:25	5

Client Sample ID: BH-39 (15)

Lab Sample ID: 890-1502-39

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 12:05	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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 14:45	11/03/21 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/02/21 14:45	11/03/21 18:53	1
o-Terphenyl	117		70 - 130				11/02/21 14:45	11/03/21 18:53	1

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## Client Sample Results

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

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

## Client Sample ID: BH-39 (15)

Lab Sample ID: 890-1502-39

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## Method: 300.0 - Anions, Ion Chromatography - 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

## 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 12:05	11/03/21 02:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:05	11/03/21 02:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
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 Organics (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 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
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 14:45	11/03/21 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				11/02/21 14:45	11/03/21 19:15	1
o-Terphenyl	110		70 - 130				11/02/21 14:45	11/03/21 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1190		5.04		mg/Kg			11/07/21 12:39	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-41 (15)

Lab Sample ID: 890-1502-41

Date Collected: 10/27/21 00:00

Matrix: Solid

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 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 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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 11:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 11:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	11/02/21 16:07	11/03/21 11:27	1
o-Terphenyl	95		70 - 130	11/02/21 16:07	11/03/21 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	702		4.96		mg/Kg			11/07/21 12:47	1

Client Sample ID: BH-42 (15)

Lab Sample ID: 890-1502-42

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:11	11/04/21 02:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 02:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	11/01/21 12:11	11/04/21 02:46	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-42 (15)

Lab Sample ID: 890-1502-42

Date Collected: 10/27/21 00:00

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	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			11/05/21 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 12:32	1
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	Qualifier	RL	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)

Lab Sample ID: 890-1502-43

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:11	11/04/21 03:14	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:11	11/04/21 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	11/01/21 12:11	11/04/21 03:14	1
1,4-Difluorobenzene (Surr)	215	S1+	70 - 130	11/01/21 12:11	11/04/21 03:14	1

## Method: 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	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

## Client Sample Results

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

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

## Client Sample ID: BH-43 (15)

## Lab Sample ID: 890-1502-43

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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		11/02/21 16:07	11/03/21 12:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 12:53	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2440		24.9		mg/Kg			11/07/21 13:02	5

## Client Sample ID: BH-44 (15)

## Lab Sample ID: 890-1502-44

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00201	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 (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

## 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		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
Oil 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
o-Terphenyl	116		70 - 130				11/02/21 16:07	11/03/21 13:14	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

## Client Sample ID: BH-44 (15)

Lab Sample ID: 890-1502-44

Date Collected: 10/27/21 00:00

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	465		5.00		mg/Kg			11/07/21 13:09	1

## Client Sample ID: BH-45 (15)

Lab Sample ID: 890-1502-45

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:11	11/04/21 04:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 04:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:11	11/04/21 04:08	1
1,4-Difluorobenzene (Surr)	203	S1+	70 - 130				11/01/21 12:11	11/04/21 04:08	1

## Method: Total BTEX - Total 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 13:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 13:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/02/21 16:07	11/03/21 13:36	1
o-Terphenyl	112		70 - 130				11/02/21 16:07	11/03/21 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	284	F1	4.95		mg/Kg			11/08/21 04:30	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

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 12:11	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 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 (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

## 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		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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2560		25.1		mg/Kg			11/08/21 04:53	5

Client Sample ID: BH-47 (15)

Lab Sample ID: 890-1502-47

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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 12:11	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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-47 (15)

Lab Sample ID: 890-1502-47

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	211	S1+	70 - 130	11/01/21 12:11	11/04/21 05:03	1

## Method: Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 14:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 14:18	1
Oil 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
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	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		4.98		mg/Kg			11/08/21 05:00	1

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

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 12:11	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

## 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	75.2		50.0		mg/Kg			11/05/21 13:50	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 15

## 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		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
Oil 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 - 130				11/02/21 16:07	11/03/21 14:39	1

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

Lab Sample ID: 890-1502-49

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:11	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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 15:00	1
o-Terphenyl	106		70 - 130				11/02/21 16:07	11/03/21 15:00	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

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)

Lab Sample ID: 890-1502-50

Date Collected: 10/27/21 00:00

Matrix: Solid

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	0.0214		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 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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1330		4.99		mg/Kg			11/08/21 05:39	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: BH-51 (15)

Lab Sample ID: 890-1502-51

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:11	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 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			11/05/21 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1750		25.2		mg/Kg			11/08/21 05:46	5

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

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 12:11	11/04/21 08:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 08:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:11	11/04/21 08:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	11/01/21 12:11	11/04/21 08:36	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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)	233	S1+	70 - 130	11/01/21 12:11	11/04/21 08:36	1

## Method: Total BTEX - Total BTEX Calculation

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

## 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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				11/02/21 16:07	11/03/21 16:24	1
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)

Lab Sample ID: 890-1502-53

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/03/21 08:30	11/04/21 11:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/03/21 08:30	11/04/21 11:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	11/03/21 08:30	11/04/21 11:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/03/21 08:30	11/04/21 11:48	1

## Method: Total BTEX - Total BTEX Calculation

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

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

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

## Client Sample Results

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

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

## 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

Sample Depth: 15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 16:46	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	960		5.00		mg/Kg			11/08/21 06:02	1

## 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

## 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 12:11	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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 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
Oil 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

## Method: 300.0 - Anions, Ion Chromatography - 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

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:11	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

## 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 (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

## 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		11/02/21 16:07	11/03/21 17:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 17:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/02/21 16:07	11/03/21 17:28	1
o-Terphenyl	99		70 - 130				11/02/21 16:07	11/03/21 17:28	1

## Method: 300.0 - Anions, Ion Chromatography - 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 15

## Method: 8021B - Volatile 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 12:11	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 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	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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 17:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 17:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	11/02/21 16:07	11/03/21 17:49	1
o-Terphenyl	113		70 - 130	11/02/21 16:07	11/03/21 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2450		25.0		mg/Kg			11/08/21 06:40	5

Client Sample ID: BH-57 (15)

Lab Sample ID: 890-1502-57

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/04/21 11:11	11/05/21 00:32	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/04/21 11:11	11/05/21 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	11/04/21 11:11	11/05/21 00:32	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: BH-57 (15)

Lab Sample ID: 890-1502-57

Date Collected: 10/27/21 00:00

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)	221	S1+	70 - 130	11/04/21 11:11	11/05/21 00:32	1

## Method: Total BTEX - Total BTEX Calculation

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

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

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/02/21 16:07	11/03/21 18:11	1
o-Terphenyl	102		70 - 130				11/02/21 16:07	11/03/21 18:11	1

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

Lab Sample ID: 890-1502-58

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/04/21 11:11	11/05/21 00:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/04/21 11:11	11/05/21 00:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/04/21 11:11	11/05/21 00:58	1
1,4-Difluorobenzene (Surr)	243	S1+	70 - 130	11/04/21 11:11	11/05/21 00:58	1

## Method: 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 (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:32	1
Oil 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 Chromatography - 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

Date Collected: 10/27/21 00:00

Matrix: Solid

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		11/04/21 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/02/21 16:07	11/03/21 18:53	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
Oil 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-59 (15)

Lab Sample ID: 890-1502-59

Date Collected: 10/27/21 00:00

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	1760		24.9		mg/Kg			11/08/21 07:18	5

## Client Sample ID: BH-60 (15)

Lab Sample ID: 890-1502-60

Date Collected: 10/27/21 00:00

Matrix: Solid

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		11/04/21 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

## 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 19:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/02/21 16:07	11/03/21 19:15	1
Oil 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-Terphenyl	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

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## Client Sample Results

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

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

Client Sample ID: BH-61 (15)

Lab Sample ID: 890-1502-61

Date Collected: 10/27/21 00:00

Matrix: Solid

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 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 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	49.9		mg/Kg		11/03/21 10:38	11/03/21 21:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	49.9		mg/Kg		11/03/21 10:38	11/03/21 21:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 21:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	50	S1-	70 - 130	11/03/21 10:38	11/03/21 21:06	1
o-Terphenyl	34	S1-	70 - 130	11/03/21 10:38	11/03/21 21:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4660		49.9		mg/Kg			11/08/21 07:33	10

Client Sample ID: BH-62 (15)

Lab Sample ID: 890-1502-62

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00202	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)	118		70 - 130	11/01/21 12:13	11/03/21 06:08	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-62 (15)

Lab Sample ID: 890-1502-62

Date Collected: 10/27/21 00:00

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)	103		70 - 130	11/01/21 12:13	11/03/21 06:08	1

## Method: Total BTEX - Total BTEX Calculation

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

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

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 22:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 22:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/03/21 22:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				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	Result	Qualifier	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)

Lab Sample ID: 890-1502-63

Date Collected: 10/27/21 00:00

Matrix: Solid

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 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: 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 (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

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

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

Sample Depth: 15

## 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		11/03/21 10:38	11/03/21 22:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 22:39	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1000		4.97		mg/Kg			11/08/21 07:49	1

Client Sample ID: BH-64 (15)

Lab Sample ID: 890-1502-64

Date Collected: 10/27/21 00:00

Matrix: Solid

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 12:13	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 (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

## 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		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
Oil 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
o-Terphenyl	103		70 - 130				11/03/21 10:38	11/03/21 23:00	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-64 (15)

Lab Sample ID: 890-1502-64

Date Collected: 10/27/21 00:00

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	2760		24.9		mg/Kg			11/08/21 07:56	5

## Client Sample ID: BH-65 (15)

Lab Sample ID: 890-1502-65

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## Method: 8021B - Volatile 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 07:09	1
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 Organics (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/03/21 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	823	F1	4.99		mg/Kg			11/08/21 08:58	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

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 12:13	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
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	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 (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		11/03/21 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	522		4.95		mg/Kg			11/08/21 09:21	1

Client Sample ID: BH-67 (15)

Lab Sample ID: 890-1502-67

Date Collected: 10/27/21 00:00

Matrix: Solid

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	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 07:50	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:13	11/03/21 07:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	11/01/21 12:13	11/03/21 07:50	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-67 (15)

Lab Sample ID: 890-1502-67

Date Collected: 10/27/21 00:00

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)	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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 00:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 00:02	1
Oil 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
o-Terphenyl	110		70 - 130				11/03/21 10:38	11/04/21 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	854		4.98		mg/Kg			11/08/21 09:29	1

Client Sample ID: BH-68 (15)

Lab Sample ID: 890-1502-68

Date Collected: 10/28/21 00:00

Matrix: Solid

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		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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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		11/03/21 10:38	11/04/21 00:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/04/21 00:23	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1930		25.2		mg/Kg			11/08/21 09:36	5

Client Sample ID: BH-69 (15)

Lab Sample ID: 890-1502-69

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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		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 (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 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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 00:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				11/03/21 10:38	11/04/21 00:44	1
o-Terphenyl	114		70 - 130				11/03/21 10:38	11/04/21 00:44	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

## Client Sample ID: BH-69 (15)

Lab Sample ID: 890-1502-69

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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)

Lab Sample ID: 890-1502-70

Date Collected: 10/28/21 00:00

Matrix: Solid

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 08:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 08:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:13	11/03/21 08:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:13	11/03/21 08:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130				11/01/21 12:13	11/03/21 08:51	1
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 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 - 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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 01:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	921		4.97		mg/Kg			11/08/21 10:07	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-71 (15)

Lab Sample ID: 890-1502-71

Date Collected: 10/28/21 00:00

Matrix: Solid

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 12:13	11/03/21 10:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
Ethylbenzene	0.00378		0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 10:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 10:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/01/21 12:13	11/03/21 10:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130	11/01/21 12:13	11/03/21 10:40	1

## Method: Total BTEX - Total BTEX 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 (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 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 10:38	11/04/21 01:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 01:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/03/21 10:38	11/04/21 01:48	1
o-Terphenyl	107		70 - 130	11/03/21 10:38	11/04/21 01:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	452		4.95		mg/Kg			11/08/21 10:15	1

Client Sample ID: BH-72 (15)

Lab Sample ID: 890-1502-72

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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		11/01/21 12:13	11/03/21 11:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:13	11/03/21 11:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:13	11/03/21 11:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	11/01/21 12:13	11/03/21 11:00	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-72 (15)

Lab Sample ID: 890-1502-72

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	11/01/21 12:13	11/03/21 11:00	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	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 (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 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 10:38	11/04/21 02:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				11/03/21 10:38	11/04/21 02:09	1
o-Terphenyl	128		70 - 130				11/03/21 10:38	11/04/21 02:09	1

## Method: 300.0 - Anions, Ion 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)

Lab Sample ID: 890-1502-73

Date Collected: 10/28/21 00:00

Matrix: Solid

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	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:13	11/03/21 11:21	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:13	11/03/21 11:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	11/01/21 12:13	11/03/21 11:21	1
1,4-Difluorobenzene (Surr)	102		70 - 130	11/01/21 12:13	11/03/21 11:21	1

## Method: Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.5		49.9		mg/Kg			11/05/21 13:50	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-73 (15)

## Lab Sample ID: 890-1502-73

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 10:38	11/04/21 02:31	1
Diesel Range Organics (Over C10-C28)	58.5		49.9		mg/Kg		11/03/21 10:38	11/04/21 02:31	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2790		24.8		mg/Kg			11/08/21 10:30	5

## Client Sample ID: BH-74 (15)

## Lab Sample ID: 890-1502-74

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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 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 (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 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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				11/03/21 10:38	11/04/21 02:52	1
o-Terphenyl	102		70 - 130				11/03/21 10:38	11/04/21 02:52	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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	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

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 12:13	11/03/21 12:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:13	11/03/21 12:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:13	11/03/21 12:02	1
1,4-Difluorobenzene (Surr)	79		70 - 130				11/01/21 12:13	11/03/21 12:02	1

## Method: Total BTEX - Total BTEX Calculation

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

## 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

## 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		11/03/21 10:38	11/04/21 03:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/04/21 03:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/04/21 03:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/03/21 10:38	11/04/21 03:14	1
o-Terphenyl	109		70 - 130				11/03/21 10:38	11/04/21 03:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	982	F1	4.98		mg/Kg			11/08/21 10:45	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

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

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 12:13	11/03/21 12:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:22	1
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	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:13	11/03/21 12:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	11/01/21 12:13	11/03/21 12:22	1
1,4-Difluorobenzene (Surr)	104		70 - 130	11/01/21 12:13	11/03/21 12:22	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	<49.8	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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 03:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 03:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 03:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	11/03/21 10:38	11/04/21 03:36	1
o-Terphenyl	96		70 - 130	11/03/21 10:38	11/04/21 03:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1190		5.00		mg/Kg			11/08/21 11:08	1

Client Sample ID: BH-77 (15)

Lab Sample ID: 890-1502-77

Date Collected: 10/28/21 00:00

Matrix: Solid

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 12:13	11/03/21 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:13	11/03/21 12:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:13	11/03/21 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/01/21 12:13	11/03/21 12:42	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-77 (15)

Lab Sample ID: 890-1502-77

Date Collected: 10/28/21 00:00

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)	71		70 - 130	11/01/21 12:13	11/03/21 12:42	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 (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 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 10:38	11/04/21 03:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 03:57	1
Oil 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
o-Terphenyl	105		70 - 130				11/03/21 10:38	11/04/21 03:57	1

## 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)

Lab Sample ID: 890-1502-78

Date Collected: 10/28/21 00:00

Matrix: Solid

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	<0.00198	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		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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-78 (15)

## Lab Sample ID: 890-1502-78

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 10:38	11/04/21 04:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 10:38	11/04/21 04:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				11/03/21 10:38	11/04/21 04:18	1
o-Terphenyl	112		70 - 130				11/03/21 10:38	11/04/21 04:18	1

## Method: 300.0 - Anions, Ion Chromatography - 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

## 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		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 (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 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 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
Oil 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

## 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)

Lab Sample ID: 890-1502-80

Date Collected: 10/28/21 00:00

Matrix: Solid

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	<0.00198	U	0.00198		mg/Kg		11/01/21 12:13	11/03/21 13:44	1
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 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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 10:38	11/04/21 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	609		5.01		mg/Kg			11/08/21 11:54	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-81 (15)

Lab Sample ID: 890-1502-81

Date Collected: 10/28/21 00:00

Matrix: Solid

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 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 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 (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 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 11:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 11:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 11:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	11/03/21 11:37	11/04/21 11:05	1
o-Terphenyl	101		70 - 130	11/03/21 11:37	11/04/21 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	871		5.04		mg/Kg			11/08/21 12:02	1

Client Sample ID: BH-82 (15)

Lab Sample ID: 890-1502-82

Date Collected: 10/28/21 00:00

Matrix: Solid

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	<0.00198	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



## Client Sample Results

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

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

Client Sample ID: BH-82 (15)

Lab Sample ID: 890-1502-82

Date Collected: 10/28/21 00:00

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/03/21 11:37	11/04/21 12:11	1
o-Terphenyl	102		70 - 130				11/03/21 11:37	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)

Lab Sample ID: 890-1502-83

Date Collected: 10/28/21 00:00

Matrix: Solid

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 12:16	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

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00427		0.00400		mg/Kg			11/09/21 10:40	1

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

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

## Client Sample Results

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

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

## 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

Sample Depth: 15

## 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		11/03/21 11:37	11/04/21 12:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:32	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	775		5.05		mg/Kg			11/08/21 12:17	1

## Client Sample ID: BH-84 (15)

## Lab Sample ID: 890-1502-84

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 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 (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

## 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		11/03/21 11:37	11/04/21 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 12:55	1
Oil 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: BH-84 (15)

Lab Sample ID: 890-1502-84

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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

## 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 12:16	11/03/21 19:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:16	11/03/21 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				11/01/21 12:16	11/03/21 19:17	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/01/21 12:16	11/03/21 19:17	1

## 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 (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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 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
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				11/03/21 11:37	11/04/21 13:16	1
o-Terphenyl	106		70 - 130				11/03/21 11:37	11/04/21 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	656	F1	4.99		mg/Kg			11/09/21 12:52	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 15

## 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		11/01/21 12:16	11/03/21 19:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 12:16	11/03/21 19:37	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/01/21 12:16	11/03/21 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	11/01/21 12:16	11/03/21 19:37	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/01/21 12:16	11/03/21 19:37	1

## Method: Total BTEX - Total BTEX Calculation

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

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

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 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		11/03/21 11:37	11/04/21 13:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 13:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	11/03/21 11:37	11/04/21 13:38	1
o-Terphenyl	110		70 - 130	11/03/21 11:37	11/04/21 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1090		5.00		mg/Kg			11/09/21 13:15	1

Client Sample ID: BH-87 (15)

Lab Sample ID: 890-1502-87

Date Collected: 10/28/21 00:00

Matrix: Solid

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 12:16	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)	110		70 - 130	11/01/21 12:16	11/03/21 19:57	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-87 (15)

Lab Sample ID: 890-1502-87

Date Collected: 10/28/21 00:00

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)	98		70 - 130	11/01/21 12:16	11/03/21 19:57	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	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	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 13:59	1
Oil 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
1-Chlorooctane	93		70 - 130				11/03/21 11:37	11/04/21 13:59	1
o-Terphenyl	110		70 - 130				11/03/21 11:37	11/04/21 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1500		5.00		mg/Kg			11/09/21 13:22	1

Client Sample ID: BH-88 (15)

Lab Sample ID: 890-1502-88

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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 12:16	11/03/21 20:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 20:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	11/01/21 12:16	11/03/21 20:18	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/01/21 12:16	11/03/21 20:18	1

## Method: Total 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	<50.0	U	50.0		mg/Kg			11/08/21 15:54	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: BH-88 (15)

Lab Sample ID: 890-1502-88

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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		11/03/21 11:37	11/04/21 14:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 14:20	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390		25.2		mg/Kg			11/09/21 13:30	5

Client Sample ID: BH-89 (15)

Lab Sample ID: 890-1502-89

Date Collected: 10/28/21 00:00

Matrix: Solid

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	<0.00198	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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range 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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/03/21 11:37	11/04/21 14:41	1
o-Terphenyl	107		70 - 130				11/03/21 11:37	11/04/21 14:41	1

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## Client Sample Results

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

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

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

## 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)

Lab Sample ID: 890-1502-90

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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		11/01/21 12:16	11/03/21 20:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 20:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				11/01/21 12:16	11/03/21 20:59	1
1,4-Difluorobenzene (Surr)	126		70 - 130				11/01/21 12:16	11/03/21 20:59	1

## Method: Total BTEX - Total 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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range 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 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/03/21 11:37	11/04/21 15:03	1
o-Terphenyl	112		70 - 130				11/03/21 11:37	11/04/21 15:03	1

## Method: 300.0 - Anions, Ion 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: BH-91 (RS ) (6)

Lab Sample ID: 890-1502-91

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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		11/01/21 12:16	11/03/21 22:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/03/21 22:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/03/21 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	11/01/21 12:16	11/03/21 22:48	1
1,4-Difluorobenzene (Surr)	111		70 - 130	11/01/21 12:16	11/03/21 22:48	1

## Method: Total BTEX - Total 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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range 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 15:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	11/03/21 11:37	11/04/21 15:46	1
o-Terphenyl	107		70 - 130	11/03/21 11:37	11/04/21 15:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		5.01		mg/Kg			11/09/21 14:08	1

Client Sample ID: SW-1 (0-6)

Lab Sample ID: 890-1502-92

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

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ANALYSIS TABLE

## 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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: SW-1 (0-6)

Lab Sample ID: 890-1502-92

Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	122		70 - 130	11/01/21 12:16	11/03/21 23:09	1

## Method: Total BTEX - Total BTEX Calculation

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	331		49.9		mg/Kg			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	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
Oil 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
o-Terphenyl	106		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/Kg			11/07/21 02:54	5

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

Lab Sample ID: 890-1502-93

Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

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 23:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 23:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/03/21 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	11/01/21 12:16	11/03/21 23:29	1
1,4-Difluorobenzene (Surr)	74		70 - 130	11/01/21 12:16	11/03/21 23:29	1

## Method: Total BTEX - Total 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 (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 0 - 6

## 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 16:29	1
Diesel Range Organics (Over C10-C28)	74.3		49.9		mg/Kg		11/03/21 11:37	11/04/21 16:29	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.4		4.98		mg/Kg			11/07/21 03:16	1

Client Sample ID: SW-3 (0-6)

Lab Sample ID: 890-1502-94

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

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ANALYSIS TABLE

## 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 12:16	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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range 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 16:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 16:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/03/21 11:37	11/04/21 16:51	1
o-Terphenyl	106		70 - 130				11/03/21 11:37	11/04/21 16:51	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

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

Sample Depth: 0 - 6

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ANALYSIS TABLE

## 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

Sample Depth: 0 - 6

## 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 12:16	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

## 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 (DRO) (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 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		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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				11/03/21 11:37	11/04/21 17:14	1
o-Terphenyl	107		70 - 130				11/03/21 11:37	11/04/21 17:14	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			11/07/21 03:46	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 0 - 6

## Method: 8021B - Volatile 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 12:16	11/04/21 00:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:16	11/04/21 00:30	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/01/21 12:16	11/04/21 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	11/01/21 12:16	11/04/21 00:30	1
1,4-Difluorobenzene (Surr)	110		70 - 130	11/01/21 12:16	11/04/21 00:30	1

## Method: Total BTEX - Total 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

## Method: 8015 NM - Diesel Range Organics (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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 17:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 17:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	11/03/21 11:37	11/04/21 17:35	1
o-Terphenyl	122		70 - 130	11/03/21 11:37	11/04/21 17:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2250		24.9		mg/Kg			11/07/21 03:53	5

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

Lab Sample ID: 890-1502-97

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

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ANALYSIS TABLE

## 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	11/04/21 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)	112		70 - 130	11/01/21 12:16	11/04/21 00:51	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Lab Sample ID: 890-1502-97

Date Collected: 10/25/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	11/01/21 12:16	11/04/21 00:51	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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	988		49.9		mg/Kg			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 17:56	1
Diesel Range Organics (Over C10-C28)	988		49.9		mg/Kg		11/03/21 11:37	11/04/21 17:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/03/21 11:37	11/04/21 17:56	1
o-Terphenyl	98		70 - 130				11/03/21 11:37	11/04/21 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7870		49.8		mg/Kg			11/07/21 04:01	10

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

Lab Sample ID: 890-1502-98

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

## 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		11/01/21 12:16	11/04/21 01:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/01/21 12:16	11/04/21 01:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/01/21 12:16	11/04/21 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	11/01/21 12:16	11/04/21 01:11	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/01/21 12:16	11/04/21 01:11	1

## Method: Total BTEX - Total 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.9		49.9		mg/Kg			11/08/21 15:54	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Lab Sample ID: 890-1502-98

Date Collected: 10/26/21 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

## 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 18:17	1
Diesel Range Organics (Over C10-C28)	86.9		49.9		mg/Kg		11/03/21 11:37	11/04/21 18:17	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6430		50.0		mg/Kg			11/07/21 04:08	10

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

Lab Sample ID: 890-1502-99

Date Collected: 10/26/21 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

## 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	11/04/21 01:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/04/21 01:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				11/01/21 12:16	11/04/21 01:31	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/01/21 12:16	11/04/21 01:31	1

## 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	651		49.9		mg/Kg			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	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	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 11:37	11/04/21 18:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				11/03/21 11:37	11/04/21 18:39	1
o-Terphenyl	104		70 - 130				11/03/21 11:37	11/04/21 18:39	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Lab Sample ID: 890-1502-99

Date Collected: 10/26/21 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4070		25.0		mg/Kg			11/07/21 04:15	5

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

Lab Sample ID: 890-1502-100

Date Collected: 10/26/21 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

## 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	11/04/21 01:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:16	11/04/21 01:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				11/01/21 12:16	11/04/21 01:52	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/01/21 12:16	11/04/21 01:52	1

## Method: Total BTEX - Total BTEX Calculation

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

## Method: 8015 NM - Diesel Range Organics (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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 19:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 19:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 11:37	11/04/21 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				11/03/21 11:37	11/04/21 19:01	1
o-Terphenyl	112		70 - 130				11/03/21 11:37	11/04/21 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2870		24.8		mg/Kg			11/07/21 04:23	5

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: SW-10 (0-6)

Lab Sample ID: 890-1502-101

Date Collected: 10/26/21 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Toluene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.00399		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:28	1
Xylenes, Total	<0.00399	U F2 F1	0.00399		mg/Kg		11/01/21 12:18	11/04/21 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/01/21 12:18	11/04/21 05:28	1
1,4-Difluorobenzene (Surr)	92		70 - 130	11/01/21 12:18	11/04/21 05:28	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		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: 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 *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
Oil 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 Chromatography - 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)

Lab Sample ID: 890-1502-102

Date Collected: 10/26/21 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 0 - 6

## 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 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)	113		70 - 130	11/01/21 12:18	11/04/21 05:49	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

Sample Depth: 0 - 6

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

## 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: 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 *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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/03/21 13:15	11/04/21 12:11	1
o-Terphenyl	104		70 - 130				11/03/21 13:15	11/04/21 12:11	1

## Method: 300.0 - Anions, Ion 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)

Lab Sample ID: 890-1502-103

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

Sample Depth: 10

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		11/01/21 12:18	11/04/21 06:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130	11/01/21 12:18	11/04/21 06:09	1
1,4-Difluorobenzene (Surr)	113		70 - 130	11/01/21 12:18	11/04/21 06:09	1

## Method: Total BTEX - Total 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 (DRO) (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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: SW-12 (10)

## Lab Sample ID: 890-1502-103

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 10

## 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 *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 12:32	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1080		4.95		mg/Kg			11/08/21 09:46	1

## 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

## 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		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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/03/21 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
Oil 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 - 130				11/03/21 13:15	11/04/21 12:55	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

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

## Lab Sample ID: 890-1502-105

Date Collected: 10/26/21 00:00

Matrix: Solid

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 12:18	11/04/21 06:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/01/21 12:18	11/04/21 06:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				11/01/21 12:18	11/04/21 06:50	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/01/21 12:18	11/04/21 06:50	1

## 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.3		49.8		mg/Kg			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:16	1
Diesel Range Organics (Over C10-C28)	56.3		49.8		mg/Kg		11/03/21 13:15	11/04/21 13:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/03/21 13:15	11/04/21 13:16	1
o-Terphenyl	106		70 - 130				11/03/21 13:15	11/04/21 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		5.00		mg/Kg			11/08/21 10:07	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

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

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 07:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:10	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/01/21 12:18	11/04/21 07:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/01/21 12:18	11/04/21 07:10	1
1,4-Difluorobenzene (Surr)	57	S1-	70 - 130	11/01/21 12:18	11/04/21 07:10	1

## Method: Total BTEX - Total BTEX 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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 13:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 13:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	11/03/21 13:15	11/04/21 13:38	1
o-Terphenyl	100		70 - 130	11/03/21 13:15	11/04/21 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	209		4.97		mg/Kg			11/08/21 10:39	1

Client Sample ID: SW-16 (15)

Lab Sample ID: 890-1502-107

Date Collected: 10/26/21 00:00

Matrix: Solid

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 07:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 07:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/01/21 12:18	11/04/21 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	11/01/21 12:18	11/04/21 07:31	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

Client Sample ID: SW-16 (15)

Lab Sample ID: 890-1502-107

Date Collected: 10/26/21 00:00

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)	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 - Diesel Range Organics (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 (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 13:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				11/03/21 13:15	11/04/21 13:59	1
o-Terphenyl	105		70 - 130				11/03/21 13:15	11/04/21 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1170		4.96		mg/Kg			11/08/21 10:49	1

Client Sample ID: SW-17 (15)

Lab Sample ID: 890-1502-108

Date Collected: 10/26/21 00:00

Matrix: Solid

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	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	55.1		50.0		mg/Kg			11/08/21 15:54	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: SW-17 (15)

## Lab Sample ID: 890-1502-108

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 *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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2270		25.2		mg/Kg			11/08/21 11:00	5

## 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

## 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 12:18	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 (DRO) (GC)

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

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

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: SW-18 (15)

## Lab Sample ID: 890-1502-109

Date Collected: 10/26/21 00:00

Matrix: Solid

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

## Client Sample ID: SW-19 (15)

## Lab Sample ID: 890-1502-110

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## Method: 8021B - Volatile 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 12:18	11/04/21 08:32	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/01/21 12:18	11/04/21 08:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				11/01/21 12:18	11/04/21 08:32	1
1,4-Difluorobenzene (Surr)	83		70 - 130				11/01/21 12:18	11/04/21 08:32	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/09/21 10:40	1

## Method: 8015 NM - Diesel Range 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: 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 *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/03/21 13:15	11/04/21 15:03	1
o-Terphenyl	103		70 - 130				11/03/21 13:15	11/04/21 15:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1000		4.95		mg/Kg			11/08/21 11:20	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

Job ID: 890-1502-1  
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

Sample Depth: 15

## 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		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 BTEX Calculation

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

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

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

## Method: 8015B NM - Diesel Range Organics (DRO) (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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	11/03/21 13:15	11/04/21 15:46	1
o-Terphenyl	105		70 - 130	11/03/21 13:15	11/04/21 15:46	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 11:31	1

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

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 12:18	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

## Client Sample Results

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

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

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

Sample Depth: 15

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	11/01/21 12:18	11/04/21 10:41	1

## 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	154		49.9		mg/Kg			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:07	1
Diesel Range Organics (Over C10-C28)	154		49.9		mg/Kg		11/03/21 13:15	11/04/21 16:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/03/21 13:15	11/04/21 16:07	1
o-Terphenyl	107		70 - 130				11/03/21 13:15	11/04/21 16:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5770		50.1		mg/Kg			11/08/21 12:02	10

Client Sample ID: SW-22 (15)

Lab Sample ID: 890-1502-113

Date Collected: 10/26/21 00:00

Matrix: Solid

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 12:18	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

## 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

## 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

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## Client Sample Results

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

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

## 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

Sample Depth: 15

## 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 *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 16:29	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9240		49.8		mg/Kg			11/08/21 12:12	10

## Client Sample ID: SW-23 (15)

## 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

## 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		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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range Organics (DRO) (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
Oil 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 - 130				11/03/21 13:15	11/04/21 16:51	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## 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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1070		4.96		mg/Kg			11/08/21 12:43	1

## Client Sample ID: SW-24 (15)

## Lab Sample ID: 890-1502-115

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 12:18	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)	110		70 - 130				11/01/21 12:18	11/04/21 11:42	1
1,4-Difluorobenzene (Surr)	114		70 - 130				11/01/21 12:18	11/04/21 11:42	1

## Method: Total BTEX - Total 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

## 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			11/08/21 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/03/21 13:15	11/04/21 17:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 17:14	1
Oil 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

## 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

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## Client Sample Results

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

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

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

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 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 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 10:58	1

## Method: 8015 NM - Diesel Range Organics (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 (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		11/03/21 13:15	11/04/21 17:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 17:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	11/03/21 13:15	11/04/21 17:35	1
o-Terphenyl	105		70 - 130	11/03/21 13:15	11/04/21 17:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5920		49.9		mg/Kg			11/08/21 13:04	10

Client Sample ID: SW-26 (15)

Lab Sample ID: 890-1502-117

Date Collected: 10/26/21 00:00

Matrix: Solid

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	<0.00198	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)	118		70 - 130	11/01/21 12:18	11/04/21 12:23	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: SW-26 (15)

Lab Sample ID: 890-1502-117

Date Collected: 10/26/21 00:00

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)	96		70 - 130	11/01/21 12:18	11/04/21 12:23	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 10:58	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: 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 *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 17:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 17:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				11/03/21 13:15	11/04/21 17:56	1
o-Terphenyl	103		70 - 130				11/03/21 13:15	11/04/21 17:56	1

## 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)

Lab Sample ID: 890-1502-118

Date Collected: 10/26/21 00:00

Matrix: Solid

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	0.00206		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

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00411		0.00402		mg/Kg			11/09/21 10:58	1

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

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

## Client Sample Results

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

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

## Client Sample ID: SW-27 (15)

## Lab Sample ID: 890-1502-118

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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 *1	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:17	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9970		50.0		mg/Kg			11/08/21 13:25	10

## Client Sample ID: SW-28 (15)

## Lab Sample ID: 890-1502-119

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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		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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range Organics (DRO) (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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:15	11/04/21 18:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				11/03/21 13:15	11/04/21 18:39	1
o-Terphenyl	83		70 - 130				11/03/21 13:15	11/04/21 18:39	1

Eurofins Xenco, Carlsbad



## Client Sample Results

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

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

## Client Sample ID: SW-28 (15)

## Lab Sample ID: 890-1502-119

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 15

## 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

Date Collected: 10/26/21 00:00

Matrix: Solid

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		11/04/21 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

## Method: 8015 NM - Diesel Range Organics (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 (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		11/03/21 13:15	11/04/21 19:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 19:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/03/21 13:15	11/04/21 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/03/21 13:15	11/04/21 19:01	1
o-Terphenyl	99		70 - 130				11/03/21 13:15	11/04/21 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	416		5.00		mg/Kg			11/08/21 13:46	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: SW-30 (RS) (6)

Lab Sample ID: 890-1502-121

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

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

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 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 10:58	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: 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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 10:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	11/03/21 13:58	11/04/21 10:53	1
o-Terphenyl	108		70 - 130	11/03/21 13:58	11/04/21 10:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	169		4.97		mg/Kg			11/09/21 14:45	1

Client Sample ID: SW-31 (RS) (4)

Lab Sample ID: 890-1502-122

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 4

## 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		11/01/21 11:07	11/02/21 00:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/01/21 11:07	11/02/21 00:00	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/01/21 11:07	11/02/21 00:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	11/01/21 11:07	11/02/21 00:00	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

Client Sample ID: SW-31 (RS) (4)

Lab Sample ID: 890-1502-122

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 4

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

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

## 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 (DRO) (GC)

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

## Method: 8015B NM - Diesel Range 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 13:58	11/04/21 11:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/03/21 13:58	11/04/21 11:55	1
Oil 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				11/03/21 13:58	11/04/21 11:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.99		mg/Kg			11/09/21 14:53	1

Client Sample ID: SW-32 (RS) (6)

Lab Sample ID: 890-1502-123

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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 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

## 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

## 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			11/08/21 15:54	1

Eurofins Xenco, Carlsbad

## Client Sample Results

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

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

## Client Sample ID: SW-32 (RS) (6)

## Lab Sample ID: 890-1502-123

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 6

## 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		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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	582		5.00		mg/Kg			11/09/21 15:01	1

## Client Sample ID: SW-33 (RS) (8)

## Lab Sample ID: 890-1502-124

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Sample Depth: 8

## Method: 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 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 (DRO) (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 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		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
Oil 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 - 130				11/03/21 13:58	11/04/21 12:36	1

Eurofins Xenco, Carlsbad

Client Sample Results

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

Job ID: 890-1502-1  
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  
Sample Depth: 8

Lab Sample ID: 890-1502-124  
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - 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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Surrogate Summary

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

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-1502-1	BH-1 (6)	118	73
890-1502-1 MS	BH-1 (6)	111	105
890-1502-1 MSD	BH-1 (6)	109	103
890-1502-2	BH-2 (6)	120	98
890-1502-3	BH-3 (6)	122	70
890-1502-4	BH-4 (6)	124	67 S1-
890-1502-5	BH-5 (6)	140 S1+	97
890-1502-6	BH-6 (6)	136 S1+	104
890-1502-7	BH-7 (6)	123	97
890-1502-8	BH-8 (6)	146 S1+	69 S1-
890-1502-9	BH-9 (6)	130	93
890-1502-10	BH-10 (6)	136 S1+	105
890-1502-11	BH-11 (6)	112	76
890-1502-12	BH-12 (6)	137 S1+	98
890-1502-13	BH-13 (6)	120	96
890-1502-14	BH-14 (6)	130	95
890-1502-15	BH-15 (6)	137 S1+	98
890-1502-16	BH-16 (6)	110	82
890-1502-17	BH-17 (6)	123	98
890-1502-18	BH-18 (6)	127	98
890-1502-19	BH-19 (6)	117	81
890-1502-20	BH-20 (6)	113	94
890-1502-21	BH-21 (6)	99	72
890-1502-21 MS	BH-21 (6)	133 S1+	111
890-1502-21 MSD	BH-21 (6)	113	104
890-1502-22	BH-22 (6)	130	98
890-1502-23	BH-23 (6)	116	100
890-1502-24	BH-24 (6)	126	96
890-1502-25	BH-25 (15)	122	97
890-1502-26	BH-26 (15)	123	107
890-1502-27	BH-27 (15)	112	85
890-1502-28	BH-28 (15)	121	104
890-1502-29	BH-29 (15)	123	91
890-1502-30	BH-30 (15)	71	70
890-1502-31	BH-31 (15)	114	111
890-1502-32	BH-32 (15)	86	93
890-1502-33	BH-33 (15)	132 S1+	108
890-1502-34	BH-34 (15)	124	100
890-1502-35	BH-35 (15)	127	110
890-1502-36	BH-36 (15)	128	109
890-1502-37	BH-37 (15)	117	101
890-1502-38	BH-38 (15)	129	118
890-1502-39	BH-39 (15)	117	100
890-1502-40	BH-40 (15)	115	100
890-1502-41	BH-41 (15)	132 S1+	110
890-1502-41 MS	BH-41 (15)	66 S1-	179 S1+
890-1502-41 MSD	BH-41 (15)	70	216 S1+
890-1502-42	BH-42 (15)	86	198 S1+
890-1502-43	BH-43 (15)	88	215 S1+

Euofins Xenco, Carlsbad

## Surrogate Summary

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)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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 S1+	65 S1-
890-1502-51	BH-51 (15)	112	199 S1+
890-1502-52	BH-52 (15)	105	233 S1+
890-1502-53	BH-53 (15)	114	99
890-1502-53 MS	BH-53 (15)	124	100
890-1502-53 MSD	BH-53 (15)	109	96
890-1502-54	BH-54 (15)	90	202 S1+
890-1502-55	BH-55 (15)	88	191 S1+
890-1502-56	BH-56 (15)	116	115
890-1502-57	BH-57 (15)	96	221 S1+
890-1502-58	BH-58 (15)	112	243 S1+
890-1502-59	BH-59 (15)	111	243 S1+
890-1502-60	BH-60 (15)	13 S1-	230 S1+
890-1502-61	BH-61 (15)	115	99
890-1502-61 MS	BH-61 (15)	131 S1+	110
890-1502-61 MSD	BH-61 (15)	134 S1+	100
890-1502-62	BH-62 (15)	118	103
890-1502-63	BH-63 (15)	124	102
890-1502-64	BH-64 (15)	120	99
890-1502-65	BH-65 (15)	134 S1+	101
890-1502-66	BH-66 (15)	95	72
890-1502-67	BH-67 (15)	115	100
890-1502-68	BH-68 (15)	125	109
890-1502-69	BH-69 (15)	129	103
890-1502-70	BH-70 (15)	130	102
890-1502-71	BH-71 (15)	116	97
890-1502-72	BH-72 (15)	122	103
890-1502-73	BH-73 (15)	130	102
890-1502-74	BH-74 (15)	121	98
890-1502-75	BH-75 (15)	88	79
890-1502-76	BH-76 (15)	119	104
890-1502-77	BH-77 (15)	82	71
890-1502-78	BH-78 (15)	118	99
890-1502-79	BH-79 (15)	129	104
890-1502-80	BH-80 (15)	116	106
890-1502-81	BH-81 (15)	80	69 S1-
890-1502-81 MS	BH-81 (15)	118	103
890-1502-81 MSD	BH-81 (15)	96	86
890-1502-82	BH-82 (15)	105	83
890-1502-83	BH-83 (15)	107	90
890-1502-84	BH-84 (15)	126	101
890-1502-85	BH-85 (15)	114	110
890-1502-86	BH-86 (15)	115	100

Eurofins Xenco, Carlsbad

## Surrogate Summary

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)					
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)				
890-1502-87	BH-87 (15)	110	98				
890-1502-88	BH-88 (15)	128	101				
890-1502-89	BH-89 (15)	129	112				
890-1502-90	BH90 (RS ) (6)	128	126				
890-1502-91	BH-91 (RS ) (6)	114	111				
890-1502-92	SW-1 (0-6)	93	122				
890-1502-93	SW-2 (0-6)	108	74				
890-1502-94	SW-3 (0-6)	128	97				
890-1502-95	SW-4 (0-6)	133 S1+	105				
890-1502-96	SW-5 (0-6)	129	110				
890-1502-97	SW-6 (0-6)	112	98				
890-1502-98	SW-7 (0-6)	114	96				
890-1502-99	SW-8 (0-6)	119	104				
890-1502-100	SW-9 (0-6)	126	101				
890-1502-101	SW-10 (0-6)	111	92				
890-1502-101 MS	SW-10 (0-6)	123	99				
890-1502-101 MSD	SW-10 (0-6)	123	101				
890-1502-102	SW-11 (0-6)	113	88				
890-1502-103	SW-12 (10)	140 S1+	113				
890-1502-104	SW-13 (15)	123	110				
890-1502-105	SW-14 (15)	135 S1+	108				
890-1502-106	SW-15 (15)	85	57 S1-				
890-1502-107	SW-16 (15)	129	108				
890-1502-108	SW-17 (15)	122	105				
890-1502-109	SW-18 (15)	118	101				
890-1502-110	SW-19 (15)	88	83				
890-1502-111	SW-20 (15)	116	101				
890-1502-112	SW-21 (15)	126	111				
890-1502-113	SW-22 (15)	116	97				
890-1502-114	SW-23 (15)	123	104				
890-1502-115	SW-24 (15)	110	114				
890-1502-116	SW-25 (15)	134 S1+	108				
890-1502-117	SW-26 (15)	118	96				
890-1502-118	SW-27 (15)	121	103				
890-1502-119	SW-28 (15)	128	107				
890-1502-120	SW-29 (15)	125	215 S1+				
890-1502-121	SW-30 (RS) (6)	136 S1+	96				
890-1502-121 MS	SW-30 (RS) (6)	122	97				
890-1502-121 MSD	SW-30 (RS) (6)	114	103				
890-1502-122	SW-31 (RS) (4)	109	95				
890-1502-123	SW-32 (RS) (6)	151 S1+	78				
890-1502-124	SW-33 (RS) (8)	142 S1+	98				
890-1520-A-1-B MS	Matrix Spike	101	103				
890-1520-A-1-C MSD	Matrix Spike Duplicate	61 S1-	204 S1+				
LCS 880-11075/1-A	Lab Control Sample	113	101				
LCS 880-11076/1-A	Lab Control Sample	106	87				
LCS 880-11109/1-A	Lab Control Sample	113	103				
LCS 880-11111/1-A	Lab Control Sample	87	223 S1+				
LCS 880-11112/1-A	Lab Control Sample	112	103				
LCS 880-11113/1-A	Lab Control Sample	115	105				

Eurofins Xenco, Carlsbad

## Surrogate Summary

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)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
LCS 880-11114/1-A	Lab Control Sample	114	106
LCS 880-11388/1-A	Lab Control Sample	129	85
LCS 880-11445/1-A	Lab Control Sample	103	230 S1+
LCS 880-11449/3	Lab Control Sample	94	190 S1+
LCSD 880-11075/2-A	Lab Control Sample Dup	107	106
LCSD 880-11076/2-A	Lab Control Sample Dup	108	97
LCSD 880-11109/2-A	Lab Control Sample Dup	128	103
LCSD 880-11112/2-A	Lab Control Sample Dup	121	106
LCSD 880-11113/2-A	Lab Control Sample Dup	116	107
LCSD 880-11114/2-A	Lab Control Sample Dup	112	107
LCSD 880-11388/2-A	Lab Control Sample Dup	105	102
LCSD 880-11445/2-A	Lab Control Sample Dup	82	234 S1+
LCSD 880-11449/4	Lab Control Sample Dup	95	198 S1+
MB 880-11021/5-A	Method Blank	106	101
MB 880-11075/5-A	Method Blank	120	97
MB 880-11076/5-A	Method Blank	115	93
MB 880-11109/5-A	Method Blank	120	106
MB 880-11111/5-A	Method Blank	58 S1-	189 S1+
MB 880-11112/5-A	Method Blank	117	106
MB 880-11113/5-A	Method Blank	117	107
MB 880-11114/5-A	Method Blank	116	105
MB 880-11207/5-A	Method Blank	107	71
MB 880-11258/5-A	Method Blank	54 S1-	182 S1+
MB 880-11388/5-A	Method Blank	96	99
MB 880-11445/5-A	Method Blank	65 S1-	196 S1+
MB 880-11449/8	Method Blank	63 S1-	187 S1+
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
LCSD 880-11111/2-A	Lab Control Sample Dup		
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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

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## Surrogate Summary

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

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

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

**Matrix: Solid**

**Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1502-2	BH-2 (6)	119	131 S1+
890-1502-3	BH-3 (6)	105	117
890-1502-4	BH-4 (6)	112	125
890-1502-5	BH-5 (6)	104	117
890-1502-6	BH-6 (6)	111	123
890-1502-7	BH-7 (6)	103	115
890-1502-8	BH-8 (6)	104	117
890-1502-9	BH-9 (6)	111	122
890-1502-10	BH-10 (6)	106	118
890-1502-11	BH-11 (6)	109	123
890-1502-12	BH-12 (6)	104	112
890-1502-13	BH-13 (6)	103	116
890-1502-14	BH-14 (6)	102	113
890-1502-15	BH-15 (6)	111	123
890-1502-16	BH-16 (6)	100	113
890-1502-17	BH-17 (6)	102	113
890-1502-18	BH-18 (6)	100	107
890-1502-19	BH-19 (6)	105	115
890-1502-20	BH-20 (6)	9 S1-	10 S1-
890-1502-21	BH-21 (6)	103	123
890-1502-21 MS	BH-21 (6)	89	94
890-1502-21 MSD	BH-21 (6)	94	101
890-1502-22	BH-22 (6)	103	117
890-1502-23	BH-23 (6)	92	106
890-1502-24	BH-24 (6)	109	123
890-1502-25	BH-25 (15)	107	122
890-1502-26	BH-26 (15)	102	119
890-1502-27	BH-27 (15)	105	120
890-1502-28	BH-28 (15)	104	120
890-1502-29	BH-29 (15)	109	128
890-1502-30	BH-30 (15)	115	136 S1+
890-1502-31	BH-31 (15)	105	123
890-1502-32	BH-32 (15)	123	150 S1+
890-1502-33	BH-33 (15)	112	133 S1+
890-1502-34	BH-34 (15)	124	152 S1+
890-1502-35	BH-35 (15)	107	132 S1+
890-1502-36	BH-36 (15)	95	110
890-1502-37	BH-37 (15)	95	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

Eurofins Xenco, Carlsbad



## Surrogate Summary

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1502-48	BH-48 (15)	111	111
890-1502-49	BH-49 (15)	101	106
890-1502-50	BH-50 (15)	114	119
890-1502-51	BH-51 (15 )	101	106
890-1502-52	BH-52 (15)	101	103
890-1502-53	BH-53 (15)	96	98
890-1502-54	BH-54 (15)	99	100
890-1502-55	BH-55 (15)	99	99
890-1502-56	BH-56 (15)	106	113
890-1502-57	BH-57 (15)	99	102
890-1502-58	BH-58 (15)	93	93
890-1502-59	BH-59 (15)	110	110
890-1502-60	BH-60 (15)	88	87
890-1502-61	BH-61 (15)	50 S1-	34 S1-
890-1502-61 MS	BH-61 (15)	41 S1-	31 S1-
890-1502-61 MSD	BH-61 (15)	75	61 S1-
890-1502-62	BH-62 (15)	93	90
890-1502-63	BH-63 (15)	95	95
890-1502-64	BH-64 (15)	97	103
890-1502-65	BH-65 (15)	99	107
890-1502-66	BH-66 (15)	102	112
890-1502-67	BH-67 (15)	102	110
890-1502-68	BH-68 (15)	97	98
890-1502-69	BH-69 (15)	109	114
890-1502-70	BH-70 (15)	97	103
890-1502-71	BH-71 (15)	99	107
890-1502-72	BH-72 (15)	115	128
890-1502-73	BH-73 (15)	90	91
890-1502-74	BH-74 (15)	98	102
890-1502-75	BH-75 (15)	100	109
890-1502-76	BH-76 (15)	93	96
890-1502-77	BH-77 (15)	99	105
890-1502-78	BH-78 (15)	108	112
890-1502-79	BH-79 (15)	103	103
890-1502-80	BH-80 (15)	109	122
890-1502-81	BH-81 (15)	91	101
890-1502-81 MS	BH-81 (15)	95	99
890-1502-81 MSD	BH-81 (15)	95	97
890-1502-82	BH-82 (15)	89	102
890-1502-83	BH-83 (15)	91	105
890-1502-84	BH-84 (15)	94	105
890-1502-85	BH-85 (15)	93	106
890-1502-86	BH-86 (15)	93	110
890-1502-87	BH-87 (15)	93	110
890-1502-88	BH-88 (15)	98	108
890-1502-89	BH-89 (15)	92	107
890-1502-90	BH90 (RS ) (6)	94	112
890-1502-91	BH-91 (RS ) (6)	92	107
890-1502-92	SW-1 (0-6)	90	106
890-1502-93	SW-2 (0-6)	89	106

Eurofins Xenco, Carlsbad

## Surrogate Summary

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-1502-94	SW-3 (0-6)	89	106
890-1502-95	SW-4 (0-6)	90	107
890-1502-96	SW-5 (0-6)	102	122
890-1502-97	SW-6 (0-6)	89	98
890-1502-98	SW-7 (0-6)	91	109
890-1502-99	SW-8 (0-6)	91	104
890-1502-100	SW-9 (0-6)	94	112
890-1502-101	SW-10 (0-6)	100	100
890-1502-101 MS	SW-10 (0-6)	101	93
890-1502-101 MSD	SW-10 (0-6)	109	97
890-1502-102	SW-11 (0-6)	106	104
890-1502-103	SW-12 (10)	101	98
890-1502-104	SW-13 (15)	86	83
890-1502-105	SW-14 (15)	107	106
890-1502-106	SW-15 (15)	102	100
890-1502-107	SW-16 (15)	106	105
890-1502-108	SW-17 (15)	97	97
890-1502-109	SW-18 (15)	103	103
890-1502-110	SW-19 (15)	103	103
890-1502-111	SW-20 (15)	104	105
890-1502-112	SW-21 (15)	107	107
890-1502-113	SW-22 (15)	106	108
890-1502-114	SW-23 (15)	104	101
890-1502-115	SW-24 (15)	107	106
890-1502-116	SW-25 (15)	104	105
890-1502-117	SW-26 (15)	104	103
890-1502-118	SW-27 (15)	99	97
890-1502-119	SW-28 (15)	90	83
890-1502-120	SW-29 (15)	103	99
890-1502-121	SW-30 (RS) (6)	90	108
890-1502-121 MS	SW-30 (RS) (6)	100	92
890-1502-121 MSD	SW-30 (RS) (6)	92	84
890-1502-122	SW-31 (RS) (4)	86	93
890-1502-123	SW-32 (RS) (6)	84	83
890-1502-124	SW-33 (RS) (8)	80	80
LCS 880-11223/2-A	Lab Control Sample	116	109
LCS 880-11255/2-A	Lab Control Sample	98	106
LCS 880-11273/2-A	Lab Control Sample	84	80
LCS 880-11356/2-A	Lab Control Sample	103	100
LCS 880-11364/2-A	Lab Control Sample	81	89
LCS 880-11375/2-A	Lab Control Sample	102	99
LCS 880-11376/2-A	Lab Control Sample	108	88
LCSD 880-11223/3-A	Lab Control Sample Dup	113	106
LCSD 880-11255/3-A	Lab Control Sample Dup	100	108
LCSD 880-11273/3-A	Lab Control Sample Dup	87	85
LCSD 880-11356/3-A	Lab Control Sample Dup	87	84
LCSD 880-11364/3-A	Lab Control Sample Dup	89	97
LCSD 880-11375/3-A	Lab Control Sample Dup	92	85
LCSD 880-11376/3-A	Lab Control Sample Dup	103	95
MB 880-11223/1-A	Method Blank	108	113

Eurofins Xenco, Carlsbad

Surrogate Summary

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

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(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				
<b>Surrogate Legend</b>							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

## QC Sample Results

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

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

## 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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 08:33	11/01/21 12:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 08:33	11/01/21 12:08	1

Surrogate	MB %Recovery	MB 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

Matrix: Solid

Analysis Batch: 11206

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:05	11/03/21 00:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 11:05	11/03/21 00:26	1

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Prep Type: Total/NA

Prep Batch: 11075

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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: LCSD 880-11075/2-A

Matrix: Solid

Analysis Batch: 11206

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11075

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-1502-1 MS

Matrix: Solid

Analysis Batch: 11206

Client Sample ID: BH-1 (6)

Prep Type: Total/NA

Prep Batch: 11075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 11:07	11/01/21 23:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 11:07	11/01/21 23:18	1

Eurofins Xenco, Carlsbad



## QC Sample Results

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 Blank

Prep Type: Total/NA

Prep Batch: 11076

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 880-11076/1-A

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	106		70 - 130				
1,4-Difluorobenzene (Surr)	87		70 - 130				

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

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11076

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		70 - 130						
1,4-Difluorobenzene (Surr)	97		70 - 130						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins Xenco, Carlsbad

## QC Sample Results

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: 890-1502-121 MS

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: SW-30 (RS) (6)

Prep Type: Total/NA

Prep Batch: 11076

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-1502-121 MSD

Matrix: Solid

Analysis Batch: 11022

Client Sample ID: SW-30 (RS) (6)

Prep Type: Total/NA

Prep Batch: 11076

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-11109/5-A

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11109

Analyte	MB Result	MB 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 17:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 17:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 17:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/02/21 17:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:05	11/02/21 17:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:05	11/02/21 17:47	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11109

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

Lab Sample ID: LCSD 880-11109/2-A

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11109

			Spike	LCS	LCS				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene			0.100	0.1108		mg/Kg		111	70 - 130	17	35
Toluene			0.100	0.1179		mg/Kg		118	70 - 130	23	35
Ethylbenzene			0.100	0.1173		mg/Kg		117	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.2363		mg/Kg		118	70 - 130	14	35
o-Xylene			0.100	0.1143		mg/Kg		114	70 - 130	14	35

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

Lab Sample ID: 890-1502-21 MS

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: BH-21 (6)

Prep Type: Total/NA

Prep Batch: 11109

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F1 F2	0.100	0.05197	F1	mg/Kg		51	70 - 130		
Toluene	<0.00202	U	0.100	0.07531		mg/Kg		74	70 - 130		
Ethylbenzene	<0.00202	U F1	0.100	0.06742	F1	mg/Kg		67	70 - 130		
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1125	F1	mg/Kg		56	70 - 130		
o-Xylene	<0.00202	U F1	0.100	0.06405	F1	mg/Kg		64	70 - 130		

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

Lab Sample ID: 890-1502-21 MSD

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: BH-21 (6)

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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 880-11111/5-A

Matrix: Solid

Analysis Batch: 11259

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11111

Analyte	MB Result	MB 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	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 01:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:11	11/04/21 01:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:11	11/04/21 01:52	1

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	223	S1+	70 - 130

Lab Sample ID: LCSD 880-11111/2-A

Matrix: Solid

Analysis Batch: 11259

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11111

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1167		mg/Kg					
Toluene	0.100	0.1109		mg/Kg					
Ethylbenzene	0.100	0.1068		mg/Kg					
m-Xylene & p-Xylene	0.200	0.2116		mg/Kg					
o-Xylene	0.100	0.1243		mg/Kg					

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: 890-1502-41 MS

Matrix: Solid

Analysis Batch: 11259

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11111

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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: 890-1502-41 MS

Matrix: Solid

Analysis Batch: 11259

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F2 F1	0.101	0.006767	F1	mg/Kg		6	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.202	<0.00403	U F1	mg/Kg		0	70 - 130
o-Xylene	<0.00200	U F2 F1	0.101	0.01517	F1	mg/Kg		14	70 - 130

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

Lab Sample ID: 890-1502-41 MSD

Matrix: Solid

Analysis Batch: 11259

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11111

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U F2 F1	0.0994	0.02353	F2 F1	mg/Kg		23	70 - 130	57	35
Toluene	<0.00200	U F2 F1	0.0994	0.01239	F2 F1	mg/Kg		12	70 - 130	82	35
Ethylbenzene	<0.00200	U F2 F1	0.0994	0.01841	F2 F1	mg/Kg		18	70 - 130	92	35
m-Xylene & p-Xylene	<0.00399	U F1	0.199	0.006042	F1	mg/Kg		3	70 - 130	NC	35
o-Xylene	<0.00200	U F2 F1	0.0994	0.03039	F2 F1	mg/Kg		30	70 - 130	67	35

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Eurofins Xenco, Carlsbad



## QC Sample Results

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 880-11112/1-A

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11112

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	0.100	0.09260		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-11112/2-A

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11112

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09459		mg/Kg		95	70 - 130	8	35
Toluene	0.100	0.09920		mg/Kg		99	70 - 130	9	35
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1972		mg/Kg		99	70 - 130	6	35
o-Xylene	0.100	0.09839		mg/Kg		98	70 - 130	6	35

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

Lab Sample ID: 890-1502-61 MS

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11112

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%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

## QC Sample Results

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: 890-1502-61 MSD

Matrix: Solid

Analysis Batch: 11221

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11112

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-11113/5-A

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11113

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 17:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 17:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 17:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 17:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:16	11/03/21 17:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:16	11/03/21 17:26	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				11/01/21 12:16	11/03/21 17:26	1
1,4-Difluorobenzene (Surr)	107		70 - 130				11/01/21 12:16	11/03/21 17:26	1

Lab Sample ID: LCS 880-11113/1-A

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11113

	Spike	LCS	LCS					%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	0.100	0.09035		mg/Kg		90	70 - 130		
Toluene	0.100	0.09580		mg/Kg		96	70 - 130		
Ethylbenzene	0.100	0.1041		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene	0.200	0.1993		mg/Kg		100	70 - 130		
o-Xylene	0.100	0.09761		mg/Kg		98	70 - 130		

	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	115		70 - 130						
1,4-Difluorobenzene (Surr)	105		70 - 130						

Lab Sample ID: LCSD 880-11113/2-A

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11113

	Spike	LCSD	LCSD					%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09227		mg/Kg		92	70 - 130	2	35	
Toluene	0.100	0.09735		mg/Kg		97	70 - 130	2	35	
Ethylbenzene	0.100	0.1026		mg/Kg		103	70 - 130	1	35	
m-Xylene & p-Xylene	0.200	0.1995		mg/Kg		100	70 - 130	0	35	
o-Xylene	0.100	0.09796		mg/Kg		98	70 - 130	0	35	

	LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	116		70 - 130							

Eurofins Xenco, Carlsbad

## QC Sample Results

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: LCSD 880-11113/2-A

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11113

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

Lab Sample ID: 890-1502-81 MS

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: BH-81 (15)

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

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: BH-81 (15)

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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11114

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1	
Toluene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 05:00	1	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/01/21 12:18	11/04/21 05:00	1	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/01/21 12:18	11/04/21 05:00	1	

	MB	MB								
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				

Eurofins Xenco, Carlsbad

## QC Sample Results

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 880-11114/1-A

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11114

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09032		mg/Kg		90	70 - 130
Toluene	0.100	0.09084		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09641		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1881		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09302		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11114

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08744		mg/Kg		87	70 - 130	3	35
Toluene	0.100	0.09130		mg/Kg		91	70 - 130	1	35
Ethylbenzene	0.100	0.09282		mg/Kg		93	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1809		mg/Kg		90	70 - 130	4	35
o-Xylene	0.100	0.09153		mg/Kg		92	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F2 F1	0.100	0.05871	F1	mg/Kg		58	70 - 130
Toluene	<0.00200	U F2 F1	0.100	0.06635	F1	mg/Kg		66	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.100	0.07485		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.1433		mg/Kg		72	70 - 130
o-Xylene	<0.00200	U F2 F1	0.100	0.07000	F1	mg/Kg		69	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-1502-101 MSD

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: SW-10 (0-6)

Prep Type: Total/NA

Prep Batch: 11114

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.100	0.04046	F2 F1	mg/Kg		39	70 - 130	37	35
Toluene	<0.00200	U F2 F1	0.100	0.04350	F2 F1	mg/Kg		43	70 - 130	42	35
Ethylbenzene	<0.00200	U F2 F1	0.100	0.04739	F2 F1	mg/Kg		47	70 - 130	45	35

Eurofins Xenco, Carlsbad

## QC Sample Results

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: 890-1502-101 MSD

Matrix: Solid

Analysis Batch: 11374

Client Sample ID: SW-10 (0-6)

Prep Type: Total/NA

Prep Batch: 11114

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-11207/5-A

Matrix: Solid

Analysis Batch: 11206

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11207

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/02/21 09:20	11/02/21 13:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/02/21 09:20	11/02/21 13:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/02/21 09:20	11/02/21 13:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/02/21 09:20	11/02/21 13:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/02/21 09:20	11/02/21 13:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/02/21 09:20	11/02/21 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	11/02/21 09:20	11/02/21 13:33	1
1,4-Difluorobenzene (Surr)	71		70 - 130	11/02/21 09:20	11/02/21 13:33	1

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

Analyte	MB Result	MB 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

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

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	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/04/21 08:30	11/04/21 11:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/04/21 08:30	11/04/21 11:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/04/21 08:30	11/04/21 11:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/04/21 08:30	11/04/21 11:26	1

Eurofins Xenco, Carlsbad



## QC Sample Results

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	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/04/21 08:30	11/04/21 11:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/04/21 08:30	11/04/21 11:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	11/04/21 08:30	11/04/21 11:26	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/04/21 08:30	11/04/21 11:26	1

Lab Sample ID: LCS 880-11388/1-A

Matrix: Solid

Analysis Batch: 11420

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11388

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07875		mg/Kg		79	70 - 130
Toluene	0.100	0.09099		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.1049		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.1016		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: LCSD 880-11388/2-A

Matrix: Solid

Analysis Batch: 11420

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11388

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.0994	0.07316		mg/Kg		74	70 - 130
Toluene	<0.00202	U	0.0994	0.07604		mg/Kg		75	70 - 130
Ethylbenzene	<0.00202	U	0.0994	0.07655		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1626		mg/Kg		82	70 - 130
o-Xylene	<0.00202	U	0.0994	0.08042		mg/Kg		81	70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1502-53 MSD

Matrix: Solid

Analysis Batch: 11420

Client Sample ID: BH-53 (15)

Prep Type: Total/NA

Prep Batch: 11388

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.08660		mg/Kg		87	70 - 130	17	35
Toluene	<0.00202	U	0.0998	0.08136		mg/Kg		80	70 - 130	7	35
Ethylbenzene	<0.00202	U	0.0998	0.07768		mg/Kg		78	70 - 130	1	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1611		mg/Kg		81	70 - 130	1	35
o-Xylene	<0.00202	U	0.0998	0.08199		mg/Kg		82	70 - 130	2	35

	MSD	MSD	
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

Matrix: Solid

Analysis Batch: 11449

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11445

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 11449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1225		mg/Kg		122	70 - 130
Toluene	0.100	0.1133		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.1054		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2176		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1278		mg/Kg		128	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

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 880-11445/1-A

Matrix: Solid

Analysis Batch: 11449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11445

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,4-Difluorobenzene (Surr)	230	S1+	70 - 130

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

Matrix: Solid

Analysis Batch: 11449

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11445

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limits
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
m-Xylene & p-Xylene			0.200	0.1558		mg/Kg		78	70 - 130	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

Matrix: Solid

Analysis Batch: 11449

Client Sample ID: Matrix Spike

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		ma/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

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

Eurofins Xenco, Carlsbad

## QC Sample Results

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

Analysis Batch: 11449

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
Toluene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			11/04/21 15:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			11/04/21 15:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			11/04/21 15:47	1

Surrogate	MB %Recovery	MB 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

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

Surrogate	LCS %Recovery	LCS 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

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	198	S1+	70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

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)

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

Matrix: Solid

Analysis Batch: 11317

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11223

Analyte	MB Result	MB 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 10:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 10:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 11:44	11/03/21 10:40	1
Surrogate	MB %Recovery	MB 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

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

Matrix: Solid

Analysis Batch: 11317

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1194		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1003		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	116		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-11223/3-A

Matrix: Solid

Analysis Batch: 11317

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11223

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1154		mg/Kg		115	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	986.8		mg/Kg		99	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	113		70 - 130						
o-Terphenyl	106		70 - 130						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	997	1550	F1	mg/Kg		155	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1181		mg/Kg		116	70 - 130

Eurofins Xenco, Carlsbad



## QC Sample Results

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

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

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

Lab Sample ID: 890-1502-1 MS

Matrix: Solid

Analysis Batch: 11317

Client Sample ID: BH-1 (6)

Prep Type: Total/NA

Prep Batch: 11223

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 890-1502-1 MSD

Matrix: Solid

Analysis Batch: 11317

Client Sample ID: BH-1 (6)

Prep Type: Total/NA

Prep Batch: 11223

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	1000	1120	F2	mg/Kg		112	70 - 130	32	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1198		mg/Kg		117	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	114		70 - 130								
o-Terphenyl	109		70 - 130								

Lab Sample ID: MB 880-11255/1-A

Matrix: Solid

Analysis Batch: 11321

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11255

Analyte	MB Result	MB 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 10:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 10:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 14:45	11/03/21 10:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				11/02/21 14:45	11/03/21 10:22	1
o-Terphenyl	115		70 - 130				11/02/21 14:45	11/03/21 10:22	1

Lab Sample ID: LCS 880-11255/2-A

Matrix: Solid

Analysis Batch: 11321

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	942.0		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1089		mg/Kg		109	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 130				
o-Terphenyl	106		70 - 130				

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: LCSD 880-11255/3-A

Matrix: Solid

Analysis Batch: 11321

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11255

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1055		mg/Kg		105	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1037		mg/Kg		104	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	108		70 - 130						

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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		
Surrogate	MS %Recovery	MS 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1099		mg/Kg		110	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	943.3		mg/Kg		94	70 - 130	11	20
Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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 10:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 10:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/02/21 16:07	11/03/21 10:22	1

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: MB 880-11273/1-A

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11273

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	11/02/21 16:07	11/03/21 10:22	1
o-Terphenyl	103		70 - 130	11/02/21 16:07	11/03/21 10:22	1

Lab Sample ID: LCS 880-11273/2-A

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11273

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	883.1		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	916.4		mg/Kg		92	70 - 130		

	LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	84		70 - 130			
o-Terphenyl	80		70 - 130			

Lab Sample ID: LCSD 880-11273/3-A

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11273

			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	879.9		mg/Kg		88	70 - 130	0	20	
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130	11	20	

	LCSD	LCSD				
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	87		70 - 130			
o-Terphenyl	85		70 - 130			

Lab Sample ID: 890-1502-41 MS

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11273

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1108		mg/Kg		111	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	897.0		mg/Kg		90	70 - 130		

	MS	MS				
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	95		70 - 130			
o-Terphenyl	87		70 - 130			

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: 890-1502-41 MSD

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: BH-41 (15)

Prep Type: Total/NA

Prep Batch: 11273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	87		70 - 130								

Lab Sample ID: MB 880-11356/1-A

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11356

Analyte	MB Result	MB 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 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 10:38	11/03/21 19:59	1
Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	905.5		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1094		mg/Kg		109	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	100		70 - 130						

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1023		mg/Kg		102	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	960.5		mg/Kg		96	70 - 130	13	20

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: LCSD 880-11356/3-A

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11356

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 890-1502-61 MS

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11356

	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 F1 F2	997	482.0	F1	mg/Kg		48	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	997	328.9	F1	mg/Kg		31	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	41	S1-	70 - 130							
o-Terphenyl	31	S1-	70 - 130							

Lab Sample ID: 890-1502-61 MSD

Matrix: Solid

Analysis Batch: 11323

Client Sample ID: BH-61 (15)

Prep Type: Total/NA

Prep Batch: 11356

	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 F1 F2	1000	918.0	F2	mg/Kg		92	70 - 130	62	20	
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	1000	633.8	F1 F2	mg/Kg		61	70 - 130	63	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	75		70 - 130									
o-Terphenyl	61	S1-	70 - 130									

Lab Sample ID: MB 880-11364/1-A

Matrix: Solid

Analysis Batch: 11416

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11364

	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		11/03/21 11:37	11/04/21 10:00	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 10:00	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 11:37	11/04/21 10:00	1		
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		

Eurofins Xenco, Carlsbad



## QC Sample Results

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

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

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

Lab Sample ID: LCS 880-11364/2-A

Matrix: Solid

Analysis Batch: 11416

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11364

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	840.1		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	883.5		mg/Kg		88	70 - 130		

Lab Sample ID: LCSD 880-11364/3-A

Matrix: Solid

Analysis Batch: 11416

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11364

Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
			Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	887.3		mg/Kg		89	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	925.6		mg/Kg		93	70 - 130	5	20

Lab Sample ID: 890-1502-81 MS

Matrix: Solid

Analysis Batch: 11416

Client Sample ID: BH-81 (15)

Prep Type: Total/NA

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		

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

	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
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	95		70 - 130								

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: 890-1502-81 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
<i>o</i> -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	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		11/03/21 13:15	11/04/21 10:00	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 10:00	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:15	11/04/21 10:00	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
1-Chlorooctane	112		70 - 130				11/03/21 13:15	11/04/21 10:00	1	
<i>o</i> -Terphenyl	123		70 - 130				11/03/21 13:15	11/04/21 10:00	1	

Lab Sample ID: LCS 880-11375/2-A

Matrix: Solid

Analysis Batch: 11418

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11375

		Spike	LCS	LCS				%Rec.		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10		1000	976.2		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)		1000	1075		mg/Kg		107	70 - 130		
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	102		70 - 130							
<i>o</i> -Terphenyl	99		70 - 130							

Lab Sample ID: LCSD 880-11375/3-A

Matrix: Solid

Analysis Batch: 11418

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11375

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	747.4	*1	mg/Kg		75	70 - 130	27	20
Diesel Range Organics (Over C10-C28)			1000	959.3		mg/Kg		96	70 - 130	11	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	92		70 - 130								
o-Terphenyl	85		70 - 130								

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: 890-1502-101 MS

Matrix: Solid

Analysis Batch: 11418

Client Sample ID: SW-10 (0-6)

Prep Type: Total/NA

Prep Batch: 11375

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	101		70 - 130						
o-Terphenyl	93		70 - 130						

Lab Sample ID: 890-1502-101 MSD

Matrix: Solid

Analysis Batch: 11418

Client Sample ID: SW-10 (0-6)

Prep Type: Total/NA

Prep Batch: 11375

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	1000	1063		mg/Kg		105	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	979.4		mg/Kg		94	70 - 130	8	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
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

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/03/21 13:58	11/04/21 09:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/03/21 13:58	11/04/21 09:53	1
o-Terphenyl	94		70 - 130				11/03/21 13:58	11/04/21 09:53	1

Lab Sample ID: LCS 880-11376/2-A

Matrix: Solid

Analysis Batch: 11414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	977.8		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	838.1		mg/Kg		84	70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

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

Lab Sample ID: LCS 880-11376/2-A

Matrix: Solid

Analysis Batch: 11414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11376

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: LCSD 880-11376/3-A

Matrix: Solid

Analysis Batch: 11414

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 11376

			Spike	LCSD	LCSD				%Rec.			
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	965.5		mg/Kg		97	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)			1000	913.0		mg/Kg		91	70 - 130	9	20	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-1502-121 MS

Matrix: Solid

Analysis Batch: 11414

Client Sample ID: SW-30 (RS) (6)

Prep Type: Total/NA

Prep Batch: 11376

	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1036		mg/Kg		101	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.9	U	997	863.0		mg/Kg		84	70 - 130			

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-1502-121 MSD

Matrix: Solid

Analysis Batch: 11414

Client Sample ID: SW-30 (RS) (6)

Prep Type: Total/NA

Prep Batch: 11376

	Sample	Sample	Spike	MSD	MSD				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	954.6		mg/Kg		93	70 - 130	8	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	789.2		mg/Kg		77	70 - 130	9	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	84		70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11227/1-A

Matrix: Solid

Analysis Batch: 11379

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/06/21 05:15	1

Lab Sample ID: LCS 880-11227/2-A

Matrix: Solid

Analysis Batch: 11379

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	266.7		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-11227/3-A

Matrix: Solid

Analysis Batch: 11379

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	267.5		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-1499-A-1-H MS

Matrix: Solid

Analysis Batch: 11379

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	987	F1	248	1189	F1	mg/Kg		82	90 - 110

Lab Sample ID: 890-1499-A-1-I MSD

Matrix: Solid

Analysis Batch: 11379

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	987	F1	248	1194	F1	mg/Kg		84	90 - 110	0	20

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

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/07/21 01:48	1

Lab Sample ID: LCS 880-11233/2-A

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	229.5		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-11233/3-A

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	233.0		mg/Kg		93	90 - 110	1	20

Eurofins Xenco, Carlsbad



## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1502-92 MS

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: SW-1 (0-6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1430		1250	2745		mg/Kg		105	90 - 110

Lab Sample ID: 890-1502-92 MSD

Matrix: Solid

Analysis Batch: 11381

Client Sample ID: SW-1 (0-6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1430		1250	2746		mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-11236/1-A

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	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

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.1		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-11236/3-A

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	249.5		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-1502-4 MS

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: BH-4 (6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	48.9		253	282.3		mg/Kg		92	90 - 110

Lab Sample ID: 890-1502-4 MSD

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: BH-4 (6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	48.9		253	277.9		mg/Kg		91	90 - 110	2	20

Lab Sample ID: 890-1502-111 MS

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: SW-20 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1150		248	1264	4	mg/Kg		48	90 - 110

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1502-111 MSD

Matrix: Solid

Analysis Batch: 11452

Client Sample ID: SW-20 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1150		248	1261	4	mg/Kg		46	90 - 110	0	20

Lab Sample ID: MB 880-11237/1-A

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/07/21 05:07	1

Lab Sample ID: LCS 880-11237/2-A

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	236.9		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-11237/3-A

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	241.4		mg/Kg		97	90 - 110	2	20

Lab Sample ID: 890-1502-5 MS

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: BH-5 (6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	123		249	353.6		mg/Kg		93	90 - 110

Lab Sample ID: 890-1502-5 MSD

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: BH-5 (6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	123		249	352.1		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-1502-15 MS

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: BH-15 (6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4220	F1	1250	5802	F1	mg/Kg		126	90 - 110

Lab Sample ID: 890-1502-15 MSD

Matrix: Solid

Analysis Batch: 11453

Client Sample ID: BH-15 (6)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4220	F1	1250	5826	F1	mg/Kg		128	90 - 110	0	20

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-11238/1-A

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/07/21 09:27	1

Lab Sample ID: LCS 880-11238/2-A

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	238.0		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-11238/3-A

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	234.9		mg/Kg		94	90 - 110	1	20

Lab Sample ID: 890-1502-25 MS

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: BH-25 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	447	F1	250	648.9	F1	mg/Kg		81	90 - 110

Lab Sample ID: 890-1502-25 MSD

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: BH-25 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	447	F1	250	656.3	F1	mg/Kg		84	90 - 110	1	20

Lab Sample ID: 890-1502-35 MS

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: BH-35 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	333	F1	253	539.3	F1	mg/Kg		82	90 - 110

Lab Sample ID: 890-1502-35 MSD

Matrix: Solid

Analysis Batch: 11454

Client Sample ID: BH-35 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	333	F1	253	539.2	F1	mg/Kg		82	90 - 110	0	20

Lab Sample ID: MB 880-11240/1-A

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/08/21 04:07	1

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-11240/2-A

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	232.0		mg/Kg		93	90 - 110

Lab Sample ID: LCSD 880-11240/3-A

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	233.4		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 890-1502-45 MS

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: BH-45 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	284	F1	248	510.8		mg/Kg		91	90 - 110

Lab Sample ID: 890-1502-45 MSD

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: BH-45 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	284	F1	248	499.4	F1	mg/Kg		87	90 - 110	2	20

Lab Sample ID: 890-1502-55 MS

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: BH-55 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4680	F1	1250	5790	F1	mg/Kg		89	90 - 110

Lab Sample ID: 890-1502-55 MSD

Matrix: Solid

Analysis Batch: 11455

Client Sample ID: BH-55 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4680	F1	1250	5826		mg/Kg		92	90 - 110	1	20

Lab Sample ID: MB 880-11242/1-A

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/08/21 08:35	1

Lab Sample ID: LCS 880-11242/2-A

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	236.3		mg/Kg		95	90 - 110

Eurofins Xenco, Carlsbad

## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-11242/3-A

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	237.4		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-1502-65 MS

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: BH-65 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	823	F1	250	1040	F1	mg/Kg		87	90 - 110		

Lab Sample ID: 890-1502-65 MSD

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: BH-65 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	823	F1	250	1044	F1	mg/Kg		89	90 - 110	0	20

Lab Sample ID: 890-1502-75 MS

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: BH-75 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	982	F1	249	1200	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 890-1502-75 MSD

Matrix: Solid

Analysis Batch: 11456

Client Sample ID: BH-75 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	982	F1	249	1186	F1	mg/Kg		82	90 - 110	1	20

Lab Sample ID: MB 880-11243/1-A

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/09/21 12:29	1

Lab Sample ID: LCS 880-11243/2-A

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	251.9		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-11243/3-A

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	253.1		mg/Kg		101	90 - 110	0	20

Eurofins Xenco, Carlsbad



## QC Sample Results

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

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

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-1502-85 MS

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: BH-85 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	656	F1	250	870.1	F1	mg/Kg		86	90 - 110		

Lab Sample ID: 890-1502-85 MSD

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: BH-85 (15)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	656	F1	250	878.2	F1	mg/Kg		89	90 - 110	1	20

Lab Sample ID: 890-1502-124 MS

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: SW-33 (RS) (8)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	831	F1	252	1043	F1	mg/Kg		84	90 - 110		

Lab Sample ID: 890-1502-124 MSD

Matrix: Solid

Analysis Batch: 11705

Client Sample ID: SW-33 (RS) (8)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	831	F1	252	1043	F1	mg/Kg		84	90 - 110	0	20

## QC Association Summary

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

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

## GC VOA

## Prep Batch: 11021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-11021/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 11022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	8021B	11076
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	8021B	11076
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	8021B	11076
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	8021B	11076
MB 880-11021/5-A	Method Blank	Total/NA	Solid	8021B	11021
MB 880-11076/5-A	Method Blank	Total/NA	Solid	8021B	11076
LCS 880-11076/1-A	Lab Control Sample	Total/NA	Solid	8021B	11076
LCSD 880-11076/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11076
890-1502-121 MS	SW-30 (RS) (6)	Total/NA	Solid	8021B	11076
890-1502-121 MSD	SW-30 (RS) (6)	Total/NA	Solid	8021B	11076

## Prep Batch: 11075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	5035	
890-1502-2	BH-2 (6)	Total/NA	Solid	5035	
890-1502-3	BH-3 (6)	Total/NA	Solid	5035	
890-1502-4	BH-4 (6)	Total/NA	Solid	5035	
890-1502-5	BH-5 (6)	Total/NA	Solid	5035	
890-1502-6	BH-6 (6)	Total/NA	Solid	5035	
890-1502-7	BH-7 (6)	Total/NA	Solid	5035	
890-1502-8	BH-8 (6)	Total/NA	Solid	5035	
890-1502-9	BH-9 (6)	Total/NA	Solid	5035	
890-1502-10	BH-10 (6)	Total/NA	Solid	5035	
890-1502-11	BH-11 (6)	Total/NA	Solid	5035	
890-1502-12	BH-12 (6)	Total/NA	Solid	5035	
890-1502-13	BH-13 (6)	Total/NA	Solid	5035	
890-1502-14	BH-14 (6)	Total/NA	Solid	5035	
890-1502-15	BH-15 (6)	Total/NA	Solid	5035	
890-1502-16	BH-16 (6)	Total/NA	Solid	5035	
890-1502-17	BH-17 (6)	Total/NA	Solid	5035	
890-1502-18	BH-18 (6)	Total/NA	Solid	5035	
890-1502-19	BH-19 (6)	Total/NA	Solid	5035	
890-1502-20	BH-20 (6)	Total/NA	Solid	5035	
MB 880-11075/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11075/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-11075/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1502-1 MS	BH-1 (6)	Total/NA	Solid	5035	
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	5035	

## Prep Batch: 11076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	5035	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	5035	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	5035	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	5035	
MB 880-11076/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11076/1-A	Lab Control Sample	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

## QC Association Summary

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

Job ID: 890-1502-1  
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 Batch
890-1502-41	BH-41 (15)	Total/NA	Solid	5035	
890-1502-42	BH-42 (15)	Total/NA	Solid	5035	
890-1502-43	BH-43 (15)	Total/NA	Solid	5035	
890-1502-44	BH-44 (15)	Total/NA	Solid	5035	
890-1502-45	BH-45 (15)	Total/NA	Solid	5035	
890-1502-46	BH-46 (15)	Total/NA	Solid	5035	
890-1502-47	BH-47 (15)	Total/NA	Solid	5035	
890-1502-48	BH-48 (15)	Total/NA	Solid	5035	
890-1502-49	BH-49 (15)	Total/NA	Solid	5035	
890-1502-50	BH-50 (15)	Total/NA	Solid	5035	
890-1502-51	BH-51 (15 )	Total/NA	Solid	5035	
890-1502-52	BH-52 (15)	Total/NA	Solid	5035	
890-1502-54	BH-54 (15)	Total/NA	Solid	5035	
890-1502-55	BH-55 (15)	Total/NA	Solid	5035	
890-1502-56	BH-56 (15)	Total/NA	Solid	5035	
MB 880-11111/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-11111/1-A	Lab Control Sample	Total/NA	Solid	5035	

Eurofins Xenco, Carlsbad

## QC Association Summary

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

Job ID: 890-1502-1  
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 Batch
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	
890-1502-88	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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## QC Association Summary

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

Job ID: 890-1502-1  
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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## QC Association Summary

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 Batch
890-1502-21	BH-21 (6)	Total/NA	Solid	8021B	11109
890-1502-22	BH-22 (6)	Total/NA	Solid	8021B	11109
890-1502-23	BH-23 (6)	Total/NA	Solid	8021B	11109
890-1502-24	BH-24 (6)	Total/NA	Solid	8021B	11109
890-1502-25	BH-25 (15)	Total/NA	Solid	8021B	11109
890-1502-26	BH-26 (15)	Total/NA	Solid	8021B	11109
890-1502-27	BH-27 (15)	Total/NA	Solid	8021B	11109
890-1502-28	BH-28 (15)	Total/NA	Solid	8021B	11109
890-1502-29	BH-29 (15)	Total/NA	Solid	8021B	11109
890-1502-30	BH-30 (15)	Total/NA	Solid	8021B	11109
890-1502-31	BH-31 (15)	Total/NA	Solid	8021B	11109
890-1502-32	BH-32 (15)	Total/NA	Solid	8021B	11109
890-1502-33	BH-33 (15)	Total/NA	Solid	8021B	11109
890-1502-34	BH-34 (15)	Total/NA	Solid	8021B	11109
890-1502-35	BH-35 (15)	Total/NA	Solid	8021B	11109
890-1502-36	BH-36 (15)	Total/NA	Solid	8021B	11109
890-1502-37	BH-37 (15)	Total/NA	Solid	8021B	11109
890-1502-38	BH-38 (15)	Total/NA	Solid	8021B	11109
890-1502-39	BH-39 (15)	Total/NA	Solid	8021B	11109
890-1502-40	BH-40 (15)	Total/NA	Solid	8021B	11109
890-1502-61	BH-61 (15)	Total/NA	Solid	8021B	11112
890-1502-62	BH-62 (15)	Total/NA	Solid	8021B	11112
890-1502-63	BH-63 (15)	Total/NA	Solid	8021B	11112
890-1502-64	BH-64 (15)	Total/NA	Solid	8021B	11112
890-1502-65	BH-65 (15)	Total/NA	Solid	8021B	11112
890-1502-66	BH-66 (15)	Total/NA	Solid	8021B	11112
890-1502-67	BH-67 (15)	Total/NA	Solid	8021B	11112
890-1502-68	BH-68 (15)	Total/NA	Solid	8021B	11112
890-1502-69	BH-69 (15)	Total/NA	Solid	8021B	11112
890-1502-70	BH-70 (15)	Total/NA	Solid	8021B	11112
890-1502-71	BH-71 (15)	Total/NA	Solid	8021B	11112

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## QC Association Summary

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

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

## GC VOA (Continued)

## Analysis Batch: 11221 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-72	BH-72 (15)	Total/NA	Solid	8021B	11112
890-1502-73	BH-73 (15)	Total/NA	Solid	8021B	11112
890-1502-74	BH-74 (15)	Total/NA	Solid	8021B	11112
890-1502-75	BH-75 (15)	Total/NA	Solid	8021B	11112
890-1502-76	BH-76 (15)	Total/NA	Solid	8021B	11112
890-1502-77	BH-77 (15)	Total/NA	Solid	8021B	11112
890-1502-78	BH-78 (15)	Total/NA	Solid	8021B	11112
890-1502-79	BH-79 (15)	Total/NA	Solid	8021B	11112
890-1502-80	BH-80 (15)	Total/NA	Solid	8021B	11112
MB 880-11109/5-A	Method Blank	Total/NA	Solid	8021B	11109
MB 880-11112/5-A	Method Blank	Total/NA	Solid	8021B	11112
LCS 880-11109/1-A	Lab Control Sample	Total/NA	Solid	8021B	11109
LCS 880-11112/1-A	Lab Control Sample	Total/NA	Solid	8021B	11112
LCSD 880-11109/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11109
LCSD 880-11112/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11112
890-1502-21 MS	BH-21 (6)	Total/NA	Solid	8021B	11109
890-1502-21 MSD	BH-21 (6)	Total/NA	Solid	8021B	11109
890-1502-61 MS	BH-61 (15)	Total/NA	Solid	8021B	11112
890-1502-61 MSD	BH-61 (15)	Total/NA	Solid	8021B	11112

## Prep Batch: 11258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-11258/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 11259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-41	BH-41 (15)	Total/NA	Solid	8021B	11111
890-1502-42	BH-42 (15)	Total/NA	Solid	8021B	11111
890-1502-43	BH-43 (15)	Total/NA	Solid	8021B	11111
890-1502-44	BH-44 (15)	Total/NA	Solid	8021B	11111
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	11111
890-1502-41 MS	BH-41 (15)	Total/NA	Solid	8021B	11111
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	8021B	11111

## Analysis Batch: 11374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-81	BH-81 (15)	Total/NA	Solid	8021B	11113

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## QC Association Summary

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

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

## GC VOA (Continued)

## Analysis Batch: 11374 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-82	BH-82 (15)	Total/NA	Solid	8021B	11113
890-1502-83	BH-83 (15)	Total/NA	Solid	8021B	11113
890-1502-84	BH-84 (15)	Total/NA	Solid	8021B	11113
890-1502-85	BH-85 (15)	Total/NA	Solid	8021B	11113
890-1502-86	BH-86 (15)	Total/NA	Solid	8021B	11113
890-1502-87	BH-87 (15)	Total/NA	Solid	8021B	11113
890-1502-88	BH-88 (15)	Total/NA	Solid	8021B	11113
890-1502-89	BH-89 (15)	Total/NA	Solid	8021B	11113
890-1502-90	BH90 (RS ) (6)	Total/NA	Solid	8021B	11113
890-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	8021B	11113
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8021B	11113
890-1502-93	SW-2 (0-6)	Total/NA	Solid	8021B	11113
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8021B	11113
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8021B	11113
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8021B	11113
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8021B	11113
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8021B	11113
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8021B	11113
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8021B	11113
890-1502-101	SW-10 (0-6)	Total/NA	Solid	8021B	11114
890-1502-102	SW-11 (0-6)	Total/NA	Solid	8021B	11114
890-1502-103	SW-12 (10)	Total/NA	Solid	8021B	11114
890-1502-104	SW-13 (15)	Total/NA	Solid	8021B	11114
890-1502-105	SW-14 (15)	Total/NA	Solid	8021B	11114
890-1502-106	SW-15 (15)	Total/NA	Solid	8021B	11114
890-1502-107	SW-16 (15)	Total/NA	Solid	8021B	11114
890-1502-108	SW-17 (15)	Total/NA	Solid	8021B	11114
890-1502-109	SW-18 (15)	Total/NA	Solid	8021B	11114
890-1502-110	SW-19 (15)	Total/NA	Solid	8021B	11114
890-1502-111	SW-20 (15)	Total/NA	Solid	8021B	11114
890-1502-112	SW-21 (15)	Total/NA	Solid	8021B	11114
890-1502-113	SW-22 (15)	Total/NA	Solid	8021B	11114
890-1502-114	SW-23 (15)	Total/NA	Solid	8021B	11114
890-1502-115	SW-24 (15)	Total/NA	Solid	8021B	11114
890-1502-116	SW-25 (15)	Total/NA	Solid	8021B	11114
890-1502-117	SW-26 (15)	Total/NA	Solid	8021B	11114
890-1502-118	SW-27 (15)	Total/NA	Solid	8021B	11114
890-1502-119	SW-28 (15)	Total/NA	Solid	8021B	11114
MB 880-11113/5-A	Method Blank	Total/NA	Solid	8021B	11113
MB 880-11114/5-A	Method Blank	Total/NA	Solid	8021B	11114
LCS 880-11113/1-A	Lab Control Sample	Total/NA	Solid	8021B	11113
LCS 880-11114/1-A	Lab Control Sample	Total/NA	Solid	8021B	11114
LCSD 880-11113/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11113
LCSD 880-11114/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	11114
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	8021B	11113
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8021B	11113
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8021B	11114
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid	8021B	11114

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## QC Association Summary

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

Job ID: 890-1502-1  
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

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	Total BTEX	
890-1502-2	BH-2 (6)	Total/NA	Solid	Total BTEX	
890-1502-3	BH-3 (6)	Total/NA	Solid	Total BTEX	
890-1502-4	BH-4 (6)	Total/NA	Solid	Total BTEX	

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## QC Association Summary

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
890-1502-5	BH-5 (6)	Total/NA	Solid	Total BTEX	
890-1502-6	BH-6 (6)	Total/NA	Solid	Total BTEX	
890-1502-7	BH-7 (6)	Total/NA	Solid	Total BTEX	
890-1502-8	BH-8 (6)	Total/NA	Solid	Total BTEX	
890-1502-9	BH-9 (6)	Total/NA	Solid	Total BTEX	
890-1502-10	BH-10 (6)	Total/NA	Solid	Total BTEX	
890-1502-11	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	
890-1502-16	BH-16 (6)	Total/NA	Solid	Total BTEX	
890-1502-17	BH-17 (6)	Total/NA	Solid	Total BTEX	
890-1502-18	BH-18 (6)	Total/NA	Solid	Total BTEX	
890-1502-19	BH-19 (6)	Total/NA	Solid	Total BTEX	
890-1502-20	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	
890-1502-29	BH-29 (15)	Total/NA	Solid	Total BTEX	
890-1502-30	BH-30 (15)	Total/NA	Solid	Total BTEX	
890-1502-31	BH-31 (15)	Total/NA	Solid	Total BTEX	
890-1502-32	BH-32 (15)	Total/NA	Solid	Total BTEX	
890-1502-33	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	
890-1502-37	BH-37 (15)	Total/NA	Solid	Total BTEX	
890-1502-38	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	BH-47 (15)	Total/NA	Solid	Total BTEX	
890-1502-48	BH-48 (15)	Total/NA	Solid	Total BTEX	
890-1502-49	BH-49 (15)	Total/NA	Solid	Total BTEX	
890-1502-50	BH-50 (15)	Total/NA	Solid	Total BTEX	
890-1502-51	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	
890-1502-55	BH-55 (15)	Total/NA	Solid	Total BTEX	

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## QC Association Summary

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	
890-1502-57	BH-57 (15)	Total/NA	Solid	Total BTEX	
890-1502-58	BH-58 (15)	Total/NA	Solid	Total BTEX	
890-1502-59	BH-59 (15)	Total/NA	Solid	Total BTEX	
890-1502-60	BH-60 (15)	Total/NA	Solid	Total BTEX	
890-1502-61	BH-61 (15)	Total/NA	Solid	Total BTEX	
890-1502-62	BH-62 (15)	Total/NA	Solid	Total BTEX	
890-1502-63	BH-63 (15)	Total/NA	Solid	Total BTEX	
890-1502-64	BH-64 (15)	Total/NA	Solid	Total BTEX	
890-1502-65	BH-65 (15)	Total/NA	Solid	Total BTEX	
890-1502-66	BH-66 (15)	Total/NA	Solid	Total BTEX	
890-1502-67	BH-67 (15)	Total/NA	Solid	Total BTEX	
890-1502-68	BH-68 (15)	Total/NA	Solid	Total BTEX	
890-1502-69	BH-69 (15)	Total/NA	Solid	Total BTEX	
890-1502-70	BH-70 (15)	Total/NA	Solid	Total BTEX	
890-1502-71	BH-71 (15)	Total/NA	Solid	Total BTEX	
890-1502-72	BH-72 (15)	Total/NA	Solid	Total BTEX	
890-1502-73	BH-73 (15)	Total/NA	Solid	Total BTEX	
890-1502-74	BH-74 (15)	Total/NA	Solid	Total BTEX	
890-1502-75	BH-75 (15)	Total/NA	Solid	Total BTEX	
890-1502-76	BH-76 (15)	Total/NA	Solid	Total BTEX	
890-1502-77	BH-77 (15)	Total/NA	Solid	Total BTEX	
890-1502-78	BH-78 (15)	Total/NA	Solid	Total BTEX	
890-1502-79	BH-79 (15)	Total/NA	Solid	Total BTEX	
890-1502-80	BH-80 (15)	Total/NA	Solid	Total BTEX	
890-1502-81	BH-81 (15)	Total/NA	Solid	Total BTEX	
890-1502-82	BH-82 (15)	Total/NA	Solid	Total BTEX	
890-1502-83	BH-83 (15)	Total/NA	Solid	Total BTEX	
890-1502-84	BH-84 (15)	Total/NA	Solid	Total BTEX	
890-1502-85	BH-85 (15)	Total/NA	Solid	Total BTEX	
890-1502-86	BH-86 (15)	Total/NA	Solid	Total BTEX	
890-1502-87	BH-87 (15)	Total/NA	Solid	Total BTEX	
890-1502-88	BH-88 (15)	Total/NA	Solid	Total BTEX	
890-1502-89	BH-89 (15)	Total/NA	Solid	Total BTEX	
890-1502-90	BH90 (RS ) (6)	Total/NA	Solid	Total BTEX	
890-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	Total BTEX	
890-1502-92	SW-1 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-93	SW-2 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-94	SW-3 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-95	SW-4 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-96	SW-5 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-97	SW-6 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-98	SW-7 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-99	SW-8 (0-6)	Total/NA	Solid	Total BTEX	
890-1502-100	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	
890-1502-103	SW-12 (10)	Total/NA	Solid	Total BTEX	
890-1502-104	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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## QC Association Summary

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
890-1502-107	SW-16 (15)	Total/NA	Solid	Total BTEX	
890-1502-108	SW-17 (15)	Total/NA	Solid	Total BTEX	
890-1502-109	SW-18 (15)	Total/NA	Solid	Total BTEX	
890-1502-110	SW-19 (15)	Total/NA	Solid	Total BTEX	
890-1502-111	SW-20 (15)	Total/NA	Solid	Total BTEX	
890-1502-112	SW-21 (15)	Total/NA	Solid	Total BTEX	
890-1502-113	SW-22 (15)	Total/NA	Solid	Total BTEX	
890-1502-114	SW-23 (15)	Total/NA	Solid	Total BTEX	
890-1502-115	SW-24 (15)	Total/NA	Solid	Total BTEX	
890-1502-116	SW-25 (15)	Total/NA	Solid	Total BTEX	
890-1502-117	SW-26 (15)	Total/NA	Solid	Total BTEX	
890-1502-118	SW-27 (15)	Total/NA	Solid	Total BTEX	
890-1502-119	SW-28 (15)	Total/NA	Solid	Total BTEX	
890-1502-120	SW-29 (15)	Total/NA	Solid	Total BTEX	
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	Total BTEX	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	Total BTEX	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	Total BTEX	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 11223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	
890-1502-7	BH-7 (6)	Total/NA	Solid	8015NM Prep	
890-1502-8	BH-8 (6)	Total/NA	Solid	8015NM Prep	
890-1502-9	BH-9 (6)	Total/NA	Solid	8015NM Prep	
890-1502-10	BH-10 (6)	Total/NA	Solid	8015NM Prep	
890-1502-11	BH-11 (6)	Total/NA	Solid	8015NM Prep	
890-1502-12	BH-12 (6)	Total/NA	Solid	8015NM Prep	
890-1502-13	BH-13 (6)	Total/NA	Solid	8015NM Prep	
890-1502-14	BH-14 (6)	Total/NA	Solid	8015NM Prep	
890-1502-15	BH-15 (6)	Total/NA	Solid	8015NM Prep	
890-1502-16	BH-16 (6)	Total/NA	Solid	8015NM Prep	
890-1502-17	BH-17 (6)	Total/NA	Solid	8015NM Prep	
890-1502-18	BH-18 (6)	Total/NA	Solid	8015NM Prep	
890-1502-19	BH-19 (6)	Total/NA	Solid	8015NM Prep	
890-1502-20	BH-20 (6)	Total/NA	Solid	8015NM Prep	
MB 880-11223/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11223/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-1 MS	BH-1 (6)	Total/NA	Solid	8015NM Prep	
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

## QC Association Summary

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

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

## GC Semi VOA

## Prep Batch: 11255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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 Batch
890-1502-41	BH-41 (15)	Total/NA	Solid	8015NM Prep	
890-1502-42	BH-42 (15)	Total/NA	Solid	8015NM Prep	
890-1502-43	BH-43 (15)	Total/NA	Solid	8015NM Prep	
890-1502-44	BH-44 (15)	Total/NA	Solid	8015NM Prep	
890-1502-45	BH-45 (15)	Total/NA	Solid	8015NM Prep	
890-1502-46	BH-46 (15)	Total/NA	Solid	8015NM Prep	
890-1502-47	BH-47 (15)	Total/NA	Solid	8015NM Prep	
890-1502-48	BH-48 (15)	Total/NA	Solid	8015NM Prep	
890-1502-49	BH-49 (15)	Total/NA	Solid	8015NM Prep	
890-1502-50	BH-50 (15)	Total/NA	Solid	8015NM Prep	
890-1502-51	BH-51 (15 )	Total/NA	Solid	8015NM Prep	
890-1502-52	BH-52 (15)	Total/NA	Solid	8015NM Prep	
890-1502-53	BH-53 (15)	Total/NA	Solid	8015NM Prep	
890-1502-54	BH-54 (15)	Total/NA	Solid	8015NM Prep	
890-1502-55	BH-55 (15)	Total/NA	Solid	8015NM Prep	
890-1502-56	BH-56 (15)	Total/NA	Solid	8015NM Prep	
890-1502-57	BH-57 (15)	Total/NA	Solid	8015NM Prep	
890-1502-58	BH-58 (15)	Total/NA	Solid	8015NM Prep	
890-1502-59	BH-59 (15)	Total/NA	Solid	8015NM Prep	
890-1502-60	BH-60 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11273/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11273/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11273/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

## QC Association Summary

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

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

## GC Semi VOA (Continued)

## Prep Batch: 11273 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-41 MS	BH-41 (15)	Total/NA	Solid	8015NM Prep	
890-1502-41 MSD	BH-41 (15)	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 11317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Total/NA	Solid	8015B NM	11223
890-1502-2	BH-2 (6)	Total/NA	Solid	8015B NM	11223
890-1502-3	BH-3 (6)	Total/NA	Solid	8015B NM	11223
890-1502-4	BH-4 (6)	Total/NA	Solid	8015B NM	11223
890-1502-5	BH-5 (6)	Total/NA	Solid	8015B NM	11223
890-1502-6	BH-6 (6)	Total/NA	Solid	8015B NM	11223
890-1502-7	BH-7 (6)	Total/NA	Solid	8015B NM	11223
890-1502-8	BH-8 (6)	Total/NA	Solid	8015B NM	11223
890-1502-9	BH-9 (6)	Total/NA	Solid	8015B NM	11223
890-1502-10	BH-10 (6)	Total/NA	Solid	8015B NM	11223
890-1502-11	BH-11 (6)	Total/NA	Solid	8015B NM	11223
890-1502-12	BH-12 (6)	Total/NA	Solid	8015B NM	11223
890-1502-13	BH-13 (6)	Total/NA	Solid	8015B NM	11223
890-1502-14	BH-14 (6)	Total/NA	Solid	8015B NM	11223
890-1502-15	BH-15 (6)	Total/NA	Solid	8015B NM	11223
890-1502-16	BH-16 (6)	Total/NA	Solid	8015B NM	11223
890-1502-17	BH-17 (6)	Total/NA	Solid	8015B NM	11223
890-1502-18	BH-18 (6)	Total/NA	Solid	8015B NM	11223
890-1502-19	BH-19 (6)	Total/NA	Solid	8015B NM	11223
890-1502-20	BH-20 (6)	Total/NA	Solid	8015B NM	11223
MB 880-11223/1-A	Method Blank	Total/NA	Solid	8015B NM	11223
LCS 880-11223/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11223
LCSD 880-11223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11223
890-1502-1 MS	BH-1 (6)	Total/NA	Solid	8015B NM	11223
890-1502-1 MSD	BH-1 (6)	Total/NA	Solid	8015B NM	11223

## Analysis Batch: 11321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-21	BH-21 (6)	Total/NA	Solid	8015B NM	11255
890-1502-22	BH-22 (6)	Total/NA	Solid	8015B NM	11255
890-1502-23	BH-23 (6)	Total/NA	Solid	8015B NM	11255
890-1502-24	BH-24 (6)	Total/NA	Solid	8015B NM	11255
890-1502-25	BH-25 (15)	Total/NA	Solid	8015B NM	11255
890-1502-26	BH-26 (15)	Total/NA	Solid	8015B NM	11255
890-1502-27	BH-27 (15)	Total/NA	Solid	8015B NM	11255
890-1502-28	BH-28 (15)	Total/NA	Solid	8015B NM	11255
890-1502-29	BH-29 (15)	Total/NA	Solid	8015B NM	11255
890-1502-30	BH-30 (15)	Total/NA	Solid	8015B NM	11255
890-1502-31	BH-31 (15)	Total/NA	Solid	8015B NM	11255
890-1502-32	BH-32 (15)	Total/NA	Solid	8015B NM	11255
890-1502-33	BH-33 (15)	Total/NA	Solid	8015B NM	11255
890-1502-34	BH-34 (15)	Total/NA	Solid	8015B NM	11255
890-1502-35	BH-35 (15)	Total/NA	Solid	8015B NM	11255
890-1502-36	BH-36 (15)	Total/NA	Solid	8015B NM	11255
890-1502-37	BH-37 (15)	Total/NA	Solid	8015B NM	11255
890-1502-38	BH-38 (15)	Total/NA	Solid	8015B NM	11255

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## QC Association Summary

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

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

## GC Semi VOA (Continued)

## Analysis Batch: 11321 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-39	BH-39 (15)	Total/NA	Solid	8015B NM	11255
890-1502-40	BH-40 (15)	Total/NA	Solid	8015B NM	11255
MB 880-11255/1-A	Method Blank	Total/NA	Solid	8015B NM	11255
LCS 880-11255/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11255
LCSD 880-11255/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11255
890-1502-21 MS	BH-21 (6)	Total/NA	Solid	8015B NM	11255
890-1502-21 MSD	BH-21 (6)	Total/NA	Solid	8015B NM	11255

## Analysis Batch: 11323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-41	BH-41 (15)	Total/NA	Solid	8015B NM	11273
890-1502-42	BH-42 (15)	Total/NA	Solid	8015B NM	11273
890-1502-43	BH-43 (15)	Total/NA	Solid	8015B NM	11273
890-1502-44	BH-44 (15)	Total/NA	Solid	8015B NM	11273
890-1502-45	BH-45 (15)	Total/NA	Solid	8015B NM	11273
890-1502-46	BH-46 (15)	Total/NA	Solid	8015B NM	11273
890-1502-47	BH-47 (15)	Total/NA	Solid	8015B NM	11273
890-1502-48	BH-48 (15)	Total/NA	Solid	8015B NM	11273
890-1502-49	BH-49 (15)	Total/NA	Solid	8015B NM	11273
890-1502-50	BH-50 (15)	Total/NA	Solid	8015B NM	11273
890-1502-51	BH-51 (15 )	Total/NA	Solid	8015B NM	11273
890-1502-52	BH-52 (15)	Total/NA	Solid	8015B NM	11273
890-1502-53	BH-53 (15)	Total/NA	Solid	8015B NM	11273
890-1502-54	BH-54 (15)	Total/NA	Solid	8015B NM	11273
890-1502-55	BH-55 (15)	Total/NA	Solid	8015B NM	11273
890-1502-56	BH-56 (15)	Total/NA	Solid	8015B NM	11273
890-1502-57	BH-57 (15)	Total/NA	Solid	8015B NM	11273
890-1502-58	BH-58 (15)	Total/NA	Solid	8015B NM	11273
890-1502-59	BH-59 (15)	Total/NA	Solid	8015B NM	11273
890-1502-60	BH-60 (15)	Total/NA	Solid	8015B NM	11273
890-1502-61	BH-61 (15)	Total/NA	Solid	8015B NM	11356
890-1502-62	BH-62 (15)	Total/NA	Solid	8015B NM	11356
890-1502-63	BH-63 (15)	Total/NA	Solid	8015B NM	11356
890-1502-64	BH-64 (15)	Total/NA	Solid	8015B NM	11356
890-1502-65	BH-65 (15)	Total/NA	Solid	8015B NM	11356
890-1502-66	BH-66 (15)	Total/NA	Solid	8015B NM	11356
890-1502-67	BH-67 (15)	Total/NA	Solid	8015B NM	11356
890-1502-68	BH-68 (15)	Total/NA	Solid	8015B NM	11356
890-1502-69	BH-69 (15)	Total/NA	Solid	8015B NM	11356
890-1502-70	BH-70 (15)	Total/NA	Solid	8015B NM	11356
890-1502-71	BH-71 (15)	Total/NA	Solid	8015B NM	11356
890-1502-72	BH-72 (15)	Total/NA	Solid	8015B NM	11356
890-1502-73	BH-73 (15)	Total/NA	Solid	8015B NM	11356
890-1502-74	BH-74 (15)	Total/NA	Solid	8015B NM	11356
890-1502-75	BH-75 (15)	Total/NA	Solid	8015B NM	11356
890-1502-76	BH-76 (15)	Total/NA	Solid	8015B NM	11356
890-1502-77	BH-77 (15)	Total/NA	Solid	8015B NM	11356
890-1502-78	BH-78 (15)	Total/NA	Solid	8015B NM	11356
890-1502-79	BH-79 (15)	Total/NA	Solid	8015B NM	11356
890-1502-80	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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## QC Association Summary

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 Batch
890-1502-61	BH-61 (15)	Total/NA	Solid	8015NM Prep	
890-1502-62	BH-62 (15)	Total/NA	Solid	8015NM Prep	
890-1502-63	BH-63 (15)	Total/NA	Solid	8015NM Prep	
890-1502-64	BH-64 (15)	Total/NA	Solid	8015NM Prep	
890-1502-65	BH-65 (15)	Total/NA	Solid	8015NM Prep	
890-1502-66	BH-66 (15)	Total/NA	Solid	8015NM Prep	
890-1502-67	BH-67 (15)	Total/NA	Solid	8015NM Prep	
890-1502-68	BH-68 (15)	Total/NA	Solid	8015NM Prep	
890-1502-69	BH-69 (15)	Total/NA	Solid	8015NM Prep	
890-1502-70	BH-70 (15)	Total/NA	Solid	8015NM Prep	
890-1502-71	BH-71 (15)	Total/NA	Solid	8015NM Prep	
890-1502-72	BH-72 (15)	Total/NA	Solid	8015NM Prep	
890-1502-73	BH-73 (15)	Total/NA	Solid	8015NM Prep	
890-1502-74	BH-74 (15)	Total/NA	Solid	8015NM Prep	
890-1502-75	BH-75 (15)	Total/NA	Solid	8015NM Prep	
890-1502-76	BH-76 (15)	Total/NA	Solid	8015NM Prep	
890-1502-77	BH-77 (15)	Total/NA	Solid	8015NM Prep	
890-1502-78	BH-78 (15)	Total/NA	Solid	8015NM Prep	
890-1502-79	BH-79 (15)	Total/NA	Solid	8015NM Prep	
890-1502-80	BH-80 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11356/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11356/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-61 MS	BH-61 (15)	Total/NA	Solid	8015NM Prep	
890-1502-61 MSD	BH-61 (15)	Total/NA	Solid	8015NM Prep	

## Prep Batch: 11364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-81	BH-81 (15)	Total/NA	Solid	8015NM Prep	
890-1502-82	BH-82 (15)	Total/NA	Solid	8015NM Prep	
890-1502-83	BH-83 (15)	Total/NA	Solid	8015NM Prep	
890-1502-84	BH-84 (15)	Total/NA	Solid	8015NM Prep	
890-1502-85	BH-85 (15)	Total/NA	Solid	8015NM Prep	
890-1502-86	BH-86 (15)	Total/NA	Solid	8015NM Prep	
890-1502-87	BH-87 (15)	Total/NA	Solid	8015NM Prep	
890-1502-88	BH-88 (15)	Total/NA	Solid	8015NM Prep	
890-1502-89	BH-89 (15)	Total/NA	Solid	8015NM Prep	
890-1502-90	BH90 (RS ) (6)	Total/NA	Solid	8015NM Prep	
890-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

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

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

## GC Semi VOA (Continued)

## Prep Batch: 11364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-93	SW-2 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8015NM Prep	
MB 880-11364/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11364/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11364/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	8015NM Prep	
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8015NM Prep	

## Prep Batch: 11375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-101	SW-10 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-102	SW-11 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-103	SW-12 (10)	Total/NA	Solid	8015NM Prep	
890-1502-104	SW-13 (15)	Total/NA	Solid	8015NM Prep	
890-1502-105	SW-14 (15)	Total/NA	Solid	8015NM Prep	
890-1502-106	SW-15 (15)	Total/NA	Solid	8015NM Prep	
890-1502-107	SW-16 (15)	Total/NA	Solid	8015NM Prep	
890-1502-108	SW-17 (15)	Total/NA	Solid	8015NM Prep	
890-1502-109	SW-18 (15)	Total/NA	Solid	8015NM Prep	
890-1502-110	SW-19 (15)	Total/NA	Solid	8015NM Prep	
890-1502-111	SW-20 (15)	Total/NA	Solid	8015NM Prep	
890-1502-112	SW-21 (15)	Total/NA	Solid	8015NM Prep	
890-1502-113	SW-22 (15)	Total/NA	Solid	8015NM Prep	
890-1502-114	SW-23 (15)	Total/NA	Solid	8015NM Prep	
890-1502-115	SW-24 (15)	Total/NA	Solid	8015NM Prep	
890-1502-116	SW-25 (15)	Total/NA	Solid	8015NM Prep	
890-1502-117	SW-26 (15)	Total/NA	Solid	8015NM Prep	
890-1502-118	SW-27 (15)	Total/NA	Solid	8015NM Prep	
890-1502-119	SW-28 (15)	Total/NA	Solid	8015NM Prep	
890-1502-120	SW-29 (15)	Total/NA	Solid	8015NM Prep	
MB 880-11375/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11375/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-11375/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8015NM Prep	
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid	8015NM Prep	

## Prep Batch: 11376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-121	SW-30 (RS) (6)	Total/NA	Solid	8015NM Prep	
890-1502-122	SW-31 (RS) (4)	Total/NA	Solid	8015NM Prep	
890-1502-123	SW-32 (RS) (6)	Total/NA	Solid	8015NM Prep	
890-1502-124	SW-33 (RS) (8)	Total/NA	Solid	8015NM Prep	
MB 880-11376/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-11376/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

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

Job ID: 890-1502-1  
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 Batch
890-1502-81	BH-81 (15)	Total/NA	Solid	8015B NM	11364
890-1502-82	BH-82 (15)	Total/NA	Solid	8015B NM	11364
890-1502-83	BH-83 (15)	Total/NA	Solid	8015B NM	11364
890-1502-84	BH-84 (15)	Total/NA	Solid	8015B NM	11364
890-1502-85	BH-85 (15)	Total/NA	Solid	8015B NM	11364
890-1502-86	BH-86 (15)	Total/NA	Solid	8015B NM	11364
890-1502-87	BH-87 (15)	Total/NA	Solid	8015B NM	11364
890-1502-88	BH-88 (15)	Total/NA	Solid	8015B NM	11364
890-1502-89	BH-89 (15)	Total/NA	Solid	8015B NM	11364
890-1502-90	BH90 (RS ) (6)	Total/NA	Solid	8015B NM	11364
890-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	8015B NM	11364
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-93	SW-2 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-94	SW-3 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-95	SW-4 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-96	SW-5 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-97	SW-6 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-98	SW-7 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-99	SW-8 (0-6)	Total/NA	Solid	8015B NM	11364
890-1502-100	SW-9 (0-6)	Total/NA	Solid	8015B NM	11364
MB 880-11364/1-A	Method Blank	Total/NA	Solid	8015B NM	11364
LCS 880-11364/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11364
LCSD 880-11364/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11364
890-1502-81 MS	BH-81 (15)	Total/NA	Solid	8015B NM	11364
890-1502-81 MSD	BH-81 (15)	Total/NA	Solid	8015B NM	11364

## 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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## QC Association Summary

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

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

## GC Semi VOA (Continued)

## Analysis Batch: 11418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-106	SW-15 (15)	Total/NA	Solid	8015B NM	11375
890-1502-107	SW-16 (15)	Total/NA	Solid	8015B NM	11375
890-1502-108	SW-17 (15)	Total/NA	Solid	8015B NM	11375
890-1502-109	SW-18 (15)	Total/NA	Solid	8015B NM	11375
890-1502-110	SW-19 (15)	Total/NA	Solid	8015B NM	11375
890-1502-111	SW-20 (15)	Total/NA	Solid	8015B NM	11375
890-1502-112	SW-21 (15)	Total/NA	Solid	8015B NM	11375
890-1502-113	SW-22 (15)	Total/NA	Solid	8015B NM	11375
890-1502-114	SW-23 (15)	Total/NA	Solid	8015B NM	11375
890-1502-115	SW-24 (15)	Total/NA	Solid	8015B NM	11375
890-1502-116	SW-25 (15)	Total/NA	Solid	8015B NM	11375
890-1502-117	SW-26 (15)	Total/NA	Solid	8015B NM	11375
890-1502-118	SW-27 (15)	Total/NA	Solid	8015B NM	11375
890-1502-119	SW-28 (15)	Total/NA	Solid	8015B NM	11375
890-1502-120	SW-29 (15)	Total/NA	Solid	8015B NM	11375
MB 880-11375/1-A	Method Blank	Total/NA	Solid	8015B NM	11375
LCS 880-11375/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	11375
LCSD 880-11375/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	11375
890-1502-101 MS	SW-10 (0-6)	Total/NA	Solid	8015B NM	11375
890-1502-101 MSD	SW-10 (0-6)	Total/NA	Solid	8015B NM	11375

## Analysis Batch: 11598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	
890-1502-6	BH-6 (6)	Total/NA	Solid	8015 NM	
890-1502-7	BH-7 (6)	Total/NA	Solid	8015 NM	
890-1502-8	BH-8 (6)	Total/NA	Solid	8015 NM	
890-1502-9	BH-9 (6)	Total/NA	Solid	8015 NM	
890-1502-10	BH-10 (6)	Total/NA	Solid	8015 NM	
890-1502-11	BH-11 (6)	Total/NA	Solid	8015 NM	
890-1502-12	BH-12 (6)	Total/NA	Solid	8015 NM	
890-1502-13	BH-13 (6)	Total/NA	Solid	8015 NM	
890-1502-14	BH-14 (6)	Total/NA	Solid	8015 NM	
890-1502-15	BH-15 (6)	Total/NA	Solid	8015 NM	
890-1502-16	BH-16 (6)	Total/NA	Solid	8015 NM	
890-1502-17	BH-17 (6)	Total/NA	Solid	8015 NM	
890-1502-18	BH-18 (6)	Total/NA	Solid	8015 NM	
890-1502-19	BH-19 (6)	Total/NA	Solid	8015 NM	
890-1502-20	BH-20 (6)	Total/NA	Solid	8015 NM	
890-1502-21	BH-21 (6)	Total/NA	Solid	8015 NM	
890-1502-22	BH-22 (6)	Total/NA	Solid	8015 NM	
890-1502-23	BH-23 (6)	Total/NA	Solid	8015 NM	
890-1502-24	BH-24 (6)	Total/NA	Solid	8015 NM	
890-1502-25	BH-25 (15)	Total/NA	Solid	8015 NM	
890-1502-26	BH-26 (15)	Total/NA	Solid	8015 NM	
890-1502-27	BH-27 (15)	Total/NA	Solid	8015 NM	
890-1502-28	BH-28 (15)	Total/NA	Solid	8015 NM	

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## QC Association Summary

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
890-1502-29	BH-29 (15)	Total/NA	Solid	8015 NM	
890-1502-30	BH-30 (15)	Total/NA	Solid	8015 NM	
890-1502-31	BH-31 (15)	Total/NA	Solid	8015 NM	
890-1502-32	BH-32 (15)	Total/NA	Solid	8015 NM	
890-1502-33	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	BH-49 (15)	Total/NA	Solid	8015 NM	
890-1502-50	BH-50 (15)	Total/NA	Solid	8015 NM	
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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## QC Association Summary

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	
890-1502-91	BH-91 (RS ) (6)	Total/NA	Solid	8015 NM	
890-1502-92	SW-1 (0-6)	Total/NA	Solid	8015 NM	
890-1502-93	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	
890-1502-105	SW-14 (15)	Total/NA	Solid	8015 NM	
890-1502-106	SW-15 (15)	Total/NA	Solid	8015 NM	
890-1502-107	SW-16 (15)	Total/NA	Solid	8015 NM	
890-1502-108	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	

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## QC Association Summary

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 Batch
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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## QC Association Summary

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

Job ID: 890-1502-1  
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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## QC Association Summary

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

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

## HPLC/IC (Continued)

## Leach Batch: 11238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-39	BH-39 (15)	Soluble	Solid	DI Leach	
890-1502-40	BH-40 (15)	Soluble	Solid	DI Leach	
890-1502-41	BH-41 (15)	Soluble	Solid	DI Leach	
890-1502-42	BH-42 (15)	Soluble	Solid	DI Leach	
890-1502-43	BH-43 (15)	Soluble	Solid	DI Leach	
890-1502-44	BH-44 (15)	Soluble	Solid	DI Leach	
MB 880-11238/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11238/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11238/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-25 MS	BH-25 (15)	Soluble	Solid	DI Leach	
890-1502-25 MSD	BH-25 (15)	Soluble	Solid	DI Leach	
890-1502-35 MS	BH-35 (15)	Soluble	Solid	DI Leach	
890-1502-35 MSD	BH-35 (15)	Soluble	Solid	DI Leach	

## Leach Batch: 11240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep 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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## QC Association Summary

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

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

## HPLC/IC (Continued)

## Leach Batch: 11242 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-70	BH-70 (15)	Soluble	Solid	DI Leach	
890-1502-71	BH-71 (15)	Soluble	Solid	DI Leach	
890-1502-72	BH-72 (15)	Soluble	Solid	DI Leach	
890-1502-73	BH-73 (15)	Soluble	Solid	DI Leach	
890-1502-74	BH-74 (15)	Soluble	Solid	DI Leach	
890-1502-75	BH-75 (15)	Soluble	Solid	DI Leach	
890-1502-76	BH-76 (15)	Soluble	Solid	DI Leach	
890-1502-77	BH-77 (15)	Soluble	Solid	DI Leach	
890-1502-78	BH-78 (15)	Soluble	Solid	DI Leach	
890-1502-79	BH-79 (15)	Soluble	Solid	DI Leach	
890-1502-80	BH-80 (15)	Soluble	Solid	DI Leach	
890-1502-81	BH-81 (15)	Soluble	Solid	DI Leach	
890-1502-82	BH-82 (15)	Soluble	Solid	DI Leach	
890-1502-83	BH-83 (15)	Soluble	Solid	DI Leach	
890-1502-84	BH-84 (15)	Soluble	Solid	DI Leach	
MB 880-11242/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11242/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11242/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-65 MS	BH-65 (15)	Soluble	Solid	DI Leach	
890-1502-65 MSD	BH-65 (15)	Soluble	Solid	DI Leach	
890-1502-75 MS	BH-75 (15)	Soluble	Solid	DI Leach	
890-1502-75 MSD	BH-75 (15)	Soluble	Solid	DI Leach	

## Leach Batch: 11243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-85	BH-85 (15)	Soluble	Solid	DI Leach	
890-1502-86	BH-86 (15)	Soluble	Solid	DI Leach	
890-1502-87	BH-87 (15)	Soluble	Solid	DI Leach	
890-1502-88	BH-88 (15)	Soluble	Solid	DI Leach	
890-1502-89	BH-89 (15)	Soluble	Solid	DI Leach	
890-1502-90	BH90 (RS ) (6)	Soluble	Solid	DI Leach	
890-1502-91	BH-91 (RS ) (6)	Soluble	Solid	DI Leach	
890-1502-121	SW-30 (RS) (6)	Soluble	Solid	DI Leach	
890-1502-122	SW-31 (RS) (4)	Soluble	Solid	DI Leach	
890-1502-123	SW-32 (RS) (6)	Soluble	Solid	DI Leach	
890-1502-124	SW-33 (RS) (8)	Soluble	Solid	DI Leach	
MB 880-11243/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-11243/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-11243/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1502-85 MS	BH-85 (15)	Soluble	Solid	DI Leach	
890-1502-85 MSD	BH-85 (15)	Soluble	Solid	DI Leach	
890-1502-124 MS	SW-33 (RS) (8)	Soluble	Solid	DI Leach	
890-1502-124 MSD	SW-33 (RS) (8)	Soluble	Solid	DI Leach	

## Analysis Batch: 11379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-1	BH-1 (6)	Soluble	Solid	300.0	11227
890-1502-2	BH-2 (6)	Soluble	Solid	300.0	11227
890-1502-3	BH-3 (6)	Soluble	Solid	300.0	11227
MB 880-11227/1-A	Method Blank	Soluble	Solid	300.0	11227
LCS 880-11227/2-A	Lab Control Sample	Soluble	Solid	300.0	11227

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## QC Association Summary

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

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

## HPLC/IC (Continued)

## Analysis Batch: 11379 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-11227/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11227
890-1499-A-1-H MS	Matrix Spike	Soluble	Solid	300.0	11227
890-1499-A-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	11227

## Analysis Batch: 11381

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 Batch
890-1502-4	BH-4 (6)	Soluble	Solid	300.0	11236
890-1502-102	SW-11 (0-6)	Soluble	Solid	300.0	11236
890-1502-103	SW-12 (10)	Soluble	Solid	300.0	11236
890-1502-104	SW-13 (15)	Soluble	Solid	300.0	11236
890-1502-105	SW-14 (15)	Soluble	Solid	300.0	11236
890-1502-106	SW-15 (15)	Soluble	Solid	300.0	11236
890-1502-107	SW-16 (15)	Soluble	Solid	300.0	11236
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	11236
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	11236
890-1502-119	SW-28 (15)	Soluble	Solid	300.0	11236
890-1502-120	SW-29 (15)	Soluble	Solid	300.0	11236
MB 880-11236/1-A	Method Blank	Soluble	Solid	300.0	11236
LCS 880-11236/2-A	Lab Control Sample	Soluble	Solid	300.0	11236
LCSD 880-11236/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11236
890-1502-4 MS	BH-4 (6)	Soluble	Solid	300.0	11236
890-1502-4 MSD	BH-4 (6)	Soluble	Solid	300.0	11236
890-1502-111 MS	SW-20 (15)	Soluble	Solid	300.0	11236
890-1502-111 MSD	SW-20 (15)	Soluble	Solid	300.0	11236

Eurofins Xenco, Carlsbad

## QC Association Summary

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

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

## HPLC/IC

## Analysis Batch: 11453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-5	BH-5 (6)	Soluble	Solid	300.0	11237
890-1502-6	BH-6 (6)	Soluble	Solid	300.0	11237
890-1502-7	BH-7 (6)	Soluble	Solid	300.0	11237
890-1502-8	BH-8 (6)	Soluble	Solid	300.0	11237
890-1502-9	BH-9 (6)	Soluble	Solid	300.0	11237
890-1502-10	BH-10 (6)	Soluble	Solid	300.0	11237
890-1502-11	BH-11 (6)	Soluble	Solid	300.0	11237
890-1502-12	BH-12 (6)	Soluble	Solid	300.0	11237
890-1502-13	BH-13 (6)	Soluble	Solid	300.0	11237
890-1502-14	BH-14 (6)	Soluble	Solid	300.0	11237
890-1502-15	BH-15 (6)	Soluble	Solid	300.0	11237
890-1502-16	BH-16 (6)	Soluble	Solid	300.0	11237
890-1502-17	BH-17 (6)	Soluble	Solid	300.0	11237
890-1502-18	BH-18 (6)	Soluble	Solid	300.0	11237
890-1502-19	BH-19 (6)	Soluble	Solid	300.0	11237
890-1502-20	BH-20 (6)	Soluble	Solid	300.0	11237
890-1502-21	BH-21 (6)	Soluble	Solid	300.0	11237
890-1502-22	BH-22 (6)	Soluble	Solid	300.0	11237
890-1502-23	BH-23 (6)	Soluble	Solid	300.0	11237
890-1502-24	BH-24 (6)	Soluble	Solid	300.0	11237
MB 880-11237/1-A	Method Blank	Soluble	Solid	300.0	11237
LCS 880-11237/2-A	Lab Control Sample	Soluble	Solid	300.0	11237
LCSD 880-11237/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11237
890-1502-5 MS	BH-5 (6)	Soluble	Solid	300.0	11237
890-1502-5 MSD	BH-5 (6)	Soluble	Solid	300.0	11237
890-1502-15 MS	BH-15 (6)	Soluble	Solid	300.0	11237
890-1502-15 MSD	BH-15 (6)	Soluble	Solid	300.0	11237

## Analysis Batch: 11454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-25	BH-25 (15)	Soluble	Solid	300.0	11238
890-1502-26	BH-26 (15)	Soluble	Solid	300.0	11238
890-1502-27	BH-27 (15)	Soluble	Solid	300.0	11238
890-1502-28	BH-28 (15)	Soluble	Solid	300.0	11238
890-1502-29	BH-29 (15)	Soluble	Solid	300.0	11238
890-1502-30	BH-30 (15)	Soluble	Solid	300.0	11238
890-1502-31	BH-31 (15)	Soluble	Solid	300.0	11238
890-1502-32	BH-32 (15)	Soluble	Solid	300.0	11238
890-1502-33	BH-33 (15)	Soluble	Solid	300.0	11238
890-1502-34	BH-34 (15)	Soluble	Solid	300.0	11238
890-1502-35	BH-35 (15)	Soluble	Solid	300.0	11238
890-1502-36	BH-36 (15)	Soluble	Solid	300.0	11238
890-1502-37	BH-37 (15)	Soluble	Solid	300.0	11238
890-1502-38	BH-38 (15)	Soluble	Solid	300.0	11238
890-1502-39	BH-39 (15)	Soluble	Solid	300.0	11238
890-1502-40	BH-40 (15)	Soluble	Solid	300.0	11238
890-1502-41	BH-41 (15)	Soluble	Solid	300.0	11238
890-1502-42	BH-42 (15)	Soluble	Solid	300.0	11238
890-1502-43	BH-43 (15)	Soluble	Solid	300.0	11238
890-1502-44	BH-44 (15)	Soluble	Solid	300.0	11238
MB 880-11238/1-A	Method Blank	Soluble	Solid	300.0	11238

Eurofins Xenco, Carlsbad

## QC Association Summary

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

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

## HPLC/IC (Continued)

## Analysis Batch: 11454 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-11238/2-A	Lab Control Sample	Soluble	Solid	300.0	11238
LCSD 880-11238/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11238
890-1502-25 MS	BH-25 (15)	Soluble	Solid	300.0	11238
890-1502-25 MSD	BH-25 (15)	Soluble	Solid	300.0	11238
890-1502-35 MS	BH-35 (15)	Soluble	Solid	300.0	11238
890-1502-35 MSD	BH-35 (15)	Soluble	Solid	300.0	11238

## Analysis Batch: 11455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-45	BH-45 (15)	Soluble	Solid	300.0	11240
890-1502-46	BH-46 (15)	Soluble	Solid	300.0	11240
890-1502-47	BH-47 (15)	Soluble	Solid	300.0	11240
890-1502-48	BH-48 (15)	Soluble	Solid	300.0	11240
890-1502-49	BH-49 (15)	Soluble	Solid	300.0	11240
890-1502-50	BH-50 (15)	Soluble	Solid	300.0	11240
890-1502-51	BH-51 (15 )	Soluble	Solid	300.0	11240
890-1502-52	BH-52 (15)	Soluble	Solid	300.0	11240
890-1502-53	BH-53 (15)	Soluble	Solid	300.0	11240
890-1502-54	BH-54 (15)	Soluble	Solid	300.0	11240
890-1502-55	BH-55 (15)	Soluble	Solid	300.0	11240
890-1502-56	BH-56 (15)	Soluble	Solid	300.0	11240
890-1502-57	BH-57 (15)	Soluble	Solid	300.0	11240
890-1502-58	BH-58 (15)	Soluble	Solid	300.0	11240
890-1502-59	BH-59 (15)	Soluble	Solid	300.0	11240
890-1502-60	BH-60 (15)	Soluble	Solid	300.0	11240
890-1502-61	BH-61 (15)	Soluble	Solid	300.0	11240
890-1502-62	BH-62 (15)	Soluble	Solid	300.0	11240
890-1502-63	BH-63 (15)	Soluble	Solid	300.0	11240
890-1502-64	BH-64 (15)	Soluble	Solid	300.0	11240
MB 880-11240/1-A	Method Blank	Soluble	Solid	300.0	11240
LCS 880-11240/2-A	Lab Control Sample	Soluble	Solid	300.0	11240
LCSD 880-11240/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11240
890-1502-45 MS	BH-45 (15)	Soluble	Solid	300.0	11240
890-1502-45 MSD	BH-45 (15)	Soluble	Solid	300.0	11240
890-1502-55 MS	BH-55 (15)	Soluble	Solid	300.0	11240
890-1502-55 MSD	BH-55 (15)	Soluble	Solid	300.0	11240

## Analysis Batch: 11456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep 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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## QC Association Summary

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

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

## HPLC/IC (Continued)

## Analysis Batch: 11456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-77	BH-77 (15)	Soluble	Solid	300.0	11242
890-1502-78	BH-78 (15)	Soluble	Solid	300.0	11242
890-1502-79	BH-79 (15)	Soluble	Solid	300.0	11242
890-1502-80	BH-80 (15)	Soluble	Solid	300.0	11242
890-1502-81	BH-81 (15)	Soluble	Solid	300.0	11242
890-1502-82	BH-82 (15)	Soluble	Solid	300.0	11242
890-1502-83	BH-83 (15)	Soluble	Solid	300.0	11242
890-1502-84	BH-84 (15)	Soluble	Solid	300.0	11242
MB 880-11242/1-A	Method Blank	Soluble	Solid	300.0	11242
LCS 880-11242/2-A	Lab Control Sample	Soluble	Solid	300.0	11242
LCSD 880-11242/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11242
890-1502-65 MS	BH-65 (15)	Soluble	Solid	300.0	11242
890-1502-65 MSD	BH-65 (15)	Soluble	Solid	300.0	11242
890-1502-75 MS	BH-75 (15)	Soluble	Solid	300.0	11242
890-1502-75 MSD	BH-75 (15)	Soluble	Solid	300.0	11242

## Analysis Batch: 11705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1502-85	BH-85 (15)	Soluble	Solid	300.0	11243
890-1502-86	BH-86 (15)	Soluble	Solid	300.0	11243
890-1502-87	BH-87 (15)	Soluble	Solid	300.0	11243
890-1502-88	BH-88 (15)	Soluble	Solid	300.0	11243
890-1502-89	BH-89 (15)	Soluble	Solid	300.0	11243
890-1502-90	BH90 (RS ) (6)	Soluble	Solid	300.0	11243
890-1502-91	BH-91 (RS ) (6)	Soluble	Solid	300.0	11243
890-1502-121	SW-30 (RS) (6)	Soluble	Solid	300.0	11243
890-1502-122	SW-31 (RS) (4)	Soluble	Solid	300.0	11243
890-1502-123	SW-32 (RS) (6)	Soluble	Solid	300.0	11243
890-1502-124	SW-33 (RS) (8)	Soluble	Solid	300.0	11243
MB 880-11243/1-A	Method Blank	Soluble	Solid	300.0	11243
LCS 880-11243/2-A	Lab Control Sample	Soluble	Solid	300.0	11243
LCSD 880-11243/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	11243
890-1502-85 MS	BH-85 (15)	Soluble	Solid	300.0	11243
890-1502-85 MSD	BH-85 (15)	Soluble	Solid	300.0	11243
890-1502-124 MS	SW-33 (RS) (8)	Soluble	Solid	300.0	11243
890-1502-124 MSD	SW-33 (RS) (8)	Soluble	Solid	300.0	11243

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-1 (6)

Lab Sample ID: 890-1502-1

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 01:08	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 12:43	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11227	11/02/21 11:52	CH	XEN MID
Soluble	Analysis	300.0		1			11379	11/06/21 06:09	CH	XEN MID

Client Sample ID: BH-3 (6)

Lab Sample ID: 890-1502-3

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 01:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

## Client Sample ID: BH-4 (6)

## Lab Sample ID: 890-1502-4

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 02:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 13:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 05:30	CH	XEN MID

## Client Sample ID: BH-6 (6)

## Lab Sample ID: 890-1502-6

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.05 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 14:23	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-7 (6)

Lab Sample ID: 890-1502-7

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 05:59	CH	XEN MID

Client Sample ID: BH-8 (6)

Lab Sample ID: 890-1502-8

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 03:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 14:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 06:07	CH	XEN MID

Client Sample ID: BH-9 (6)

Lab Sample ID: 890-1502-9

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Matrix: Solid

Date Received: 10/29/21 12:45

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	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 03:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/08/21 17:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 15:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 06:36	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: BH-11 (6)

## Lab Sample ID: 890-1502-11

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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 05:34	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 16:22	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 06:51	CH	XEN MID

## Client Sample ID: BH-13 (6)

## Lab Sample ID: 890-1502-13

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 06:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

## Client Sample ID: BH-17 (6)

## Lab Sample ID: 890-1502-17

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 18:03	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: BH-17 (6)

## Lab Sample ID: 890-1502-17

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 07:43	CH	XEN MID

## Client Sample ID: BH-18 (6)

## Lab Sample ID: 890-1502-18

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 07:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 18:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		5			11453	11/07/21 08:13	CH	XEN MID

## Client Sample ID: BH-20 (6)

## Lab Sample ID: 890-1502-20

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11075	11/01/21 11:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11206	11/03/21 08:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11223	11/02/21 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11317	11/03/21 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:20	CH	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

Client Sample ID: BH-21 (6)

Lab Sample ID: 890-1502-21

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 18:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 11:27	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:27	CH	XEN MID

Client Sample ID: BH-22 (6)

Lab Sample ID: 890-1502-22

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 19:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 13:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11237	11/02/21 12:31	CH	XEN MID
Soluble	Analysis	300.0		1			11453	11/07/21 08:49	CH	XEN MID

## Client Sample ID: BH-25 (15)

## Lab Sample ID: 890-1502-25

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 19:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 13:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 10:11	CH	XEN MID

## Client Sample ID: BH-27 (15)

## Lab Sample ID: 890-1502-27

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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	Prep	8015NM Prep			10.05 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 14:18	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

Job ID: 890-1502-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 10:18	CH	XEN MID

## Client Sample ID: BH-28 (15)

## Lab Sample ID: 890-1502-28

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Matrix: Solid

Date Received: 10/29/21 12:45

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	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 21:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 15:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 10:56	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-31 (15)

Lab Sample ID: 890-1502-31

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/02/21 23:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 16:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:18	CH	XEN MID

Client Sample ID: BH-34 (15)

Lab Sample ID: 890-1502-34

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 00:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: BH-34 (15)

## Lab Sample ID: 890-1502-34

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 17:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:25	CH	XEN MID

## Client Sample ID: BH-35 (15)

## Lab Sample ID: 890-1502-35

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 00:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 17:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 11:55	CH	XEN MID

## Client Sample ID: BH-37 (15)

## Lab Sample ID: 890-1502-37

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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	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	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 18:11	AJ	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

## Client Sample ID: BH-37 (15)

## Lab Sample ID: 890-1502-37

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 01:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 18:53	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 12:32	CH	XEN MID

## Client Sample ID: BH-40 (15)

## Lab Sample ID: 890-1502-40

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11109	11/01/21 12:05	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 02:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11255	11/02/21 14:45	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11321	11/03/21 19:15	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		1			11454	11/07/21 12:39	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-41 (15)

Lab Sample ID: 890-1502-41

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 02:46	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 12:32	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 12:54	CH	XEN MID

Client Sample ID: BH-43 (15)

Lab Sample ID: 890-1502-43

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 03:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 12:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11238	11/02/21 12:34	CH	XEN MID
Soluble	Analysis	300.0		5			11454	11/07/21 13:02	CH	XEN MID

Client Sample ID: BH-44 (15)

Lab Sample ID: 890-1502-44

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 03:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-44 (15)

Lab Sample ID: 890-1502-44

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-45 (15)

Lab Sample ID: 890-1502-45

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-47 (15)

Lab Sample ID: 890-1502-47

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.05 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 14:18	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-47 (15)

Lab Sample ID: 890-1502-47

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 05:00	CH	XEN MID

Client Sample ID: BH-48 (15)

Lab Sample ID: 890-1502-48

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 06:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 15:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 05:39	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-51 (15)

Lab Sample ID: 890-1502-51

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 08:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 16:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 05:46	CH	XEN MID

Client Sample ID: BH-52 (15)

Lab Sample ID: 890-1502-52

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11388	11/03/21 08:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11420	11/04/21 11:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 16:46	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 06:02	CH	XEN MID

Client Sample ID: BH-54 (15)

Lab Sample ID: 890-1502-54

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11111	11/01/21 12:11	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11259	11/04/21 09:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-55 (15)

Lab Sample ID: 890-1502-55

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-57 (15)

Lab Sample ID: 890-1502-57

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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	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 18:11	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: BH-57 (15)

## Lab Sample ID: 890-1502-57

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11445	11/04/21 11:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11449	11/05/21 01:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11273	11/02/21 16:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 19:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		1			11455	11/08/21 07:26	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-61 (15)

Lab Sample ID: 890-1502-61

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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 06:08	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			10.02 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 22:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-64 (15)

Lab Sample ID: 890-1502-64

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 06:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-64 (15)

Lab Sample ID: 890-1502-64

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 23:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	11240	11/02/21 12:39	CH	XEN MID
Soluble	Analysis	300.0		5			11455	11/08/21 07:56	CH	XEN MID

Client Sample ID: BH-65 (15)

Lab Sample ID: 890-1502-65

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 07:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/03/21 23:41	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 09:21	CH	XEN MID

Client Sample ID: BH-67 (15)

Lab Sample ID: 890-1502-67

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.05 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 00:02	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: BH-67 (15)

## Lab Sample ID: 890-1502-67

Date Collected: 10/27/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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	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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 08:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 01:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:07	CH	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

Client Sample ID: BH-71 (15)

Lab Sample ID: 890-1502-71

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 10:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 01:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:15	CH	XEN MID

Client Sample ID: BH-72 (15)

Lab Sample ID: 890-1502-72

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 11:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 02:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 10:22	CH	XEN MID

Client Sample ID: BH-73 (15)

Lab Sample ID: 890-1502-73

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 11:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 02:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 10:30	CH	XEN MID

Client Sample ID: BH-74 (15)

Lab Sample ID: 890-1502-74

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 11:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 02:52	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 10:37	CH	XEN MID

Client Sample ID: BH-75 (15)

Lab Sample ID: 890-1502-75

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-77 (15)

Lab Sample ID: 890-1502-77

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 03:57	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: BH-77 (15)

## Lab Sample ID: 890-1502-77

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		5			11456	11/08/21 12:34	CH	XEN MID

## Client Sample ID: BH-78 (15)

## Lab Sample ID: 890-1502-78

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 13:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 04:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:39	CH	XEN MID

## Client Sample ID: BH-79 (15)

## Lab Sample ID: 890-1502-79

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 13:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 04:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:46	CH	XEN MID

## Client Sample ID: BH-80 (15)

## Lab Sample ID: 890-1502-80

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	11112	11/01/21 12:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11221	11/03/21 13:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11356	11/03/21 10:38	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11323	11/04/21 05:01	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 11:54	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-81 (15)

Lab Sample ID: 890-1502-81

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 17:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 11:05	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:02	CH	XEN MID

Client Sample ID: BH-82 (15)

Lab Sample ID: 890-1502-82

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 18:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 12:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:17	CH	XEN MID

Client Sample ID: BH-84 (15)

Lab Sample ID: 890-1502-84

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 18:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-84 (15)

Lab Sample ID: 890-1502-84

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/05/21 13:50	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 12:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	11242	11/02/21 12:43	CH	XEN MID
Soluble	Analysis	300.0		1			11456	11/08/21 12:25	CH	XEN MID

Client Sample ID: BH-85 (15)

Lab Sample ID: 890-1502-85

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 19:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 13:38	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 13:15	CH	XEN MID

Client Sample ID: BH-87 (15)

Lab Sample ID: 890-1502-87

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.05 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 13:59	AJ	XEN MID

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

## Client Sample ID: BH-87 (15)

## Lab Sample ID: 890-1502-87

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
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 13:22	CH	XEN MID

## Client Sample ID: BH-88 (15)

## Lab Sample ID: 890-1502-88

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 20:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 15:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 14:01	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: BH-91 (RS ) (6)

Lab Sample ID: 890-1502-91

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 22:48	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 15:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 14:08	CH	XEN MID

Client Sample ID: SW-1 (0-6)

Lab Sample ID: 890-1502-92

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/03/21 23:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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

Lab Sample ID: 890-1502-97

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 17:56	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

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

Lab Sample ID: 890-1502-97

Date Collected: 10/25/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11113	11/01/21 12:16	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 01:52	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	11364	11/03/21 11:37	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11416	11/04/21 19:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 04:23	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

Client Sample ID: SW-10 (0-6)

Lab Sample ID: 890-1502-101

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 05:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 11:05	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11233	11/02/21 12:00	CH	XEN MID
Soluble	Analysis	300.0		5			11381	11/07/21 04:30	CH	XEN MID

Client Sample ID: SW-11 (0-6)

Lab Sample ID: 890-1502-102

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 09:36	CH	XEN MID

Client Sample ID: SW-12 (10)

Lab Sample ID: 890-1502-103

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 06:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 12:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 09:46	CH	XEN MID

Client Sample ID: SW-13 (15)

Lab Sample ID: 890-1502-104

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

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	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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## Lab Chronicle

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

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

## 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

## Client Sample ID: SW-16 (15)

## Lab Sample ID: 890-1502-107

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.05 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 13:59	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

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

## Client Sample ID: SW-16 (15)

## Lab Sample ID: 890-1502-107

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
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 10:49	CH	XEN MID

## Client Sample ID: SW-17 (15)

## Lab Sample ID: 890-1502-108

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 08:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 15:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 11:20	CH	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

Job ID: 890-1502-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 10:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10			11452	11/08/21 12:02	CH	XEN MID

Client Sample ID: SW-22 (15)

Lab Sample ID: 890-1502-113

Date Collected: 10/26/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 11:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

Job ID: 890-1502-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-115

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-116

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

## Client Sample ID: SW-26 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-117

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 17:56	AJ	XEN MID

Eurofins Xenco, Carlsbad

## Lab Chronicle

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

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-117

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		1			11452	11/08/21 13:15	CH	XEN MID

## Client Sample ID: SW-27 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-118

Matrix: Solid

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	11114	11/01/21 12:18	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11374	11/04/21 12:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	11375	11/03/21 13:15	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11418	11/04/21 18:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	11236	11/02/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10			11452	11/08/21 13:25	CH	XEN MID

## Client Sample ID: SW-28 (15)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-119

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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)

Date Collected: 10/26/21 00:00

Date Received: 10/29/21 12:45

## Lab Sample ID: 890-1502-120

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins Xenco, Carlsbad



## Lab Chronicle

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

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

Client Sample ID: SW-30 (RS) (6)

Lab Sample ID: 890-1502-121

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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)

Lab Sample ID: 890-1502-122

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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)

Lab Sample ID: 890-1502-123

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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)

Lab Sample ID: 890-1502-124

Date Collected: 10/28/21 00:00

Matrix: Solid

Date Received: 10/29/21 12:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	11076	11/01/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	11022	11/02/21 00:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			11768	11/09/21 10:58	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

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

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

Client Sample ID: SW-33 (RS) (8)  
Date Collected: 10/28/21 00:00  
Date Received: 10/29/21 12:45

Lab Sample ID: 890-1502-124  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			11598	11/08/21 15:54	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	11376	11/03/21 13:58	DM	XEN MID
Total/NA	Analysis	8015B NM		1			11414	11/04/21 12:36	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	11243	11/02/21 12:46	CH	XEN MID
Soluble	Analysis	300.0		1			11705	11/09/21 15:08	CH	XEN MID

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

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Accreditation/Certification Summary

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

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

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

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

Job ID: 890-1502-1  
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

## Sample Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1502-1	BH-1 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-2	BH-2 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-3	BH-3 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-4	BH-4 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-5	BH-5 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-6	BH-6 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-7	BH-7 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-8	BH-8 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-9	BH-9 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-10	BH-10 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-11	BH-11 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-12	BH-12 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-13	BH-13 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-14	BH-14 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-15	BH-15 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-16	BH-16 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-17	BH-17 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-18	BH-18 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-19	BH-19 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-20	BH-20 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-21	BH-21 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-22	BH-22 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-23	BH-23 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-24	BH-24 (6)	Solid	10/27/21 00:00	10/29/21 12:45	6
890-1502-25	BH-25 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-26	BH-26 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-27	BH-27 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-28	BH-28 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-29	BH-29 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-30	BH-30 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-31	BH-31 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-32	BH-32 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-33	BH-33 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-34	BH-34 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-35	BH-35 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-36	BH-36 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-37	BH-37 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-38	BH-38 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-39	BH-39 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-40	BH-40 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-41	BH-41 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-42	BH-42 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-43	BH-43 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-44	BH-44 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-45	BH-45 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-46	BH-46 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-47	BH-47 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-48	BH-48 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-49	BH-49 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-50	BH-50 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-51	BH-51 (15 )	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-52	BH-52 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-53	BH-53 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15
890-1502-54	BH-54 (15)	Solid	10/27/21 00:00	10/29/21 12:45	15



## 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
890-1502-93	SW-2 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-94	SW-3 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-95	SW-4 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-96	SW-5 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-97	SW-6 (0-6)	Solid	10/25/21 00:00	10/29/21 12:45	0 - 6
890-1502-98	SW-7 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-99	SW-8 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-100	SW-9 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-101	SW-10 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-102	SW-11 (0-6)	Solid	10/26/21 00:00	10/29/21 12:45	0 - 6
890-1502-103	SW-12 (10)	Solid	10/26/21 00:00	10/29/21 12:45	10
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
890-1502-118	SW-27 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-119	SW-28 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-120	SW-29 (15)	Solid	10/26/21 00:00	10/29/21 12:45	15
890-1502-121	SW-30 (RS) (6)	Solid	10/28/21 00:00	10/29/21 12:45	6
890-1502-122	SW-31 (RS) (4)	Solid	10/28/21 00:00	10/29/21 12:45	4
890-1502-123	SW-32 (RS) (6)	Solid	10/28/21 00:00	10/29/21 12:45	6
890-1502-124	SW-33 (RS) (8)	Solid	10/28/21 00:00	10/29/21 12:45	8

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.



890-1502 Chain of Custody

Client Name:		Permian Water Solutions		Site Manager:		Clair Gonzales	
Project Name:		Kaiser SWD		Project #:		212C-MD-02230	
Project Location: (county, state)		Lea County, New Mexico		Sampler Signature:		Ezequiel Moreno	
Invoice to:		Dusty McInturf - Permian Water Solutions		Date:		10/29/21 12:45	
Receiving Laboratory:		Eurofins Xenco		Date:		10/29/21 12:45	
Comments:							
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)
		DATE	TIME				
	BH-1 (6)	10/27/2021		X			
	BH-2 (6)	10/27/2021		X			
	BH-3 (6)	10/27/2021		X			
	BH-4 (6)	10/27/2021		X			
	BH-5 (6)	10/27/2021		X			
	BH-6 (6)	10/27/2021		X			
	BH-7 (6)	10/27/2021		X			
	BH-8 (6)	10/27/2021		X			
	BH-9 (6)	10/27/2021		X			
	BH-10 (6)	10/27/2021		X			
Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Ferdinand		10/29/21	12:45	Clair Gonzales		10/29/21	12:45
Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Relinquished by:		Date:	Time:	Received by:		Date:	Time:

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LAB USE ONLY	REMARKS:	ANALYSIS REQUEST (Circle or Specify Method No.)	
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report	Sample Temperature 2.4 2.2	BTX 8021B BTX 8260B	
		TPH TX1005 (Ext to C35)	
		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	
		TCLP Volatiles	
		TCLP Semi Volatiles	
		RCI	
		GC/MS Vol. 8260B / 624	
		GC/MS Semi. Vol. 8270C/625	
		PCB's 8082 / 608	
		NORM	
		PLM (Asbestos)	
		Chloride	
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			

- 1
- 2
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- 12
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- 14

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

301 W. Main Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559 Fax  
(432) 682-3946

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: 212C-MD-02230	
Project Location: Lea County, New Mexico		Project #: 212C-MD-02230	
Invoice to: Dusty McInturf - Permian Water Solutions		Sampler Signature: Ezequiel Moreno	
Receiving Laboratory: Eurofins Xenco		Comments:	
LAB #		LAB USE ONLY	
SAMPLE IDENTIFICATION		SAMPLING	
YEAR: 2020		DATE	
TIME		WATER	
SOIL		HCL	
HNO <sub>3</sub>		ICE	
None		# CONTAINERS	
FILTERED (Y/N)		BTX 8021B BTX 8260B	
TPH TX1005 (Ext to C35)		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		TCLP Volatiles	
TCLP Semi Volatiles		RCI	
GC/MS Vol. 8260B / 624		GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608		NORM	
PLM (Asbestos)		Chloride	
Chloride Sulfate TDS		General Water Chemistry (see attached list)	
Anion/Cation Balance		Hold	
LAB USE ONLY		REMARKS:	
STANDARD		RUSH: Same Day 24 hr 48 hr 72 hr	
Rush Charges Authorized		Special Report Limits or TRRP Report	
Sample Temperature		(Circle) HAND DELIVERED FEDEX UPS Tracking #:	

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Analysis Request of Custody Record



Tetra Tech, Inc.

801 W. 28th Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name:		Permian Water Solutions		Site Manager:		Clair Gonzales						
Project Name:		Kaiser SWD		Project #:		212C-MD-02230						
Project Location: (county, state)		Lea County, New Mexico		Project #:		212C-MD-02230						
Invoice to:		Dusty McInturff - Permian Water Solutions		Sampler Signature:		Ezequiel Moreno						
Receiving Laboratory:		Eurofins Xenco		Sampler Signature:		Ezequiel Moreno						
Comments:												
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD						
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None			
	BH-21 (6')	10/27/2021		X		X						
	BH-22 (6')	10/27/2021		X		X						
	BH-23 (6')	10/27/2021		X		X						
	BH-24 (6')	10/27/2021		X		X						
	BH-25 (15')	10/27/2021		X		X						
	BH-26 (15')	10/27/2021		X		X						
	BH-27 (15')	10/27/2021		X		X						
	BH-28 (15')	10/27/2021		X		X						
	BH-29 (15')	10/27/2021		X		X						
	BH-30 (15')	10/27/2021		X		X						
Relinquished by:	Date: 10/29/21	Time: 12:45	Received by:	Date: 10-29-21	Time: 1045							
Relinquished by:	Date:	Time:	Received by:	Date:	Time:							
Relinquished by:	Date:	Time:	Received by:	Date:	Time:							

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY	REMARKS:	<input checked="" type="checkbox"/> STANDARD	
		<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr	
<input type="checkbox"/> Rush Charges Authorized			
<input type="checkbox"/> Special Report Limits or TRRP Report			

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Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W. Wall Street, Ste 1100  
Midland, Texas 79705  
Tel (432) 682-4559 Fax (432) 682-3846

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Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: 212C-MD-02230	
Project Location: Lea County, New Mexico		Project #: 212C-MD-02230	
Invoice to: Dusty McInturf - Permian Water Solutions		Sampler Signature: Ezequiel Moreno	
Receiving Laboratory: Eurofins Xenco		Comments:	
LAB #		SAMPLE IDENTIFICATION	
LAB USE ONLY		YEAR: 2020	
DATE		TIME	
WATER		MATRIX	
SOIL		PRESERVATIVE METHOD	
HCL		HNO <sub>3</sub>	
ICE		None	
# CONTAINERS		FILTERED (Y/N)	
BTX 8021B BTX 8260B		TPH TX1005 (Ext to C35)	
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	
TCLP Volatiles		TCLP Semi Volatiles	
RCI		GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625		PCB's 8082 / 608	
NORM		PLM (Asbestos)	
Chloride		Chloride Sulfate TDS	
General Water Chemistry (see attached list)		Anion/Cation Balance	
Hold			
LAB USE ONLY		REMARKS:	
STANDARD		RUSH: Same-Day 24 hr 48 hr 72 hr	
Rush Charges Authorized		Special Report Limits or TRRP Report	
Sample Temperature		(Circle) HAND DELIVERED FEDEX UPS Tracking #:	
Relinquished by: <i>Emily Moore</i> Date: 10/29/21 Time: 12:46		Received by: <i>Clair Gonzales</i> Date: 10-29-21 Time: 1045	
Relinquished by:		Received by:	
Date: Time:		Date: Time:	

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

907 W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559

**(432) 682-3946**

For

Page 5 of 13

Client Name:		Permian Water Solutions				Site Manager:		Clair Gonzales			
Project Name:		Kaiser SWD									
Project Location: (county, state)		Lea County, New Mexico				Project #:		212C-MD-02230			
Invoice to:											
Receiving Laboratory:		Dusty McInturf - Permian Water Solutions				Sampler Signature:		Ezequiel Moreno			
Comments:		Eurofins Xenco									
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	
		YEAR 2020									
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None		
		BH-41 (15')	10/27/2021		X				X		
		BH-42 (15')	10/27/2021		X				X		
		BH-43 (15')	10/27/2021		X				X		
		BH-44 (15')	10/27/2021		X				X		
		BH-45 (15')	10/27/2021		X				X		
		BH-46 (15')	10/27/2021		X				X		
		BH-47 (15')	10/27/2021		X				X		
		BH-48 (15')	10/27/2021		X				X		
		BH-49 (15')	10/27/2021		X				X		
		BH-50 (15')	10/27/2021		X				X		
Relinquished by:		Date:		Time:		Received by:		Date:		Time:	
Relinquished by: <i>Eand Mue</i>		Date: 10/29/21		Time: 12:45		Received by: <i>Clair Gonz</i>		Date: 10-29-21		Time: 1045	
Relinquished by:		Date:		Time:		Received by:		Date:		Time:	
Relinquished by:		Date:		Time:		Received by:		Date:		Time:	

## ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W. Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559

(432) 682-3946

1

**Client Name:** Permian Water Solutions

Site Manager:

Clair Gonzales

**Project Name:**

Kaiser SWD

Lea County New Mexico

Lea County, New Mexico

Project #:

212C-MD-02230

**Invoice to:**

## Dusty McIntuff - Permian Water Solutions

**Receiving Laboratory:**

Eurofins Xenco

**Sampler Signature:**

Ezequiel Morenc

**Comments:**

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	LAB USE ONLY	REMARKS:				
		DATE	TIME	WATER	SOIL						HCL	HNO <sub>3</sub>	ICE	None
	BH-51 (15)	10/27/2021		X		X			X					
	BH-52 (15)	10/27/2021		X			X		X					
	BH-53 (15)	10/27/2021		X			X		X					
	BH-54 (15)	10/27/2021		X			X		X					
	BH-55 (15)	10/27/2021		X			X		X					
	BH-56 (15)	10/27/2021		X			X		X					
	BH-57 (15)	10/27/2021		X			X		X					
	BH-58 (15)	10/27/2021		X			X		X					
	BH-59 (15)	10/27/2021		X			X		X					
	BH-60 (15)	10/27/2021		X			X		X					
Relinquished by: <i>Ernest Moore</i>	Date: 10/29/21 Time: 12:46	Received by: <i>Clare Goy</i>	Date: 10-29-21 Time: 10:45											
Relinquished by:	Date: Time:	Received by:	Date: Time:											
Relinquished by:	Date: Time:	Received by:	Date: Time:											

Sample Temperature	LAB USE ONLY		STANDARD	RUSH: Same Day 24 hr 48 hr 72 hr	Rush Charges Authorized	Special Report Limits or TRRP Report
	<input checked="" type="checkbox"/>					

## ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE  
ONLY

REMARKS:

☒ STANDARD

**Sample Temperature**

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: \_\_\_\_\_

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79705

Tel (432) 682-4559

(432) 697 7046

**Fa:**

Page 7 of 13

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: 212C-MD-02230	
Project Location: Lea County, New Mexico		Invoice to: DUSTY MCINTURFF - Permian Water Solutions	
Receiving Laboratory: Eurofins Xenco		Sampler Signature: Ezequiel Moreno	
Comments:			
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION	
		YEAR 2020	
		DATE	
		TIME	
		WATER	
		SOIL	
		HCL	
		HNO <sub>3</sub>	
		ICE	
		None	
		# CONTAINERS	
		FILTERED (Y/N)	
BH-61 (15')		10/27/2021	
BH-62 (15')		10/27/2021	
BH-63 (15')		10/27/2021	
BH-64 (15')		10/27/2021	
BH-65 (15')		10/27/2021	
BH-66 (15')		10/27/2021	
BH-67 (15')		10/27/2021	
BH-68 (15')		10/28/2021	
BH-69 (15')		10/28/2021	
BH-70 (15')		10/28/2021	
Relinquished by: <i>Eurofins</i>		Received by: <i>Joe Gulp</i>	
Date: 10/29/21		Date: 10-29-21	
Time: 12:46		Time: 1045	
Relinquished by:		Received by:	
Date:		Date:	
Time:		Time:	
Relinquished by:		Received by:	
Date:		Date:	
Time:		Time:	

## ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

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Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

3011 W. Main Street, Suite 100  
Midland, Texas 79705  
Tel (432) 692-4559  
Fax (432) 682-3946

Page 8 of 13

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales							
Project Name: Kaiser SWD		Project #: 212C-MD-02230							
Project Location: Lea County, New Mexico		Project #: 212C-MD-02230							
Invoice to: Dusty McInturf - Permian Water Solutions		Sampler Signature: Ezequiel Moreno							
Receiving Laboratory: Eurofins Xenco		Comments:							
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		YEAR: 2020	DATE						TIME
	BH-71 (15)		10/28/2021			X			BTEX 8021B BTEX 8260B
	BH-72 (15)		10/28/2021		X				TPH TX1005 (Ext to C35)
	BH-73 (15)		10/28/2021		X				TPH 8015M ( GRO - DRO - ORO - MRO)
	BH-74 (15)		10/28/2021		X				PAH 8270C
	BH-75 (15)		10/28/2021		X				Total Metals Ag As Ba Cd Cr Pb Se Hg
	BH-76 (15)		10/28/2021		X				TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	BH-77 (15)		10/28/2021		X				TCLP Volatiles
	BH-78 (15)		10/28/2021		X				TCLP Semi Volatiles
	BH-79 (15)		10/28/2021		X				RCI
	BH-80 (15)		10/28/2021		X				GC/MS Vol. 8260B / 624
									GC/MS Semi. Vol. 8270C/625
									PCB's 8082 / 608
									NORM
									PLM (Asbestos)
									Chloride
									Chloride Sulfate TDS
									General Water Chemistry (see attached list)
									Anion/Cation Balance
									Hold
Relinquished by: <i>Ezequiel Moreno</i> 10/29/21 12:46		Received by: <i>Clair Cruz</i> 10/29/21 10:45		LAB USE ONLY		REMARKS:			
Relinquished by:		Received by:		Sample Temperature		<input checked="" type="checkbox"/> STANDARD			
Date: Time:		Date: Time:				<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr			
Date: Time:		Date: Time:				<input type="checkbox"/> Rush Charges Authorized			
Date: Time:		Date: Time:				<input type="checkbox"/> Special Report Limits or TRRP Report			

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Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name:	Permian Water Solutions	Site Manager:	Clair Gonzales
Project Name:	Kaiser SWD	Project #:	212C-MD-02230
Project Location: (county, state)	Lea County, New Mexico	Invoice to:	Dusty McInturf - Permian Water Solutions
Receiving Laboratory:	Eurofins Xenco	Sampler Signature:	Ezequiel Moreno
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None			
										YEAR: 2020		
	BH-81 (15)	10/28/2021		X		X						
	BH-82 (15)	10/28/2021		X		X						
	BH-83 (15)	10/28/2021		X		X						
	BH-84 (15)	10/28/2021		X		X						
	BH-85 (15)	10/28/2021		X		X						
	BH-86 (15)	10/28/2021		X		X						
	BH-87 (15)	10/28/2021		X		X						
	BH-88 (15)	10/28/2021		X		X						
	BH-89 (15)	10/28/2021		X		X						
	BH-90 (RS) (6)	10/28/2021		X		X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
<i>Emil M...</i>	10/29/21	12:46	<i>Clair Gonzales</i>	10-29-21	10:45
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

ANALYSIS REQUEST  
(Circle or Specify Method No.)

LAB USE ONLY	REMARKS:	<input checked="" type="checkbox"/> STANDARD
		<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
Sample Temperature	<input type="checkbox"/> Rush Charges Authorized	
	<input type="checkbox"/> Special Report Limits or TRRP Report	

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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### **Analysis Request of Chain of Custody Record**



**Tetra Tech, Inc.**

901W Wall Street, Ste 100  
Midland, Texas 79705

Tel (432) 682-4559

(472) 682-2046

F-a)

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W. Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559

(432) 682-3946

**Client Name:** Permian Water Solutions

Site Manager:

Clair Gonzales

Project Name: Kaizer SWM

**Project Location:**  
(county, state)      Lea County, New Mexico

Project #:

212C-MD-02230

**Invoice to:**

## Dusty McIntuff - Permian Water Solutions

**Receiving Laboratory:****Sampler Signature:**

Eurofins Xenco

Ezequiel Morenc

**Comments:**

[illegible]

## ANALYSIS REQUEST

(Circle or Specify Method No.)

## REMARKS:

LAB USE ONLY

☒ STANDARD

### Sample Temperature

	RUSH: Same Day	24 hr	48 hr	72 hr
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100				

Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

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Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

501 W. Wall Street, Suite 100  
Midland, Texas 79705  
Tel (432) 682-4559 Fax (432) 682-3946

Page 12 of 13

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales					
Project Name: Kaiser SWD		Project #: 212C-MD-02230					
Project Location: Lea County, New Mexico		Project #:					
Invoice to: Dusty McInturf - Permian Water Solutions		Sampler Signature: Ezequiel Moreno					
Receiving Laboratory: Eurofins Xenco		Comments:					
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)
		DATE	TIME				
	SW-20 (15)	10/26/2021		X			
	SW-21 (15)	10/26/2021		X			
	SW-22 (15)	10/26/2021		X			
	SW-23 (15)	10/26/2021		X			
	SW-24 (15)	10/26/2021		X			
	SW-25 (15)	10/26/2021		X			
	SW-26 (15)	10/26/2021		X			
	SW-27 (15)	10/26/2021		X			
	SW-28 (15)	10/26/2021		X			
	SW-29 (15)	10/26/2021		X			
Relinquished by: Tracy McQuinn		Date: 10/29/21	Time: 12:46	Received by: Luis G. G.		Date: 10-29-21	Time: 10:45
Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Relinquished by:		Date:	Time:	Received by:		Date:	Time:

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY	BTEX 8021B	BTEX 8260B	
	TPH TX1005 (Ext to C35)		
	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		
	TCLP Volatiles		
	TCLP Semi Volatiles		
	RCI		
	GC/MS Vol. 8260B / 624		
	GC/MS Semi. Vol. 8270C/625		
	PCB's 8082 / 608		
	NORM		
	PLM (Asbestos)		
	Chloride		
Chloride Sulfate TDS			
General Water Chemistry (see attached list)			
Anion/Cation Balance			
Hold			

REMARKS:

- ☒ STANDARD
- ☐ RUSH: Same-Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

9077 Wall Street, Suite 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name:

Permian Water Solutions

Site Manager:

Clair Gonzales

Project Name:

Kaiser SWD

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02230

Invoice to:

Dusty McInturf - Permian Water Solutions

Receiving Laboratory:

Eurofins Xenco

Sampler Signature:

Ezequiel Moreno

Comments:

LAB #  
(LAB USE ONLY)

SAMPLE IDENTIFICATION

YEAR 2020	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		

X	BTEX 8021B	BTEX 8260B
X	TPH TX1005 (Ext to C35)	
X	TPH 8015M ( GRO - DRO - ORO - MRO)	
X	PAH 8270C	
X	Total Metals Ag As Ba Cd Cr Pb Se Hg	
X	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
X	TCLP Volatiles	
X	TCLP Semi Volatiles	
X	RCi	
X	GC/MS Vol. 8260B / 624	
X	GC/MS Semi. Vol. 8270C/625	
X	PCB's 8082 / 608	
X	NORM	
X	PLM (Asbestos)	
X	Chloride	
X	Chloride Sulfate TDS	
X	General Water Chemistry (see attached list)	
X	Anion/Cation Balance	
X	Hold	

Relinquished by:

*Ezequiel Moreno* Date: 10/29/21 Time: 12:46

Received by:

*Clair Gonzales* Date: 10-29-21 Time: 1045

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY

REMARKS:

☒ STANDARD

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

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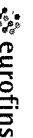
Eurofins Xenco Carlsbad

1080 N Canal St

Carlsbad NM 88220

Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



## Environment Testing America

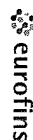
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Eurofins Xenco, Carlsbad

1089 N Canal St  
Carlsbad NM 88220

Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



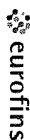
**Environment Testing  
America**

Client Information (Sub Contract Lab)										Sampler	Lab PM	Carrier Tracking No(s)	COC No					
Client Contact:			Phone			E-Mail			Kramer Jessica			890-488 2						
Shipping/Receiving			Phone			E-Mail			jessica.kramer@eurofinsnet.com			Page 2 of 14						
Company			Eurofins Xenco			Accreditations Required (See note)			NELAP - Louisiana NELAP - Texas			Page 2 of 14						
Address			1211 W. Florida Ave			Due Date Requested			11/4/2021			Job #:						
City			Midland			TAT Requested (day/s):						Preservation Codes						
State Zip			TX 79701			PO #:						A. HCL						
Phone			432-704-5440 (Tel)			WO #:						B. NaOH						
Email						Project #:			88000039			C. Zn Acetate						
Project Name:			Kaiser SWD			SSOW#:						D. Nitric Acid						
Site						Field Filtered Sample (Yes or No)						E. NaHSO4						
Sample Identification - Client ID (Lab ID)						Sample Date		Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Solid, O=Other, A=Air)	Perform MS/MSD (Yes or No)		8015MOD_NM/8015NM_S_Prep (MOD) Full TPH		Total Number of containers		Special Instructions/Note.	
						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-10 (6) (890-1502-10)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-11 (6) (890-1502-11)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-12 (6) (890-1502-12)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-13 (6) (890-1502-13)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-14 (6) (890-1502-14)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-15 (6) (890-1502-15)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-16 (6) (890-1502-16)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-17 (6) (890-1502-17)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
BH-18 (6) (890-1502-18)						10/27/21		Mountain		Solid		X	X	X	X	X	X	X
Note: Since laboratory accreditations are subject to change Eurofins Xenco 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/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 compliance to Eurofins Xenco LLC.																		
Possible Hazard Identification																		
Unconfirmed																		
Deliverable Requested I II III IV Other (specify)																		
Primary Deliverable Rank 2																		
Empty Kit Relinquished by																		
Relinquished by																		
Relinquished by																		
Relinquished by																		
Custody Seals Intact:																		
A Yes A No																		
Custody Seal No																		
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																		
Return To Client																		
Disposal By Lab																		
Archive For																		
Months																		
Special Instructions/QC Requirements																		
Method of Shipment																		
Received by																		
Received by																		
Received by																		
Cooler Temperature(s) °C and Other Remarks																		

Eurofins Xenco, Carlsbad

1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



## Environment Testing America

Client Information (Sub Contract Lab)						Sampler	Lab P.M.	Carrier Tracking No(s)	COC No
Client Contact:						Kramer Jessica			890-486 3
Shipping/Receiving						Phone	E-Mail	State of Origin	Page
Eurofins Xenco						Jessica.kramer@eurofinset.com	New Mexico		Page 3 of 14
Address						Accreditations Required (See note):			
1211 W Florida Ave						NELAP - Louisiana NELAP - Texas			
City						Due Date Requested			
Midland						11/4/2021			
State Zip						TAT Requested (days):			
TX 79701									
Phone						PO #			
432-704-5440(Tel)						WO #			
Email						Project Name:			
Kaiser SWD						Project #			
Site						SSOM#			
Sample Identification - Client ID (Lab ID)						Field Filtered Sample (Yes or No)			
						Perform MS/MSD (Yes or No)			
						8015MOD_NM/8015NM_S_Prep (MOD) Full TPH			
						8021B/5035FP_Calc BTEX			
						300_ORGFM_28D/DI_LEACH Chloride			
						Total_BTEX_GCV			
						8015MOD_Calc			
						Total Number of containers			
						Special Instructions/Note			
BH-19 (6) (890-1502-19)						X			
BH-20 (6) (890-1502-20)						X			
BH-21 (6) (890-1502-21)						X			
BH-22 (6) (890-1502-22)						X			
BH-23 (6) (890-1502-23)						X			
BH-24 (6) (890-1502-24)						X			
BH-25 (15) (890-1502-25)						X			
BH-26 (15) (890-1502-26)						X			
BH-27 (15) (890-1502-27)						X			



**Eurofins Xenco, Carlsbad**

Eurofins Xenco, Carlsbad

1089 N Canal St.  
Carlsbad NM 88220

Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record

eurofins


**Environment Testing  
America**

Client Information (Sub Contract Lab)						Carrier Tracking No(s)	
Client Contact:		Phone		Kramer Jessica		890-488 4	
Shipping/Receiving				E-Mail: jessica.kramer@eurofnsl.com		Page 4 of 14	
Company		Eurofins Xenco		Accreditations Required (See note) NELAP - Louisiana NELAP - Texas		Job # 890-1502-1	
Address 1211 W Florida Ave		Due Date Requested 11/4/2021		Analysis Requested		Preservation Codes	
City Midland		TAT Requested (days) 7				A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Ammonia H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other	
State Zip TX 79701		PO #				M Hexane N None O AsNaO2 P Na2OAS Q Na2SO3 R Na2S2O3 S H2SO4 T TSP Dodecylhydrate U Acetone V MCAA W pH 4-5 Z other (specify)	
Phone: 432-704-5440(Tel)		WO #					
Email							
Project Name Kaiser SWD		Project # 88000039					
Site		SSOW#					
Sample Identification - Client ID (Lab ID)				Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	
				8015MOD_NM/8015NM_S_Prep (MOD) Full TPH			
				8021B/6035FP_Calc BTEX			
				300_ORGFMM_28D/DI_LEACH Chloride			
				Total_BTEX_GCV			
				8015MOD_Calc			
				Total Number of containers		Special Instructions/Note	
BH-28 (15) (890-1502-28)				10/27/21 Mountain Solid		1	
BH-29 (15) (890-1502-29)				10/27/21 Mountain Solid		1	
BH-30 (15) (890-1502-30)				10/27/21 Mountain Solid		1	
BH-31 (15) (890-1502-31)				10/27/21 Mountain Solid		1	
BH-32 (15) (890-1502-32)				10/27/21 Mountain Solid		1	
BH-33 (15) (890-1502-33)				10/27/21 Mountain Solid		1	
BH-34 (15) (890-1502-34)				10/27/21 Mountain Solid		1	
BH-35 (15) (890-1502-35)				10/27/21 Mountain Solid		1	
BH-36 (15) (890-1502-36)				10/27/21 Mountain Solid		1	
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte &amp; 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 analysts/test/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 compliance to Eurofins Xenco LLC.</p>							
Possible Hazard Identification				Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month )			
Unconfirmed Deliverable Requested I II III IV Other (specify)				Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Primary Deliverable Rank 2				Special Instructions/QC Requirements			
Empty Kit Relinquished by		Date		Time		Method of Shipment	
Relinquished by		Date/Time		Company		Received by _____ Date/Time	
Relinquished by		Date/Time		Company		Received by _____ Date/Time	
Relinquished by		Date/Time		Company		Received by _____ Date/Time	
Cooler Temperature(s) °C and Other Remarks.							

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**Eurofins Xenco, Carlsbad**  
1089 N Canal St.  
Carlsbad NM 88220  
Phone: 575-988-3199 Fax: 575-988-3199

**Chain of Custody Record**

 **eurofins**  
Environment Testing  
America

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No												
Client Contact	Kramer Jessica				890-488 5												
Shipping/Receiving	Phone		Email	State of Origin	Page 5 of 14												
			Jessica.kramer@eurofinsnet.com	New Mexico													
Company	Eurofins Xenco		Accreditations Required (See note):		Job #												
			NELAP - Louisiana NELAP - Texas		890-1502-1												
Address	1211 W Florida Ave	Due Date Requested	11/4/2021	Analysis Requested													
City	Midland	TAT Requested (days)															
State Zip	TX 79701																
Phone	432-704-5440(Tel)	PO #															
Email		WO #															
Project Name:	Kaiser SWD	Project #	88000039														
Site		SSOW#															
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=Grab, BT=Tissue, A=Air)</b>	<b>Matrix (W=Water, S=Soil, O=Other, D=Drinking Water, M=Metal, P=Plastic, F=Food, L=Liquid, G=Gas, A=Air)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8016MOD_NM/8016NM_S_Prep (MOD) Full TPH</b>		<b>8021B/5035FP_Calc BTEX</b>	<b>300_ORGFM_28D/DI_LEACH Chloride</b>	<b>Total_BTEX_GCV</b>	<b>8016MOD_Calc</b>	<b>Preservation Codes</b>		<b>Special Instructions/Note</b>	
BH-37 (15) (890-1502-37)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-38 (15) (890-1502-38)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-39 (15) (890-1502-39)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-40 (15) (890-1502-40)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-41 (15) (890-1502-41)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-42 (15) (890-1502-42)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-43 (15) (890-1502-43)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-44 (15) (890-1502-44)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
BH-45 (15) (890-1502-45)		10/27/21	Mountain	Solid		X	X	X	X	X	X	X	X	X	X	X	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco 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/test/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 compliance to Eurofins Xenco LLC.																	
<b>Possible Hazard Identification</b>																	
<b>Unconfirmed</b>																	
Deliverable Requested I II III IV Other (Specify)																	
Primary Deliverable Rank 2																	
Special Instructions/QC Requirements																	
Empty Kit Relinquished by																	
Date/Time																	
Company																	
Received by																	
Date/Time																	
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Relinquished by																	
Date/Time																	
Company																	
Custody Seals Intact: Custody Seal No																	
Cooler Temperature(s) °C and Other Remarks.																	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																	
Return To Client																	
Disposal By Lab																	
Archive For																	
Months																	



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Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing America

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No											
Client Contact:	Phone	Kramer Jessica	State of Origin:	890-488 6												
Shipping/Receiving	E-Mail	Jessica.kramer@eurofins.com	New Mexico	Page 6 of 14												
Company:	Eurofins Xenco		Accreditations Required (See note)		Job #:											
Address:	1211 W Florida Ave		NELAP - Louisiana NELAP - Texas		890-1502-1											
City:	Midland	Due Date Requested	Analysis Requested													
State Zip:	TX, 79701	11/4/2021														
Phone:	432-704-5440(Tel)	TAT Requested (days):														
Email:		PO #:														
Project Name:	Kaiser SWD	W/O #:														
Site:		Project #														
		88000039														
		SSOW#:														
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=Grab)</b>	<b>Matrix (W=Water, S=solid, O=wastewater, B=Trunk, A=Air)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8015MOD_NM/8015NM_S_Prep (MOD) Full TPH</b>		<b>8021B/5035FP_Calc BTEX</b>	<b>300_ORGFM_28D/DI_LEACH Chloride</b>	<b>Total_BTEX_GCV</b>	<b>8015MOD_Calc</b>	<b>Total Number of containers</b>		<b>Special Instructions/Note</b>
BH-46 (15) (890-1502-46)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-47 (15) (890-1502-47)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-48 (15) (890-1502-48)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-49 (15) (890-1502-49)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-50 (15) (890-1502-50)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-51 (15) (890-1502-51)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-52 (15) (890-1502-52)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-53 (15) (890-1502-53)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
BH-54 (15) (890-1502-54)		10/27/21		Mountain	Solid		X	X	X	X	X	X	X	X	X	
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/assessments 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 compliance to Eurofins Xenco LLC.																
<b>Possible Hazard Identification</b>																
<b>Uncollected</b>																
Deliverable Requested: I II III IV Other (Specify) Primary Deliverable Rank 2																
Empty Kit Relinquished by: Date: Time: Method of Shipment:																
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:																
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:																
Custody Seals Intact: Custody Seal No: Cooler Temperature(s) °C and Other Remarks:																



**Eurofins Xenco, Carlsbad**  
1089 N Canal St.  
Carlsbad NM 86220  
Phone: 575-988-3199 Fax 575-988-3199

**Chain of Custody Record**



Environment Testing  
America

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Kramer Jessica	Carrier Tracking No(s)	COC No	890-488 7							
Client Contact:	Phone		E-Mail:	Jessica.kramer@eurofins.com	State of Origin	Page	Page 7 of 14							
Shipping/Receiving					New Mexico									
Company	Eurofins Xenco	Due Date Requested	Accreditations Required (See note)				Job #							
Address	1211 W Florida Ave	11/4/2021	NELAP - Louisiana NELAP - Texas				890-1502-1							
City	Midland	TAT Requested (days)	<b>Analysis Requested</b>				<b>Preservation Codes</b>							
State Zip	TX 79701						A HCL 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 Other							
Phone	432-704-5440(Tel)	PO #					M Hexane N None O AsNaO2 P Na2OAS Q Na2SO3 R Na2SO3 S H2SO4 T TSP Dodecylhydrate U Acetone V MCAA W pH 4.5 Z other (Specify)							
Email		WO #												
Project Name	Kaiser SWD	Project #												
Site		88000039												
		SSOW#												
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=grab)</b>	<b>Matrix (W=Water, S=Solid, O=wastewater, BT=Tissue, A=Air)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8015MOD_NM/8015NM_S_Prep (MOD) Full TPH</b>	<b>8021B/6035FP_Calc BTEX</b>	<b>300_ORGFM_28D/DI_LEACH Chloride</b>	<b>Total_BTEX_GCV</b>	<b>8015MOD_Calc</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note</b>
BH-55 (15) (890-1502-55)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-56 (15) (890-1502-56)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-57 (15) (890-1502-57)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-58 (15) (890-1502-58)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-59 (15) (890-1502-59)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-60 (15) (890-1502-60)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-61 (15) (890-1502-61)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-62 (15) (890-1502-62)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-63 (15) (890-1502-63)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
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/test/mark 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 compliance to Eurofins Xenco LLC.														
<b>Possible Hazard Identification</b>														
<b>Unconfirmed</b>														
Deliverable Requested I II III IV Other (Specify) Primary Deliverable Rank 2														
<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>														
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months														
<b>Special Instructions/QC Requirements</b>														
<b>Empty Kit Relinquished by</b>														
Date/Time _____ Date _____ Company _____ Received by _____														
<b>Relinquished by</b>														
Date/Time _____ Date _____ Company _____ Received by _____														
<b>Relinquished by</b>														
Date/Time _____ Date _____ Company _____ Received by _____														
<b>Custody Seals Intact</b>														
Custody Seal No _____ Cooler Temperature(s) °C and Other Remarks _____														

Eurofins Xenco, Carlsbad

1089 N Canal St  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record

eurofins

Environment Testing  
America

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No									
Client Contact:		Phone	Kramer Jessica		890-488 8									
Shipping/Receiving		E-Mail	Jessica.kramer@eurofins.com	State of Origin	Page: 8 of 14									
Company		Accreditations Required (See note)		New Mexico	Job #									
Eurofins Xenco		NELAP - Louisiana, NELAP - Texas			890-1502-1									
Address	1211 W Florida Ave	Due Date Requested	11/4/2021	<b>Analysis Requested</b>										
City	Midland	TAT Requested (days):												
State, Zip:	TX 79701	PO #:												
Phone	432-704-5440(Tel)	WO #:												
Email		Project #	88000039											
Project Name	Kaiser SWD	SSOW#:												
Site														
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=comp, G=grab)</b>	<b>Matrix (W=water, S=solid, O=water/Oil, BT-Tissue, A=Al)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8015MOD_NM/8015NM_S_Prep (MOD) Full TPH</b>	<b>8021B/5035FP_Calc BTEX</b>	<b>300_ORGFM_28D/DI_LEACH Chloride</b>	<b>Total BTEX_GCV</b>	<b>8015MOD_Calc</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note:</b>
BH-64 (15) (890-1502-64)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-65 (15) (890-1502-65)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-66 (15) (890-1502-66)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-67 (15) (890-1502-67)		10/27/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-68 (15) (890-1502-68)		10/28/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-69 (15) (890-1502-69)		10/28/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-70 (15) (890-1502-70)		10/28/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-71 (15) (890-1502-71)		10/28/21		Mountain	Solid	X	X	X	X	X	X	X	1	
BH-72 (15) (890-1502-72)		10/28/21		Mountain	Solid	X	X	X	X	X	X	X	1	
Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontracted 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/test/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 compliance to Eurofins Xenco LLC.														
<b>Possible Hazard Identification</b>														
<b>Unconfirmed</b>														
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2														
Empty Kit Relinquished by Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time														
Relinquished by Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time														
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Custody Seal Intact: Custody Seal No														
Cooler Temperature(s) °C and Other Remarks														



**Eurofins Xenco, Carlsbad**  
1089 N Canal St  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



**eurofins**

## Environment Testing America

<b>Client Information (Sub Contract Lab)</b>			Sampler	Lab PM	Carrier Tracking No(s)	COC No.										
Client Contact: <b>Kramer Jessica</b>			Phone	E-Mail	State of Origin	890-488-9										
Shipping/Receiving			Accreditations Required (See note):			Page: 9 of 14										
Company: Eurofins Xenco			NELAP - Louisiana NELAP - Texas			Job #:										
Address: 1211 W Florida Ave			Due Date Requested: 1/14/2021	890-1502-1												
City: Midland			TAT Requested (days):	<b>Analysis Requested</b>												
State Zip: TX, 79701																
Phone: 432-704-5440(Tel)			PO #:													
Email:			WO #:													
Project Name: Kaiser SWD			Project #: 88000039													
Site:			SSOM#:													
<b>Sample Identification - Client ID (Lab ID)</b>			<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=grab)</b>	<b>Matrix (W=water, S=solid, O=waste/soil, BT=tissue, AA=AI)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8015MOD_NM/8015NM_S_Prep (MOD) Full TPH</b>	<b>8021B/6035FP_Calc BTEX</b>	<b>300_ORGFMM_28D/DI_LEACH Chloride</b>	<b>Total_BTEX_GCV</b>	<b>8015MOD_Calc</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note</b>	
BH-73 (15) (890-1502-73)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-74 (15) (890-1502-74)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-75 (15) (890-1502-75)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-76 (15) (890-1502-76)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-77 (15) (890-1502-77)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-78 (15) (890-1502-78)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-79 (15) (890-1502-79)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-80 (15) (890-1502-80)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
BH-81 (15) (890-1502-81)			10/28/21	Mountain		Solid	X	X	X	X	X	X	X	X	1	
<p>Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte &amp; 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/test/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 compliance to Eurofins Xenco LLC.</p>																
<b>Possible Hazard Identification</b>																
<b>Unconfirmed</b>																
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements																
Empty Kit Relinquished by: Date/Time: Company: Date/Time: Company: Method of Shipment: Date/Time: Company:																
Relinquished by: Date/Time: Company: Date/Time: Company: Date/Time: Company:																
Relinquished by: Date/Time: Company: Date/Time: Company: Date/Time: Company:																
Custody Seals Intact: Custody Seal No: Cooler Temperature(s) °C and Other Remarks:																
Δ Yes Δ No																

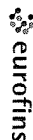
Eurofins Xenco, Carlsbad

1089 N Canal St.

Carlsbad NM 88220

Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



## Environment Testing America

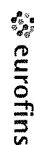
Client Information (Sub Contract Lab)						Sampler	Lab PM	Carrier Tracking No(s)	COC No.				
Client Contact:						Kramer Jessica			890-488-10				
Shipping/Receiving						Phone:	E-Mail jessica.kramer@eurofinsnet.com	State of Origin New Mexico	Page 10 of 14				
Company Eurofins Xenco						Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas				Job #: 890-1502-1			
Address 1211 W Florida Ave Midland TX 79701						Due Date Requested 11/4/2021	Analysis Requested			Preservation Codes			
City TX 79701						TAT Requested (day's):				A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2OAS E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecylhydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4.5 L EDA Z other (specify) Other:			
Project Name Kaiser SWD						Project # 88000039							
Site:						SSOM#:							
Sample Identification - Client ID (Lab ID)						Sample Date	Sample Time	Sample Type (C=C-comp, G=grab)	Matrix (W=water, S=solid, O=wastechl, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note.
BH-82 (15) (890-1502-82)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-83 (15) (890-1502-83)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-84 (15) (890-1502-84)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-85 (15) (890-1502-85)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-86 (15) (890-1502-86)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-87 (15) (890-1502-87)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-88 (15) (890-1502-88)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH-89 (15) (890-1502-89)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
BH90 (RS ) (6) (890-1502-90)		10/28/21	Mountain	Solid	X	X	X	X	X	X	X		
Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontractor 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/test/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 compliance to Eurofins Xenco LLC.													
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested I II III IV Other (specify)						Primary Deliverable Rank 2							
Empty Kit Relinquished by:						Date	Time	Method of Shipment					
Relinquished by:						Date/Time		Received by:	Date/Time		Company		
Relinquished by:						Date/Time		Received by:	Date/Time		Company		
Relinquished by:						Date/Time		Received by:	Date/Time		Company		
Custody Seals Intact:						Cooler Temperature(s) °C and Other Remarks							
Δ Yes Δ NO													



## Eurofins Xenco, Carlsbad

1089 N Canal St  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



## Environment Testing America

Client Information (Sub Contract Lab)						Sampler	Lab PM	COC No.
Client Contact:						Kramer Jessica	Garter Tracking (N/A)	890-486-11
Shipping/Receiving						Phone:	E-Mail	Page:
Eurofins Xenco						jessica.kramer@eurofinset.com	New Mexico	Page 11 of 14
Address						Accreditations Required (See note)		Job #:
1211 W Florida Ave						NELAP - Louisiana NELAP - Texas		890-1502-1
City						Analysis Requested		
Midland								
State Zip:								
TX 79701								
Phone:								
432-704-5440(Tel)								
Email								
Project Name								
Kaiser SWD								
Site								
SSOW#								
Due Date Requested								
11/4/2021								
TAT Requested (days):								
Sample Identification - Client ID (Lab ID)								
BH-91 (RS ) (6) (890-1502-91)								
SW-1 (0-6) (890-1502-92)								
SW-2 (0-6) (890-1502-93)								
SW-3 (0-6) (890-1502-94)								
SW-4 (0-6) (890-1502-95)								
SW-5 (0-6) (890-1502-96)								
SW-6 (0-6) (890-1502-97)								
SW-7 (0-6) (890-1502-98)								
SW-8 (0-6) (890-1502-99)								
Note: Since laboratory accreditations are subject to change Eurofins Xenco 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/test/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 compliance to Eurofins Xenco LLC.								
Possible Hazard Identification								
Unconfirmed								
Deliverable Requested I II III IV Other (specify)								
Primary Deliverable Rank 2								
Empty Kit Relinquished by						Date	Time	Method of Shipment
Relinquished by						Date/Time	Company	Date/Time
Relinquished by						Date/Time	Company	Date/Time
Relinquished by						Date/Time	Company	Date/Time
Custody Seals Intact:						Cooler Temperature(s) °C and Other Remarks.		
A Yes A No								
Custody Seal No								

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**Eurofins Xenco, Carlsbad**  
1089 N Canal St.  
Carlsbad NM 88220  
Phone: 575-988-3199 Fax 575-988-3199

**Chain of Custody Record**



<b>Client Information (Sub Contract Lab)</b>		Lab PM		Carrier Tracking No(s)		COC No																							
Client Contact		Kramer Jessica				890-488-12																							
Shipping/Receiving		E-Mail		State of Origin		Page																							
Eurofins Xenco		jessica.kramer@eurofinsnet.com		New Mexico		Page 12 of 14																							
Address		Due Date Requested		Accreditations Required (See note)		Job #																							
1211 W Florida Ave		11/4/2021		NELAP - Louisiana NELAP - Texas		890-1502-1																							
City		TAT Requested (days)		<b>Analysis Requested</b>																									
Midland																													
State, Zip																													
TX 79701																													
Phone		PO #																											
432-704-5440(Tel)																													
Email		W/O #																											
Project Name		Project #																											
Kaiser SWD		88000039																											
Site		SSOW#																											
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=AA)</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>8015MOD_NM/8015NM_S_Prep (MOD) Full TPH</b>		<b>8021B/6035FP_Calc BTEX</b>		<b>300_ORGFM_28D/DI_LEACH Chloride</b>		<b>Total_BTEX_GCV</b>		<b>8015MOD_Calc</b>		<b>Total Number of containers</b>		<b>Special Instructions/Note</b>			
SW-9 (0-6) (890-1502-100)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-10 (0-6) (890-1502-101)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-11 (0-6) (890-1502-102)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-12 (10) (890-1502-103)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-13 (15) (890-1502-104)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-14 (15) (890-1502-105)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-15 (15) (890-1502-106)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-16 (15) (890-1502-107)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
SW-17 (15) (890-1502-108)		10/26/21		Mountain		Solid		Solid		X		X		X		X		X		X		X		X		1			
<p>Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte &amp; 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/test/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 compliance to Eurofins Xenco LLC.</p>																													
<b>Possible Hazard Identification</b>																													
<b>Unconfirmed</b>																													
<b>Deliverable Requested</b> I II III IV Other (Specify) <b>Primary Deliverable Rank</b> 2																													
<b>Empty Kit Relinquished by</b> <b>Date</b> <b>Time</b> <b>Method of Shipment</b>																													
Relinquished by <b>Date/Time</b> <b>Company</b> <b>Received by</b> <b>Date/Time</b> <b>Company</b>																													
Relinquished by <b>Date/Time</b> <b>Company</b> <b>Received by</b> <b>Date/Time</b> <b>Company</b>																													
Relinquished by <b>Date/Time</b> <b>Company</b> <b>Received by</b> <b>Date/Time</b> <b>Company</b>																													
<b>Custody Seals Intact:</b> <b>Custody Seal No</b> <b>Cooler Temperature(s) °C and Other Remarks.</b>																													
Δ Yes Δ No																													

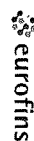
Eurofins Xenco, Carlsbad

1089 N Canal St

Carlsbad NM 88220

Phone 575-988-3199 Fax, 575-988-3199

## Chain of Custody Record



## Environment "Testing" America

[illegible]



Eurofins Xenco, Carlsbad

## Chain of Custody Record



## Environment Testing America

1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

Client Information (Sub Contract Lab)						Sampler		Lab PM		Carrier Tracking No(s)		COC No.				
Client Contact:						Phone		Kramer Jessica		State of Origin		890-488-14				
Shipping/Receiving						E-Mail		jessica.kramer@eurofinsnet.com		New Mexico		Page: Page 14 of 14				
Company Eurofins Xenco						Accreditations Required (See note) NELAP - Louisiana NELAP - Texas						Job #: 890-1502-1				
Address 1211 W Florida Ave						Due Date Requested 11/14/2021										
City Midland						TAT Requested (days):										
State, Zip TX 79701																
Phone 432-704-5440(Te)						PO #:										
Email						WO #:										
Project Name Kaiser SWD						Project # 88000039										
Site						SSOW#										
Sample Identification - Client ID (Lab ID)						Sample Date		Sample Time		Sample Type (C=comp, G=grab) Preservation Code		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note	
SW-27 (15) (890-1502-118)						10/26/21		Mountain		Solid		X	X	X		X
SW-28 (15) (890-1502-119)						10/26/21		Mountain		Solid		X	X	X		X
SW-29 (15) (890-1502-120)						10/26/21		Mountain		Solid		X	X	X		X
SW-30 (RS) (6) (890-1502-121)						10/28/21		Mountain		Solid		X	X	X		X
SW-31 (RS) (4) (890-1502-122)						10/28/21		Mountain		Solid		X	X	X		X
SW-32 (RS) (6) (890-1502-123)						10/28/21		Mountain		Solid		X	X	X		X
SW-33 (RS) (8) (890-1502-124)						10/28/21		Mountain		Solid		X	X	X		X
Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyze & accreditation compliance upon our subcontractor 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/test/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 compliance to Eurofins Xenco LLC																
Possible Hazard Identification													Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Unconfirmed													<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months			
Deliverable Requested I II III IV Other (specify)													Primary Deliverable Rank 2			
Empty Kit Relinquished by:													Date	Time	Method of Shipment	
Relinquished by:													Date/Time			Company
Relinquished by:													Date/Time			Company
Relinquished by:													Date/Time			Company
Custody Seals Intact:													Custody Seal No			
Δ Yes Δ NO																

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-1502-1

SDG Number: 212C-MD-02230

Login Number: 1502

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, 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.	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: 890-1502-1

SDG Number: 212C-MD-02230

Login Number: 1502

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland

List Creation: 11/01/21 08:46 AM

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 <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: 890-2290-1

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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:  
5/16/2022 4:19:28 PM

Jessica Kramer, Project Manager  
(432)704-5440  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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

Laboratory Job ID: 890-2290-1  
SDG: Lea County NM

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## Definitions/Glossary

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

Job ID: 890-2290-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
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.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

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

Job ID: 890-2290-1  
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.



## Client Sample Results

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

Sample Depth: 5

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

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 14:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:33	05/15/22 14:33	1
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	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/14/22 12:33	05/15/22 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/14/22 12:33	05/15/22 14:33	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/14/22 12:33	05/15/22 14:33	1

## Method: Total BTEX - Total BTEX 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	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	522		50.0	mg/Kg			05/11/22 10:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 13:54	1
Diesel Range Organics (Over C10-C28)	346		50.0	mg/Kg		05/10/22 08:18	05/10/22 13:54	1
Oil Range Organics (Over C28-C36)	176		50.0	mg/Kg		05/10/22 08:18	05/10/22 13:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	119		70 - 130	05/10/22 08:18	05/10/22 13:54	1
o-Terphenyl (Surr)	108		70 - 130	05/10/22 08:18	05/10/22 13:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4070	F1	50.5	mg/Kg			05/12/22 07:19	10

Client Sample ID: BH-93

Lab Sample ID: 890-2290-2

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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

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

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## Client Sample Results

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

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-93

Lab Sample ID: 890-2290-2

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	05/14/22 12:33	05/15/22 15:01	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/16/22 16:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	145		49.9	mg/Kg			05/11/22 10:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:05	1
Diesel Range Organics (Over C10-C28)	62.5		49.9	mg/Kg		05/10/22 08:18	05/10/22 16:05	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	976		24.9	mg/Kg			05/12/22 07:44	5

Client Sample ID: BH-94

Lab Sample ID: 890-2290-3

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:33	05/15/22 15:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:33	05/15/22 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/14/22 12:33	05/15/22 15:28	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/14/22 12:33	05/15/22 15:28	1

## Method: Total BTEX - Total 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	412		50.0	mg/Kg			05/11/22 10:27	1

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## Client Sample Results

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

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-94

Lab Sample ID: 890-2290-3

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8015B NM - Diesel Range Organics (DRO) (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 14:16	1
Diesel Range Organics (Over C10-C28)	247		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
Oil Range Organics (Over C28-C36)	165		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1770		24.9	mg/Kg			05/12/22 07:52	5

Client Sample ID: BH-95

Lab Sample ID: 890-2290-4

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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

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 BTEX 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 Range Organics (DRO) (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 Range Organics (DRO) (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 14:37	1
Diesel Range Organics (Over C10-C28)	113		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:37	1
Oil Range Organics (Over C28-C36)	131		50.0	mg/Kg		05/10/22 08:18	05/10/22 14:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	104		70 - 130			05/10/22 08:18	05/10/22 14:37	1
o-Terphenyl (Surr)	93		70 - 130			05/10/22 08:18	05/10/22 14:37	1

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## Client Sample Results

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

Job ID: 890-2290-1  
SDG: Lea County NM

## Client Sample ID: BH-95

## Lab Sample ID: 890-2290-4

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3780		49.5	mg/Kg			05/12/22 08:00	10

## Client Sample ID: BH-96

## Lab Sample ID: 890-2290-5

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00200	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 BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/16/22 16:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 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
Oil 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

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1350		25.2	mg/Kg			05/12/22 08:08	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

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

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC)

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 16:50	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/14/22 12:33	05/15/22 16:50	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/14/22 12:33	05/15/22 16:50	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/14/22 12:33	05/15/22 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/14/22 12:33	05/15/22 16:50	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/14/22 12:33	05/15/22 16:50	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/16/22 16:56	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	238		49.9	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 14:59	1
Diesel Range Organics (Over C10-C28)	97.6		49.9	mg/Kg		05/10/22 08:18	05/10/22 14:59	1
Oil Range Organics (Over C28-C36)	140		49.9	mg/Kg		05/10/22 08:18	05/10/22 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130	05/10/22 08:18	05/10/22 14:59	1
o-Terphenyl (Surr)	99		70 - 130	05/10/22 08:18	05/10/22 14:59	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5290		49.8	mg/Kg			05/12/22 13:24	10

Client Sample ID: BH-98

Lab Sample ID: 890-2290-7

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC)

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-98

Lab Sample ID: 890-2290-7

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	05/14/22 12:33	05/15/22 17:16	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			05/16/22 16:56	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	102		50.0	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (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 C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 15:43	1
Oil Range Organics (Over C28-C36)	102		50.0	mg/Kg		05/10/22 08:18	05/10/22 15:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	117		70 - 130			05/10/22 08:18	05/10/22 15:43	1
o-Terphenyl (Surr)	108		70 - 130			05/10/22 08:18	05/10/22 15:43	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2090		25.0	mg/Kg			05/12/22 13:33	5

Client Sample ID: BH-99

Lab Sample ID: 890-2290-8

Date Collected: 05/06/22 00:00

Matrix: Solid

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 12:33	05/15/22 17:42	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:33	05/15/22 17:42	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/14/22 12:33	05/15/22 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/14/22 12:33	05/15/22 17:42	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/14/22 12:33	05/15/22 17:42	1

## 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	73.6		50.0	mg/Kg			05/11/22 10:27	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

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

Sample Depth: 5

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
Oil Range Organics (Over C28-C36)	73.6		50.0	mg/Kg		05/10/22 08:18	05/10/22 16:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130			05/10/22 08:18	05/10/22 16:26	1
o-Terphenyl (Surr)	96		70 - 130			05/10/22 08:18	05/10/22 16:26	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2860		24.9	mg/Kg			05/12/22 13:41	5

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

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC)

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 BTEX 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 Range Organics (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
Oil Range Organics (Over C28-C36)	56.8		49.9	mg/Kg		05/10/22 08:18	05/10/22 16:49	1
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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## 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

Sample Depth: 5

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5050		49.7	mg/Kg			05/12/22 13:49	10

## Client Sample ID: BH-101

## Lab Sample ID: 890-2290-10

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00199	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

## 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 12:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130			05/10/22 08:18	05/10/22 12:49	1
o-Terphenyl (Surr)	103		70 - 130			05/10/22 08:18	05/10/22 12:49	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2460		24.8	mg/Kg			05/12/22 13:57	5

## Client Sample ID: BH-102

## Lab Sample ID: 890-2290-11

Date Collected: 05/06/22 00:00

Matrix: Solid

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-102

Lab Sample ID: 890-2290-11

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 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 Organics (DRO) (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 Range Organics (DRO) (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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2550		25.3	mg/Kg			05/12/22 14:05	5

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

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC)

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

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

Sample Depth: 5

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/16/22 16:56	1

## Method: 8015 NM - Diesel Range Organics (DRO) (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 Range Organics (DRO) (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 C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 17:54	1
Oil 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 Chromatography - Soluble

Analyte	Result	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

Lab Sample ID: 890-2290-13

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00199	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 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 (DRO) (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 Range Organics (DRO) (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	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-104

Lab Sample ID: 890-2290-13

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 18:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	116		70 - 130			05/10/22 08:18	05/10/22 18:15	1
o-Terphenyl (Surr)	113		70 - 130			05/10/22 08:18	05/10/22 18:15	1

## Method: 300.0 - Anions, Ion Chromatography - 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

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00200	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 BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	176		49.9	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:02	1
Diesel Range Organics (Over C10-C28)	54.4		49.9	mg/Kg		05/10/22 08:18	05/10/22 20:02	1
Oil Range Organics (Over C28-C36)	122		49.9	mg/Kg		05/10/22 08:18	05/10/22 20:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130			05/10/22 08:18	05/10/22 20:02	1
o-Terphenyl (Surr)	96		70 - 130			05/10/22 08:18	05/10/22 20:02	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## Client Sample ID: BH-105

Lab Sample ID: 890-2290-14

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 300.0 - Anions, Ion Chromatography - 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

Lab Sample ID: 890-2290-15

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Toluene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Ethylbenzene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
m-Xylene & p-Xylene	<0.800	U	0.800	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
o-Xylene	<0.400	U	0.400	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Xylenes, Total	<0.800	U	0.800	mg/Kg		05/14/22 12:37	05/14/22 22:04	200
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			05/14/22 12:37	05/14/22 22:04	200
1,4-Difluorobenzene (Surr)	94		70 - 130			05/14/22 12:37	05/14/22 22:04	200

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
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 Range 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
Oil 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 Chromatography - Soluble

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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-107

Lab Sample ID: 890-2290-16

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC)

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 20:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/14/22 12:37	05/14/22 20:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 20:42	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/14/22 12:37	05/14/22 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	05/14/22 12:37	05/14/22 20:42	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/14/22 12:37	05/14/22 20:42	1

## Method: Total BTEX - Total BTEX 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	338		50.0	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	1
Diesel Range Organics (Over C10-C28)	169		50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	1
Oil Range Organics (Over C28-C36)	169		50.0	mg/Kg		05/10/22 08:18	05/10/22 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	113		70 - 130	05/10/22 08:18	05/10/22 19:41	1
o-Terphenyl (Surr)	99		70 - 130	05/10/22 08:18	05/10/22 19:41	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1530		24.9	mg/Kg			05/12/22 16:35	5

Client Sample ID: BH-108

Lab Sample ID: 890-2290-17

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Toluene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Ethylbenzene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
m-Xylene & p-Xylene	<0.795	U	0.795	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
o-Xylene	<0.398	U	0.398	mg/Kg		05/14/22 12:37	05/14/22 22:31	200
Xylenes, Total	<0.795	U	0.795	mg/Kg		05/14/22 12:37	05/14/22 22:31	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/14/22 12:37	05/14/22 22:31	200

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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

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ANALYSIS TABLE

Lab Sample ID: 890-2290-17

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	05/14/22 12:37	05/14/22 22:31	200

## Method: Total BTEX - Total 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) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8980		250	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<250	U	250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
Diesel Range Organics (Over C10-C28)	7670		250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
Oil Range Organics (Over C28-C36)	1310		250	mg/Kg		05/10/22 08:18	05/10/22 18:58	5
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

Date Collected: 05/06/22 00:00

Date Received: 05/06/22 15:23

Sample Depth: 5

Lab Sample ID: 890-2290-18

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/14/22 12:37	05/14/22 21:09	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/14/22 12:37	05/14/22 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/14/22 12:37	05/14/22 21:09	1
1,4-Difluorobenzene (Surr)	105		70 - 130	05/14/22 12:37	05/14/22 21:09	1

## Method: Total BTEX - Total BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.4		49.9	mg/Kg			05/11/22 10:27	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-109

Lab Sample ID: 890-2290-18

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 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
Oil 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)	117		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 Chromatography - 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

Lab Sample ID: 890-2290-19

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 5

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

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 BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	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 Range Organics (DRO) (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	05/11/22 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
Oil Range Organics (Over C28-C36)	263		50.0	mg/Kg		05/10/22 08:18	05/11/22 07:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	111		70 - 130			05/10/22 08:18	05/11/22 07:03	1
o-Terphenyl (Surr)	106		70 - 130			05/10/22 08:18	05/11/22 07:03	1

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## Client Sample Results

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

Sample Depth: 5

Lab Sample ID: 890-2290-19

Matrix: Solid

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ANALYSIS TABLE

## Method: 300.0 - Anions, Ion Chromatography - 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

Date Received: 05/06/22 15:23

Sample Depth: 5

Lab Sample ID: 890-2290-20

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC)

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 21:36	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/14/22 12:37	05/14/22 21:36	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/14/22 21:36	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/14/22 12:37	05/14/22 21:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			05/14/22 12:37	05/14/22 21:36	1
1,4-Difluorobenzene (Surr)	100		70 - 130			05/14/22 12:37	05/14/22 21:36	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	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	64.3		49.9	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 08:18	05/10/22 20:45	1
Oil Range Organics (Over C28-C36)	64.3		49.9	mg/Kg		05/10/22 08:18	05/10/22 20:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	103		70 - 130			05/10/22 08:18	05/10/22 20:45	1
o-Terphenyl (Surr)	94		70 - 130			05/10/22 08:18	05/10/22 20:45	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3640		25.1	mg/Kg			05/12/22 15:24	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-112

Lab Sample ID: 890-2290-21

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/14/22 12:37	05/15/22 00:44	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/14/22 12:37	05/15/22 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	05/14/22 12:37	05/15/22 00:44	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/14/22 12:37	05/15/22 00:44	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/16/22 16:56	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	362		50.0	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	362	*1	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	116		70 - 130	05/09/22 16:33	05/10/22 19:05	1
o-Terphenyl (Surr)	123		70 - 130	05/09/22 16:33	05/10/22 19:05	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	374		5.00	mg/Kg			05/12/22 13:00	1

Client Sample ID: BH-113

Lab Sample ID: 890-2290-22

Date Collected: 05/06/22 00:00

Matrix: Solid

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	<0.00199	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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

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

Sample Depth: 5

## 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 (DRO) (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 Range Organics (DRO) (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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	942		4.97	mg/Kg	-		05/12/22 13:09	1

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
890-2290-1	BH-92	98	103				
890-2290-2	BH-93	96	100				
890-2290-3	BH-94	99	102				
890-2290-4	BH-95	99	102				
890-2290-5	BH-96	107	102				
890-2290-6	BH-97	106	101				
890-2290-7	BH-98	103	100				
890-2290-8	BH-99	113	103				
890-2290-9	BH-100	109	99				
890-2290-10	BH-101	105	101				
890-2290-10 MS	BH-101	103	108				
890-2290-10 MSD	BH-101	87	96				
890-2290-11	BH-102	103	103				
890-2290-12	BH-103	108	104				
890-2290-13	BH-104	106	103				
890-2290-14	BH-105	105	92				
890-2290-15	BH-106	90	94				
890-2290-16	BH-107	90	98				
890-2290-17	BH-108	99	98				
890-2290-18	BH-109	110	105				
890-2290-19	BH-110	74	96				
890-2290-20	BH-111	100	100				
890-2290-21	BH-112	87	92				
890-2290-22	BH-113	107	102				
LCS 880-25563/1-A	Lab Control Sample	95	103				
LCS 880-25564/1-A	Lab Control Sample	101	100				
LCSD 880-25563/2-A	Lab Control Sample Dup	99	105				
LCSD 880-25564/2-A	Lab Control Sample Dup	96	107				
MB 880-25563/5-A	Method Blank	77	94				
MB 880-25564/5-A	Method Blank	77	92				
<b>Surrogate Legend</b>							
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)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(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				

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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

## Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25563/5-A

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25563

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Prep Type: Total/NA

Prep Batch: 25563

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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	MB Result	MB 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

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## QC Sample Results

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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25564

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 880-25564/1-A

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.1104		mg/Kg		110	70 - 130
Toluene	0.100	0.1137		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1151		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2290		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD 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

Surrogate	LCSD %Recovery	LCSD Qualifier	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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS 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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2290-10 MS

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: BH-101

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00199	U	0.101	0.08784		mg/Kg		87	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-2290-10 MSD

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: BH-101

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08471		mg/Kg		85	70 - 130	18	35
Toluene	<0.00199	U	0.100	0.08214		mg/Kg		82	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.100	0.08185		mg/Kg		82	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1660		mg/Kg		83	70 - 130	8	35
o-Xylene	<0.00199	U	0.100	0.07935		mg/Kg		79	70 - 130	10	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-25199/1-A

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25199

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 11:21	1

Surrogate	MB %Recovery	MB 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

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	123		70 - 130

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## QC Sample Results

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: 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
<i>o</i> -Terphenyl (Surr)	124		70 - 130

Lab Sample ID: LCSD 880-25199/3-A

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25199

	Spike	LCSD	LCSD					%Rec	
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
<i>o</i> -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

	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
<i>o</i> -Terphenyl (Surr)	108		70 - 130

Lab Sample ID: 880-14554-A-1-D MSD

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25199

	Sample	Sample	Spike	MSD	MSD			%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
C6-C10	<50.0	U *1	998	899.1		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	998	969.3		mg/Kg		95	70 - 130

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	94		70 - 130
<i>o</i> -Terphenyl (Surr)	94		70 - 130

Lab Sample ID: MB 880-25221/1-A

Matrix: Solid

Analysis Batch: 25235

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25221

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
C6-C10	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 11:44	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 11:44	1	

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## QC Sample Results

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	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 08:18	05/10/22 11:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	110		70 - 130	05/10/22 08:18	05/10/22 11:44	1
o-Terphenyl (Surr)	117		70 - 130	05/10/22 08:18	05/10/22 11:44	1

Lab Sample ID: LCS 880-25221/2-A

Matrix: Solid

Analysis Batch: 25235

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25221

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C6-C10	1000	1043		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	993.9		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130
o-Terphenyl (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-25221/3-A

Matrix: Solid

Analysis Batch: 25235

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25221

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C6-C10	1000	1171		mg/Kg		117	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	1177		mg/Kg		118	70 - 130	17	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	124		70 - 130
o-Terphenyl (Surr)	109		70 - 130

Lab Sample ID: 890-2290-10 MS

Matrix: Solid

Analysis Batch: 25235

Client Sample ID: BH-101

Prep Type: Total/NA

Prep Batch: 25221

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C6-C10	<49.9	U F1 F2	1000	1218		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	983.9		mg/Kg		98	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	107		70 - 130
o-Terphenyl (Surr)	92		70 - 130

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## QC Sample Results

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: 890-2290-10 MSD

Matrix: Solid

Analysis Batch: 25235

Client Sample ID: BH-101

Prep Type: Total/NA

Prep Batch: 25221

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C10	<49.9	U F1 F2	998	1540	F1 F2	mg/Kg		151	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1141		mg/Kg		114	70 - 130	15	20

Surrogate	MSD %Recovery	MSD 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

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/12/22 06:55	1

Lab Sample ID: LCS 880-25289/2-A

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	270.0		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 880-25289/3-A

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	269.9		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 890-2290-1 MS

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: BH-92

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4070	F1	2530	6956	F1	mg/Kg		114	90 - 110

Lab Sample ID: 890-2290-1 MSD

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: BH-92

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4070	F1	2530	6972	F1	mg/Kg		115	90 - 110	0	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2290-11 MS

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: BH-102

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2550		1260	3909		mg/Kg		107	90 - 110		

Lab Sample ID: 890-2290-11 MSD

Matrix: Solid

Analysis Batch: 25351

Client Sample ID: BH-102

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2550		1260	3911		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-25414/1-A

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/12/22 11:56	1

Lab Sample ID: LCS 880-25414/2-A

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	245.3		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-25414/3-A

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	245.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-14738-A-1-B MS

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	208		248	438.3		mg/Kg		93	90 - 110		

Lab Sample ID: 880-14738-A-1-C MSD

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	208		248	435.7		mg/Kg		92	90 - 110	1	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## GC VOA

## Analysis Batch: 25561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Total/NA	Solid	8021B	25563
890-2290-2	BH-93	Total/NA	Solid	8021B	25563
890-2290-3	BH-94	Total/NA	Solid	8021B	25563
890-2290-4	BH-95	Total/NA	Solid	8021B	25563
890-2290-5	BH-96	Total/NA	Solid	8021B	25563
890-2290-6	BH-97	Total/NA	Solid	8021B	25563
890-2290-7	BH-98	Total/NA	Solid	8021B	25563
890-2290-8	BH-99	Total/NA	Solid	8021B	25563
890-2290-9	BH-100	Total/NA	Solid	8021B	25563
890-2290-10	BH-101	Total/NA	Solid	8021B	25564
890-2290-11	BH-102	Total/NA	Solid	8021B	25564
890-2290-12	BH-103	Total/NA	Solid	8021B	25564
890-2290-13	BH-104	Total/NA	Solid	8021B	25564
890-2290-14	BH-105	Total/NA	Solid	8021B	25564
890-2290-15	BH-106	Total/NA	Solid	8021B	25564
890-2290-16	BH-107	Total/NA	Solid	8021B	25564
890-2290-17	BH-108	Total/NA	Solid	8021B	25564
890-2290-18	BH-109	Total/NA	Solid	8021B	25564
890-2290-19	BH-110	Total/NA	Solid	8021B	25564
890-2290-20	BH-111	Total/NA	Solid	8021B	25564
890-2290-21	BH-112	Total/NA	Solid	8021B	25564
890-2290-22	BH-113	Total/NA	Solid	8021B	25564
MB 880-25563/5-A	Method Blank	Total/NA	Solid	8021B	25563
MB 880-25564/5-A	Method Blank	Total/NA	Solid	8021B	25564
LCS 880-25563/1-A	Lab Control Sample	Total/NA	Solid	8021B	25563
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	8021B	25564
LCSD 880-25563/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25563
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25564
890-2290-10 MS	BH-101	Total/NA	Solid	8021B	25564
890-2290-10 MSD	BH-101	Total/NA	Solid	8021B	25564

## Prep Batch: 25563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-1	BH-92	Total/NA	Solid	5035	
890-2290-2	BH-93	Total/NA	Solid	5035	
890-2290-3	BH-94	Total/NA	Solid	5035	
890-2290-4	BH-95	Total/NA	Solid	5035	
890-2290-5	BH-96	Total/NA	Solid	5035	
890-2290-6	BH-97	Total/NA	Solid	5035	
890-2290-7	BH-98	Total/NA	Solid	5035	
890-2290-8	BH-99	Total/NA	Solid	5035	
890-2290-9	BH-100	Total/NA	Solid	5035	
MB 880-25563/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25563/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25563/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Prep Batch: 25564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-10	BH-101	Total/NA	Solid	5035	
890-2290-11	BH-102	Total/NA	Solid	5035	
890-2290-12	BH-103	Total/NA	Solid	5035	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

## GC VOA (Continued)

## Prep Batch: 25564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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

## Lab Chronicle

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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 14:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 13:54	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		10			25351	05/12/22 07:19	CH	XEN MID

**Client Sample ID: BH-93****Lab Sample ID: 890-2290-2****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 15:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 16:05	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 07:44	CH	XEN MID

**Client Sample ID: BH-94****Lab Sample ID: 890-2290-3****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 15:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 14:16	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 07:52	CH	XEN MID

**Client Sample ID: BH-95****Lab Sample ID: 890-2290-4****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

**Client Sample ID: BH-95****Lab Sample ID: 890-2290-4****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25563	05/14/22 12:33	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 16:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 14:59	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		10			25351	05/12/22 13:24	CH	XEN MID

**Client Sample ID: BH-98****Lab Sample ID: 890-2290-7****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 15:43	SM	XEN MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-102

Lab Sample ID: 890-2290-11

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-105

Lab Sample ID: 890-2290-14

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 20:02	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		1			25351	05/12/22 15:03	CH	XEN MID

Client Sample ID: BH-106

Lab Sample ID: 890-2290-15

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-107

Lab Sample ID: 890-2290-16

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 20:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 19:41	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 16:35	CH	XEN MID

Client Sample ID: BH-108

Lab Sample ID: 890-2290-17

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		200			25561	05/14/22 22:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		5			25235	05/10/22 18:58	SM	XEN MID

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## Lab Chronicle

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****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

**Client Sample ID: BH-109****Lab Sample ID: 890-2290-18****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/14/22 21:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25658	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25343	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25221	05/10/22 08:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25235	05/10/22 20:24	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	25289	05/10/22 17:06	SC	XEN MID
Soluble	Analysis	300.0		5			25351	05/12/22 15:14	CH	XEN MID

**Client Sample ID: BH-110****Lab Sample ID: 890-2290-19****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Client Sample ID: BH-112

Lab Sample ID: 890-2290-21

Date Collected: 05/06/22 00:00

Matrix: Solid

Date Received: 05/06/22 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
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- 7
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- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
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

## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-1  
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2290-1	BH-92	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-2	BH-93	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-3	BH-94	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-4	BH-95	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-5	BH-96	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-6	BH-97	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-7	BH-98	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-8	BH-99	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-9	BH-100	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-10	BH-101	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-11	BH-102	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-12	BH-103	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-13	BH-104	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-14	BH-105	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-15	BH-106	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-16	BH-107	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-17	BH-108	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-18	BH-109	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-19	BH-110	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-20	BH-111	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-21	BH-112	Solid	05/06/22 00:00	05/06/22 15:23	5
890-2290-22	BH-113	Solid	05/06/22 00:00	05/06/22 15:23	5



### **Analysis Request of Chain of Custody Record**



**Tetra Tech, Inc.**

Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 2 of 3[illegible]

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901W Wall Street, Ste 1000  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 3 of 3[illegible]

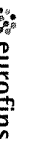
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Eurofins Carlsbad

1089 N Canal St  
Carlsbad, NM 88220  
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing  
America

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No					
Client Contact:	Phone:		Kramer Jessica		890-747 1					
Shipping/Receiving			E-Mail: Jessica.Kramer@eurofins.com	State of Origin: New Mexico	Page: Page 1 of 3					
Company: Eurofins Environment Testing South Cent			Accreditations Required (See note): NELAP - Texas		Lab #:					
Address: 1211 W. Florida Ave	Due Date Requested: 5/12/2022				890-2290-1					
City: Midland	TAT Requested (days):									
State, Zip: TX, 79701										
Phone: 432-704-5440(Tel)	PO #:									
Email:	WO #:									
Project Name: Kaiser SWD	Project # 88001057									
Site:	SSOW#:									
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (G=grab, B=Batch, A=All)</b>	<b>Matrix (W=water, S=solid, O=washbottle, B=Batch, A=All)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>Analysis Requested</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note:</b>
BH-92 (890-2290-1)		5/6/22	Mountain		Solid	X	X			
BH-93 (890-2290-2)		5/6/22	Mountain		Solid	X	X			
BH-94 (890-2290-3)		5/6/22	Mountain		Solid	X	X			
BH-95 (890-2290-4)		5/6/22	Mountain		Solid	X	X			
BH-96 (890-2290-5)		5/6/22	Mountain		Solid	X	X			
BH-97 (890-2290-6)		5/6/22	Mountain		Solid	X	X			
BH-98 (890-2290-7)		5/6/22	Mountain		Solid	X	X			
BH-99 (890-2290-8)		5/6/22	Mountain		Solid	X	X			
BH-100 (890-2290-9)		5/6/22	Mountain		Solid	X	X			
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, the matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other institutions 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.										
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>					
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements:					
Empty Kit Relinquished by			Date	Time	Method of Shipment:					
Relinquished by <i>Cue cap 5.9.22</i>			Date/Time		Received by <i>Jessica</i> Date/Time <i>5/9/22</i>					
Relinquished by			Date/Time		Received by _____ Date/Time _____					
Relinquished by			Date/Time		Received by _____ Date/Time _____					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No		Cooler Temperature(s) °C and Other Remarks					

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- 12
- 13
- 14

Eurofins Carlsbad

1089 N Canal St  
Carlsbad NM 88220  
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing  
America

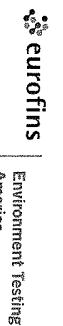
<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No:						
Client Contact:		Phone	Kramer Jessica		890-747 2						
Shipping/Receiving			E-Mail: Jessica.Kramer@eurofins.com	State of Origin	Page 2 of 3						
Company: Eurofins Environment Testing South Cent			Accreditations Required (See note)	New Mexico							
Address: 1211 W Florida Ave		Due Date Requested	NEIAP - Texas								
City: Midland		5/12/2022	Job #:								
State Zip: TX 79701		TAT Requested (days):	890-2290-1								
Phone: 432-704-5440(Tel)		PO #:	Preservation Codes								
Email:		WFO #:	A. HCL M. Hexane B. NaOH N. None C. Zn Acetate O. AsNaO2 D. Nitric Acid P. Na2O4S E. NaHSO4 Q. Na2SO3 F. MeOH R. Na2SC03 G. Amchlor S. H2SO4 H. Ascorbic Acid T. TSP Dodecylate I. Ice U. Acetone J. DI Water V. MCAA K. EDTA W. pH 4.5 L. EDA Z. other (specify)								
Project Name: Kaiser SMD		Project #:	Other:								
88001057		SSOV#:									
Site:											
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=grab)</b>	<b>Matrix (Synthetic, Sealed, On-wastefill, BI-Tissue, AAH)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8016MOD_NM/8016NM_S_Prep Full TPH</b>	<b>8016MOD_Calc</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note</b>
BH-101 (890-2290-10)		5/6/22	Mountain		Solid		X	X		1	
BH-102 (890-2290-11)		5/6/22	Mountain		Solid		X	X		1	
BH-103 (890-2290-12)		5/6/22	Mountain		Solid		X	X		1	
BH-104 (890-2290-13)		5/6/22	Mountain		Solid		X	X		1	
BH-105 (890-2290-14)		5/6/22	Mountain		Solid		X	X		1	
BH-106 (890-2290-15)		5/6/22	Mountain		Solid		X	X		1	
BH-107 (890-2290-16)		5/6/22	Mountain		Solid		X	X		1	
BH-108 (890-2290-17)		5/6/22	Mountain		Solid		X	X		1	
BH-109 (890-2290-18)		5/6/22	Mountain		Solid		X	X		1	
<p>Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyze &amp; 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/test/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.</p>											
<b>Possible Hazard Identification</b>											
<b>Unconfirmed</b>											
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank: 2											
Empty Kit Relinquished by: Date: Time: Method of Shipment:											
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:											
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:											
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:											
Custody Seals Intact: Custody Seal No: Cooler Temperature(s) °C and Other Remarks:											
A Yes A No											



Eurofins Carlsbad

1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No						
Client Contact		Phone	Kramer Jessica		890-747 3						
Shipping/Receiving		E-Mail	Jessica.Kramer@eurofins.com	State of Origin	Page 3 of 3						
Company		Accreditations Required (See note):	NEIAP - Texas		Job #						
Eurofins Environment Testing South Center					890-2290-1						
Address		Due Date Requested	Analysis Requested								
1211 W. Florida Ave		5/12/2022									
City		YAT Requested (days):									
Midland											
State zip											
TX 79701											
Phone		PO #:									
432-704-5440(Tel)											
Email		WO #:									
Project Name		Project #									
Kaiser SWD		88001057									
Site		SSOW#									
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=comp, G=grab)</b>	<b>Matrix (W=water, S=solid, O=oil, BT=Tissue, A=Air)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8015MOD_NM/8015NM_S_Prep Full TPH</b>	<b>8015MOD_Calc</b>	<b>Total Number of containers</b>	<b>Special Instructions/Note</b>
BH-110 (890-2290-19)		5/6/22	Mountain		Solid	X	X			1	
BH-111 (890-2290-20)		5/6/22	Mountain		Solid	X	X			1	
BH-112 (890-2290-21)		5/6/22	Mountain		Solid	X	X			1	
BH-113 (890-2290-22)		5/6/22	Mountain		Solid	X	X			1	
SW-34 (890-2290-23)		5/6/22	Mountain		Solid	X	X			1	
SW-35 (890-2290-24)		5/6/22	Mountain		Solid	X	X			1	
SW-36 (890-2290-25)		5/6/22	Mountain		Solid	X	X			1	
SW-37 (890-2290-26)		5/6/22	Mountain		Solid	X	X			1	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte, &amp; accreditation compliance upon our subcontracted 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other institutions with the proper accreditation. 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.</p>											
<b>Possible Hazard Identification</b>											
<b>Unconfirmed</b>											
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2											
Empty Kit Relinquished by: Date Time											
Relinquished by: Date Time Company											
Relinquished by: Date Time Company											
Relinquished by: Date Time Company											
Custody Seats Intact: Custody Seal No											
A Yes A No											

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2290-1

SDG Number: Lea County NM

Login Number: 2290

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2290-1

SDG Number: Lea County NM

Login Number: 2290

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 05/09/22 12:39 PM

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 <6mm (1/4").	True	



## 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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:  
5/16/2022 4:19:36 PM

Jessica Kramer, Project Manager  
(432)704-5440  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-2290-2  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
U	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
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
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.



## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

Client Sample ID: SW-34

Lab Sample ID: 890-2290-23

Date Collected: 05/06/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 0 - 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	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/14/22 12:37	05/15/22 01:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/14/22 12:37	05/15/22 01:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/14/22 12:37	05/15/22 01:36	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/14/22 12:37	05/15/22 01:36	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 Organics (DRO) (GC)

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 Range Organics (DRO) (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
OII 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1170		24.8	mg/Kg			05/12/22 13:19	5

Client Sample ID: SW-35

Lab Sample ID: 890-2290-24

Date Collected: 05/06/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 0 - 5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/14/22 12:37	05/15/22 02:02	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/14/22 12:37	05/15/22 02:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/14/22 12:37	05/15/22 02:02	1
1,4-Difluorobenzene (Surr)	101		70 - 130	05/14/22 12:37	05/15/22 02:02	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U *1	49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
Diesel Range Organics (Over C10-C28)	435		49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/09/22 16:33	05/10/22 20:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			05/09/22 16:33	05/10/22 20:32	1
o-Terphenyl (Surr)	116		70 - 130			05/09/22 16:33	05/10/22 20:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1150		24.8	mg/Kg			05/12/22 13:46	5

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

Lab Sample ID: 890-2290-25

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC)

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 BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.201	U	0.201	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	4280		50.0	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	146	*1	50.0	mg/Kg		05/09/22 16:33	05/10/22 19:48	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

Client Sample ID: SW-36

Lab Sample ID: 890-2290-25

Date Collected: 05/06/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 0 - 5

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	4130		50.0	mg/Kg		05/09/22 16:33	05/10/22 19:48	1
Oil 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 Chromatography - 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

Date Collected: 05/06/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 05/06/22 15:23

Sample Depth: 0 - 5

## Method: 8021B - Volatile Organic Compounds (GC)

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

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	346		50.0	mg/Kg			05/11/22 10:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U *1	50.0	mg/Kg		05/09/22 16:33	05/10/22 20:53	1
Diesel Range Organics (Over C10-C28)	346		50.0	mg/Kg		05/09/22 16:33	05/10/22 20:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 20:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130			05/09/22 16:33	05/10/22 20:53	1
o-Terphenyl (Surr)	108		70 - 130			05/09/22 16:33	05/10/22 20:53	1

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Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

Client Sample ID: SW-37  
Date Collected: 05/06/22 00:00  
Date Received: 05/06/22 15:23  
Sample Depth: 0 - 5

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ANALYSIS TABLE

Lab Sample ID: 890-2290-26  
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1510		25.3	mg/Kg			05/12/22 14:05	5	

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-2290-23	SW-34	99	98
890-2290-24	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
LCS 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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-14554-A-1-C MS	Matrix Spike	109	108
880-14554-A-1-D MSD	Matrix Spike Duplicate	94	94
890-2290-23	SW-34	108	106
890-2290-24	SW-35	118	116
890-2290-25	SW-36	124	126
890-2290-26	SW-37	108	108
LCS 880-25199/2-A	Lab Control Sample	123	124
LCSD 880-25199/3-A	Lab Control Sample Dup	129	132 S1+
MB 880-25199/1-A	Method Blank	99	103
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

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	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 880-25564/1-A

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1104		mg/Kg		110	70 - 130
Toluene	0.100	0.1137		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1151		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2290		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-2290-A-10-E MS

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2290-A-10-E MS

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-2290-A-10-F MSD

Matrix: Solid

Analysis Batch: 25561

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08471		mg/Kg		85	70 - 130	18	35
Toluene	<0.00199	U	0.100	0.08214		mg/Kg		82	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.100	0.08185		mg/Kg		82	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1660		mg/Kg		83	70 - 130	8	35
o-Xylene	<0.00199	U	0.100	0.07935		mg/Kg		79	70 - 130	10	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-25199/1-A

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25199

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/09/22 16:33	05/10/22 11:21	1

Surrogate	MB %Recovery	MB 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

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
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
1-Chlorooctane (Surr)	123		70 - 130
o-Terphenyl (Surr)	124		70 - 130

Lab Sample ID: LCSD 880-25199/3-A

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Matrix: Solid

Analysis Batch: 25231

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C10	<50.0	U *1	998	899.1		mg/Kg		90	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	969.3		mg/Kg		95	70 - 130	14	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	94		70 - 130
o-Terphenyl (Surr)	94		70 - 130

Eurofins Carlsbad

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25414/1-A

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			05/12/22 11:56	1

Lab Sample ID: LCS 880-25414/2-A

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.3		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-25414/3-A

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	245.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-14738-A-1-B MS

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	208		248	438.3		mg/Kg		93	90 - 110

Lab Sample ID: 880-14738-A-1-C MSD

Matrix: Solid

Analysis Batch: 25429

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	208		248	435.7		mg/Kg		92	90 - 110	1	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

## GC VOA

## Analysis Batch: 25561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8021B	25564
890-2290-24	SW-35	Total/NA	Solid	8021B	25564
890-2290-25	SW-36	Total/NA	Solid	8021B	25564
890-2290-26	SW-37	Total/NA	Solid	8021B	25564
MB 880-25564/5-A	Method Blank	Total/NA	Solid	8021B	25564
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	8021B	25564
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25564
890-2290-A-10-E MS	Matrix Spike	Total/NA	Solid	8021B	25564
890-2290-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25564

## Prep Batch: 25564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	5035	
890-2290-24	SW-35	Total/NA	Solid	5035	
890-2290-25	SW-36	Total/NA	Solid	5035	
890-2290-26	SW-37	Total/NA	Solid	5035	
MB 880-25564/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25564/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25564/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2290-A-10-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2290-A-10-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 25659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	Total BTEX	
890-2290-24	SW-35	Total/NA	Solid	Total BTEX	
890-2290-25	SW-36	Total/NA	Solid	Total BTEX	
890-2290-26	SW-37	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 25199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8015NM Prep	
890-2290-24	SW-35	Total/NA	Solid	8015NM Prep	
890-2290-25	SW-36	Total/NA	Solid	8015NM Prep	
890-2290-26	SW-37	Total/NA	Solid	8015NM Prep	
MB 880-25199/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25199/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14554-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14554-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 25231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2290-23	SW-34	Total/NA	Solid	8015B NM	25199
890-2290-24	SW-35	Total/NA	Solid	8015B NM	25199
890-2290-25	SW-36	Total/NA	Solid	8015B NM	25199
890-2290-26	SW-37	Total/NA	Solid	8015B NM	25199
MB 880-25199/1-A	Method Blank	Total/NA	Solid	8015B NM	25199
LCS 880-25199/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25199

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
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**

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	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 01:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 20:10	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:19	CH	XEN MID

**Client Sample ID: SW-35****Lab Sample ID: 890-2290-24****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		1			25561	05/15/22 02:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 20:32	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:46	CH	XEN MID

**Client Sample ID: SW-36****Lab Sample ID: 890-2290-25****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

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	25564	05/14/22 12:37	MR	XEN MID
Total/NA	Analysis	8021B		50			25561	05/15/22 03:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25659	05/16/22 16:56	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25344	05/11/22 10:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25199	05/09/22 16:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25231	05/10/22 19:48	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	25414	05/12/22 11:30	CH	XEN MID
Soluble	Analysis	300.0		5			25429	05/12/22 13:55	CH	XEN MID

**Client Sample ID: SW-37****Lab Sample ID: 890-2290-26****Date Collected: 05/06/22 00:00****Matrix: Solid****Date Received: 05/06/22 15:23**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

Client Sample ID: SW-37  
Date Collected: 05/06/22 00:00  
Date Received: 05/06/22 15:23

Lab Sample ID: 890-2290-26  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
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



Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2290-2  
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2290-23	SW-34	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5
890-2290-24	SW-35	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5
890-2290-25	SW-36	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5
890-2290-26	SW-37	Solid	05/06/22 00:00	05/06/22 15:23	0 - 5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



### **Analysis Request of Chain of Custody Record**



**Tetra Tech, Inc.**

901W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 2 of 3[illegible]

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### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 3 of 3

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: 212C-MD-02230	
Project Location: Lea County, New Mexico (county, state)		Project #: 212C-MD-02230	
Invoice to: Dusty McIntuff - Permian Water Solutions		Sampler Signature: Ezequiel Moreno	
Receiving Laboratory: Eurofins Xenco		Comments:	
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION	
YEAR 2020		SAMPLING	
DATE		TIME	
WATER		MATRIX	
SOIL		PRESERVATIVE METHOD	
HCL		HNO3	
ICE		None	
# CONTAINERS		FILTERED (Y/N)	
BH-112 (5)		5/6/2022	
BH-113 (5)		5/6/2022	
SW-34 (0-5)		5/6/2022	
SW-35 (0-5)		5/6/2022	
SW-36 (0-5)		5/6/2022	
SW-37 (0-5)		5/6/2022	
Relinquished by: Emily Moore		Date: 5/6/22 Time: 1524	
Relinquished by: [Signature]		Date: 5.6.22 Time: [Signature]	
Relinquished by: [Signature]		Date: [Signature] Time: [Signature]	
Relinquished by: [Signature]		Date: [Signature] Time: [Signature]	
LAB USE ONLY		REMARKS:	
STANDARD		RUSH: Same Day 24 hr 48 hr 72 hr	
Rush Charges Authorized		Special Report Limits or TRRP Report	
Hand Delivered FEDEX UPS Tracking #		ANALYSIS REQUEST (Circle or Specify Method No.)	
BTEX 8021B BTEX 8260B		TPH TX1005 (Ext to C35)	
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	
TCLP Volatiles		TCLP Semi Volatiles	
RCI		GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625		PCB's 8082 / 608	
NORM		PLM (Asbestos)	
Chloride		Chloride Sulfate TDS	
General Water Chemistry (see attached list)		Anion/Cation Balance	
Hold			

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## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2290-2

SDG Number: Lea County NM

Login Number: 2290

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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2290-2

SDG Number: Lea County NM

Login Number: 2290

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 05/09/22 12:39 PM

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 <6mm (1/4").	True	



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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

7/20/2022 7:58:20 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-2515-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
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	These commonly used abbreviations may or may not be present in this report.
α	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

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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.



Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Job ID: 890-2515-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: SW34 0-6

Lab Sample ID: 890-2515-1

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

## 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		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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	49.9		mg/Kg		07/12/22 14:24	07/12/22 20:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 20:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	07/12/22 14:24	07/12/22 20:46	1
o-Terphenyl	109		70 - 130	07/12/22 14:24	07/12/22 20:46	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.4		5.01		mg/Kg			07/14/22 03:51	1

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

Sample Depth: 0 - 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 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 0 - 6

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	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	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 21:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/12/22 14:24	07/12/22 21:50	1
o-Terphenyl	106		70 - 130				07/12/22 14:24	07/12/22 21:50	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	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

Lab Sample ID: 890-2515-3

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

## 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		07/14/22 09:52	07/15/22 17:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:52	07/15/22 17:36	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/14/22 09:52	07/15/22 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	07/14/22 09:52	07/15/22 17:36	1
1,4-Difluorobenzene (Surr)	107		70 - 130	07/14/22 09:52	07/15/22 17:36	1

## Method: Total BTEX - Total BTEX 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)

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 0 - 6

## 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		07/12/22 14:24	07/12/22 22:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:11	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.8		5.05		mg/Kg			07/14/22 04:27	1

Client Sample ID: SW37 0-6

Lab Sample ID: 890-2515-4

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 0 - 6

## 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		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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel 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		07/12/22 14:24	07/12/22 22:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 22:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				07/12/22 14:24	07/12/22 22:33	1
o-Terphenyl	112		70 - 130				07/12/22 14:24	07/12/22 22:33	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## 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

## 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

## 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

Sample Depth: 6

## Method: 8021B - Volatile Organic Compounds (GC)

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 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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 22:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 22:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 22:54	1
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

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.0		4.95		mg/Kg			07/14/22 04:46	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 6

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:52	07/15/22 18:38	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/14/22 09:52	07/15/22 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	07/14/22 09:52	07/15/22 18:38	1
1,4-Difluorobenzene (Surr)	107		70 - 130	07/14/22 09:52	07/15/22 18:38	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			07/15/22 08:13	1

## 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			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 23:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 23:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	07/12/22 14:24	07/12/22 23:16	1
o-Terphenyl	103		70 - 130	07/12/22 14:24	07/12/22 23:16	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.9		5.02		mg/Kg			07/14/22 08:00	1

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

Sample Depth: 10

## Method: 8021B - Volatile Organic Compounds (GC)

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)	174	S1+	70 - 130	07/14/22 09:52	07/15/22 19:20	10

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 10

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0404	U	0.0404		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	99.5		50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 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
Oil 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
1-Chlorooctane	95		70 - 130				07/12/22 14:24	07/13/22 04:16	1
o-Terphenyl	105		70 - 130				07/12/22 14:24	07/13/22 04:16	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Lab Sample ID: 890-2515-8

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 10

## Method: 8021B - Volatile Organic Compounds (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

## Method: Total BTEX - Total BTEX Calculation

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 - Diesel 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-115 10

Lab Sample ID: 890-2515-8

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 10

## 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		07/12/22 14:24	07/13/22 04:38	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>86.1</b>		49.9		mg/Kg		07/12/22 14:24	07/13/22 04:38	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>47.4</b>		5.00		mg/Kg			07/14/22 08:18	1

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

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>0.0597</b>		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
<b>Total BTEX</b>	<b>0.0597</b>		0.0403		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total TPH</b>	<b>196</b>		49.9		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 03:54	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>196</b>		49.9		mg/Kg		07/12/22 14:24	07/13/22 03:54	1
Oil 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
o-Terphenyl	125		70 - 130				07/12/22 14:24	07/13/22 03:54	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

## 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

Lab Sample ID: 890-2515-10

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 10

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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	10
m-Xylene & p-Xylene	<0.0398	U	0.0398		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
o-Xylene	<0.0199	U	0.0199		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
Xylenes, Total	<0.0398	U	0.0398		mg/Kg		07/14/22 09:52	07/15/22 20:22	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	186	S1+	70 - 130				07/14/22 09:52	07/15/22 20:22	10
1,4-Difluorobenzene (Surr)	127		70 - 130				07/14/22 09:52	07/15/22 20:22	10

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0553		0.0398		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	743		50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 02:50	1
Diesel Range Organics (Over C10-C28)	644		50.0		mg/Kg		07/12/22 14:24	07/13/22 02:50	1
Oil Range Organics (Over C28-C36)	98.9		50.0		mg/Kg		07/12/22 14:24	07/13/22 02:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				07/12/22 14:24	07/13/22 02:50	1
o-Terphenyl	133	S1+	70 - 130				07/12/22 14:24	07/13/22 02:50	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		4.96		mg/Kg			07/14/22 08:37	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-118 10

Lab Sample ID: 890-2515-11

Date Collected: 07/06/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 10

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
Toluene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
Ethylbenzene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
m-Xylene & p-Xylene	<0.202	U	0.202		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
o-Xylene	<0.101	U	0.101		mg/Kg		07/18/22 15:14	07/19/22 16:21	50
Xylenes, Total	<0.202	U	0.202		mg/Kg		07/18/22 15:14	07/19/22 16:21	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	07/18/22 15:14	07/19/22 16:21	50
1,4-Difluorobenzene (Surr)	62	S1-	70 - 130	07/18/22 15:14	07/19/22 16:21	50

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.202	U	0.202		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4480		249		mg/Kg			07/13/22 09:51	1

## 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	<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
Oil 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
1-Chlorooctane	90		70 - 130	07/12/22 14:24	07/13/22 03:12	5
o-Terphenyl	94		70 - 130	07/12/22 14:24	07/13/22 03:12	5

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	187		4.95		mg/Kg			07/14/22 08:46	1

Client Sample ID: BH-119 8

Lab Sample ID: 890-2515-12

Date Collected: 07/06/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 18:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 09:52	07/15/22 18:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-119 8

Lab Sample ID: 890-2515-12

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				07/14/22 09:52	07/15/22 18:59	1
1,4-Difluorobenzene (Surr)	110		70 - 130				07/14/22 09:52	07/15/22 18:59	1
<b>Method: Total BTEX - Total BTEX Calculation</b>									
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
<b>Method: 8015 NM - Diesel Range Organics (DRO) (GC)</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5070		250		mg/Kg			07/13/22 09:51	1
<b>Method: 8015B NM - Diesel Range Organics (DRO) (GC)</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		07/12/22 14:24	07/13/22 03:33	5
Diesel Range Organics (Over C10-C28)	4490		250		mg/Kg		07/12/22 14:24	07/13/22 03:33	5
Oil Range Organics (Over C28-C36)	578		250		mg/Kg		07/12/22 14:24	07/13/22 03:33	5
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
<b>Method: 300.0 - Anions, Ion Chromatography - Soluble</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3960		25.1		mg/Kg			07/14/22 09:14	5

Client Sample ID: BH-120 8

Lab Sample ID: 890-2515-13

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

<b>Method: 8021B - Volatile Organic Compounds (GC)</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
Toluene	<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
Ethylbenzene	<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.00402		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
o-Xylene	<0.00201	U F1 F2	0.00201		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
Xylenes, Total	<0.00402	U F1 F2	0.00402		mg/Kg		07/14/22 09:57	07/15/22 01:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				07/14/22 09:57	07/15/22 01:35	1
1,4-Difluorobenzene (Surr)	95		70 - 130				07/14/22 09:57	07/15/22 01:35	1
<b>Method: Total BTEX - Total BTEX Calculation</b>									
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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-120 8

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Lab Sample ID: 890-2515-13

Matrix: Solid

REMOVED FROM  
ANALYSIS TABLE

## Method: 8015 NM - Diesel Range Organics (DRO) (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	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/12/22 14:24	07/12/22 23:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/12/22 14:24	07/12/22 23:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/12/22 14:24	07/12/22 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/12/22 14:24	07/12/22 23:37	1
o-Terphenyl	102		70 - 130				07/12/22 14:24	07/12/22 23:37	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1150		25.2		mg/Kg			07/14/22 09:23	5

Client Sample ID: BH-121 8

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Lab Sample ID: 890-2515-14

Matrix: Solid

## 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 09:57	07/15/22 02:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 02:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130				07/14/22 09:57	07/15/22 02:01	1
1,4-Difluorobenzene (Surr)	80		70 - 130				07/14/22 09:57	07/15/22 02:01	1

## Method: Total BTEX - Total BTEX 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

## 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			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 23:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 23:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/12/22 23:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-121 8

Lab Sample ID: 890-2515-14

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	07/12/22 14:24	07/12/22 23:59	1
o-Terphenyl	118		70 - 130	07/12/22 14:24	07/12/22 23:59	1

## Method: 300.0 - Anions, Ion Chromatography - 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

Lab Sample ID: 890-2515-15

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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		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
1,4-Difluorobenzene (Surr)	76		70 - 130	07/14/22 09:57	07/15/22 02:27	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 Organics (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 00:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 00:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 00:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	07/12/22 14:24	07/13/22 00:20	1
o-Terphenyl	119		70 - 130	07/12/22 14:24	07/13/22 00:20	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1280		25.3		mg/Kg			07/14/22 18:34	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-123 8

Lab Sample ID: 890-2515-16

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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		07/14/22 09:57	07/15/22 02:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 09:57	07/15/22 02:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 09:57	07/15/22 02:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130	07/14/22 09:57	07/15/22 02:54	1
1,4-Difluorobenzene (Surr)	80		70 - 130	07/14/22 09:57	07/15/22 02:54	1

## Method: Total BTEX - Total BTEX 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel 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		07/12/22 14:24	07/13/22 00:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 00:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 00:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	07/12/22 14:24	07/13/22 00:41	1
o-Terphenyl	103		70 - 130	07/12/22 14:24	07/13/22 00:41	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	201		4.97		mg/Kg			07/14/22 18:43	1

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

Sample Depth: 8

REMOVED FROM  
ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 8

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	74		70 - 130	07/14/22 09:57	07/15/22 03:20	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/12/22 14:24	07/13/22 01:24	1
o-Terphenyl	107		70 - 130				07/12/22 14:24	07/13/22 01:24	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.96		mg/Kg			07/14/22 18:52	1

Client Sample ID: BH-125 8

Lab Sample ID: 890-2515-18

Date Collected: 07/06/22 00:00

Date Received: 07/08/22 16:08

Sample Depth: 8

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	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 BTEX 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 Range Organics (DRO) (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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 8

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 01:46	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3800		25.0		mg/Kg			07/14/22 19:02	5

Client Sample ID: BH-126 8

Lab Sample ID: 890-2515-19

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/13/22 02:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				07/12/22 14:24	07/13/22 02:07	1
o-Terphenyl	115		70 - 130				07/12/22 14:24	07/13/22 02:07	1

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## Client Sample Results

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

Matrix: Solid

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	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

## 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		07/14/22 09:57	07/15/22 04:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 09:57	07/15/22 04:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130				07/14/22 09:57	07/15/22 04:39	1
1,4-Difluorobenzene (Surr)	77		70 - 130				07/14/22 09:57	07/15/22 04:39	1

## Method: Total BTEX - Total 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel 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		07/12/22 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 14:24	07/13/22 02:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/12/22 14:24	07/13/22 02:29	1
o-Terphenyl	106		70 - 130				07/12/22 14:24	07/13/22 02:29	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	472		25.0		mg/Kg			07/14/22 19:20	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-128 8

Lab Sample ID: 890-2515-21

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	07/15/22 05:05	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/22 09:57	07/15/22 05:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	07/14/22 09:57	07/15/22 05:05	1
1,4-Difluorobenzene (Surr)	72		70 - 130	07/14/22 09:57	07/15/22 05:05	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/15/22 08:13	1

## 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			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	49.9		mg/Kg		07/12/22 15:30	07/13/22 11:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		07/12/22 15:30	07/13/22 11:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 11:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/12/22 15:30	07/13/22 11:31	1
o-Terphenyl	107		70 - 130	07/12/22 15:30	07/13/22 11:31	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	582		5.04		mg/Kg			07/14/22 07:28	1

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

Sample Depth: 8

## 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 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	74		70 - 130	07/14/22 09:57	07/15/22 05:32	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			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 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
Oil 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
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, Ion Chromatography - 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 Received: 07/08/22 16:08

Sample Depth: 8

## 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		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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-130 8

Lab Sample ID: 890-2515-23

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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		07/12/22 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
Oil 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 Chromatography - 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

Lab Sample ID: 890-2515-24

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	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 (DRO) (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 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		07/12/22 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
Oil 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	S1-	70 - 130				07/12/22 15:30	07/13/22 13:20	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Sample Depth: 8

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.5		5.00		mg/Kg			07/14/22 08:07	1

Client Sample ID: BH-132 8

Lab Sample ID: 890-2515-25

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/22 09:57	07/15/22 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	150	S1+	70 - 130				07/14/22 09:57	07/15/22 08:11	1
1,4-Difluorobenzene (Surr)	74		70 - 130				07/14/22 09:57	07/15/22 08:11	1

## 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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/12/22 15:30	07/13/22 13:41	1
o-Terphenyl	102		70 - 130				07/12/22 15:30	07/13/22 13:41	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	172		4.96		mg/Kg			07/14/22 08:15	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-133 8

Lab Sample ID: 890-2515-26

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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 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 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

## 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			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	07/12/22 15:30	07/13/22 14:03	1
o-Terphenyl	101		70 - 130	07/12/22 15:30	07/13/22 14:03	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	634		4.95		mg/Kg			07/14/22 08:39	1

Client Sample ID: BH-134 8

Lab Sample ID: 890-2515-27

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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		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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-134 8

Lab Sample ID: 890-2515-27

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC) (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

## 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			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 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
Oil 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
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, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		5.01		mg/Kg			07/14/22 08:47	1

Client Sample ID: BH-135 8

Lab Sample ID: 890-2515-28

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	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

## 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			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-135 8

Lab Sample ID: 890-2515-28

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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		07/12/22 15:30	07/13/22 14:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 14:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 14:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				07/12/22 15:30	07/13/22 14:45	1
o-Terphenyl	103		70 - 130				07/12/22 15:30	07/13/22 14:45	1

## Method: 300.0 - Anions, Ion Chromatography - 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

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 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
Oil 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

## 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

## 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 09:57	07/15/22 10:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 10:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 09:57	07/15/22 10:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 09:57	07/15/22 10:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	17	S1-	70 - 130				07/14/22 09:57	07/15/22 10:34	1
1,4-Difluorobenzene (Surr)	79		70 - 130				07/14/22 09:57	07/15/22 10:34	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/15/22 08:13	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			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/12/22 15:30	07/13/22 15:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/12/22 15:30	07/13/22 15:28	1
o-Terphenyl	104		70 - 130				07/12/22 15:30	07/13/22 15:28	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167		5.00		mg/Kg			07/14/22 10:17	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:57	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 Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/15/22 08:13	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.9		50.0		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 16:11	1
Diesel Range Organics (Over C10-C28)	55.9		50.0		mg/Kg		07/12/22 15:30	07/13/22 16:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	07/12/22 15:30	07/13/22 16:11	1
o-Terphenyl	111		70 - 130	07/12/22 15:30	07/13/22 16:11	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	512		4.99		mg/Kg			07/14/22 10:25	1

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

Sample Depth: 8

## 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		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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	74		70 - 130	07/14/22 09:57	07/15/22 11:27	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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/13/22 09:51	1

## Method: 8015B NM - Diesel 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		07/12/22 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
Oil 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
1-Chlorooctane	92		70 - 130				07/12/22 15:30	07/13/22 16:32	1
o-Terphenyl	106		70 - 130				07/12/22 15:30	07/13/22 16:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

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

Lab Sample ID: 890-2515-33

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## 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		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

## 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 (DRO) (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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Sample Depth: 8

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/12/22 15:30	07/13/22 16:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/12/22 15:30	07/13/22 16:53	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	970		4.97		mg/Kg			07/14/22 15:31	1

Client Sample ID: BH-141 8

Lab Sample ID: 890-2515-34

Date Collected: 07/07/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

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 (DRO) (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 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		07/12/22 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
Oil 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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Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Lab Sample ID: 890-2515-34  
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2410		24.8		mg/Kg			07/14/22 15:55	5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (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
890-2515-2	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
890-2515-6	BH-108 6	110	107
890-2515-7	BH-114 10	174 S1+	126
890-2515-8	BH-115 10	205 S1+	128
890-2515-9	BH-116 10	180 S1+	126
890-2515-10	BH-117 10	186 S1+	127
890-2515-11	BH-118 10	103	62 S1-
890-2515-12	BH-119 8	118	110
890-2515-13	BH-120 8	120	95
890-2515-13 MS	BH-120 8	132 S1+	78
890-2515-13 MSD	BH-120 8	112	91
890-2515-14	BH-121 8	137 S1+	80
890-2515-15	BH-122 8	135 S1+	76
890-2515-16	BH-123 8	149 S1+	80
890-2515-17	BH-124 8	145 S1+	74
890-2515-18	BH-125 8	147 S1+	74
890-2515-19	BH-126 8	147 S1+	76
890-2515-20	BH-127 8	144 S1+	77
890-2515-21	BH-128 8	147 S1+	72
890-2515-22	BH-129 8	129	74
890-2515-23	BH-130 8	135 S1+	80
890-2515-24	BH-131 8	132 S1+	76
890-2515-25	BH-132 8	150 S1+	74
890-2515-26	BH-133 8	142 S1+	81
890-2515-27	BH-134 8	142 S1+	78
890-2515-28	BH-135 8	118	74
890-2515-29	BH-136 8	148 S1+	72
890-2515-30	BH-137 8	17 S1-	79
890-2515-31	BH-138 8	139 S1+	76
890-2515-32	BH-139 8	135 S1+	74
890-2515-33	BH-140 8	107	107
890-2515-33 MS	BH-140 8	98	100
890-2515-33 MSD	BH-140 8	97	98
890-2515-34	BH-141 8	104	104
LCS 880-29722/1-A	Lab Control Sample	94	102
LCS 880-29723/1-A	Lab Control Sample	129	77
LCS 880-29739/1-A	Lab Control Sample	97	98
LCS 880-29987/1-A	Lab Control Sample	119	90
LCSD 880-29722/2-A	Lab Control Sample Dup	98	101
LCSD 880-29723/2-A	Lab Control Sample Dup	138 S1+	78
LCSD 880-29739/2-A	Lab Control Sample Dup	102	96
LCSD 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.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2515-1	SW34 0-6	95	109
890-2515-1 MS	SW34 0-6	80	79
890-2515-1 MSD	SW34 0-6	81	79
890-2515-2	SW35 0-6	92	106
890-2515-3	SW36 0-6	91	102
890-2515-4	SW37 0-6	98	112
890-2515-5	BH-106 6	111	125
890-2515-6	BH-108 6	89	103
890-2515-7	BH-114 10	95	105
890-2515-8	BH-115 10	84	96
890-2515-9	BH-116 10	113	125
890-2515-10	BH-117 10	120	133 S1+
890-2515-11	BH-118 10	90	94
890-2515-12	BH-119 8	97	100
890-2515-13	BH-120 8	88	102
890-2515-14	BH-121 8	107	118
890-2515-15	BH-122 8	108	119
890-2515-16	BH-123 8	89	103
890-2515-17	BH-124 8	93	107
890-2515-18	BH-125 8	86	98
890-2515-19	BH-126 8	106	115
890-2515-20	BH-127 8	93	106
890-2515-21	BH-128 8	93	107
890-2515-21 MS	BH-128 8	79	92
890-2515-21 MSD	BH-128 8	80	93
890-2515-22	BH-129 8	89	103
890-2515-23	BH-130 8	102	113
890-2515-24	BH-131 8	86	0.05 S1-
890-2515-25	BH-132 8	88	102
890-2515-26	BH-133 8	86	101
890-2515-27	BH-134 8	86	101
890-2515-28	BH-135 8	92	103
890-2515-29	BH-136 8	92	103
890-2515-30	BH-137 8	91	104
890-2515-31	BH-138 8	98	111
890-2515-32	BH-139 8	92	106

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Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2515-33	BH-140 8	90	103
890-2515-34	BH-141 8	91	101
LCS 880-29557/2-A	Lab Control Sample	99	107
LCS 880-29563/2-A	Lab Control Sample	99	112
LCSD 880-29557/3-A	Lab Control Sample Dup	101	110
LCSD 880-29563/3-A	Lab Control Sample Dup	102	113
MB 880-29557/1-A	Method Blank	94	108
MB 880-29563/1-A	Method Blank	100	118
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29669/5-A

Matrix: Solid

Analysis Batch: 29700

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
Toluene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
Ethylbenzene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
m-Xylene & p-Xylene	<0.000800	U	0.000800		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
o-Xylene	<0.000400	U	0.000400		mg/Kg		07/13/22 13:52	07/14/22 11:30	1
Xylenes, Total	<0.000800	U	0.000800		mg/Kg		07/13/22 13:52	07/14/22 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	07/13/22 13:52	07/14/22 11:30	1
1,4-Difluorobenzene (Surr)	77		70 - 130	07/13/22 13:52	07/14/22 11:30	1

Lab Sample ID: MB 880-29722/5-A

Matrix: Solid

Analysis Batch: 29790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29722

Analyte	MB Result	MB 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 11:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 11:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 11:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 09:52	07/15/22 11:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 09:52	07/15/22 11:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 09:52	07/15/22 11:11	1

Surrogate	MB %Recovery	MB 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

Prep Type: Total/NA

Prep Batch: 29722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-29722/2-A

Matrix: Solid

Analysis Batch: 29790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29722

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09685		mg/Kg		97	70 - 130	10	35

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-29723/5-A

Matrix: Solid

Analysis Batch: 29700

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29723

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.2043		mg/Kg		102	70 - 130	6	35
o-Xylene	0.100	0.1087		mg/Kg		109	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

Lab Sample ID: 890-2515-13 MS

Matrix: Solid

Analysis Batch: 29700

Client Sample ID: BH-120 8

Prep Type: Total/NA

Prep Batch: 29723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	78		70 - 130

Lab Sample ID: 890-2515-13 MSD

Matrix: Solid

Analysis Batch: 29700

Client Sample ID: BH-120 8

Prep Type: Total/NA

Prep Batch: 29723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: MB 880-29739/5-A

Matrix: Solid

Analysis Batch: 29790

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29739

Analyte	MB Result	MB 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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	MB %Recovery	MB 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

Matrix: Solid

Analysis Batch: 29790

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29739

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09154		mg/Kg		92	70 - 130
Toluene	0.100	0.08982		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.08005		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1608		mg/Kg		80	70 - 130
o-Xylene	0.100	0.08701		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-29739/2-A

Matrix: Solid

Analysis Batch: 29790

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29739

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07913		mg/Kg		79	70 - 130	15	35
Toluene	0.100	0.08469		mg/Kg		85	70 - 130	6	35
Ethylbenzene	0.100	0.07885		mg/Kg		79	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1600		mg/Kg		80	70 - 130	0	35
o-Xylene	0.100	0.08634		mg/Kg		86	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-2515-33 MS

Matrix: Solid

Analysis Batch: 29790

Client Sample ID: BH-140 8

Prep Type: Total/NA

Prep Batch: 29739

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analysis Batch: 30016

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29987

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1075		mg/Kg		108	70 - 130	6	35
Toluene	0.100	0.1084		mg/Kg		108	70 - 130	6	35

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 19:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 19:42	1

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## 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	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 14:24	07/12/22 19:42	1

Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 880-29557/2-A

Matrix: Solid

Analysis Batch: 29499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29557

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	841.3		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	860.2		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-29557/3-A

Matrix: Solid

Analysis Batch: 29499

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29557

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	831.8		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	872.7		mg/Kg		87	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 890-2515-1 MS

Matrix: Solid

Analysis Batch: 29499

Client Sample ID: SW34 0-6

Prep Type: Total/NA

Prep Batch: 29557

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	79		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-2515-1 MSD

Matrix: Solid

Analysis Batch: 29499

Client Sample ID: SW34 0-6

Prep Type: Total/NA

Prep Batch: 29557

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	998	742.9	F2	mg/Kg		72	70 - 130	30	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	860.6		mg/Kg		86	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	81		70 - 130								
o-Terphenyl	79		70 - 130								

Lab Sample ID: MB 880-29563/1-A

Matrix: Solid

Analysis Batch: 29603

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29563

Analyte	MB Result	MB 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 10:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 10:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/22 15:30	07/13/22 10:27	1
Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	877.2		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	913.4		mg/Kg		91	70 - 130		
Surrogate	LCS %Recovery	LCS 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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29563

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	889.2		mg/Kg		89	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	975.7		mg/Kg		98	70 - 130	7	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

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 Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29563

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-2515-21 MS

Matrix: Solid

Analysis Batch: 29603

Client Sample ID: BH-128 8

Prep Type: Total/NA

Prep Batch: 29563

	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 F1	996	<49.8	U F1	mg/Kg		0	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	996	<49.8	U F1	mg/Kg		0	70 - 130	
Surrogate	%Recovery	Qualifier	Limits	MS	MS					
1-Chlorooctane	79		70 - 130							
o-Terphenyl	92		70 - 130							

Lab Sample ID: 890-2515-21 MSD

Matrix: Solid

Analysis Batch: 29603

Client Sample ID: BH-128 8

Prep Type: Total/NA

Prep Batch: 29563

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	998	<49.9	U F1	mg/Kg		0	70 - 130	NC	20	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	<49.9	U F1	mg/Kg		0	70 - 130	NC	20	
Surrogate	%Recovery	Qualifier	Limits	MSD	MSD							
1-Chlorooctane	80		70 - 130									
o-Terphenyl	93		70 - 130									

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29402/1-A

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			07/14/22 03:23		1

Lab Sample ID: LCS 880-29402/2-A

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	258.0		mg/Kg		103	90 - 110			

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-29402/3-A

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	258.0		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-2515-1 MS

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: SW34 0-6

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	20.4		251	271.0		mg/Kg		100	90 - 110		

Lab Sample ID: 890-2515-1 MSD

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: SW34 0-6

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	20.4		251	271.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2515-11 MS

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: BH-118 10

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	187		248	437.9		mg/Kg		101	90 - 110		

Lab Sample ID: 890-2515-11 MSD

Matrix: Solid

Analysis Batch: 29640

Client Sample ID: BH-118 10

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	187		248	438.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-29401/1-A

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.7		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-29401/3-A

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	266.9		mg/Kg		107	90 - 110	4	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2515-21 MS

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: BH-128 8

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	582		252	824.4		mg/Kg		96	90 - 110		

Lab Sample ID: 890-2515-21 MSD

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: BH-128 8

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	582		252	828.8		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-2515-31 MS

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: BH-138 8

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	512		250	772.9		mg/Kg		105	90 - 110		

Lab Sample ID: 890-2515-31 MSD

Matrix: Solid

Analysis Batch: 29646

Client Sample ID: BH-138 8

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	512		250	779.8		mg/Kg		107	90 - 110	1	20

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

## GC VOA (Continued)

## Analysis Batch: 29790 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29739/5-A	Method Blank	Total/NA	Solid	8021B	29739
LCS 880-29722/1-A	Lab Control Sample	Total/NA	Solid	8021B	29722
LCS 880-29739/1-A	Lab Control Sample	Total/NA	Solid	8021B	29739
LCSD 880-29722/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29722
LCSD 880-29739/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29739
890-2515-33 MS	BH-140 8	Total/NA	Solid	8021B	29739
890-2515-33 MSD	BH-140 8	Total/NA	Solid	8021B	29739

## Analysis Batch: 29793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-1	SW34 0-6	Total/NA	Solid	Total BTEX	
890-2515-2	SW35 0-6	Total/NA	Solid	Total BTEX	
890-2515-3	SW36 0-6	Total/NA	Solid	Total BTEX	
890-2515-4	SW37 0-6	Total/NA	Solid	Total BTEX	
890-2515-5	BH-106 6	Total/NA	Solid	Total BTEX	
890-2515-6	BH-108 6	Total/NA	Solid	Total BTEX	
890-2515-7	BH-114 10	Total/NA	Solid	Total BTEX	
890-2515-8	BH-115 10	Total/NA	Solid	Total BTEX	
890-2515-9	BH-116 10	Total/NA	Solid	Total BTEX	
890-2515-10	BH-117 10	Total/NA	Solid	Total BTEX	
890-2515-11	BH-118 10	Total/NA	Solid	Total BTEX	
890-2515-12	BH-119 8	Total/NA	Solid	Total BTEX	
890-2515-13	BH-120 8	Total/NA	Solid	Total BTEX	
890-2515-14	BH-121 8	Total/NA	Solid	Total BTEX	
890-2515-15	BH-122 8	Total/NA	Solid	Total BTEX	
890-2515-16	BH-123 8	Total/NA	Solid	Total BTEX	
890-2515-17	BH-124 8	Total/NA	Solid	Total BTEX	
890-2515-18	BH-125 8	Total/NA	Solid	Total BTEX	
890-2515-19	BH-126 8	Total/NA	Solid	Total BTEX	
890-2515-20	BH-127 8	Total/NA	Solid	Total BTEX	
890-2515-21	BH-128 8	Total/NA	Solid	Total BTEX	
890-2515-22	BH-129 8	Total/NA	Solid	Total BTEX	
890-2515-23	BH-130 8	Total/NA	Solid	Total BTEX	
890-2515-24	BH-131 8	Total/NA	Solid	Total BTEX	
890-2515-25	BH-132 8	Total/NA	Solid	Total BTEX	
890-2515-26	BH-133 8	Total/NA	Solid	Total BTEX	
890-2515-27	BH-134 8	Total/NA	Solid	Total BTEX	
890-2515-28	BH-135 8	Total/NA	Solid	Total BTEX	
890-2515-29	BH-136 8	Total/NA	Solid	Total BTEX	
890-2515-30	BH-137 8	Total/NA	Solid	Total BTEX	
890-2515-31	BH-138 8	Total/NA	Solid	Total BTEX	
890-2515-32	BH-139 8	Total/NA	Solid	Total BTEX	
890-2515-33	BH-140 8	Total/NA	Solid	Total BTEX	
890-2515-34	BH-141 8	Total/NA	Solid	Total BTEX	

## Prep Batch: 29987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2515-11	BH-118 10	Total/NA	Solid	5035	
MB 880-29987/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29987/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29987/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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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## QC Association Summary

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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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 Batch
890-2515-1	SW34 0-6	Total/NA	Solid	8015 NM	
890-2515-2	SW35 0-6	Total/NA	Solid	8015 NM	
890-2515-3	SW36 0-6	Total/NA	Solid	8015 NM	
890-2515-4	SW37 0-6	Total/NA	Solid	8015 NM	
890-2515-5	BH-106 6	Total/NA	Solid	8015 NM	
890-2515-6	BH-108 6	Total/NA	Solid	8015 NM	
890-2515-7	BH-114 10	Total/NA	Solid	8015 NM	
890-2515-8	BH-115 10	Total/NA	Solid	8015 NM	
890-2515-9	BH-116 10	Total/NA	Solid	8015 NM	
890-2515-10	BH-117 10	Total/NA	Solid	8015 NM	
890-2515-11	BH-118 10	Total/NA	Solid	8015 NM	
890-2515-12	BH-119 8	Total/NA	Solid	8015 NM	
890-2515-13	BH-120 8	Total/NA	Solid	8015 NM	
890-2515-14	BH-121 8	Total/NA	Solid	8015 NM	
890-2515-15	BH-122 8	Total/NA	Solid	8015 NM	
890-2515-16	BH-123 8	Total/NA	Solid	8015 NM	
890-2515-17	BH-124 8	Total/NA	Solid	8015 NM	
890-2515-18	BH-125 8	Total/NA	Solid	8015 NM	
890-2515-19	BH-126 8	Total/NA	Solid	8015 NM	
890-2515-20	BH-127 8	Total/NA	Solid	8015 NM	
890-2515-21	BH-128 8	Total/NA	Solid	8015 NM	
890-2515-22	BH-129 8	Total/NA	Solid	8015 NM	
890-2515-23	BH-130 8	Total/NA	Solid	8015 NM	
890-2515-24	BH-131 8	Total/NA	Solid	8015 NM	
890-2515-25	BH-132 8	Total/NA	Solid	8015 NM	
890-2515-26	BH-133 8	Total/NA	Solid	8015 NM	
890-2515-27	BH-134 8	Total/NA	Solid	8015 NM	
890-2515-28	BH-135 8	Total/NA	Solid	8015 NM	
890-2515-29	BH-136 8	Total/NA	Solid	8015 NM	
890-2515-30	BH-137 8	Total/NA	Solid	8015 NM	
890-2515-31	BH-138 8	Total/NA	Solid	8015 NM	
890-2515-32	BH-139 8	Total/NA	Solid	8015 NM	
890-2515-33	BH-140 8	Total/NA	Solid	8015 NM	
890-2515-34	BH-141 8	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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 Batch
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	
890-2515-10	BH-117 10	Soluble	Solid	DI Leach	
890-2515-11	BH-118 10	Soluble	Solid	DI Leach	
890-2515-12	BH-119 8	Soluble	Solid	DI Leach	
890-2515-13	BH-120 8	Soluble	Solid	DI Leach	
890-2515-14	BH-121 8	Soluble	Solid	DI Leach	
890-2515-15	BH-122 8	Soluble	Solid	DI Leach	
890-2515-16	BH-123 8	Soluble	Solid	DI Leach	
890-2515-17	BH-124 8	Soluble	Solid	DI Leach	
890-2515-18	BH-125 8	Soluble	Solid	DI Leach	
890-2515-19	BH-126 8	Soluble	Solid	DI Leach	
890-2515-20	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	
890-2515-11 MS	BH-118 10	Soluble	Solid	DI Leach	
890-2515-11 MSD	BH-118 10	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: SW34 0-6

Lab Sample ID: 890-2515-1

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/12/22 22:33	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 04:37	CH	XEN MID

Client Sample ID: BH-106 6

Lab Sample ID: 890-2515-5

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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	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 04:16	SM	XEN MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		1			29640	07/14/22 08:09	CH	XEN MID

Client Sample ID: BH-115 10

Lab Sample ID: 890-2515-8

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

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	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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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 MID
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Matrix: Solid

Date Received: 07/08/22 16:08

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	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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Client Sample ID: BH-121 8

Lab Sample ID: 890-2515-14

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 890-2515-15

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 02:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29557	07/12/22 14:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29499	07/13/22 00:20	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	29402	07/11/22 09:13	KS	XEN MID
Soluble	Analysis	300.0		5			29640	07/14/22 18:34	CH	XEN MID

Client Sample ID: BH-123 8

Lab Sample ID: 890-2515-16

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 01:24	SM	XEN MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

**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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 07/08/22 16:08**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

**Client Sample ID: BH-128 8****Lab Sample ID: 890-2515-21****Date Collected: 07/07/22 00:00****Matrix: Solid****Date Received: 07/08/22 16:08**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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**

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	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****Matrix: Solid****Date Received: 07/08/22 16:08**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 07/08/22 16:08**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-133 8

Lab Sample ID: 890-2515-26

Date Collected: 07/06/22 00:00

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	29723	07/14/22 09:57	EL	XEN MID
Total/NA	Analysis	8021B		1			29700	07/15/22 09:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29793	07/15/22 08:13	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			29634	07/13/22 09:51	SM	XEN MID
Total/NA	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 14:24	AJ	XEN MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

**Client Sample ID: BH-134 8****Lab Sample ID: 890-2515-27****Date Collected: 07/07/22 00:00****Matrix: Solid****Date Received: 07/08/22 16:08**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	29401	07/11/22 09:10	KS	XEN MID
Soluble	Analysis	300.0		1			29646	07/14/22 08:47	CH	XEN MID

**Client Sample ID: BH-135 8****Lab Sample ID: 890-2515-28****Date Collected: 07/07/22 00:00****Matrix: Solid****Date Received: 07/08/22 16:08**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 07/08/22 16:08**

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	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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 07/08/22 16:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2515-1  
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

## 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



## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

890-2515 Chain of Custody



Page 1 of 4

Client Name		Permian Water Solutions		Site Manager		Chait Gonzales	
Project Name		Kaiser SWD		Project #		Chait Gonzales@tetra-tech.com	
Project Location (County, State)		Lea County, NM		Project #		212C-MD-02230	
Invoiced To		Permian Water Solutions - Dusty McHugh		Sampler Signature		Peyton Oliver	
Receiving Laboratory		Eurofins Xeno		Sampler Signature		Peyton Oliver	
Comments:							

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
	SW-34 (0-6")	7/6/2022		X				X	
	SW-35 (0-6")	7/6/2022		X				X	
	SW-36 (0-6")	7/6/2022		X				X	
	SW-37 (0-6")	7/6/2022		X				X	
	BH-106 (6")	7/6/2022		X				X	
	BH-108 (6")	7/6/2022		X				X	
	BH-114 (10")	7/6/2022		X				X	
	BH-115 (10")	7/6/2022		X				X	
	BH-116 (10")	7/6/2022		X				X	
	BH-117 (10")	7/6/2022		X				X	

LAB USE ONLY	REMARKS
LAB USE ONLY 3-2 3-0	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH Settle Day 24 hr 48 hr 72 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report

ANALYSIS REQUEST (Circle or Specify Method No.)	
<input type="checkbox"/> HTEX H2O2 <input type="checkbox"/> TPH TATB (EPA 8260) <input type="checkbox"/> TPH 80/100 GRO - DRO - ORD - MRO <input type="checkbox"/> PAH 8270 <input type="checkbox"/> Total Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> TCLP Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> TCLP Volatiles <input type="checkbox"/> TCLP Semi Volatiles <input type="checkbox"/> RCI <input type="checkbox"/> GC/MS Vol 8260B / 824 <input type="checkbox"/> GC/MS Semi Vol 8270/8260 <input type="checkbox"/> PCBs HRCB / HCB <input type="checkbox"/> NORM <input type="checkbox"/> PLM (Asbestos) <input type="checkbox"/> Chloride <input type="checkbox"/> Chloride Sulfate TDS <input type="checkbox"/> General Water Chemistry (see attached list) <input type="checkbox"/> Anion/Cation Balance	<input type="checkbox"/> HTEX H2O2 <input type="checkbox"/> TPH TATB (EPA 8260) <input type="checkbox"/> TPH 80/100 GRO - DRO - ORD - MRO <input type="checkbox"/> PAH 8270 <input type="checkbox"/> Total Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> TCLP Metals Ag As Ba Cd Cr Pb Se Hg <input type="checkbox"/> TCLP Volatiles <input type="checkbox"/> TCLP Semi Volatiles <input type="checkbox"/> RCI <input type="checkbox"/> GC/MS Vol 8260B / 824 <input type="checkbox"/> GC/MS Semi Vol 8270/8260 <input type="checkbox"/> PCBs HRCB / HCB <input type="checkbox"/> NORM <input type="checkbox"/> PLM (Asbestos) <input type="checkbox"/> Chloride <input type="checkbox"/> Chloride Sulfate TDS <input type="checkbox"/> General Water Chemistry (see attached list) <input type="checkbox"/> Anion/Cation Balance

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

14000 North Central Expressway  
Suite 100  
Dallas, TX 75243  
(214) 675-1000

Client Name		Perman Water Solutions		Site Manager		Chait Gonzales			
Project Name		Kaiser SWD		Project #		212C-MD-02230			
Project Location (County, State)		Lea County, NM		Project #		212C-MD-02230			
Project to		Perman Water Solutions - Dusty McInturf		Sampler Signature		Peyton Oliver			
Receiving Laboratory		Eurofins Xenco		Sampler Signature		Peyton Oliver			
Comments:									
LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME		WATER	SOIL			HCL
BH-118 (10)		7/6/2022		X		X			
BH-119 (8)		7/6/2022		X		X			
BH-120 (5)		7/6/2022		X		X			
BH-121 (5)		7/6/2022		X		X			
BH-122 (5)		7/6/2022		X		X			
BH-123 (8)		7/6/2022		X		X			
BH-124 (8)		7/6/2022		X		X			
BH-125 (5)		7/6/2022		X		X			
BH-126 (5)		7/6/2022		X		X			
BH-127 (5)		7/6/2022		X		X			
Requested by		Date	Time	Received by	Date	Time			
Requested by		Date	Time	Received by	Date	Time			
Requested by		Date	Time	Received by	Date	Time			

LAB USE ONLY

REMARKS

STANDARD

TEST

Special Report Limits or TRRP Report

ANALYSIS REQUEST

(Circle or Specify Method No.)

THX 1x1000 (E to 200)

THX 8015M GND (ORO - ORO - 1500)

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

RO

GCMS Vol 8268 1604

GCMS Sem Vol 8270C105

PCBs 8000 - 010

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Amion Carbon Balance

Hold

ORIGINAL COPY

### Analysis Request of Chain of Custody Record

# Tetra Tech, Inc.

MADE IN THE USA  
TETRA TECH, INC.  
10100 E. 15th Ave.  
Denver, CO 80231

## ANALYSIS REQUEST

(Circle or Specify Method No.)

Client Name: Peirman Water Solutions

Site Manager: Clair Gonzales

Project Name: Kaiser SWD

Project Location: Lea County, NM

Project #

212C-ND-02230

Project Location: Lea County, NM

Project #

212C-ND-02230

Project Location: Peirman Water Solutions - Dusty McMurff

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

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212C-ND-02230

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Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno

Project #

212C-ND-02230

Project Location: Eurofins Xeno


Project #

212C-ND-02230



### Analysis Request of Chain of Custody Record

Page 4 of 4



# Tetra Tech, Inc.

10000 Lakeshore Drive  
Tomball, TX 77375  
Tel: 281.345.4000

Client Name: **Petrian Water Solutions**

Site Manager: **Chris Gonzales**

Project Name: **Kaiser SWD**

Project Location: **Lee County, NM**

Project # **212C-IND-02230**

Invoice to: **Petrian Water Solutions - Dusty McInturf**

Receiving Laboratory: **Envirofins Xenco**

Comments:

Client Name: **Petrian Water Solutions**

Site Manager: **Chris Gonzales**

Project Name: **Kaiser SWD**

Project Location: **Lee County, NM**

Project # **212C-IND-02230**

Invoice to: **Petrian Water Solutions - Dusty McInturf**

Receiving Laboratory: **Envirofins Xenco**

Comments:

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE		# CONTAINERS	FILTERED (Y/N)	BTEX RMIS	BTEX RMIS
		DATE	TIME	WATER	SOIL	HCL	HNO				
BH-138 (S)		7/7/2022		X				X		X	X
BH-139 (S)		7/7/2022		X				X		X	X
BH-140 (S)		7/6/2022		X				X		X	X
BH-141 (S)		7/7/2022		X				X		X	X

LAB USE ONLY

REMARKS:

☒ STANDARD

☐ RUSH Same Day 24 hr 48 hr 72 hr

☐ Auto Charges Authorized

☐ Special Report Limits or TRRP Report

ANALYSIS REQUEST (Circle or Specify Method No.)

TPH 151005 (E-10-030)

TPH 8010M GRO - DRD - DRD - MRO

PAH 82790

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

RO

GCMS Vol 82920 / 824

GCMS Semi Vol 82700 / 826

PCB's 8682 / 808

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2515-1

SDG Number: Lea County NM

Login Number: 2515

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.	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

Login Number: 2515

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 07/12/22 11:11 AM

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: 890-2553-1

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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

7/20/2022 11:48:05 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-2553-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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.



## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-142 5'

Lab Sample ID: 890-2553-1

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 5'

## Method: 8021B - Volatile Organic Compounds (GC)

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

## 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			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	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 11:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 11:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 11:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	07/15/22 08:42	07/15/22 11:12	1
o-Terphenyl	88		70 - 130	07/15/22 08:42	07/15/22 11:12	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167	F1	4.95		mg/Kg			07/16/22 21:15	1

Client Sample ID: BH-143 5'

Lab Sample ID: 890-2553-2

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 5'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		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

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-143 5'

Lab Sample ID: 890-2553-2

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 5'

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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	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 (DRO) (GC)

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 (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 12:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 12:16	1
Oil 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				07/15/22 08:42	07/15/22 12:16	1
o-Terphenyl	104		70 - 130				07/15/22 08:42	07/15/22 12:16	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	984		4.98		mg/Kg			07/16/22 21:42	1

Client Sample ID: BH-144 5'

Lab Sample ID: 890-2553-3

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 5'

## 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 13:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 16:53	07/18/22 13:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 16:53	07/18/22 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	07/14/22 16:53	07/18/22 13:09	1
1,4-Difluorobenzene (Surr)	96		70 - 130	07/14/22 16:53	07/18/22 13:09	1

## Method: 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	226		50.0		mg/Kg			07/18/22 09:27	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-144 5'

Lab Sample ID: 890-2553-3

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 5'

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
Diesel Range Organics (Over C10-C28)	226		50.0		mg/Kg		07/15/22 08:42	07/15/22 14:02	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	501		4.99		mg/Kg			07/16/22 21:52	1

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

Sample Depth: 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		07/14/22 16:53	07/18/22 13:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 16:53	07/18/22 13:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				07/14/22 16:53	07/18/22 13:30	1
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 13:30	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/19/22 09:14	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 12:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				07/15/22 08:42	07/15/22 12:37	1
o-Terphenyl	82		70 - 130				07/15/22 08:42	07/15/22 12:37	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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

Sample Depth: 5'

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	903		5.00		mg/Kg			07/16/22 22:01	1

Client Sample ID: BH-146 5'

Lab Sample ID: 890-2553-5

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 5'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 13:51	1
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	1
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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	751		4.96		mg/Kg			07/16/22 22:10	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-147 6'

Lab Sample ID: 890-2553-6

Date Collected: 07/12/22 00:00

Matrix: Solid

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	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 14:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 14:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 16:53	07/18/22 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	07/14/22 16:53	07/18/22 14:11	1
1,4-Difluorobenzene (Surr)	110		70 - 130	07/14/22 16:53	07/18/22 14:11	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			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	537		50.0		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	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 15:52	1
Diesel Range Organics (Over C10-C28)	478		50.0		mg/Kg		07/15/22 08:42	07/15/22 15:52	1
Oil Range Organics (Over C28-C36)	59.0		50.0		mg/Kg		07/15/22 08:42	07/15/22 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	07/15/22 08:42	07/15/22 15:52	1
o-Terphenyl	88		70 - 130	07/15/22 08:42	07/15/22 15:52	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.7		5.01		mg/Kg			07/16/22 22:38	1

Client Sample ID: BH-148 6'

Lab Sample ID: 890-2553-7

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

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 Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-148 6'

Lab Sample ID: 890-2553-7

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

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
Oil 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, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.69		4.97		mg/Kg			07/16/22 22:47	1

Client Sample ID: BH-149 6'

Lab Sample ID: 890-2553-8

Date Collected: 07/12/22 00:00

Matrix: Solid

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	<0.00202	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)	111		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

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/19/22 09:14	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

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

Sample Depth: 6'

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	64.6		49.9		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel Range Organics (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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				07/15/22 08:42	07/15/22 17:38	1
o-Terphenyl	91		70 - 130				07/15/22 08:42	07/15/22 17:38	1

## Method: 300.0 - Anions, Ion 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'

Lab Sample ID: 890-2553-9

Date Collected: 07/12/22 00:00

Matrix: Solid

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	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 16:53	07/18/22 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				07/14/22 16:53	07/18/22 15:14	1
1,4-Difluorobenzene (Surr)	108		70 - 130				07/14/22 16:53	07/18/22 15:14	1

## Method: Total BTEX - Total BTEX 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	83.6		50.0		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 17:17	1
Diesel Range Organics (Over C10-C28)	83.6		50.0		mg/Kg		07/15/22 08:42	07/15/22 17:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 17:17	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-150 6'

Lab Sample ID: 890-2553-9

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

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 - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.9		4.96		mg/Kg			07/16/22 23:05	1

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

Sample Depth: 6'

## 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		07/14/22 16:53	07/18/22 15:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 16:53	07/18/22 15:35	1
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	1

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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 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
Oil 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

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.9		5.04		mg/Kg			07/16/22 23:15	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-152 6'

Lab Sample ID: 890-2553-11

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 6'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 17:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	07/18/22 13:40	07/19/22 17:37	1
1,4-Difluorobenzene (Surr)	99		70 - 130	07/18/22 13:40	07/19/22 17:37	1

## Method: Total BTEX - Total BTEX 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.9		50.0		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 18:42	1
Diesel Range Organics (Over C10-C28)	74.9		50.0		mg/Kg		07/15/22 08:42	07/15/22 18:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 18:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	07/15/22 08:42	07/15/22 18:42	1
o-Terphenyl	83		70 - 130	07/15/22 08:42	07/15/22 18:42	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		5.01		mg/Kg			07/16/22 23:24	1

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

Sample Depth: 6'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

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

Sample Depth: 6'

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 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

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

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 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 15:06	1
Diesel Range Organics (Over C10-C28)	117		49.9		mg/Kg		07/15/22 08:42	07/15/22 15:06	1
Oil 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
o-Terphenyl	84		70 - 130				07/15/22 08:42	07/15/22 15:06	1

## Method: 300.0 - Anions, Ion Chromatography - 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'

Lab Sample ID: 890-2553-13

Date Collected: 07/12/22 00:00

Matrix: Solid

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	<0.00200	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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1330		50.0		mg/Kg			07/18/22 09:27	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-154 6'

Lab Sample ID: 890-2553-13

Date Collected: 07/12/22 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 6'

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	1
Diesel Range Organics (Over C10-C28)	1070		50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	1
Oil Range Organics (Over C28-C36)	261		50.0		mg/Kg		07/15/22 08:42	07/15/22 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/15/22 08:42	07/15/22 13:41	1
o-Terphenyl	82		70 - 130				07/15/22 08:42	07/15/22 13:41	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.4		4.98		mg/Kg			07/17/22 00:01	1

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: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 14:45	1
Diesel Range Organics (Over C10-C28)	111		50.0		mg/Kg		07/15/22 08:42	07/15/22 14:45	1
Oil 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
o-Terphenyl	80		70 - 130				07/15/22 08:42	07/15/22 14:45	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.8		5.05		mg/Kg			07/17/22 00:29	1

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

Sample Depth: 6'

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 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	1
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 Organics (DRO) (GC)

Analyte	Result	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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.3		5.00		mg/Kg			07/17/22 00:38	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

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

Sample Depth: 6'

## 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		07/18/22 13:40	07/19/22 19:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/18/22 13:40	07/19/22 19:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/18/22 13:40	07/19/22 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	07/18/22 13:40	07/19/22 19:19	1
1,4-Difluorobenzene (Surr)	95		70 - 130	07/18/22 13:40	07/19/22 19:19	1

## Method: Total BTEX - Total 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 19:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 19:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 19:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	07/15/22 08:42	07/15/22 19:03	1
o-Terphenyl	89		70 - 130	07/15/22 08:42	07/15/22 19:03	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.4		5.00		mg/Kg			07/17/22 00:47	1

Client Sample ID: BH-158 6'

Lab Sample ID: 890-2553-17

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Sample Depth: 6'

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 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

## Method: 8015 NM - Diesel Range Organics (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<250	U	250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
Diesel Range Organics (Over C10-C28)	7890		250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
Oil Range Organics (Over C28-C36)	1660		250		mg/Kg		07/15/22 08:42	07/15/22 13:19	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				07/15/22 08:42	07/15/22 13:19	5
o-Terphenyl	88		70 - 130				07/15/22 08:42	07/15/22 13:19	5

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117		4.99		mg/Kg			07/17/22 00:56	1

Client Sample ID: SW-50 0-6'

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2553-18

Matrix: Solid

## 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		07/18/22 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 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: SW-50 0-6'

Lab Sample ID: 890-2553-18

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	152		49.9		mg/Kg			07/18/22 09:27	1

## Method: 8015B NM - Diesel 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 18:21	1
Diesel Range Organics (Over C10-C28)	152		49.9		mg/Kg		07/15/22 08:42	07/15/22 18:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/22 08:42	07/15/22 18:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130				07/15/22 08:42	07/15/22 18:21	1
o-Terphenyl	78		70 - 130				07/15/22 08:42	07/15/22 18:21	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.67		4.95		mg/Kg			07/17/22 01:06	1

Client Sample ID: SW-51 0-6'

Lab Sample ID: 890-2553-19

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/18/22 13:40	07/19/22 20:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				07/18/22 13:40	07/19/22 20:00	1
1,4-Difluorobenzene (Surr)	104		70 - 130				07/18/22 13:40	07/19/22 20:00	1

## 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	202		50.0		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	<50.0	U	50.0		mg/Kg		07/15/22 08:43	07/15/22 19:24	1
Diesel Range Organics (Over C10-C28)	202		50.0		mg/Kg		07/15/22 08:43	07/15/22 19:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:43	07/15/22 19:24	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: SW-51 0-6'

Lab Sample ID: 890-2553-19

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

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ANALYSIS TABLE

Matrix: Solid

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'

Lab Sample ID: 890-2553-20

Date Collected: 07/12/22 00:00

Date Received: 07/12/22 16:57

Sample Depth: 0' - 6'

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/22 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 (DRO) (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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		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
Oil 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

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	386		4.97		mg/Kg			07/17/22 01:24	1

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-17008-A-21-C MS	Matrix Spike	107	95
880-17008-A-21-D MSD	Matrix Spike Duplicate	117	92
890-2553-1	BH-142 5'	109	107
890-2553-1 MS	BH-142 5'	97	85
890-2553-1 MSD	BH-142 5'	118	90
890-2553-2	BH-143 5'	130	98
890-2553-3	BH-144 5'	113	96
890-2553-4	BH-145 5'	110	108
890-2553-5	BH-146 5'	112	111
890-2553-6	BH-147 6'	106	110
890-2553-7	BH-148 6'	112	96
890-2553-8	BH-149 6'	111	110
890-2553-9	BH-150 6'	105	108
890-2553-10	BH-151 6'	111	108
890-2553-11	BH-152 6'	110	99
890-2553-12	BH-153 6'	108	93
890-2553-13	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
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (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

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29774/5-A

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29774

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	07/14/22 16:53	07/18/22 12:05	1
1,4-Difluorobenzene (Surr)	110		70 - 130	07/14/22 16:53	07/18/22 12:05	1

Lab Sample ID: LCS 880-29774/1-A

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29774

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09196		mg/Kg		92	70 - 130
Toluene	0.100	0.1153		mg/Kg		115	70 - 130
Ethylbenzene	0.100	0.1149		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2397		mg/Kg		120	70 - 130
o-Xylene	0.100	0.1241		mg/Kg		124	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-29774/2-A

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29774

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

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

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: BH-142 5'

Prep Type: Total/NA

Prep Batch: 29774

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.07967		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1588		mg/Kg		79	70 - 130
o-Xylene	<0.00200	U	0.100	0.08167		mg/Kg		82	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 890-2553-1 MSD

Matrix: Solid

Analysis Batch: 29893

Client Sample ID: BH-142 5'

Prep Type: Total/NA

Prep Batch: 29774

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0994	0.06644	F1	mg/Kg		67	70 - 130	22	35
Toluene	<0.00200	U	0.0994	0.07947		mg/Kg		80	70 - 130	13	35
Ethylbenzene	<0.00200	U	0.0994	0.07332		mg/Kg		74	70 - 130	8	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1541		mg/Kg		78	70 - 130	3	35
o-Xylene	<0.00200	U	0.0994	0.08160		mg/Kg		82	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-29947/5-A

Matrix: Solid

Analysis Batch: 30015

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29947

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

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: LCS 880-29947/1-A

Matrix: Solid

Analysis Batch: 30015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 29947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09506		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-29947/2-A

Matrix: Solid

Analysis Batch: 30015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29947

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08247		mg/Kg		82	70 - 130	2	35
Toluene	0.100	0.08858		mg/Kg		89	70 - 130	7	35
Ethylbenzene	0.100	0.08883		mg/Kg		89	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1891		mg/Kg		95	70 - 130	8	35
o-Xylene	0.100	0.1032		mg/Kg		103	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-17008-A-21-C MS

Matrix: Solid

Analysis Batch: 30015

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 29947

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F2 F1	0.0998	0.03835	F2 F1	mg/Kg		38	70 - 130	65	35
Toluene	<0.00201	U F2 F1	0.0998	0.05746	F2 F1	mg/Kg		58	70 - 130	104	35
Ethylbenzene	<0.00201	U F2 F1	0.0998	0.04190	F2 F1	mg/Kg		41	70 - 130	95	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.05289	F2 F1	mg/Kg		25	70 - 130	46	35
o-Xylene	0.00273	F2 F1	0.0998	0.02937	F2 F1	mg/Kg		27	70 - 130	43	35

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## QC Sample Results

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	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 10:08	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 10:08	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/22 08:42	07/15/22 10:08	1	
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 (GRO)-C6-C10			1000	867.0		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)			1000	990.9		mg/Kg		99	70 - 130	
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 (GRO)-C6-C10			1000	1009		mg/Kg		101	70 - 130	15	20
Diesel Range Organics (Over C10-C28)			1000	1041		mg/Kg		104	70 - 130	5	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	127		70 - 130								
o-Terphenyl	128		70 - 130								

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	884.9		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	756.2		mg/Kg		72	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	82		70 - 130						
o-Terphenyl	79		70 - 130						

Lab Sample ID: 890-2553-1 MSD

Matrix: Solid

Analysis Batch: 29788

Client Sample ID: BH-142 5'

Prep Type: Total/NA

Prep Batch: 29795

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	939.7		mg/Kg		92	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	809.8		mg/Kg		77	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	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

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB 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

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-29754/3-A

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	254.8		mg/Kg		102	90 - 110	1	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2553-1 MS

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: BH-142 5'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	167	F1	248	444.9	F1	mg/Kg		112	90 - 110		

Lab Sample ID: 890-2553-1 MSD

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: BH-142 5'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	167	F1	248	444.7	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: 890-2553-11 MS

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: BH-152 6'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	16.0		251	292.7		mg/Kg		110	90 - 110		

Lab Sample ID: 890-2553-11 MSD

Matrix: Solid

Analysis Batch: 29864

Client Sample ID: BH-152 6'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	16.0		251	292.7		mg/Kg		110	90 - 110	0	20

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

## GC VOA

## Analysis Batch: 30015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-11	BH-152 6'	Total/NA	Solid	8021B	29947
890-2553-12	BH-153 6'	Total/NA	Solid	8021B	29947
890-2553-13	BH-154 6'	Total/NA	Solid	8021B	29947
890-2553-14	BH-155 6'	Total/NA	Solid	8021B	29947
890-2553-15	BH-156 6'	Total/NA	Solid	8021B	29947
890-2553-16	BH-157 6'	Total/NA	Solid	8021B	29947
890-2553-17	BH-158 6'	Total/NA	Solid	8021B	29947
890-2553-18	SW-50 0-6'	Total/NA	Solid	8021B	29947
890-2553-19	SW-51 0-6'	Total/NA	Solid	8021B	29947
890-2553-20	SW-52 0-6'	Total/NA	Solid	8021B	29947
MB 880-29947/5-A	Method Blank	Total/NA	Solid	8021B	29947
LCS 880-29947/1-A	Lab Control Sample	Total/NA	Solid	8021B	29947
LCSD 880-29947/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29947
880-17008-A-21-C MS	Matrix Spike	Total/NA	Solid	8021B	29947
880-17008-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29947

## Analysis Batch: 30030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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 Batch
890-2553-1	BH-142 5'	Total/NA	Solid	8015NM Prep	
890-2553-2	BH-143 5'	Total/NA	Solid	8015NM Prep	
890-2553-3	BH-144 5'	Total/NA	Solid	8015NM Prep	
890-2553-4	BH-145 5'	Total/NA	Solid	8015NM Prep	
890-2553-5	BH-146 5'	Total/NA	Solid	8015NM Prep	
890-2553-6	BH-147 6'	Total/NA	Solid	8015NM Prep	
890-2553-7	BH-148 6'	Total/NA	Solid	8015NM Prep	
890-2553-8	BH-149 6'	Total/NA	Solid	8015NM Prep	
890-2553-9	BH-150 6'	Total/NA	Solid	8015NM Prep	
890-2553-10	BH-151 6'	Total/NA	Solid	8015NM Prep	
890-2553-11	BH-152 6'	Total/NA	Solid	8015NM Prep	
890-2553-12	BH-153 6'	Total/NA	Solid	8015NM Prep	
890-2553-13	BH-154 6'	Total/NA	Solid	8015NM Prep	
890-2553-14	BH-155 6'	Total/NA	Solid	8015NM Prep	
890-2553-15	BH-156 6'	Total/NA	Solid	8015NM Prep	
890-2553-16	BH-157 6'	Total/NA	Solid	8015NM Prep	
890-2553-17	BH-158 6'	Total/NA	Solid	8015NM Prep	
890-2553-18	SW-50 0-6'	Total/NA	Solid	8015NM Prep	
890-2553-19	SW-51 0-6'	Total/NA	Solid	8015NM Prep	
890-2553-20	SW-52 0-6'	Total/NA	Solid	8015NM Prep	
MB 880-29795/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29795/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29795/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2553-1 MS	BH-142 5'	Total/NA	Solid	8015NM Prep	
890-2553-1 MSD	BH-142 5'	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 29911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2553-1	BH-142 5'	Total/NA	Solid	8015 NM	
890-2553-2	BH-143 5'	Total/NA	Solid	8015 NM	
890-2553-3	BH-144 5'	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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 Batch
890-2553-1	BH-142 5'	Soluble	Solid	DI Leach	
890-2553-2	BH-143 5'	Soluble	Solid	DI Leach	
890-2553-3	BH-144 5'	Soluble	Solid	DI Leach	
890-2553-4	BH-145 5'	Soluble	Solid	DI Leach	
890-2553-5	BH-146 5'	Soluble	Solid	DI Leach	
890-2553-6	BH-147 6'	Soluble	Solid	DI Leach	
890-2553-7	BH-148 6'	Soluble	Solid	DI Leach	
890-2553-8	BH-149 6'	Soluble	Solid	DI Leach	
890-2553-9	BH-150 6'	Soluble	Solid	DI Leach	
890-2553-10	BH-151 6'	Soluble	Solid	DI Leach	
890-2553-11	BH-152 6'	Soluble	Solid	DI Leach	
890-2553-12	BH-153 6'	Soluble	Solid	DI Leach	
890-2553-13	BH-154 6'	Soluble	Solid	DI Leach	
890-2553-14	BH-155 6'	Soluble	Solid	DI Leach	
890-2553-15	BH-156 6'	Soluble	Solid	DI Leach	
890-2553-16	BH-157 6'	Soluble	Solid	DI Leach	
890-2553-17	BH-158 6'	Soluble	Solid	DI Leach	
890-2553-18	SW-50 0-6'	Soluble	Solid	DI Leach	
890-2553-19	SW-51 0-6'	Soluble	Solid	DI Leach	
890-2553-20	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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## QC Association Summary

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
890-2553-13	BH-154 6'	Soluble	Solid	300.0	29754
890-2553-14	BH-155 6'	Soluble	Solid	300.0	29754
890-2553-15	BH-156 6'	Soluble	Solid	300.0	29754
890-2553-16	BH-157 6'	Soluble	Solid	300.0	29754
890-2553-17	BH-158 6'	Soluble	Solid	300.0	29754
890-2553-18	SW-50 0-6'	Soluble	Solid	300.0	29754
890-2553-19	SW-51 0-6'	Soluble	Solid	300.0	29754
890-2553-20	SW-52 0-6'	Soluble	Solid	300.0	29754
MB 880-29754/1-A	Method Blank	Soluble	Solid	300.0	29754
LCS 880-29754/2-A	Lab Control Sample	Soluble	Solid	300.0	29754
LCSD 880-29754/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29754
890-2553-1 MS	BH-142 5'	Soluble	Solid	300.0	29754
890-2553-1 MSD	BH-142 5'	Soluble	Solid	300.0	29754
890-2553-11 MS	BH-152 6'	Soluble	Solid	300.0	29754
890-2553-11 MSD	BH-152 6'	Soluble	Solid	300.0	29754

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-142 5'

Lab Sample ID: 890-2553-1

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 13:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 14:02	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 21:52	CH	XEN MID

Client Sample ID: BH-145 5'

Lab Sample ID: 890-2553-4

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 13:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 12:58	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:10	CH	XEN MID

Client Sample ID: BH-147 6'

Lab Sample ID: 890-2553-6

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-148 6'

Lab Sample ID: 890-2553-7

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	29774	07/14/22 16:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29893	07/18/22 14:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 17:38	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 22:56	CH	XEN MID

Client Sample ID: BH-150 6'

Lab Sample ID: 890-2553-9

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-152 6'

Lab Sample ID: 890-2553-11

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 17:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 15:06	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/16/22 23:51	CH	XEN MID

Client Sample ID: BH-154 6'

Lab Sample ID: 890-2553-13

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 14:45	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 00:29	CH	XEN MID

Client Sample ID: BH-156 6'

Lab Sample ID: 890-2553-15

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 20:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		5			29788	07/15/22 13:19	SM	XEN MID

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Client Sample ID: BH-158 6'

Lab Sample ID: 890-2553-17

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 19:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29795	07/15/22 08:42	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 18:21	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 01:06	CH	XEN MID

Client Sample ID: SW-51 0-6'

Lab Sample ID: 890-2553-19

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 20:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29795	07/15/22 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 19:24	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 01:15	CH	XEN MID

Client Sample ID: SW-52 0-6'

Lab Sample ID: 890-2553-20

Date Collected: 07/12/22 00:00

Matrix: Solid

Date Received: 07/12/22 16:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29947	07/18/22 13:40	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	30015	07/19/22 20:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			30030	07/19/22 09:14	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29911	07/18/22 09:27	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	29795	07/15/22 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29788	07/15/22 16:13	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	29754	07/14/22 12:47	SMC	XEN MID
Soluble	Analysis	300.0		1			29864	07/17/22 01:24	CH	XEN MID

Eurofins Carlsbad



Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

**Laboratory References:**  
XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
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

## Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2553-1  
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2553-1	BH-142 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-2	BH-143 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-3	BH-144 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-4	BH-145 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-5	BH-146 5'	Solid	07/12/22 00:00	07/12/22 16:57	5'
890-2553-6	BH-147 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-7	BH-148 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-8	BH-149 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-9	BH-150 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-10	BH-151 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-11	BH-152 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-12	BH-153 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-13	BH-154 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-14	BH-155 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-15	BH-156 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-16	BH-157 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-17	BH-158 6'	Solid	07/12/22 00:00	07/12/22 16:57	6'
890-2553-18	SW-50 0-6'	Solid	07/12/22 00:00	07/12/22 16:57	0' - 6'
890-2553-19	SW-51 0-6'	Solid	07/12/22 00:00	07/12/22 16:57	0' - 6'
890-2553-20	SW-52 0-6'	Solid	07/12/22 00:00	07/12/22 16:57	0' - 6'

## Analysis Request of Chain of Custody Record

890-2553 Chain of Custody

Page 1 of 2



## Tetra Tech, Inc.

 801 W. Wall Street, Ste. 100  
 Midland, Texas, 79705  
 Tel (432) 682-4559  
 Fax (432) 682-3948

Client Name: <b>Permian Water Solutions</b>		Site Manager: <b>Clair Gonzales</b>	
Project Name: <b>Kaiser SWD</b>		Project #: <b>212C-MD-02230</b>	
Project Location: <b>Lea County, NM</b>		Project #: <b>212C-MD-02230</b>	
Invoice for: <b>Permian Water Solutions - Dusty McInturff</b>		Sample Signature: <b>[Signature]</b>	
Receiving Laboratory: <b>Eurofins Xeno</b>		Comments: <b>Sept 2</b>	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None					
										YEAR 2020				
	BH-142 (5')	7/12/22		X									X	BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) 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 TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance
	BH-143 (5')	7/12/22		X									X	
	BH-144 (5')	7/12/22		X									X	
	BH-145 (5')	7/12/22		X									X	
	BH-146 (5')	7/12/22		X									X	
	BH-147 (6')	7/12/22		X									X	
	BH-148 (6')	7/12/22		X									X	
	BH-149 (6')	7/12/22		X									X	
	BH-150 (6')	7/12/22		X									X	
	BH-151 (6')	7/12/22		X									X	

Relinquished by: <b>[Signature]</b>	Date: <b>7/12/22</b>	Time: <b>1657</b>	Received by: <b>[Signature]</b>	Date: <b>7-12-22</b>	Time: <b>1655</b>
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report	

ORIGINAL COPY

T-M-007 - 0.2 AP-Cooling In Process





## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2553-1

SDG Number: Lea County NM

Login Number: 2553

List Number: 1

Creator: Stutzman, Amanda

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.	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: 890-2553-1

SDG Number: Lea County NM

Login Number: 2553

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 07/14/22 10:49 AM

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: 890-2689-1

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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:  
8/11/2022 8:29:02 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-2689-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
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
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: BH-118 (13')

Lab Sample ID: 890-2689-1

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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		08/05/22 11:19	08/06/22 01:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/22 11:19	08/06/22 01:44	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/22 11:19	08/06/22 01:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	08/05/22 11:19	08/06/22 01:44	1
1,4-Difluorobenzene (Surr)	96		70 - 130	08/05/22 11:19	08/06/22 01:44	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	247		49.9		mg/Kg			08/04/22 09:51	1

## Method: 8015B NM - 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		08/03/22 09:25	08/03/22 22:32	1
Diesel Range Organics (Over C10-C28)	247		49.9		mg/Kg		08/03/22 09:25	08/03/22 22:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 22:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	08/03/22 09:25	08/03/22 22:32	1
o-Terphenyl	94		70 - 130	08/03/22 09:25	08/03/22 22:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	263		5.03		mg/Kg			08/06/22 06:13	1

Client Sample ID: BH-119 (10')

Lab Sample ID: 890-2689-2

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/22 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

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

## 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			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/04/22 09:51	1

## Method: 8015B NM - Diesel 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		08/03/22 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
Oil 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
o-Terphenyl	113		70 - 130				08/03/22 09:25	08/03/22 20:23	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	382		25.1		mg/Kg			08/06/22 06:41	5

Client Sample ID: BH-158 (8')

Lab Sample ID: 890-2689-3

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## Method: 8021B - Volatile Organic Compounds (GC)

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)	110		70 - 130				08/05/22 11:19	08/06/22 00:42	1
1,4-Difluorobenzene (Surr)	93		70 - 130				08/05/22 11:19	08/06/22 00:42	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		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 (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 23:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 23:57	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: BH-158 (8')

Lab Sample ID: 890-2689-3

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII 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')

Lab Sample ID: 890-2689-4

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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		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

## 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			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 00:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 00:58	1
OII 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

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.0		4.97		mg/Kg			08/06/22 07:00	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: SW-51 (0-6')

Lab Sample ID: 890-2689-5

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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		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)	111		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 Calculation

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 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

## 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		08/03/22 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
Oil 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 Chromatography - Soluble

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')

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2689-6

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/22 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

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## 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')

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2689-6

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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			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	58.9		50.0		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 (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 22:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 22:53	1
Oil Range Organics (Over C28-C36)	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 - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	581		25.3		mg/Kg			08/06/22 07:36	5

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

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/22 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

## 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			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	217		50.0		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 (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 21:49	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

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

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	133		50.0		mg/Kg		08/03/22 09:25	08/03/22 21:49	1
Oil Range Organics (Over C28-C36)	83.6		50.0		mg/Kg		08/03/22 09:25	08/03/22 21:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/03/22 09:25	08/03/22 21:49	1
o-Terphenyl	91		70 - 130				08/03/22 09:25	08/03/22 21:49	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	563		25.2		mg/Kg			08/06/22 07:46	5

Client Sample ID: BH-161 (8')

Lab Sample ID: 890-2689-8

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## Method: 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 03:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/22 11:19	08/06/22 03:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				08/05/22 11:19	08/06/22 03:27	1
1,4-Difluorobenzene (Surr)	77		70 - 130				08/05/22 11:19	08/06/22 03:27	1

## Method: Total BTEX - Total BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	218		49.9		mg/Kg			08/04/22 09:51	1

## Method: 8015B NM - Diesel 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		08/03/22 09:25	08/03/22 22:11	1
Diesel Range Organics (Over C10-C28)	147		49.9		mg/Kg		08/03/22 09:25	08/03/22 22:11	1
Oil Range Organics (Over C28-C36)	71.4		49.9		mg/Kg		08/03/22 09:25	08/03/22 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/03/22 09:25	08/03/22 22:11	1
o-Terphenyl	92		70 - 130				08/03/22 09:25	08/03/22 22:11	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

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

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
Chloride	515		25.0		mg/Kg			08/06/22 07:55	5

Client Sample ID: BH-162 (8')

Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

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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 BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/04/22 09:51	1

## Method: 8015B NM - Diesel 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		08/03/22 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 00:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				08/03/22 09:25	08/04/22 00:18	1
o-Terphenyl	94		70 - 130				08/03/22 09:25	08/04/22 00:18	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		24.9		mg/Kg			08/06/22 08:04	5

Client Sample ID: BH-163 (8')

Date Collected: 07/26/22 12:00

Date Received: 07/29/22 14:06

Lab Sample ID: 890-2689-10

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 02:25	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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: BH-163 (8')

Lab Sample ID: 890-2689-10

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 BTEX 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 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

## 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		08/03/22 09:25	08/03/22 23:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 23:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/03/22 09:25	08/03/22 23:37	1
o-Terphenyl	104		70 - 130				08/03/22 09:25	08/03/22 23:37	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		5.02		mg/Kg			08/06/22 08:13	1

Client Sample ID: BH-164 (8')

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ANALYSIS TABLE

Lab Sample ID: 890-2689-11

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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		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 Calculation

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

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

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

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 Range Organics (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
Oil Range Organics (Over C28-C36)	625		250		mg/Kg		08/03/22 09:25	08/03/22 21:27	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/03/22 09:25	08/03/22 21:27	5
o-Terphenyl	105		70 - 130				08/03/22 09:25	08/03/22 21:27	5

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1340		24.9		mg/Kg			08/06/22 08:22	5

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

## 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		08/05/22 11:19	08/06/22 07:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/22 11:19	08/06/22 07:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				08/05/22 11:19	08/06/22 07:54	1
1,4-Difluorobenzene (Surr)	91		70 - 130				08/05/22 11:19	08/06/22 07:54	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			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	64.6		49.9		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 (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 23:15	1
Diesel Range Organics (Over C10-C28)	64.6		49.9		mg/Kg		08/03/22 09:25	08/03/22 23:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/03/22 23:15	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: BH-165 (13')

Lab Sample ID: 890-2689-12

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	613		24.9		mg/Kg			08/06/22 08:50	5

Client Sample ID: SW-43 (0-4')

Lab Sample ID: 890-2689-13

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

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ANALYSIS TABLE

## 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		08/07/22 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

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/04/22 09:51	1

## Method: 8015B NM - Diesel 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		08/03/22 09:25	08/04/22 01:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/22 09:25	08/04/22 01:38	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.9		5.00		mg/Kg			08/06/22 08:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: SW-39 (0-13')

Lab Sample ID: 890-2689-14

Date Collected: 07/29/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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		08/07/22 12:02	08/08/22 01:03	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/07/22 12:02	08/08/22 01:03	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/07/22 12:02	08/08/22 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	08/07/22 12:02	08/08/22 01:03	1
1,4-Difluorobenzene (Surr)	93		70 - 130	08/07/22 12:02	08/08/22 01:03	1

## 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			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/04/22 09:51	1

## Method: 8015B NM - Diesel 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		08/03/22 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		5.04		mg/Kg			08/06/22 20:26	1

Client Sample ID: SW-40 (0-13')

Lab Sample ID: 890-2689-15

Date Collected: 07/29/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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		08/07/22 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.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: SW-40 (0-13')

Lab Sample ID: 890-2689-15

Date Collected: 07/29/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

## 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			08/08/22 14:27	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		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 (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/22 09:25	08/04/22 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				08/03/22 09:25	08/04/22 02:18	1
o-Terphenyl	90		70 - 130				08/03/22 09:25	08/04/22 02:18	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.3		5.03		mg/Kg			08/06/22 20:35	1

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-2689-1	BH-118 (13')	94	96
890-2689-2	BH-119 (10')	114	92
890-2689-2 MS	BH-119 (10')	124	98
890-2689-2 MSD	BH-119 (10')	112	93
890-2689-3	BH-158 (8')	110	93
890-2689-4	SW-50 (0-6')	117	89
890-2689-5	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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(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

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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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(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			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

## 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	08/02/22 14:31	08/05/22 11:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/02/22 14:31	08/05/22 11:25	1

Lab Sample ID: MB 880-31573/5-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31573

Analyte	MB Result	MB 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 00:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/22 11:19	08/06/22 00:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/22 11:19	08/06/22 00:00	1

Surrogate	MB %Recovery	MB 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

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-31573/2-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09262		mg/Kg		93	70 - 130	7	35

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09534		mg/Kg		95	70 - 130	7	35
Ethylbenzene	0.100	0.1047		mg/Kg		105	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2146		mg/Kg		107	70 - 130	0	35
o-Xylene	0.100	0.1189		mg/Kg		119	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-2689-2 MS

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: BH-119 (10')

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.101	0.09178		mg/Kg		91	70 - 130
Toluene	<0.00200	U	0.101	0.1004		mg/Kg		100	70 - 130
Ethylbenzene	<0.00200	U	0.101	0.1071		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.201	0.2218		mg/Kg		110	70 - 130
o-Xylene	<0.00200	U	0.101	0.1258		mg/Kg		125	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-2689-2 MSD

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: BH-119 (10')

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/22 13:42	08/07/22 13:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/22 13:42	08/07/22 13:44	1
Surrogate	MB %Recovery	MB 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

Analysis Batch: 31654

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31669

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB 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

Matrix: Solid

Analysis Batch: 31654

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		70 - 130				
1,4-Difluorobenzene (Surr)	99		70 - 130				

Lab Sample ID: LCSD 880-31669/2-A

Matrix: Solid

Analysis Batch: 31654

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31669

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2689-13 MS

Matrix: Solid

Analysis Batch: 31654

Client Sample ID: SW-43 (0-4')

Prep Type: Total/NA

Prep Batch: 31669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-2689-13 MSD

Matrix: Solid

Analysis Batch: 31654

Client Sample ID: SW-43 (0-4')

Prep Type: Total/NA

Prep Batch: 31669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00202	U	0.100	0.1039		mg/Kg		104	70 - 130	2	35
Toluene	<0.00202	U	0.100	0.1120		mg/Kg		112	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.100	0.1218		mg/Kg		122	70 - 130	3	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2532		mg/Kg		126	70 - 130	3	35
o-Xylene	<0.00202	U F1	0.100	0.1413	F1	mg/Kg		141	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-31397/1-A

Matrix: Solid

Analysis Batch: 31371

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31397

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/22 09:25	08/03/22 19:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	08/03/22 09:25	08/03/22 19:19	1
o-Terphenyl	109		70 - 130	08/03/22 09:25	08/03/22 19:19	1

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-31397/2-A

Matrix: Solid

Analysis Batch: 31371

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31397

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1052		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1023		mg/Kg		102	70 - 130		
									</		

Lab Sample ID: LCSD 880-31397/3-A

Matrix: Solid

Analysis Batch: 31371

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31397

Top Data: 6/16/17											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1144		mg/Kg		114	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	1065		mg/Kg		106	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
1-Chlorooctane	111		70 - 130								
o-Terphenyl	110		70 - 130								

Lab Sample ID: 890-2689-2 MS

Matrix: Solid

Analysis Batch: 31371

Client Sample ID: BH-119 (10')

Prep Type: Total/NA

Prep Batch: 31397

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1062		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	844.1		mg/Kg		84	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	96		70 - 130						
o-Terphenyl	92		70 - 130						

Lab Sample ID: 890-2689-2 MSD

Matrix: Solid

Analysis Batch: 31371

Client Sample ID: BH-119 (10')

Prep Type: Total/NA

Prep Batch: 31397

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	906.5		mg/Kg	-	88	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	780.0		mg/Kg		78	70 - 130	8	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	88		70 - 130								

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## QC Sample Results

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

Client Sample ID: BH-119 (10')

Prep Type: Total/NA

Prep Batch: 31397

Surrogate	%Recovery	MSD Qualifier	MSD Limits
o-Terphenyl	84		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31360/1-A

Matrix: Solid

Analysis Batch: 31623

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/06/22 05:46	1

Lab Sample ID: LCS 880-31360/2-A

Matrix: Solid

Analysis Batch: 31623

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	236.9		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-31360/3-A

Matrix: Solid

Analysis Batch: 31623

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	237.0		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-2689-1 MS

Matrix: Solid

Analysis Batch: 31623

Client Sample ID: BH-118 (13')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	263		252	507.4		mg/Kg		97	90 - 110

Lab Sample ID: 890-2689-1 MSD

Matrix: Solid

Analysis Batch: 31623

Client Sample ID: BH-118 (13')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	263		252	505.2		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 890-2689-11 MS

Matrix: Solid

Analysis Batch: 31623

Client Sample ID: BH-164 (8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1340		1240	2642		mg/Kg		105	90 - 110

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QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2689-11 MSD					Client Sample ID: BH-164 (8')							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 31623												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	1340		1240	2664		mg/Kg		107	90 - 110	1	20	

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

## GC VOA (Continued)

## Analysis Batch: 31654 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-15	SW-40 (0-13')	Total/NA	Solid	8021B	31669
MB 880-31602/5-A	Method Blank	Total/NA	Solid	8021B	31602
MB 880-31669/5-A	Method Blank	Total/NA	Solid	8021B	31669
LCS 880-31669/1-A	Lab Control Sample	Total/NA	Solid	8021B	31669
LCSD 880-31669/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31669
890-2689-13 MS	SW-43 (0-4')	Total/NA	Solid	8021B	31669
890-2689-13 MSD	SW-43 (0-4')	Total/NA	Solid	8021B	31669

## Prep Batch: 31669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-13	SW-43 (0-4')	Total/NA	Solid	5035	
890-2689-14	SW-39 (0-13')	Total/NA	Solid	5035	
890-2689-15	SW-40 (0-13')	Total/NA	Solid	5035	
MB 880-31669/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31669/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31669/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2689-13 MS	SW-43 (0-4')	Total/NA	Solid	5035	
890-2689-13 MSD	SW-43 (0-4')	Total/NA	Solid	5035	

## Analysis Batch: 31779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	Total BTEX	
890-2689-2	BH-119 (10')	Total/NA	Solid	Total BTEX	
890-2689-3	BH-158 (8')	Total/NA	Solid	Total BTEX	
890-2689-4	SW-50 (0-6')	Total/NA	Solid	Total BTEX	
890-2689-5	SW-51 (0-6')	Total/NA	Solid	Total BTEX	
890-2689-6	BH-159 (8')	Total/NA	Solid	Total BTEX	
890-2689-7	BH-160 (8')	Total/NA	Solid	Total BTEX	
890-2689-8	BH-161 (8')	Total/NA	Solid	Total BTEX	
890-2689-9	BH-162 (8')	Total/NA	Solid	Total BTEX	
890-2689-10	BH-163 (8')	Total/NA	Solid	Total BTEX	
890-2689-11	BH-164 (8')	Total/NA	Solid	Total BTEX	
890-2689-12	BH-165 (13')	Total/NA	Solid	Total BTEX	
890-2689-13	SW-43 (0-4')	Total/NA	Solid	Total BTEX	
890-2689-14	SW-39 (0-13')	Total/NA	Solid	Total BTEX	
890-2689-15	SW-40 (0-13')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 31371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2689-1	BH-118 (13')	Total/NA	Solid	8015B NM	31397
890-2689-2	BH-119 (10')	Total/NA	Solid	8015B NM	31397
890-2689-3	BH-158 (8')	Total/NA	Solid	8015B NM	31397
890-2689-4	SW-50 (0-6')	Total/NA	Solid	8015B NM	31397
890-2689-5	SW-51 (0-6')	Total/NA	Solid	8015B NM	31397
890-2689-6	BH-159 (8')	Total/NA	Solid	8015B NM	31397
890-2689-7	BH-160 (8')	Total/NA	Solid	8015B NM	31397
890-2689-8	BH-161 (8')	Total/NA	Solid	8015B NM	31397
890-2689-9	BH-162 (8')	Total/NA	Solid	8015B NM	31397
890-2689-10	BH-163 (8')	Total/NA	Solid	8015B NM	31397

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
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	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
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
890-2689-10	BH-163 (8')	Soluble	Solid	300.0	31360
890-2689-11	BH-164 (8')	Soluble	Solid	300.0	31360
890-2689-12	BH-165 (13')	Soluble	Solid	300.0	31360
890-2689-13	SW-43 (0-4')	Soluble	Solid	300.0	31360
890-2689-14	SW-39 (0-13')	Soluble	Solid	300.0	31360
890-2689-15	SW-40 (0-13')	Soluble	Solid	300.0	31360
MB 880-31360/1-A	Method Blank	Soluble	Solid	300.0	31360
LCS 880-31360/2-A	Lab Control Sample	Soluble	Solid	300.0	31360
LCSD 880-31360/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31360
890-2689-1 MS	BH-118 (13')	Soluble	Solid	300.0	31360
890-2689-1 MSD	BH-118 (13')	Soluble	Solid	300.0	31360
890-2689-11 MS	BH-164 (8')	Soluble	Solid	300.0	31360
890-2689-11 MSD	BH-164 (8')	Soluble	Solid	300.0	31360

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: BH-118 (13')

Lab Sample ID: 890-2689-1

Date Collected: 07/26/22 12:00

Matrix: Solid

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			4.95 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

Date Collected: 07/26/22 12:00

Matrix: Solid

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			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 00:22	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 20:23	AJ	EETSC M
Soluble	Leach	DI Leach			4.99 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 06:41	AJ	EETSC M

Client Sample ID: BH-158 (8')

Lab Sample ID: 890-2689-3

Date Collected: 07/26/22 12:00

Matrix: Solid

Date Received: 07/29/22 14:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31573	08/05/22 11:19	MR	EETSC 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC MIC
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 00:58	AJ	EETSC M
Soluble	Leach	DI Leach			5.03 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		1			31623	08/06/22 07:00	AJ	EETSC M

Client Sample ID: SW-51 (0-6')

Lab Sample ID: 890-2689-5

Date Collected: 07/26/22 12:00

Matrix: Solid

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	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

Client Sample ID: BH-159 (8')

Lab Sample ID: 890-2689-6

Date Collected: 07/26/22 12:00

Matrix: Solid

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			4.99 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 02:46	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.00 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/03/22 21:49	AJ	EETSC M

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-2689-8

Date Collected: 07/26/22 12:00

Matrix: Solid

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			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')

Lab Sample ID: 890-2689-9

Date Collected: 07/26/22 12:00

Matrix: Solid

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			5.02 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 02:05	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		1			31371	08/04/22 00:18	AJ	EETSC M
Soluble	Leach	DI Leach			5.02 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 08:04	AJ	EETSC M

Client Sample ID: BH-163 (8')

Lab Sample ID: 890-2689-10

Date Collected: 07/26/22 12:00

Matrix: Solid

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			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 Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	31573	08/05/22 11:19	MR	EETSC MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 07:34	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31397	08/03/22 09:25	DM	EETSC M
Total/NA	Analysis	8015B NM		5			31371	08/03/22 21:27	AJ	EETSC M
Soluble	Leach	DI Leach			5.03 g	50 mL	31360	08/02/22 19:05	SMC	EETSC M
Soluble	Analysis	300.0		5			31623	08/06/22 08:22	AJ	EETSC M

Client Sample ID: BH-165 (13')

Lab Sample ID: 890-2689-12

Date Collected: 07/26/22 12:00

Matrix: Solid

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	31573	08/05/22 11:19	MR	EETSC MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 07:54	MR	EETSC M
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC M
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC M
Total/NA	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')

Lab Sample ID: 890-2689-13

Date Collected: 07/26/22 12:00

Matrix: Solid

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			4.96 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 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')

Lab Sample ID: 890-2689-14

Date Collected: 07/29/22 12:00

Matrix: Solid

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

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Client Sample ID: SW-39 (0-13')

Lab Sample ID: 890-2689-14

Date Collected: 07/29/22 12:00

Matrix: Solid

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	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31397	08/03/22 09:25	DM	EETSC MID
Total/NA	Analysis	8015B NM		1			31371	08/04/22 01:58	AJ	EETSC MID
Soluble	Leach	DI Leach			4.96 g	50 mL	31360	08/02/22 19:05	SMC	EETSC MID
Soluble	Analysis	300.0		1			31623	08/06/22 20:26	AJ	EETSC MID

Client Sample ID: SW-40 (0-13')

Lab Sample ID: 890-2689-15

Date Collected: 07/29/22 12:00

Matrix: Solid

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			5.02 g	5 mL	31669	08/07/22 12:02	EL	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31654	08/08/22 01:23	EL	EETSC MID
Total/NA	Analysis	Total BTEX		1			31779	08/08/22 14:27	SM	EETSC MID
Total/NA	Analysis	8015 NM		1			31489	08/04/22 09:51	AJ	EETSC MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31397	08/03/22 09:25	DM	EETSC MID
Total/NA	Analysis	8015B NM		1			31371	08/04/22 02:18	AJ	EETSC MID
Soluble	Leach	DI Leach			4.97 g	50 mL	31360	08/02/22 19:05	SMC	EETSC MID
Soluble	Analysis	300.0		1			31623	08/06/22 20:35	AJ	EETSC MID

## Laboratory References:

EETSC MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2689-1  
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EETSC MID
Total BTEX	Total BTEX Calculation	TAL SOP	EETSC MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EETSC MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EETSC MID
300.0	Anions, Ion Chromatography	MCAWW	EETSC MID
5035	Closed System Purge and Trap	SW846	EETSC MID
8015NM Prep	Microextraction	SW846	EETSC MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EETSC MID

### 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

## Analysis Request of Chain of Custody Record



## Tetra Tech, Inc.

 Midland, Texas 79705  
 Tel (432) 682-4559  
 Fax (432) 682-3946

890-2699 Chain of Custody

Page 1 of 2



Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: Clair.Gonzales@tetratech.com	
Project Location: Lea County, NM		212C-MD-02230	
Invoice to: Permian Water Solutions - Dusty McInturf		Sampler Signature: Peyton Oliver	
Receiving Laboratory: Eurofins Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None					
										YEAR 2020				
	BH-118 (13)	7/26/2022		X									X	BTEX 8021B BTEX 8260B
	BH-119 (10)	7/26/2022		X									X	TPH TX1005 (Ext to C35)
	BH-158 (8)	7/26/2022		X									X	TPH 8015M ( GRO - DRO - ORO - MRO)
	SW-50 (0-6)	7/26/2022		X									X	PAH 8270C
	SW-51 (0-6)	7/26/2022		X									X	Total Metals Ag As Ba Cd Cr Pb Se Hg
	BH-159 (8)	7/26/2022		X									X	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	BH-160 (8)	7/26/2022		X									X	TCLP Volatiles
	BH-161 (8)	7/26/2022		X									X	TCLP Semi Volatiles
	BH-162 (8)	7/26/2022		X									X	RCI
	BH-163 (8)	7/26/2022		X									X	GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														Hold

Relinquished by: [Signature]	Date: 7/26/22	Time: 1405	Received by: [Signature]	Date: 7/26/22	Time: 1400
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
Sample Temperature	<input checked="" type="checkbox"/> STANDARD
15.4	<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
15.2	<input type="checkbox"/> Rush Charges Authorized
	<input type="checkbox"/> Special Report Limits or TRRP Report

ORIGINAL COPY

TM-007  
-0.2

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 801 W. Wall Street, Ste 100  
 Midland, Texas 79705  
 Tel (432) 652-4559  
 Fax (432) 692-3946

Page 2 of 2

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: 212C-MD-02230	
Project Location: Lea County, NM		Project #: 212C-MD-02230	
Invoice to: Permian Water Solutions - Dusty McInturf		Sampler Signature: Peyton Oliver	
Receiving Laboratory: Eurofins Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None				
										YEAR: 2020			
	BH-164 (8')	7/26/2022		X		X		X					BTEX 8021B BTEX 8260B
	BH-165 (8')	7/26/2022		X		X		X					TPH TX1005 (Ext to C35)
	SW-43 (0-4')	7/26/2022		X		X		X					TPH 8015M (GRO - DRO - ORO - MRO)
	SW-39 (0-13')	7/29/2022		X		X		X					PAH 8270C
	SW-40 (0-13')	7/29/2022		X		X		X					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
													RCI
													GC/MS Vol. 8260B / 624
													GC/MS Semi. Vol. 8270C/625
													PCB's 8082 / 608
													NORM
													PLM (Asbestos)
													Chloride
													Chloride Sulfate TDS
													General Water Chemistry (see attached list)
													Anion/Cation Balance
													Hold

Relinquished by: <i>Lea</i>	Date: 7/29/22	Time: 1405	Received by: <i>Aracelis</i>	Date: 7/29/22	Time: 1406
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
Sample Temperature	<input checked="" type="checkbox"/> STANDARD
15.4	<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
15.2	<input type="checkbox"/> Rush Charges Authorized
	<input type="checkbox"/> Special Report Limits or TRRP Report

ORIGINAL COPY

 7/29/22  
 -0.2

(Circle) HAND DELIVERED FEDEX UPS Tracking #

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2689-1

SDG Number: Lea County NM

**Login Number: 2689****List Number: 1****Creator: Stutzman, Amanda****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.	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 Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 08/02/22 10:44 AM**

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: 890-2784-1

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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

9/1/2022 4:34:02 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

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results through



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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.

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.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

## Glossary

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)

Eurofins Carlsbad



Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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-59 (6-8') (890-2784-46), SW-60 (0-13') (890-2784-47), SW-61 (8-13') (890-2784-48), SW-62 (8-13') (890-2784-49), SW-63 (8-13') (890-2784-50), SW-64 (8-10') (890-2784-51), SW-65 (8-10') (890-2784-52), SW-66 (8-10') (890-2784-53), SW-67 (8-10') (890-2784-54), SW-68 (0-6') (890-2784-55), SW-69 (0-6') (890-2784-56), SW-70 (0-4.5') (890-2784-57) and SW-71 (0-4.5') (890-2784-58). There was no cooling media present in the cooler. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE\_ONE> proceed with/cancel analysis

890-2784 Sample temp 7.2/7.0 there was no temp blank and samples were taken on the 18th- client said they just brought samples from fridge with no cooler and no temp blank- wants to processed with testing

## GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-2784-A-1-E MS) and (890-2784-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH-124 (8') (890-2784-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-58 (6-8') (890-2784-45). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH-120 (8') (890-2784-1), BH-124 (8') (890-2784-2), BH-132 (8') (890-2784-3), BH-159 (8') (890-2784-4), BH-162 (8') (890-2784-5), BH-164 (8') (890-2784-6), BH-166 (8') (890-2784-7), BH-167 (8') (890-2784-8), BH-168 (5') (890-2784-9), BH-169 (5') (890-2784-10), (890-2784-A-1-C MS) and (890-2784-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH-170 (5') (890-2784-11), BH-173 (6') (890-2784-14), BH-174 (6') (890-2784-15), BH-175 (4.5') (890-2784-16), BH-176 (4.5') (890-2784-17), BH-177 (4.5') (890-2784-18), BH-178 (4.5') (890-2784-19) and BH-179 (4.5') (890-2784-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-32669 and analytical batch 880-32586 was outside the upper control limits.

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-120 (8')

Lab Sample ID: 890-2784-1

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

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	1
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 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) (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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	49.9		mg/Kg		08/22/22 13:43	08/22/22 22:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		08/22/22 13:43	08/22/22 22:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/22/22 22:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130	08/22/22 13:43	08/22/22 22:36	1
o-Terphenyl	76		70 - 130	08/22/22 13:43	08/22/22 22:36	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	578		25.1		mg/Kg			08/29/22 04:12	5

Client Sample ID: BH-124 (8')

Lab Sample ID: 890-2784-2

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	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

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-124 (8')

Lab Sample ID: 890-2784-2

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

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 (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 13:43	08/22/22 23:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/22/22 23:41	1
Oil 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				08/22/22 13:43	08/22/22 23:41	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	298		5.02		mg/Kg			08/29/22 04:20	1

Client Sample ID: BH-132 (8')

Lab Sample ID: 890-2784-3

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 00:41	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:01	09/01/22 00:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	08/30/22 12:01	09/01/22 00:41	1
1,4-Difluorobenzene (Surr)	91		70 - 130	08/30/22 12:01	09/01/22 00:41	1

## Method: 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-132 (8')

Lab Sample ID: 890-2784-3

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## 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 00:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:03	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	325		5.00		mg/Kg			08/29/22 04:28	1

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

Sample Depth: 8

## 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		08/30/22 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 13:43	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
Oil 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 - 130				08/22/22 13:43	08/23/22 00:24	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## 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

Sample Depth: 8

## 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

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/30/22 12:01	09/01/22 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130				08/30/22 12:01	09/01/22 01:21	1
1,4-Difluorobenzene (Surr)	89		70 - 130				08/30/22 12:01	09/01/22 01:21	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 (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 - 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 00:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 00:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130				08/22/22 13:43	08/23/22 00:45	1
o-Terphenyl	82		70 - 130				08/22/22 13:43	08/23/22 00:45	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	892		5.03		mg/Kg			08/29/22 04:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 01:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 01:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 01:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	08/30/22 12:01	09/01/22 01:42	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/30/22 12:01	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	<0.00399	U	0.00399		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	92.4		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 (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 01:06	1
Diesel Range Organics (Over C10-C28)	92.4		49.9		mg/Kg		08/22/22 13:43	08/23/22 01:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	62	S1-	70 - 130	08/22/22 13:43	08/23/22 01:06	1
o-Terphenyl	76		70 - 130	08/22/22 13:43	08/23/22 01:06	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1680		25.2		mg/Kg			08/29/22 11:32	5

Client Sample ID: BH-166 (8')

Lab Sample ID: 890-2784-7

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## 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		08/30/22 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-166 (8')

Lab Sample ID: 890-2784-7

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	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/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 01:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 01:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	59	S1-	70 - 130				08/22/22 13:43	08/23/22 01:27	1
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	Qualifier	RL	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')

Lab Sample ID: 890-2784-8

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 02:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:01	09/01/22 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	08/30/22 12:01	09/01/22 02:23	1
1,4-Difluorobenzene (Surr)	90		70 - 130	08/30/22 12:01	09/01/22 02:23	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 (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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-167 (8')

Lab Sample ID: 890-2784-8

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8

## 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 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
Oil 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 Chromatography - 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')

Lab Sample ID: 890-2784-9

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)

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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 13:43	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
Oil 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 - 130				08/22/22 13:43	08/23/22 02:10	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Client Sample ID: BH-168 (5')

## Lab Sample ID: 890-2784-9

Date Collected: 08/18/22 00:00

Matrix: Solid

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

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)

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 03:04	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 03:04	1
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
Total BTEX	<0.00404	U	0.00404		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	80.5		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 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
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 02:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	56	S1-	70 - 130				08/22/22 13:43	08/23/22 02:31	1
o-Terphenyl	69	S1-	70 - 130				08/22/22 13:43	08/23/22 02:31	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	382		4.98		mg/Kg			08/29/22 05:54	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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

Sample Depth: 5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	09/01/22 04:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:01	09/01/22 04:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	08/30/22 12:01	09/01/22 04:25	1
1,4-Difluorobenzene (Surr)	87		70 - 130	08/30/22 12:01	09/01/22 04:25	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

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 (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 13:43	08/23/22 03:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	57	S1-	70 - 130	08/22/22 13:43	08/23/22 03:14	1
o-Terphenyl	66	S1-	70 - 130	08/22/22 13:43	08/23/22 03:14	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	826		5.03		mg/Kg			08/29/22 06:02	1

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)

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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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 Fac
1,4-Difluorobenzene (Surr)	84		70 - 130	08/30/22 12:01	09/01/22 04:46	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)

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
Oil 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, 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')

Lab Sample ID: 890-2784-13

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

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		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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

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

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6

## 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 13:43	08/23/22 03:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 03:56	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	253		5.02		mg/Kg			08/29/22 06:17	1

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

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	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 (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 - 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 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
Oil 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
o-Terphenyl	77		70 - 130				08/22/22 13:43	08/23/22 04:17	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## 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

## 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

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6

## Method: 8021B - Volatile Organic Compounds (GC)

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 BTEX 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 Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

## 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 04:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 04:38	1
Oil 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
1-Chlorooctane	64	S1-	70 - 130				08/22/22 13:43	08/23/22 04:38	1
o-Terphenyl	76		70 - 130				08/22/22 13:43	08/23/22 04:38	1

## 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-175 (4.5')

Lab Sample ID: 890-2784-16

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 13:43	08/23/22 04:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 04:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 04:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	59	S1-	70 - 130	08/22/22 13:43	08/23/22 04:59	1
o-Terphenyl	71		70 - 130	08/22/22 13:43	08/23/22 04:59	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	374		5.03		mg/Kg			08/29/22 07:52	1

Client Sample ID: BH-176 (4.5')

Lab Sample ID: 890-2784-17

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	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)	116		70 - 130	08/30/22 12:01	09/01/22 06:28	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-176 (4.5')

Lab Sample ID: 890-2784-17

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130	08/30/22 12:01	09/01/22 06:28	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 (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 - 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 05:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 05:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 05:21	1
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 Chromatography - 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')

Lab Sample ID: 890-2784-18

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:01	09/01/22 06:48	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

## 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 4.5

## 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 13:43	08/23/22 05:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 05:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:43	08/23/22 05:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	59	S1-	70 - 130				08/22/22 13:43	08/23/22 05:42	1
o-Terphenyl	73		70 - 130				08/22/22 13:43	08/23/22 05:42	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1360		25.0		mg/Kg			08/29/22 08:07	5

Client Sample ID: BH-178 (4.5')

Lab Sample ID: 890-2784-19

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:01	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 (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 - 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 06:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:03	1
Oil 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Client Sample ID: BH-178 (4.5')

Lab Sample ID: 890-2784-19

Date Collected: 08/18/22 00:00

Matrix: Solid

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	632		5.02		mg/Kg			08/29/22 08:31	1

## Client Sample ID: BH-179 (4.5')

Lab Sample ID: 890-2784-20

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 07:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:01	09/01/22 07:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:01	09/01/22 07:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				08/30/22 12:01	09/01/22 07:29	1
1,4-Difluorobenzene (Surr)	90		70 - 130				08/30/22 12:01	09/01/22 07:29	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			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

## 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 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/23/22 06:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
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	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1090		5.03		mg/Kg			08/29/22 08:39	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-180 (4.5')

Lab Sample ID: 890-2784-21

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	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

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 16:33	08/24/22 13:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 13:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	08/22/22 16:33	08/24/22 13:21	1
o-Terphenyl	114		70 - 130	08/22/22 16:33	08/24/22 13:21	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1540		25.1		mg/Kg			08/29/22 08:47	5

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

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	08/30/22 12:16	08/31/22 18:25	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	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) (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 (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 16:33	08/24/22 14:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 14:26	1
Oil 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
o-Terphenyl	110		70 - 130				08/22/22 16:33	08/24/22 14:26	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1560		25.1		mg/Kg			08/29/22 08:54	5

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

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 18:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	08/31/22 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/30/22 12:16	08/31/22 18:46	1
1,4-Difluorobenzene (Surr)	108		70 - 130	08/30/22 12:16	08/31/22 18:46	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		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/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## 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

Sample Depth: 4.5

## 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 16:33	08/24/22 14:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 14:47	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	806		4.98		mg/Kg			08/29/22 09:02	1

## Client Sample ID: BH-183 (4.5')

## Lab Sample ID: 890-2784-24

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 16:33	08/24/22 15:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 15:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				08/22/22 16:33	08/24/22 15:17	1
o-Terphenyl	92		70 - 130				08/22/22 16:33	08/24/22 15:17	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Client Sample ID: BH-183 (4.5')

Lab Sample ID: 890-2784-24

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		4.97		mg/Kg			08/29/22 09:10	1

## Client Sample ID: BH-184 (4.5')

Lab Sample ID: 890-2784-25

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 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 (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 - 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 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	898		5.05		mg/Kg			08/29/22 09:34	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-185 (4.5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2784-26

Matrix: Solid

## 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		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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 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
Oil 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

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	588		5.01		mg/Kg			08/29/22 09:42	1

Client Sample ID: BH-186 (4.5')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2784-27

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		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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 4.5

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ANALYSIS TABLE

Matrix: Solid

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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 (DRO) (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 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 16:33	08/24/22 18:48	1
Diesel Range Organics (Over C10-C28)	914		50.0		mg/Kg		08/22/22 16:33	08/24/22 18:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 18:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				08/22/22 16:33	08/24/22 18:48	1
o-Terphenyl	91		70 - 130				08/22/22 16:33	08/24/22 18:48	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		24.8		mg/Kg			08/29/22 10:05	5

Client Sample ID: BH-187 (4.5')

Lab Sample ID: 890-2784-28

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 4.5

Matrix: Solid

## 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 12:16	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 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Client Sample ID: BH-187 (4.5')

## Lab Sample ID: 890-2784-28

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## 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 16:33	08/24/22 17:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 17:01	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	816		4.97		mg/Kg			08/29/22 10:13	1

## 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

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	08/31/22 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 (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 - 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 16:33	08/24/22 17:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 17:23	1
Oil 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## 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

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

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	08/31/22 22:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				08/30/22 12:16	08/31/22 22:59	1
1,4-Difluorobenzene (Surr)	109		70 - 130				08/30/22 12:16	08/31/22 22:59	1

## 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	<49.8	U	49.8		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	<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
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/22/22 16:33	08/24/22 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				08/22/22 16:33	08/24/22 17:44	1
o-Terphenyl	93		70 - 130				08/22/22 16:33	08/24/22 17:44	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		5.04		mg/Kg			08/29/22 10:29	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-38 (4.5-13')

Lab Sample ID: 890-2784-31

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 13

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Toluene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Ethylbenzene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
m-Xylene & p-Xylene	<0.0808	U	0.0808		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
o-Xylene	<0.0404	U	0.0404		mg/Kg		08/30/22 12:16	08/31/22 21:09	20
Xylenes, Total	<0.0808	U	0.0808		mg/Kg		08/30/22 12:16	08/31/22 21:09	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	08/30/22 12:16	08/31/22 21:09	20
1,4-Difluorobenzene (Surr)	87		70 - 130	08/30/22 12:16	08/31/22 21:09	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0808	U	0.0808		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	151		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 (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:15	1
Diesel Range Organics (Over C10-C28)	151		49.9		mg/Kg		08/22/22 16:33	08/24/22 20:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	08/22/22 16:33	08/24/22 20:15	1
o-Terphenyl	116		70 - 130	08/22/22 16:33	08/24/22 20:15	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	448		5.02		mg/Kg			08/29/22 10:36	1

Client Sample ID: SW-42 (4.5-8')

Lab Sample ID: 890-2784-32

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

## 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 12:16	08/31/22 23:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:16	08/31/22 23:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:16	08/31/22 23:19	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:16	08/31/22 23:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	08/30/22 12:16	08/31/22 23:19	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-42 (4.5-8')

Lab Sample ID: 890-2784-32

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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: 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 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	<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
Oil 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
1-Chlorooctane	119		70 - 130				08/22/22 16:33	08/24/22 18:06	1
o-Terphenyl	113		70 - 130				08/22/22 16:33	08/24/22 18:06	1

## 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')

Lab Sample ID: 890-2784-33

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## 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		08/30/22 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

## 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/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-43 (6-8')

Lab Sample ID: 890-2784-33

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## 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 16:33	08/24/22 20:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 20:36	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	951		5.04		mg/Kg			08/29/22 10:52	1

Client Sample ID: SW-44 (4.5-8')

Lab Sample ID: 890-2784-34

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:16	09/01/22 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				08/30/22 12:16	09/01/22 00:00	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/30/22 12:16	09/01/22 00:00	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 16:33	08/24/22 20:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				08/22/22 16:33	08/24/22 20:58	1
o-Terphenyl	113		70 - 130				08/22/22 16:33	08/24/22 20:58	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-44 (4.5-8')

Lab Sample ID: 890-2784-34

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

## Method: 300.0 - Anions, Ion Chromatography - 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')

Lab Sample ID: 890-2784-35

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 0 - 8

## 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		08/30/22 12:16	09/01/22 00:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	1
Ethylbenzene	0.0108		0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	1
m-Xylene & p-Xylene	0.0209		0.00402		mg/Kg		08/30/22 12:16	09/01/22 00:20	1
o-Xylene	0.0251		0.00201		mg/Kg		08/30/22 12:16	09/01/22 00:20	1
Xylenes, Total	0.0460		0.00402		mg/Kg		08/30/22 12:16	09/01/22 00:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				08/30/22 12:16	09/01/22 00:20	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/30/22 12:16	09/01/22 00:20	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0568		0.00402		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	1110		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	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
OII 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	679		5.02		mg/Kg			08/29/22 15:12	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 0 - 5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	09/01/22 00:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 12:16	09/01/22 00:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	08/30/22 12:16	09/01/22 00:41	1
1,4-Difluorobenzene (Surr)	99		70 - 130	08/30/22 12:16	09/01/22 00:41	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 16:33	08/24/22 21:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 21:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	08/22/22 16:33	08/24/22 21:19	1
o-Terphenyl	113		70 - 130	08/22/22 16:33	08/24/22 21:19	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	995		25.0		mg/Kg			08/29/22 15:20	5

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

Sample Depth: 0 - 5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:16	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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 0 - 5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

## 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 (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 - 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 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 21:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				08/22/22 16:33	08/24/22 21:41	1
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	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	558		4.98		mg/Kg			08/29/22 15:28	1

Client Sample ID: SW-48 (6-8')

Lab Sample ID: 890-2784-38

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## 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		08/30/22 12:16	09/01/22 01:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:16	09/01/22 01:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:16	09/01/22 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	08/30/22 12:16	09/01/22 01:21	1
1,4-Difluorobenzene (Surr)	97		70 - 130	08/30/22 12:16	09/01/22 01:21	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	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	117		50.0		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-48 (6-8')

Lab Sample ID: 890-2784-38

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## 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 16:33	08/24/22 19:53	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>117</b>		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:53	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.5		4.99		mg/Kg			08/29/22 15:36	1

Client Sample ID: SW-49 (4.5-6')

Lab Sample ID: 890-2784-39

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 6

## Method: 8021B - Volatile Organic Compounds (GC)

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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total TPH</b>	<b>264</b>		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 16:33	08/24/22 19:10	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>264</b>		50.0		mg/Kg		08/22/22 16:33	08/24/22 19:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				08/22/22 16:33	08/24/22 19:10	1
o-Terphenyl	98		70 - 130				08/22/22 16:33	08/24/22 19:10	1

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## Client Sample Results

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')

Lab Sample ID: 890-2784-39

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 6

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	975		25.0		mg/Kg			08/29/22 15:59	5

## 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

Sample Depth: 0 - 8

## 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		08/30/22 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

## 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	<49.9	U	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 (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 22:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:33	08/24/22 22:02	1
Oil 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	1
o-Terphenyl	106		70 - 130				08/22/22 16:33	08/24/22 22:02	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2180		25.1		mg/Kg			08/29/22 16:07	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-54 (0-4.5')

Lab Sample ID: 890-2784-41

Date Collected: 08/18/22 00:00

Matrix: Solid

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 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 Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (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 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		08/23/22 10:46	08/24/22 23:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	08/23/22 10:46	08/24/22 23:07	1
o-Terphenyl	95		70 - 130	08/23/22 10:46	08/24/22 23:07	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	717		5.01		mg/Kg			08/29/22 16:15	1

Client Sample ID: SW-55 (4.5-8')

Lab Sample ID: 890-2784-42

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Toluene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Ethylbenzene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
m-Xylene & p-Xylene	<0.00394	U	0.00394		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
o-Xylene	<0.00197	U	0.00197		mg/Kg		08/30/22 12:29	09/01/22 06:00	1
Xylenes, Total	<0.00394	U	0.00394		mg/Kg		08/30/22 12:29	09/01/22 06:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	08/30/22 12:29	09/01/22 06:00	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-55 (4.5-8')

Lab Sample ID: 890-2784-42

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 4.5 - 8

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	08/30/22 12:29	09/01/22 06:00	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00394	U	0.00394		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/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		08/23/22 10:46	08/24/22 23:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 23:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130				08/23/22 10:46	08/24/22 23:29	1
o-Terphenyl	76		70 - 130				08/23/22 10:46	08/24/22 23:29	1

## Method: 300.0 - Anions, Ion 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')

Lab Sample ID: 890-2784-43

Date Collected: 08/18/22 00:00

Matrix: Solid

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	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	09/01/22 06:20	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/30/22 12:29	09/01/22 06:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	08/30/22 12:29	09/01/22 06:20	1
1,4-Difluorobenzene (Surr)	102		70 - 130	08/30/22 12:29	09/01/22 06:20	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-56 (0-4.5')

Lab Sample ID: 890-2784-43

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

## 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		08/23/22 10:46	08/24/22 23:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/24/22 23:51	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		5.03		mg/Kg			08/29/22 16:31	1

Client Sample ID: SW-57 (6-8')

Lab Sample ID: 890-2784-44

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## 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		08/30/22 12:29	09/01/22 06:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 06:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				08/30/22 12:29	09/01/22 06:40	1
1,4-Difluorobenzene (Surr)	104		70 - 130				08/30/22 12:29	09/01/22 06:40	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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		08/23/22 10:46	08/25/22 00:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/25/22 00:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/22 10:46	08/25/22 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				08/23/22 10:46	08/25/22 00:12	1
o-Terphenyl	100		70 - 130				08/23/22 10:46	08/25/22 00:12	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-57 (6-8')

Lab Sample ID: 890-2784-44

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.5		5.00		mg/Kg			08/29/22 16:39	1

Client Sample ID: SW-58 (6-8')

Lab Sample ID: 890-2784-45

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## Method: 8021B - Volatile Organic Compounds (GC)

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 BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0200	U	0.0200		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	8970		49.8		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	<49.8	U	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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	202		4.99		mg/Kg			08/29/22 17:03	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-59 (6-8')

Lab Sample ID: 890-2784-46

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 6 - 8

## 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		08/30/22 12:29	09/01/22 07:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	08/30/22 12:29	09/01/22 07:01	1
1,4-Difluorobenzene (Surr)	99		70 - 130	08/30/22 12:29	09/01/22 07:01	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

## 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		08/23/22 10:46	08/25/22 00:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/25/22 00:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/25/22 00:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	08/23/22 10:46	08/25/22 00:54	1
o-Terphenyl	115		70 - 130	08/23/22 10:46	08/25/22 00:54	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.5		4.97		mg/Kg			08/29/22 17:10	1

Client Sample ID: SW-60 (0-13')

Lab Sample ID: 890-2784-47

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 0 - 13

## 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		08/30/22 12:29	09/01/22 07:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 07:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 07:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	08/30/22 12:29	09/01/22 07:21	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-60 (0-13')

Lab Sample ID: 890-2784-47

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 0 - 13

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

## 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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		08/23/22 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
Oil 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
1-Chlorooctane	87		70 - 130				08/23/22 10:46	08/25/22 01:16	1
o-Terphenyl	91		70 - 130				08/23/22 10:46	08/25/22 01:16	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390		24.9		mg/Kg			08/29/22 17:32	5

Client Sample ID: SW-61 (8-13')

Lab Sample ID: 890-2784-48

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/30/22 12:29	09/01/22 07:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/30/22 12:29	09/01/22 07:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	08/30/22 12:29	09/01/22 07:42	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/30/22 12:29	09/01/22 07:42	1

## Method: Total 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	76.1		50.0		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 8 - 13

## 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 *1	50.0		mg/Kg		08/22/22 16:29	08/23/22 20:43	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>76.1</b>		50.0		mg/Kg		08/22/22 16:29	08/23/22 20:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 20:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/22/22 16:29	08/23/22 20:43	1
o-Terphenyl	88		70 - 130				08/22/22 16:29	08/23/22 20:43	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>3730</b>		49.8		mg/Kg			08/29/22 17:39	10

Client Sample ID: SW-62 (8-13')

Lab Sample ID: 890-2784-49

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	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 12:29	09/01/22 08:02	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/30/22 12:29	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		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
<b>Total TPH</b>	<b>1570</b>		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 (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/23/22 22:50	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>1570</b>		49.9		mg/Kg		08/22/22 16:29	08/23/22 22:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	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

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## Client Sample Results

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

Sample Depth: 8 - 13

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ANALYSIS TABLE

Lab Sample ID: 890-2784-49

Matrix: Solid

## 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')

Date Collected: 08/18/22 00:00

Date Received: 08/19/22 08:00

Sample Depth: 8 - 13

Lab Sample ID: 890-2784-50

Matrix: Solid

## 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 08:22	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/30/22 12:29	09/01/22 08:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				08/30/22 12:29	09/01/22 08:22	1
1,4-Difluorobenzene (Surr)	101		70 - 130				08/30/22 12:29	09/01/22 08:22	1

## 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 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	<49.9	U *1	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 21:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/22/22 16:29	08/23/22 21:04	1
o-Terphenyl	89		70 - 130				08/22/22 16:29	08/23/22 21:04	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	561		5.00		mg/Kg			08/29/22 17:54	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-64 (8-10')

Lab Sample ID: 890-2784-51

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

## 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		08/30/22 12:29	09/01/22 11:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 12:29	09/01/22 11:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 12:29	09/01/22 11:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	08/30/22 12:29	09/01/22 11:32	1
1,4-Difluorobenzene (Surr)	108		70 - 130	08/30/22 12:29	09/01/22 11:32	1

## Method: Total BTEX - Total 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 (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 - 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 *1	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	08/22/22 16:29	08/23/22 23:11	1
o-Terphenyl	99		70 - 130	08/22/22 16:29	08/23/22 23:11	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	481		5.02		mg/Kg			08/29/22 18:01	1

Client Sample ID: SW-65 (8-10')

Lab Sample ID: 890-2784-52

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-65 (8-10')

Lab Sample ID: 890-2784-52

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 *1	49.9		mg/Kg		08/22/22 16:29	08/23/22 23:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 23:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				08/22/22 16:29	08/23/22 23:32	1
o-Terphenyl	86		70 - 130				08/22/22 16:29	08/23/22 23:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	765		4.95		mg/Kg			08/29/22 18:08	1

Client Sample ID: SW-66 (8-10')

Lab Sample ID: 890-2784-53

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/30/22 12:29	09/01/22 12:13	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/30/22 12:29	09/01/22 12:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/30/22 12:29	09/01/22 12:13	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/30/22 12:29	09/01/22 12:13	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	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	<50.0	U	50.0		mg/Kg			08/23/22 11:36	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-66 (8-10')

Lab Sample ID: 890-2784-53

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

## 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 *1	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 23:53	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	275		5.01		mg/Kg			08/29/22 18:15	1

Client Sample ID: SW-67 (8-10')

Lab Sample ID: 890-2784-54

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 8 - 10

## 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 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 (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 - 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 *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
Oil 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 - 130				08/22/22 16:29	08/24/22 00:14	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## 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

Sample Depth: 8 - 10

## 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')

Lab Sample ID: 890-2784-55

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 0 - 6

## Method: 8021B - Volatile Organic Compounds (GC)

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 Fac
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	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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

## 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 *1	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:36	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2210		24.9		mg/Kg			08/29/22 09:40	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Sample Depth: 0 - 6

## 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		08/30/22 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 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	1890		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 *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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6380		49.6		mg/Kg			08/29/22 09:49	10

Client Sample ID: SW-70 (0-4.5')

Lab Sample ID: 890-2784-57

Date Collected: 08/18/22 00:00

Matrix: Solid

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	<0.0400	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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-70 (0-4.5')

Lab Sample ID: 890-2784-57

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Sample Depth: 0 - 4.5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	08/30/22 12:29	09/01/22 14:35	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0800	U	0.0800		mg/Kg			09/01/22 12:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1770		49.8		mg/Kg			08/23/22 11:36	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

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
Oil 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
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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	352		4.97		mg/Kg			08/29/22 09:58	1

Client Sample ID: SW-71 (0-4.5')

Lab Sample ID: 890-2784-58

Date Collected: 08/18/22 00:00

Matrix: Solid

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 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	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 11:36	1

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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

Lab Sample ID: 890-2784-58  
Matrix: Solid

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 *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	
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/24/22 00:57	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	110		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 Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1460		24.9		mg/Kg			08/29/22 10:07	5	

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-2784-1	BH-120 (8')	120	96
890-2784-1 MS	BH-120 (8')	136 S1+	103
890-2784-1 MSD	BH-120 (8')	136 S1+	106
890-2784-2	BH-124 (8')	143 S1+	85
890-2784-3	BH-132 (8')	115	91
890-2784-4	BH-159 (8')	107	80
890-2784-5	BH-162 (8')	121	89
890-2784-6	BH-164 (8')	114	100
890-2784-7	BH-166 (8')	115	90
890-2784-8	BH-167 (8')	106	90
890-2784-9	BH-168 (5')	120	94
890-2784-10	BH-169 (5')	128	84
890-2784-11	BH-170 (5')	130	87
890-2784-12	BH-171 (5')	124	84
890-2784-13	BH-172 (6')	124	80
890-2784-14	BH-173 (6')	123	90
890-2784-15	BH-174 (6')	130	81
890-2784-16	BH-175 (4.5')	113	92
890-2784-17	BH-176 (4.5')	116	91
890-2784-18	BH-177 (4.5')	117	93
890-2784-19	BH-178 (4.5')	117	88
890-2784-20	BH-179 (4.5')	119	90
890-2784-21	BH-180 (4.5')	94	106
890-2784-21 MS	BH-180 (4.5')	97	105
890-2784-21 MSD	BH-180 (4.5')	98	103
890-2784-22	BH-181 (4.5')	90	105
890-2784-23	BH-182 (4.5')	93	108
890-2784-24	BH-183 (4.5')	91	108
890-2784-25	BH-184 (4.5')	93	109
890-2784-26	BH-185 (4.5')	95	110
890-2784-27	BH-186 (4.5')	91	108
890-2784-28	BH-187 (4.5')	93	107
890-2784-29	BH-188 (4.5')	96	106
890-2784-30	BH-189 (4.5')	88	109
890-2784-31	SW-38 (4.5-13')	100	87
890-2784-32	SW-42 (4.5-8')	89	106
890-2784-33	SW-43 (6-8')	95	108
890-2784-34	SW-44 (4.5-8')	95	97
890-2784-35	SW-45 (0-8')	90	97
890-2784-36	SW-46 (0-5')	103	99
890-2784-37	SW-47 (0-5')	93	92
890-2784-38	SW-48 (6-8')	99	97
890-2784-39	SW-49 (4.5-6')	99	104
890-2784-40	SW-53 (0-8')	95	100
890-2784-41	SW-54 (0-4.5')	94	101
890-2784-41 MS	SW-54 (0-4.5')	100	103
890-2784-41 MSD	SW-54 (0-4.5')	94	98
890-2784-42	SW-55 (4.5-8')	92	100
890-2784-43	SW-56 (0-4.5')	91	102

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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-
890-2784-2	BH-124 (8')	58 S1-	71
890-2784-3	BH-132 (8')	67 S1-	80
890-2784-4	BH-159 (8')	69 S1-	82
890-2784-5	BH-162 (8')	68 S1-	82
890-2784-6	BH-164 (8')	62 S1-	76
890-2784-7	BH-166 (8')	59 S1-	71
890-2784-8	BH-167 (8')	61 S1-	70
890-2784-9	BH-168 (5')	60 S1-	71
890-2784-10	BH-169 (5')	56 S1-	69 S1-
890-2784-11	BH-170 (5')	57 S1-	66 S1-

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## Surrogate Summary

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)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2784-12	BH-171 (5')	70	84
890-2784-13	BH-172 (6')	70	84
890-2784-14	BH-173 (6')	63 S1-	77
890-2784-15	BH-174 (6')	64 S1-	76
890-2784-16	BH-175 (4.5')	59 S1-	71
890-2784-17	BH-176 (4.5')	58 S1-	69 S1-
890-2784-18	BH-177 (4.5')	59 S1-	73
890-2784-19	BH-178 (4.5')	60 S1-	72
890-2784-20	BH-179 (4.5')	60 S1-	75
890-2784-21	BH-180 (4.5')	117	114
890-2784-21 MS	BH-180 (4.5')	109	89
890-2784-21 MSD	BH-180 (4.5')	109	88
890-2784-22	BH-181 (4.5')	114	110
890-2784-23	BH-182 (4.5')	97	97
890-2784-24	BH-183 (4.5')	93	92
890-2784-25	BH-184 (4.5')	111	109
890-2784-26	BH-185 (4.5')	116	113
890-2784-27	BH-186 (4.5')	92	91
890-2784-28	BH-187 (4.5')	97	97
890-2784-29	BH-188 (4.5')	98	97
890-2784-30	BH-189 (4.5')	95	93
890-2784-31	SW-38 (4.5-13')	118	116
890-2784-32	SW-42 (4.5-8')	119	113
890-2784-33	SW-43 (6-8')	99	100
890-2784-34	SW-44 (4.5-8')	115	113
890-2784-35	SW-45 (0-8')	105	99
890-2784-36	SW-46 (0-5')	115	113
890-2784-37	SW-47 (0-5')	116	112
890-2784-38	SW-48 (6-8')	99	98
890-2784-39	SW-49 (4.5-6')	101	98
890-2784-40	SW-53 (0-8')	109	106
890-2784-41	SW-54 (0-4.5')	91	95
890-2784-42	SW-55 (4.5-8')	74	76
890-2784-43	SW-56 (0-4.5')	82	88
890-2784-44	SW-57 (6-8')	93	100
890-2784-45	SW-58 (6-8')	93	96
890-2784-46	SW-59 (6-8')	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

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## Surrogate Summary

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)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33358/5-A

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33358

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	08/30/22 12:01	08/31/22 23:38	1
1,4-Difluorobenzene (Surr)	93		70 - 130	08/30/22 12:01	08/31/22 23:38	1

Lab Sample ID: LCS 880-33358/1-A

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-33358/2-A

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33358

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-2784-1 MS

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

Prep Batch: 33358

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.101	0.09002		mg/Kg		89	70 - 130
Toluene	<0.00198	U	0.101	0.08715		mg/Kg		87	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-2784-1 MS

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

Prep Batch: 33358

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.101	0.09489		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00397	U	0.201	0.1923		mg/Kg		96	70 - 130
o-Xylene	<0.00198	U	0.101	0.1183		mg/Kg		118	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-2784-1 MSD

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

Prep Batch: 33358

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD Qualifier	MSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	08/30/22 12:16	08/31/22 17:36	1
1,4-Difluorobenzene (Surr)	118		70 - 130	08/30/22 12:16	08/31/22 17:36	1

Lab Sample ID: LCS 880-33361/1-A

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1051		mg/Kg		105	70 - 130
Toluene	0.100	0.1026		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.09908		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1821		mg/Kg		91	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-33361/1-A

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09507		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-33361/2-A

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33361

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-2784-21 MS

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: BH-180 (4.5')

Prep Type: Total/NA

Prep Batch: 33361

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 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

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 12:29	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							

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-33362/2-A

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33362

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-2784-41 MS

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: SW-54 (0-4.5')

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

Matrix: Solid

Analysis Batch: 33465

Client Sample ID: SW-54 (0-4.5')

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

Matrix: Solid

Analysis Batch: 33411

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200		mg/Kg			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								
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				

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## QC Sample Results

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)

Lab Sample ID: MB 880-32669/1-A

Matrix: Solid

Analysis Batch: 32586

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32669

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:43	08/22/22 21:31	1
Surrogate	MB %Recovery	MB 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

Lab Sample ID: LCS 880-32669/2-A

Matrix: Solid

Analysis Batch: 32586

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	719.7		mg/Kg		72	70 - 130
Diesel Range Organics (Over C10-C28)	1000	892.1		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS 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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32669

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	724.7		mg/Kg		72	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	912.3		mg/Kg		91	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	74		70 - 130						
o-Terphenyl	86		70 - 130						

Lab Sample ID: 890-2784-1 MS

Matrix: Solid

Analysis Batch: 32586

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

Prep Batch: 32669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	522.3	F1	mg/Kg		50	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	558.6	F1	mg/Kg		56	70 - 130

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## QC Sample Results

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: 890-2784-1 MS

Matrix: Solid

Analysis Batch: 32586

Client Sample ID: BH-120 (8')

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

Matrix: Solid

Analysis Batch: 32586

Client Sample ID: BH-120 (8')

Prep Type: Total/NA

Prep Batch: 32669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	998	552.9	F1	mg/Kg		53	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	578.2	F1	mg/Kg		58	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	52	S1-	70 - 130								
o-Terphenyl	56	S1-	70 - 130								

Lab Sample ID: MB 880-32713/1-A

Matrix: Solid

Analysis Batch: 32730

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32713

Analyte	MB Result	MB 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 16:29	08/23/22 15:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 15:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 15:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				08/22/22 16:29	08/23/22 15:45	1
o-Terphenyl	94		70 - 130				08/22/22 16:29	08/23/22 15:45	1

Lab Sample ID: LCS 880-32713/2-A

Matrix: Solid

Analysis Batch: 32730

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	819.0		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	925.9		mg/Kg		93	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	516	S1+	70 - 130				
o-Terphenyl	484	S1+	70 - 130				

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## QC Sample Results

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 880-32713/3-A

Matrix: Solid

Analysis Batch: 32730

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32713

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1054	*1	mg/Kg		105	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	1000	1016		mg/Kg		102	70 - 130	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	548	S1+	70 - 130						
o-Terphenyl	524	S1+	70 - 130						

Lab Sample ID: 890-2786-A-2-C MS

Matrix: Solid

Analysis Batch: 32730

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 32713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	74		70 - 130								

Lab Sample ID: 890-2786-A-2-D MSD

Matrix: Solid

Analysis Batch: 32730

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	998	789.4		mg/Kg		78	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	953.1		mg/Kg		93	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	89		70 - 130								
o-Terphenyl	74		70 - 130								

Lab Sample ID: MB 880-32714/1-A

Matrix: Solid

Analysis Batch: 32806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32714

Analyte	MB Result	MB 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 11:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 11:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:33	08/24/22 11:55	1

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## QC Sample Results

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: MB 880-32714/1-A

Matrix: Solid

Analysis Batch: 32806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32714

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac			
1-Chlorooctane	96		70 - 130	08/22/22 16:33	08/24/22 11:55	1				
o-Terphenyl	96		70 - 130	08/22/22 16:33	08/24/22 11:55	1				

Lab Sample ID: LCS 880-32714/2-A

Matrix: Solid

Analysis Batch: 32806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32714

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1006		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1017		mg/Kg		102	70 - 130		

	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

Matrix: Solid

Analysis Batch: 32806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32714

			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1165		mg/Kg		116	70 - 130	15	20	
Diesel Range Organics (Over C10-C28)			1000	1078		mg/Kg		108	70 - 130	6	20	

	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	568	S1+	70 - 130									
o-Terphenyl	565	S1+	70 - 130									

Lab Sample ID: 890-2784-21 MS

Matrix: Solid

Analysis Batch: 32806

Client Sample ID: BH-180 (4.5')

Prep Type: Total/NA

Prep Batch: 32714

	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	1194		mg/Kg		117	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1048		mg/Kg		105	70 - 130			

	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	109		70 - 130									
o-Terphenyl	89		70 - 130									

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## QC Sample Results

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: 890-2784-21 MSD

Matrix: Solid

Analysis Batch: 32806

Client Sample ID: BH-180 (4.5')

Prep Type: Total/NA

Prep Batch: 32714

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	88		70 - 130								

Lab Sample ID: MB 880-32774/1-A

Matrix: Solid

Analysis Batch: 32808

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32774

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 16:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 16:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/22 10:46	08/24/22 16:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				08/23/22 10:46	08/24/22 16:17	1
o-Terphenyl	94		70 - 130				08/23/22 10:46	08/24/22 16:17	1

Lab Sample ID: LCS 880-32774/2-A

Matrix: Solid

Analysis Batch: 32808

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32774

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1065		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1056		mg/Kg		106	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	575	S1+	70 - 130						
o-Terphenyl	577	S1+	70 - 130						

Lab Sample ID: LCSD 880-32774/3-A

Matrix: Solid

Analysis Batch: 32808

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32774

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1046		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	982.3		mg/Kg		98	70 - 130	7	20

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## QC Sample Results

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	527	S1+	70 - 130
o-Terphenyl	538	S1+	70 - 130

Lab Sample ID: 880-18428-A-1-C MS

Matrix: Solid

Analysis Batch: 32808

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 32774

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1043		mg/Kg		101	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	972.4		mg/Kg		97	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	96		70 - 130							
o-Terphenyl	85		70 - 130							

Lab Sample ID: 880-18428-A-1-D MSD

Matrix: Solid

Analysis Batch: 32808

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32774

	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	953.0		mg/Kg		92	70 - 130	9	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	885.0		mg/Kg		89	70 - 130	9	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	84		70 - 130									
o-Terphenyl	75		70 - 130									

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32582/1-A

Matrix: Solid

Analysis Batch: 33167

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			08/29/22 02:22	1	

Lab Sample ID: LCS 880-32582/2-A

Matrix: Solid

Analysis Batch: 33167

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	248.2		mg/Kg		99	90 - 110			

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-32582/3-A

Matrix: Solid

Analysis Batch: 33167

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	249.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2784-4 MS

Matrix: Solid

Analysis Batch: 33167

Client Sample ID: BH-159 (8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1010		1250	2342		mg/Kg		107	90 - 110		

Lab Sample ID: 890-2784-4 MSD

Matrix: Solid

Analysis Batch: 33167

Client Sample ID: BH-159 (8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1010		1250	2338		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-32583/1-A

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/29/22 06:57	1

Lab Sample ID: LCS 880-32583/2-A

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	249.3		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-32583/3-A

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	249.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2784-14 MS

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: BH-173 (6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	329		248	557.9		mg/Kg		92	90 - 110		

Lab Sample ID: 890-2784-14 MSD

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: BH-173 (6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	329		248	563.7		mg/Kg		95	90 - 110	1	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2784-24 MS

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: BH-183 (4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1050		249	1247	4	mg/Kg		78	90 - 110

Lab Sample ID: 890-2784-24 MSD

Matrix: Solid

Analysis Batch: 33168

Client Sample ID: BH-183 (4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/29/22 14:25	1

Lab Sample ID: LCS 880-32584/2-A

Matrix: Solid

Analysis Batch: 33169

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.5		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-32584/3-A

Matrix: Solid

Analysis Batch: 33169

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Client Sample ID: SW-44 (4.5-8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	955	F2 F1	252	1151	F1	mg/Kg		78	90 - 110

Lab Sample ID: 890-2784-34 MSD

Matrix: Solid

Analysis Batch: 33169

Client Sample ID: SW-44 (4.5-8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	955	F2 F1	252	1151	F1	mg/Kg		78	90 - 110	0	20

Lab Sample ID: 890-2784-44 MS

Matrix: Solid

Analysis Batch: 33169

Client Sample ID: SW-57 (6-8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	65.5		250	323.5		mg/Kg		103	90 - 110

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2784-44 MSD

Matrix: Solid

Analysis Batch: 33169

Client Sample ID: SW-57 (6-8')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/29/22 08:44	1

Lab Sample ID: LCS 880-32585/2-A

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.5		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-32585/3-A

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Client Sample ID: SW-67 (8-10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	215		252	478.7		mg/Kg		105	90 - 110

Lab Sample ID: 890-2784-54 MSD

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: SW-67 (8-10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	215		252	486.1		mg/Kg		108	90 - 110	2	20

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## QC Association Summary

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 Batch
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 Batch
890-2784-21	BH-180 (4.5')	Total/NA	Solid	5035	
890-2784-22	BH-181 (4.5')	Total/NA	Solid	5035	
890-2784-23	BH-182 (4.5')	Total/NA	Solid	5035	
890-2784-24	BH-183 (4.5')	Total/NA	Solid	5035	
890-2784-25	BH-184 (4.5')	Total/NA	Solid	5035	
890-2784-26	BH-185 (4.5')	Total/NA	Solid	5035	
890-2784-27	BH-186 (4.5')	Total/NA	Solid	5035	
890-2784-28	BH-187 (4.5')	Total/NA	Solid	5035	
890-2784-29	BH-188 (4.5')	Total/NA	Solid	5035	
890-2784-30	BH-189 (4.5')	Total/NA	Solid	5035	
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	5035	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	5035	
890-2784-33	SW-43 (6-8')	Total/NA	Solid	5035	
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	5035	
890-2784-35	SW-45 (0-8')	Total/NA	Solid	5035	
890-2784-36	SW-46 (0-5')	Total/NA	Solid	5035	
890-2784-37	SW-47 (0-5')	Total/NA	Solid	5035	
890-2784-38	SW-48 (6-8')	Total/NA	Solid	5035	
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	5035	
890-2784-40	SW-53 (0-8')	Total/NA	Solid	5035	
MB 880-33361/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33361/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33361/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## GC VOA (Continued)

## Prep Batch: 33361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-21 MS	BH-180 (4.5')	Total/NA	Solid	5035	
890-2784-21 MSD	BH-180 (4.5')	Total/NA	Solid	5035	

## Prep Batch: 33362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## GC VOA (Continued)

## Analysis Batch: 33411 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-33358/5-A	Method Blank	Total/NA	Solid	8021B	33358
MB 880-33411/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-33358/1-A	Lab Control Sample	Total/NA	Solid	8021B	33358
LCSD 880-33358/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33358
890-2784-1 MS	BH-120 (8')	Total/NA	Solid	8021B	33358
890-2784-1 MSD	BH-120 (8')	Total/NA	Solid	8021B	33358

## Analysis Batch: 33465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-21	BH-180 (4.5')	Total/NA	Solid	8021B	33361
890-2784-22	BH-181 (4.5')	Total/NA	Solid	8021B	33361
890-2784-23	BH-182 (4.5')	Total/NA	Solid	8021B	33361
890-2784-24	BH-183 (4.5')	Total/NA	Solid	8021B	33361
890-2784-25	BH-184 (4.5')	Total/NA	Solid	8021B	33361
890-2784-26	BH-185 (4.5')	Total/NA	Solid	8021B	33361
890-2784-27	BH-186 (4.5')	Total/NA	Solid	8021B	33361
890-2784-28	BH-187 (4.5')	Total/NA	Solid	8021B	33361
890-2784-29	BH-188 (4.5')	Total/NA	Solid	8021B	33361
890-2784-30	BH-189 (4.5')	Total/NA	Solid	8021B	33361
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8021B	33361
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8021B	33361
890-2784-33	SW-43 (6-8')	Total/NA	Solid	8021B	33361
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	8021B	33361
890-2784-35	SW-45 (0-8')	Total/NA	Solid	8021B	33361
890-2784-36	SW-46 (0-5')	Total/NA	Solid	8021B	33361
890-2784-37	SW-47 (0-5')	Total/NA	Solid	8021B	33361
890-2784-38	SW-48 (6-8')	Total/NA	Solid	8021B	33361
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8021B	33361
890-2784-40	SW-53 (0-8')	Total/NA	Solid	8021B	33361
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	8021B	33362
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	8021B	33362
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	8021B	33362
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8021B	33362
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8021B	33362
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8021B	33362
890-2784-47	SW-60 (0-13')	Total/NA	Solid	8021B	33362
890-2784-48	SW-61 (8-13')	Total/NA	Solid	8021B	33362
890-2784-49	SW-62 (8-13')	Total/NA	Solid	8021B	33362
890-2784-50	SW-63 (8-13')	Total/NA	Solid	8021B	33362
890-2784-51	SW-64 (8-10')	Total/NA	Solid	8021B	33362
890-2784-52	SW-65 (8-10')	Total/NA	Solid	8021B	33362
890-2784-53	SW-66 (8-10')	Total/NA	Solid	8021B	33362
890-2784-54	SW-67 (8-10')	Total/NA	Solid	8021B	33362
890-2784-55	SW-68 (0-6')	Total/NA	Solid	8021B	33362
890-2784-56	SW-69 (0-6')	Total/NA	Solid	8021B	33362
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8021B	33362
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	8021B	33362
MB 880-33361/5-A	Method Blank	Total/NA	Solid	8021B	33361
MB 880-33362/5-A	Method Blank	Total/NA	Solid	8021B	33362
LCS 880-33361/1-A	Lab Control Sample	Total/NA	Solid	8021B	33361
LCS 880-33362/1-A	Lab Control Sample	Total/NA	Solid	8021B	33362

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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 Batch
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## GC VOA (Continued)

## Analysis Batch: 33551 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	Total BTEX	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	Total BTEX	
890-2784-47	SW-60 (0-13')	Total/NA	Solid	Total BTEX	
890-2784-48	SW-61 (8-13')	Total/NA	Solid	Total BTEX	
890-2784-49	SW-62 (8-13')	Total/NA	Solid	Total BTEX	
890-2784-50	SW-63 (8-13')	Total/NA	Solid	Total BTEX	
890-2784-51	SW-64 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-52	SW-65 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-53	SW-66 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-54	SW-67 (8-10')	Total/NA	Solid	Total BTEX	
890-2784-55	SW-68 (0-6')	Total/NA	Solid	Total BTEX	
890-2784-56	SW-69 (0-6')	Total/NA	Solid	Total BTEX	
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	Total BTEX	
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 32586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Total/NA	Solid	8015B NM	32669
890-2784-2	BH-124 (8')	Total/NA	Solid	8015B NM	32669
890-2784-3	BH-132 (8')	Total/NA	Solid	8015B NM	32669
890-2784-4	BH-159 (8')	Total/NA	Solid	8015B NM	32669
890-2784-5	BH-162 (8')	Total/NA	Solid	8015B NM	32669
890-2784-6	BH-164 (8')	Total/NA	Solid	8015B NM	32669
890-2784-7	BH-166 (8')	Total/NA	Solid	8015B NM	32669
890-2784-8	BH-167 (8')	Total/NA	Solid	8015B NM	32669
890-2784-9	BH-168 (5')	Total/NA	Solid	8015B NM	32669
890-2784-10	BH-169 (5')	Total/NA	Solid	8015B NM	32669
890-2784-11	BH-170 (5')	Total/NA	Solid	8015B NM	32669
890-2784-12	BH-171 (5')	Total/NA	Solid	8015B NM	32669
890-2784-13	BH-172 (6')	Total/NA	Solid	8015B NM	32669
890-2784-14	BH-173 (6')	Total/NA	Solid	8015B NM	32669
890-2784-15	BH-174 (6')	Total/NA	Solid	8015B NM	32669
890-2784-16	BH-175 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-17	BH-176 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-18	BH-177 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-19	BH-178 (4.5')	Total/NA	Solid	8015B NM	32669
890-2784-20	BH-179 (4.5')	Total/NA	Solid	8015B NM	32669
MB 880-32669/1-A	Method Blank	Total/NA	Solid	8015B NM	32669
LCS 880-32669/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32669
LCSD 880-32669/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32669
890-2784-1 MS	BH-120 (8')	Total/NA	Solid	8015B NM	32669
890-2784-1 MSD	BH-120 (8')	Total/NA	Solid	8015B NM	32669

## Prep Batch: 32669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Total/NA	Solid	8015NM Prep	
890-2784-2	BH-124 (8')	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## GC Semi VOA (Continued)

## Prep Batch: 32669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## GC Semi VOA (Continued)

## Prep Batch: 32714 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-27	BH-186 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-28	BH-187 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-29	BH-188 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-30	BH-189 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-31	SW-38 (4.5-13')	Total/NA	Solid	8015NM Prep	
890-2784-32	SW-42 (4.5-8')	Total/NA	Solid	8015NM Prep	
890-2784-33	SW-43 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-34	SW-44 (4.5-8')	Total/NA	Solid	8015NM Prep	
890-2784-35	SW-45 (0-8')	Total/NA	Solid	8015NM Prep	
890-2784-36	SW-46 (0-5')	Total/NA	Solid	8015NM Prep	
890-2784-37	SW-47 (0-5')	Total/NA	Solid	8015NM Prep	
890-2784-38	SW-48 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-39	SW-49 (4.5-6')	Total/NA	Solid	8015NM Prep	
890-2784-40	SW-53 (0-8')	Total/NA	Solid	8015NM Prep	
MB 880-32714/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32714/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32714/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2784-21 MS	BH-180 (4.5')	Total/NA	Solid	8015NM Prep	
890-2784-21 MSD	BH-180 (4.5')	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 32730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-48	SW-61 (8-13')	Total/NA	Solid	8015B NM	32713
890-2784-49	SW-62 (8-13')	Total/NA	Solid	8015B NM	32713
890-2784-50	SW-63 (8-13')	Total/NA	Solid	8015B NM	32713
890-2784-51	SW-64 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-52	SW-65 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-53	SW-66 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-54	SW-67 (8-10')	Total/NA	Solid	8015B NM	32713
890-2784-55	SW-68 (0-6')	Total/NA	Solid	8015B NM	32713
890-2784-56	SW-69 (0-6')	Total/NA	Solid	8015B NM	32713
890-2784-57	SW-70 (0-4.5')	Total/NA	Solid	8015B NM	32713
890-2784-58	SW-71 (0-4.5')	Total/NA	Solid	8015B NM	32713
MB 880-32713/1-A	Method Blank	Total/NA	Solid	8015B NM	32713
LCS 880-32713/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32713
LCSD 880-32713/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32713
890-2786-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	32713
890-2786-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	32713

## Prep Batch: 32774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-41	SW-54 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-2784-42	SW-55 (4.5-8')	Total/NA	Solid	8015NM Prep	
890-2784-43	SW-56 (0-4.5')	Total/NA	Solid	8015NM Prep	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8015NM Prep	
890-2784-47	SW-60 (0-13')	Total/NA	Solid	8015NM Prep	
MB 880-32774/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32774/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32774/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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	

## Analysis Batch: 32780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	SW-56 (0-4.5')	Total/NA	Solid	8015 NM	
890-2784-44	SW-57 (6-8')	Total/NA	Solid	8015 NM	
890-2784-45	SW-58 (6-8')	Total/NA	Solid	8015 NM	
890-2784-46	SW-59 (6-8')	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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 Batch
890-2784-14	BH-173 (6')	Soluble	Solid	DI Leach	
890-2784-15	BH-174 (6')	Soluble	Solid	DI Leach	
890-2784-16	BH-175 (4.5')	Soluble	Solid	DI Leach	
890-2784-17	BH-176 (4.5')	Soluble	Solid	DI Leach	
890-2784-18	BH-177 (4.5')	Soluble	Solid	DI Leach	
890-2784-19	BH-178 (4.5')	Soluble	Solid	DI Leach	
890-2784-20	BH-179 (4.5')	Soluble	Solid	DI Leach	
890-2784-21	BH-180 (4.5')	Soluble	Solid	DI Leach	
890-2784-22	BH-181 (4.5')	Soluble	Solid	DI Leach	
890-2784-23	BH-182 (4.5')	Soluble	Solid	DI Leach	
890-2784-24	BH-183 (4.5')	Soluble	Solid	DI Leach	
890-2784-25	BH-184 (4.5')	Soluble	Solid	DI Leach	
890-2784-26	BH-185 (4.5')	Soluble	Solid	DI Leach	
890-2784-27	BH-186 (4.5')	Soluble	Solid	DI Leach	
890-2784-28	BH-187 (4.5')	Soluble	Solid	DI Leach	
890-2784-29	BH-188 (4.5')	Soluble	Solid	DI Leach	
890-2784-30	BH-189 (4.5')	Soluble	Solid	DI Leach	
890-2784-31	SW-38 (4.5-13')	Soluble	Solid	DI Leach	
890-2784-32	SW-42 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-33	SW-43 (6-8')	Soluble	Solid	DI Leach	
MB 880-32583/1-A	Method Blank	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## HPLC/IC (Continued)

## Leach Batch: 32583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-32583/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32583/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-14 MS	BH-173 (6')	Soluble	Solid	DI Leach	
890-2784-14 MSD	BH-173 (6')	Soluble	Solid	DI Leach	
890-2784-24 MS	BH-183 (4.5')	Soluble	Solid	DI Leach	
890-2784-24 MSD	BH-183 (4.5')	Soluble	Solid	DI Leach	

## Leach Batch: 32584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-34	SW-44 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-35	SW-45 (0-8')	Soluble	Solid	DI Leach	
890-2784-36	SW-46 (0-5')	Soluble	Solid	DI Leach	
890-2784-37	SW-47 (0-5')	Soluble	Solid	DI Leach	
890-2784-38	SW-48 (6-8')	Soluble	Solid	DI Leach	
890-2784-39	SW-49 (4.5-6')	Soluble	Solid	DI Leach	
890-2784-40	SW-53 (0-8')	Soluble	Solid	DI Leach	
890-2784-41	SW-54 (0-4.5')	Soluble	Solid	DI Leach	
890-2784-42	SW-55 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-43	SW-56 (0-4.5')	Soluble	Solid	DI Leach	
890-2784-44	SW-57 (6-8')	Soluble	Solid	DI Leach	
890-2784-45	SW-58 (6-8')	Soluble	Solid	DI Leach	
890-2784-46	SW-59 (6-8')	Soluble	Solid	DI Leach	
890-2784-47	SW-60 (0-13')	Soluble	Solid	DI Leach	
890-2784-48	SW-61 (8-13')	Soluble	Solid	DI Leach	
890-2784-49	SW-62 (8-13')	Soluble	Solid	DI Leach	
890-2784-50	SW-63 (8-13')	Soluble	Solid	DI Leach	
890-2784-51	SW-64 (8-10')	Soluble	Solid	DI Leach	
890-2784-52	SW-65 (8-10')	Soluble	Solid	DI Leach	
890-2784-53	SW-66 (8-10')	Soluble	Solid	DI Leach	
MB 880-32584/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32584/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32584/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-34 MS	SW-44 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-34 MSD	SW-44 (4.5-8')	Soluble	Solid	DI Leach	
890-2784-44 MS	SW-57 (6-8')	Soluble	Solid	DI Leach	
890-2784-44 MSD	SW-57 (6-8')	Soluble	Solid	DI Leach	

## Leach Batch: 32585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-54	SW-67 (8-10')	Soluble	Solid	DI Leach	
890-2784-55	SW-68 (0-6')	Soluble	Solid	DI Leach	
890-2784-56	SW-69 (0-6')	Soluble	Solid	DI Leach	
890-2784-57	SW-70 (0-4.5')	Soluble	Solid	DI Leach	
890-2784-58	SW-71 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-32585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2784-54 MS	SW-67 (8-10')	Soluble	Solid	DI Leach	
890-2784-54 MSD	SW-67 (8-10')	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## HPLC/IC

## Analysis Batch: 33167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-1	BH-120 (8')	Soluble	Solid	300.0	32582
890-2784-2	BH-124 (8')	Soluble	Solid	300.0	32582
890-2784-3	BH-132 (8')	Soluble	Solid	300.0	32582
890-2784-4	BH-159 (8')	Soluble	Solid	300.0	32582
890-2784-5	BH-162 (8')	Soluble	Solid	300.0	32582
890-2784-6	BH-164 (8')	Soluble	Solid	300.0	32582
890-2784-7	BH-166 (8')	Soluble	Solid	300.0	32582
890-2784-8	BH-167 (8')	Soluble	Solid	300.0	32582
890-2784-9	BH-168 (5')	Soluble	Solid	300.0	32582
890-2784-10	BH-169 (5')	Soluble	Solid	300.0	32582
890-2784-11	BH-170 (5')	Soluble	Solid	300.0	32582
890-2784-12	BH-171 (5')	Soluble	Solid	300.0	32582
890-2784-13	BH-172 (6')	Soluble	Solid	300.0	32582
MB 880-32582/1-A	Method Blank	Soluble	Solid	300.0	32582
LCS 880-32582/2-A	Lab Control Sample	Soluble	Solid	300.0	32582
LCSD 880-32582/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32582
890-2784-4 MS	BH-159 (8')	Soluble	Solid	300.0	32582
890-2784-4 MSD	BH-159 (8')	Soluble	Solid	300.0	32582

## Analysis Batch: 33168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2784-14	BH-173 (6')	Soluble	Solid	300.0	32583
890-2784-15	BH-174 (6')	Soluble	Solid	300.0	32583
890-2784-16	BH-175 (4.5')	Soluble	Solid	300.0	32583
890-2784-17	BH-176 (4.5')	Soluble	Solid	300.0	32583
890-2784-18	BH-177 (4.5')	Soluble	Solid	300.0	32583
890-2784-19	BH-178 (4.5')	Soluble	Solid	300.0	32583
890-2784-20	BH-179 (4.5')	Soluble	Solid	300.0	32583
890-2784-21	BH-180 (4.5')	Soluble	Solid	300.0	32583
890-2784-22	BH-181 (4.5')	Soluble	Solid	300.0	32583
890-2784-23	BH-182 (4.5')	Soluble	Solid	300.0	32583
890-2784-24	BH-183 (4.5')	Soluble	Solid	300.0	32583
890-2784-25	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

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## QC Association Summary

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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

## Client Sample ID: BH-120 (8')

## Lab Sample ID: 890-2784-1

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 00:00	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/22/22 22:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33167	08/29/22 04:12	CH	EET MID

## Client Sample ID: BH-124 (8')

## Lab Sample ID: 890-2784-2

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

**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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 00:24	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33167	08/29/22 04:35	CH	EET MID

**Client Sample ID: BH-162 (8')****Lab Sample ID: 890-2784-5****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 01:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 00:45	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 04:59	CH	EET MID

**Client Sample ID: BH-164 (8')****Lab Sample ID: 890-2784-6****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 01:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 01:06	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33167	08/29/22 11:32	CH	EET MID

**Client Sample ID: BH-166 (8')****Lab Sample ID: 890-2784-7****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 01:27	SM	EET MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

**Client Sample ID: BH-166 (8')****Lab Sample ID: 890-2784-7****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 05:30	CH	EET MID

**Client Sample ID: BH-167 (8')****Lab Sample ID: 890-2784-8****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

**Client Sample ID: BH-168 (5')****Lab Sample ID: 890-2784-9****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

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	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****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 04:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 03:35	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32582	08/21/22 19:23	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33167	08/29/22 06:10	CH	EET MID

**Client Sample ID: BH-172 (6')****Lab Sample ID: 890-2784-13****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

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	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

**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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 04:17	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 07:20	CH	EET MID

Client Sample ID: BH-174 (6')

Lab Sample ID: 890-2784-15

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.09 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 05:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 04:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 07:44	CH	EET MID

Client Sample ID: BH-175 (4.5')

Lab Sample ID: 890-2784-16

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

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	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')

Lab Sample ID: 890-2784-17

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 05:21	SM	EET MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-176 (4.5')

Lab Sample ID: 890-2784-17

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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')

Lab Sample ID: 890-2784-19

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33358	08/30/22 12:01	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33411	09/01/22 07:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32669	08/22/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1			32586	08/23/22 06:03	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 08:31	CH	EET MID

Client Sample ID: BH-179 (4.5')

Lab Sample ID: 890-2784-20

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: BH-180 (4.5')

Lab Sample ID: 890-2784-21

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	08/31/22 18:25	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			10.03 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 14:26	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		5	0 mL	0 mL	33168	08/29/22 08:54	CH	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-2784-24

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

**Client Sample ID: BH-183 (4.5')****Lab Sample ID: 890-2784-24****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	33361	08/30/22 12:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	08/31/22 19:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 16:17	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33168	08/29/22 09:34	CH	EET MID

**Client Sample ID: BH-185 (4.5')****Lab Sample ID: 890-2784-26****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 18:48	SM	EET MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

**Client Sample ID: BH-186 (4.5')****Lab Sample ID: 890-2784-27****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	32583	08/21/22 19:29	SMC	EET MID
Soluble	Analysis	300.0		5	0 mL	0 mL	33168	08/29/22 10:05	CH	EET MID

**Client Sample ID: BH-187 (4.5')****Lab Sample ID: 890-2784-28****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-38 (4.5-13')

Lab Sample ID: 890-2784-31

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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')

Lab Sample ID: 890-2784-32

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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 23:19	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 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		1	0 mL	0 mL	33168	08/29/22 10:44	CH	EET MID

Client Sample ID: SW-43 (6-8')

Lab Sample ID: 890-2784-33

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-2784-34

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

**Client Sample ID: SW-44 (4.5-8')****Lab Sample ID: 890-2784-34****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32714	08/22/22 16:33	DM	EET MID
Total/NA	Analysis	8015B NM		1			32806	08/24/22 20:58	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 14:49	CH	EET MID

**Client Sample ID: SW-45 (0-8')****Lab Sample ID: 890-2784-35****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 15:28	CH	EET MID

Client Sample ID: SW-48 (6-8')

Lab Sample ID: 890-2784-38

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-54 (0-4.5')

Lab Sample ID: 890-2784-41

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 MID
Soluble	Leach	DI Leach			4.97 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 16:23	CH	EET MID

Client Sample ID: SW-56 (0-4.5')

Lab Sample ID: 890-2784-43

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-2784-44

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-57 (6-8')

Lab Sample ID: 890-2784-44

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/25/22 00:12	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 16:39	CH	EET MID

Client Sample ID: SW-58 (6-8')

Lab Sample ID: 890-2784-45

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 07:01	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/25/22 00:54	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 17:10	CH	EET MID

Client Sample ID: SW-60 (0-13')

Lab Sample ID: 890-2784-47

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

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	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	Prep	8015NM Prep			10.02 g	10 mL	32774	08/23/22 10:46	DM	EET MID
Total/NA	Analysis	8015B NM		1			32808	08/25/22 01:16	AJ	EET MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

**Client Sample ID: SW-60 (0-13')****Lab Sample ID: 890-2784-47****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 07:42	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 20:43	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		10	0 mL	0 mL	33169	08/29/22 17:39	CH	EET MID

**Client Sample ID: SW-62 (8-13')****Lab Sample ID: 890-2784-49****Date Collected: 08/18/22 00:00****Matrix: Solid****Date Received: 08/19/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 08:22	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			32780	08/23/22 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 21:04	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	32584	08/21/22 19:35	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33169	08/29/22 17:54	CH	EET MID

Eurofins Carlsbad



## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-64 (8-10')

Lab Sample ID: 890-2784-51

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

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	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

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-2784-53

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-2784-54

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33362	08/30/22 12:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33465	09/01/22 12:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33551	09/01/22 12:44	SM	EET MID

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Date Collected: 08/18/22 00:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	Prep	8015NM Prep			10.04 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 22:29	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Client Sample ID: SW-70 (0-4.5')  
Date Collected: 08/18/22 00:00  
Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-57  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')  
Date Collected: 08/18/22 00:00  
Date Received: 08/19/22 08:00

Lab Sample ID: 890-2784-58  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
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- 12
- 13
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## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2784-1  
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

## 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

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### Analysis Request of Chain of Custody Record

# Tetra Tech, Inc.

Madrid, Texas 79705  
Tel (432) 662-4559  
Fax (432) 662-3946

Client Name:

Pernian Water Solutions

Site Manager:

Clair Gonzales

ANALYSIS

Project Name:

Kaiser SWD

Clair.Gonzales@tetratech.com

Project Location:

Lea County, NM

Project #:

212C-MD-02230

Invoice to:

Pernian Water Solutions - Dusty McInturf

Receiving Laboratory:

Eurofins Xenco

Sampler Signature:

Peyton Oliver

Comments:

LAB #  
(LAB USE ONLY)

## SAMPLE IDENTIFICATION

YEAR: 2020	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None			

BH-120 (8)	8/18/2022		X				X				
BH-124 (8)	8/18/2022		X				X				
BH-132 (8)	8/18/2022		X				X				
BH-159 (8)	8/18/2022		X				X				
BH-162 (8)	8/18/2022		X				X				
BH-164 (9)	8/18/2022		X				X				
BH-166 (8)	8/18/2022		X				X				
BH-167 (5)	8/18/2022		X				X				
BH-168 (5)	8/18/2022		X				X				
BH-169 (5)	8/18/2022		X				X				

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

LAB USE ONLY

Sample Temperature

REMARKS:  
☒ STANDARD

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

890-2784 Chain of Custody

Hold

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 V Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559

175872

**Client Name:** Permian Water Solutions

Site Manager: \_\_\_\_\_

Clair Gonzales

Project Name: Kaiser SWD

[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)

**Project Location:**  
(county, state)      Lea County, NM

Project #:

212C-MD-02230

**Invoice to:**

## Permian Water Solutions - Dusty McInturf

**Receiving Laboratory:**

**Sampler Signature:**

Eurofins Xenco

Peyton Oliver

**Comments:**

[illegible]

## ANALYSIS REQUEST

(Circle or Specify Method No.)

**Hold**

Analysis Request of Custody Record



Tetra Tech, Inc.

9011 W. Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Page 3 of 6

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: Clair.Gonzales@tetratech.com	
Project Location: Lea County, NM		Project #: 212C-MD-02230	
Invoice to: Permian Water Solutions - Dusty McInturf		Sampler Signature: Peyton Oliver	
Receiving Laboratory: Eurofins Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE			None
	BH-180 (4.5')	8/18/2022		X		X					
	BH-181 (4.5')	8/18/2022		X		X					
	BH-182 (4.5')	8/18/2022		X		X					
	BH-183 (4.5')	8/18/2022		X		X					
	BH-184 (4.5')	8/18/2022		X		X					
	BH-185 (4.5')	8/18/2022		X		X					
	BH-186 (4.5')	8/18/2022		X		X					
	BH-187 (4.5')	8/18/2022		X		X					
	BH-188 (4.5')	8/18/2022		X		X					
	BH-189 (4.5')	8/18/2022		X		X					

Relinquished by: [Signature]	Date: 8/19/22	Time:	Received by: [Signature]	Date: 8-19-22	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
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LAB USE ONLY	REMARKS:
<input checked="" type="checkbox"/> STANDARD	
<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr	
<input type="checkbox"/> Rush Charges Authorized	
<input type="checkbox"/> Special Report Limits or TRRP Report	

Sample Temperature	PSI
--------------------	-----

ANALYSIS REQUEST (Circle or Specify Method No.)
BTEX 8021B BTEX 8260B
TPH TX1005 (Ext to C35)
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
TCLP Volatiles
TCLP Semi Volatiles
RCI
GC/MS Vol. 8260B / 624
GC/MS Semi. Vol. 8270C/625
PCB's 8082 / 608
NORM
PLM (Asbestos)
Chloride
Chloride Sulfate TDS
General Water Chemistry (see attached list)
Anion/Cation Balance
Hold

ORIGINAL COPY









## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2784-1

SDG Number: Lea County NM

Login Number: 2784

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.	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: 890-2784-1

SDG Number: Lea County NM

Login Number: 2784

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 08/22/22 08:49 AM

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: 890-2785-1

Laboratory Sample Delivery Group: Lea County NM  
Client Project/Site: Kaiser SWD

**For:**

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

9/1/2022 12:08:19 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-2785-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

**Job ID: 890-2785-1**

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative  
890-2785-1**

**Receipt**

The samples were received on 8/19/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.0°C

**Receipt Exceptions**

The following samples were received at the laboratory outside the required temperature criteria: BH-110 (6') (890-2785-1), BH-154 (8') (890-2785-2) and SW-41 (6-13') (890-2785-3). There was no cooling media present in the cooler. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE\_ONE> proceed with/cancel analysis

890-2785 Sample temp 7.2/7.0 there was no temp blank and samples were taken on the 18th- client said they just brought samples from fridge with no cooler and no temp blank- wants to processed with testing

**GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (890-2781-A-1-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-32668 and analytical batch 880-32588 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

Client Sample ID: BH-110 (6')

Lab Sample ID: 890-2785-1

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 14:48	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		08/22/22 13:39	08/23/22 04:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 13:39	08/23/22 04:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:39	08/23/22 04:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	08/22/22 13:39	08/23/22 04:59	1
o-Terphenyl	96		70 - 130	08/22/22 13:39	08/23/22 04:59	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	388		4.98		mg/Kg			08/29/22 10:38	1

Client Sample ID: BH-154 (8')

Lab Sample ID: 890-2785-2

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

## 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		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

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

Client Sample ID: BH-154 (8')

Lab Sample ID: 890-2785-2

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

## 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 12:38	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/23/22 14:48	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 13:39	08/23/22 05:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/23/22 05:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/23/22 05:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				08/22/22 13:39	08/23/22 05:21	1
o-Terphenyl	104		70 - 130				08/22/22 13:39	08/23/22 05:21	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.9		5.03		mg/Kg			08/29/22 10:47	1

Client Sample ID: SW-41 (6-13')

Lab Sample ID: 890-2785-3

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Toluene	<0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Ethylbenzene	<0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
m-Xylene & p-Xylene	<0.0806	U	0.0806		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
o-Xylene	<0.0403	U	0.0403		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Xylenes, Total	<0.0806	U	0.0806		mg/Kg		08/30/22 11:43	09/01/22 00:23	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				08/30/22 11:43	09/01/22 00:23	20
1,4-Difluorobenzene (Surr)	93		70 - 130				08/30/22 11:43	09/01/22 00:23	20

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0806	U	0.0806		mg/Kg			09/01/22 12:38	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/23/22 14:48	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		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

Eurofins Carlsbad

## 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')

Lab Sample ID: 890-2785-3

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 13:39	08/23/22 05:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	08/22/22 13:39	08/23/22 05:42	1
o-Terphenyl	99		70 - 130	08/22/22 13:39	08/23/22 05:42	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	707		4.99		mg/Kg			08/29/22 10:56	1

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33353/5-A

Matrix: Solid

Analysis Batch: 33469

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33353

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-33353/2-A

Matrix: Solid

Analysis Batch: 33469

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33353

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Eurofins Carlsbad

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.101	0.09276		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1866		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.101	0.1040		mg/Kg		103	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-18581-A-21-F MSD

Matrix: Solid

Analysis Batch: 33469

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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: Method Blank

Prep Type: Total/NA

Prep Batch: 32668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/22/22 21:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/22/22 21:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 13:39	08/22/22 21:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	08/22/22 13:39	08/22/22 21:31	1
o-Terphenyl	96		70 - 130	08/22/22 13:39	08/22/22 21:31	1

Lab Sample ID: LCS 880-32668/2-A

Matrix: Solid

Analysis Batch: 32588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	962.3		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	942.6		mg/Kg		94	70 - 130

Eurofins Carlsbad



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-32668/2-A  
Matrix: Solid  
Analysis Batch: 32588

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 32668

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-32668/3-A  
Matrix: Solid  
Analysis Batch: 32588

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 32668

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	887.7		mg/Kg		89	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	941.0		mg/Kg		94	70 - 130	0	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 890-2781-A-1-E MS  
Matrix: Solid  
Analysis Batch: 32588

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 32668

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	1306		mg/Kg		127	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1201		mg/Kg		120	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 890-2781-A-1-F MSD  
Matrix: Solid  
Analysis Batch: 32588

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 32668

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	998	1415	F1	mg/Kg		138	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1042		mg/Kg		104	70 - 130	14	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	76		70 - 130

Eurofins Carlsbad

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32585/1-A

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/29/22 08:44	1

Lab Sample ID: LCS 880-32585/2-A

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.5		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-32585/3-A

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	248.0		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-2784-A-54-B MS

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	215		252	478.7		mg/Kg		105	90 - 110

Lab Sample ID: 890-2784-A-54-C MSD

Matrix: Solid

Analysis Batch: 33170

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	215		252	486.1		mg/Kg		108	90 - 110	2	20

Eurofins Carlsbad

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
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.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
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

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

Client Sample ID: BH-110 (6')

Lab Sample ID: 890-2785-1

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33353	08/30/22 11:43	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33469	09/01/22 02:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33548	09/01/22 12:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			32787	08/23/22 14:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32668	08/22/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1			32588	08/23/22 04:59	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 10:38	CH	EET MID

Client Sample ID: BH-154 (8')

Lab Sample ID: 890-2785-2

Date Collected: 08/18/22 12:00

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Matrix: Solid

Date Received: 08/19/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2785-1  
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: 890-2785-1  
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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

Midland, Texas 79705  
Tel (432) 882-4559

890-2785 Chain of Custody



Page 1 of 1

[illegible]

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2785-1

SDG Number: Lea County NM

Login Number: 2785

List Number: 1

Creator: Stutzman, Amanda

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.	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: 890-2785-1

SDG Number: Lea County NM

Login Number: 2785

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 08/22/22 08:49 AM

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:

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

Authorized for release by:

9/2/2022 10:38:17 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

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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: 890-2791-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

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
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Client Sample ID: SW-72 (0-4.5')

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ANALYSIS TABLE

Lab Sample ID: 890-2791-1

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	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 BTEX 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	921		49.9		mg/Kg			08/25/22 16:03	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		08/23/22 15:10	08/25/22 01:58	1
Diesel Range Organics (Over C10-C28)	921		49.9		mg/Kg		08/23/22 15:10	08/25/22 01:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/22 15:10	08/25/22 01:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				08/23/22 15:10	08/25/22 01:58	1
o-Terphenyl	105		70 - 130				08/23/22 15:10	08/25/22 01:58	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.36		0.0495		mg/Kg			08/24/22 15:18	1

Client Sample ID: BH-190 (4.5')

Lab Sample ID: 890-2791-2

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/31/22 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Client Sample ID: BH-190 (4.5')

Lab Sample ID: 890-2791-2

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## 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			09/02/22 11:24	1

## Method: 8015 NM - Diesel Range Organics (DRO) (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 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		08/23/22 15:10	08/25/22 08:35	1
Diesel Range Organics (Over C10-C28)	234		49.9		mg/Kg		08/23/22 15:10	08/25/22 08:35	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	686		5.02		mg/Kg			08/24/22 15:25	1

Client Sample ID: BH-191 (4.5')

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ANALYSIS TABLE

Lab Sample ID: 890-2791-3

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## 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		08/31/22 14:40	09/01/22 18:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/31/22 14:40	09/01/22 18:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				08/31/22 14:40	09/01/22 18:49	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/31/22 14:40	09/01/22 18:49	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/02/22 11:24	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1800		50.0		mg/Kg			08/25/22 16:03	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		08/23/22 15:10	08/25/22 02:41	1
Diesel Range Organics (Over C10-C28)	1800		50.0		mg/Kg		08/23/22 15:10	08/25/22 02:41	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Client Sample ID: BH-191 (4.5')

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2791-3

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil 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	D	Prepared	Analyzed	Dil Fac
Chloride	249		25.2		mg/Kg			08/24/22 15:49	5

Client Sample ID: BH-192 (4.5)

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-2791-4

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/31/22 14:40	09/01/22 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/31/22 14:40	09/01/22 19:09	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/31/22 14:40	09/01/22 19:09	1

## Method: Total BTEX - Total BTEX Calculation

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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2050		49.9		mg/Kg			08/25/22 16:03	1

## Method: 8015B NM - Diesel 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		08/23/22 15:10	08/25/22 03:02	1
Diesel Range Organics (Over C10-C28)	2050		49.9		mg/Kg		08/23/22 15:10	08/25/22 03:02	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.0		5.01		mg/Kg			08/24/22 15:57	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Client Sample ID: BH-193 (4.5')

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ANALYSIS TABLE

Lab Sample ID: 890-2791-5

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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	25
Ethylbenzene	<0.0497	U	0.0497		mg/Kg		08/31/22 14:40	09/01/22 21:32	25
m-Xylene & p-Xylene	<0.0994	U	0.0994		mg/Kg		08/31/22 14:40	09/01/22 21:32	25
o-Xylene	<0.0497	U	0.0497		mg/Kg		08/31/22 14:40	09/01/22 21:32	25
Xylenes, Total	<0.0994	U	0.0994		mg/Kg		08/31/22 14:40	09/01/22 21:32	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	08/31/22 14:40	09/01/22 21:32	25
1,4-Difluorobenzene (Surr)	85		70 - 130	08/31/22 14:40	09/01/22 21:32	25

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0994	U	0.0994		mg/Kg			09/02/22 11:24	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16000		250		mg/Kg			08/25/22 16:03	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	<250	U	250		mg/Kg		08/23/22 15:10	08/25/22 03:23	5
Diesel Range Organics (Over C10-C28)	16000		250		mg/Kg		08/23/22 15:10	08/25/22 03:23	5
OII Range Organics (Over C28-C36)	<250	U	250		mg/Kg		08/23/22 15:10	08/25/22 03:23	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130	08/23/22 15:10	08/25/22 03:23	5
o-Terphenyl	101		70 - 130	08/23/22 15:10	08/25/22 03:23	5

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	271		24.9		mg/Kg			08/24/22 16:20	5

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

## 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	08/31/22 14:40	09/01/22 18:00	1
1,4-Difluorobenzene (Surr)	116		70 - 130	08/31/22 14:40	09/01/22 18:00	1

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	94		70 - 130						
1,4-Difluorobenzene (Surr)	109		70 - 130						

Lab Sample ID: 890-2791-2 MSD

Matrix: Solid

Analysis Batch: 33557

Client Sample ID: BH-190 (4.5')

Prep Type: Total/NA

Prep Batch: 33466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.09702		mg/Kg		98	70 - 130	4	35
Toluene	<0.00200	U	0.0994	0.07575		mg/Kg		76	70 - 130	9	35
Ethylbenzene	<0.00200	U F1	0.0994	0.05323	F1	mg/Kg		54	70 - 130	11	35
m-Xylene & p-Xylene	<0.00399	U F1	0.199	0.09324	F1	mg/Kg		47	70 - 130	10	35
o-Xylene	<0.00200	U F1	0.0994	0.05060	F1	mg/Kg		51	70 - 130	12	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD 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

Matrix: Solid

Analysis Batch: 32797

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/24/22 12:02	1

Lab Sample ID: LCS 880-32736/2-A

Matrix: Solid

Analysis Batch: 32797

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.9		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-32736/3-A

Matrix: Solid

Analysis Batch: 32797

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	243.8		mg/Kg		98	90 - 110	0	20

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QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
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													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	686		251	918.4		mg/Kg		93	90 - 110	0	20		

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

## GC Semi VOA

## Analysis Batch: 32998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Total/NA	Solid	8015 NM	
890-2791-2	BH-190 (4.5')	Total/NA	Solid	8015 NM	
890-2791-3	BH-191 (4.5')	Total/NA	Solid	8015 NM	
890-2791-4	BH-192 (4.5')	Total/NA	Solid	8015 NM	
890-2791-5	BH-193 (4.5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 32736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Soluble	Solid	DI Leach	
890-2791-2	BH-190 (4.5')	Soluble	Solid	DI Leach	
890-2791-3	BH-191 (4.5')	Soluble	Solid	DI Leach	
890-2791-4	BH-192 (4.5')	Soluble	Solid	DI Leach	
890-2791-5	BH-193 (4.5')	Soluble	Solid	DI Leach	
MB 880-32736/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32736/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32736/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2791-2 MS	BH-190 (4.5')	Soluble	Solid	DI Leach	
890-2791-2 MSD	BH-190 (4.5')	Soluble	Solid	DI Leach	

## Analysis Batch: 32797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2791-1	SW-72 (0-4.5')	Soluble	Solid	300.0	32736
890-2791-2	BH-190 (4.5')	Soluble	Solid	300.0	32736
890-2791-3	BH-191 (4.5')	Soluble	Solid	300.0	32736
890-2791-4	BH-192 (4.5')	Soluble	Solid	300.0	32736
890-2791-5	BH-193 (4.5')	Soluble	Solid	300.0	32736
MB 880-32736/1-A	Method Blank	Soluble	Solid	300.0	32736
LCS 880-32736/2-A	Lab Control Sample	Soluble	Solid	300.0	32736
LCSD 880-32736/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32736
890-2791-2 MS	BH-190 (4.5')	Soluble	Solid	300.0	32736
890-2791-2 MSD	BH-190 (4.5')	Soluble	Solid	300.0	32736

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Client Sample ID: SW-72 (0-4.5')

Lab Sample ID: 890-2791-1

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

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	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

Matrix: Solid

Date Received: 08/19/22 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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)

Lab Sample ID: 890-2791-4

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Client Sample ID: BH-192 (4.5')

Lab Sample ID: 890-2791-4

Date Collected: 08/19/22 12:00

Matrix: Solid

Date Received: 08/19/22 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 08/19/22 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-2791-1  
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: 890-2791-1  
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2791-1	SW-72 (0-4.5')	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-2	BH-190 (4.5')	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-3	BH-191 (4.5')	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-4	BH-192 (4.5)	Solid	08/19/22 12:00	08/19/22 15:48
890-2791-5	BH-193 (4.5')	Solid	08/19/22 12:00	08/19/22 15:48

1

2

3

4

5

6

7

8

9

10

11

12

13

14



Analysis Request of Chain of Custody Record



890-2791 Chain of Custody

Page 1 of 1



Tetra Tech, Inc.

801 W. Wall Street, Ste. 100  
Midland, Texas 79705  
Tel (432) 682-4550  
Fax (432) 682-3946

Client Name:

Permian Water Solutions

Site Manager:

Clair Gonzales

Project Name:

Kaiser SMD

Clair.Gonzales@tetratech.com

Project Location:

Lea County, NM

Project #:

212C-MD-02230

Invoice to:

Permian Water Solutions - Dusty McInturf

Receiving Laboratory:

Eurofins Xence

Sampler Signature:

Repton Oliver

Comments:

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB #  
(LAB USE ONLY)

SAMPLE IDENTIFICATION

YEAR: 2020

DATE

TIME

WATER

SOIL

HCL

HNO<sub>3</sub>

ICE

None

# CONTAINERS

FILTERED (Y/N)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

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

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

Relinquished by:

Yacht 8/19/22 1548

Received by:

Clair Gonzales

Relinquished by:

Yacht 8/19/22 1548

Received by:

Clair Gonzales

Relinquished by:

Yacht 8/19/22 1548

Received by:

Clair Gonzales

LAB USE ONLY

STANDARD

Sample Temperature

26.8

26.8

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

ORIGINAL COPY

TMM-007

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-2791-1

SDG Number: Lea County NM

Login Number: 2791

List Number: 1

Creator: Stutzman, Amanda

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.	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

Login Number: 2791

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 08/23/22 10:32 AM

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: 890-3009-1

Laboratory Sample Delivery Group: Lea County NM  
Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/1/2022 7:08:10 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-3009-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

Client Sample ID: BH-185 (13')

Lab Sample ID: 890-3009-1

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 13

## 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		09/28/22 14:52	10/01/22 13:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 13:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/28/22 14:52	10/01/22 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/28/22 14:52	10/01/22 13:44	1
1,4-Difluorobenzene (Surr)	91		70 - 130	09/28/22 14:52	10/01/22 13:44	1

## Method: Total BTEX - Total BTEX 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 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 16:01	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 *1	50.0		mg/Kg		09/21/22 08:32	09/23/22 04:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/21/22 08:32	09/23/22 04:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 08:32	09/23/22 04:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	09/21/22 08:32	09/23/22 04:27	1
o-Terphenyl	111		70 - 130	09/21/22 08:32	09/23/22 04:27	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	591		24.9		mg/Kg			09/23/22 22:44	5

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

Sample Depth: 13

## 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		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)	117		70 - 130	09/28/22 14:52	10/01/22 14:04	1

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

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

Sample Depth: 13

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	09/28/22 14:52	10/01/22 14:04	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/22 19:44	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	84.3		49.9		mg/Kg			09/23/22 16:01	1

## 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 *1	49.9		mg/Kg		09/21/22 08:32	09/23/22 04:06	1
Diesel Range Organics (Over C10-C28)	84.3		49.9		mg/Kg		09/21/22 08:32	09/23/22 04:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/21/22 08:32	09/23/22 04:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/21/22 08:32	09/23/22 04:06	1
o-Terphenyl	94		70 - 130	09/21/22 08:32	09/23/22 04:06	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		25.1		mg/Kg			09/23/22 22:58	5

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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
890-3009-2	BH-186 (13')	104	94
LCS 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
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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

Analyte	MB Result	MB 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	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:52	10/01/22 07:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:52	10/01/22 07:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:52	10/01/22 07:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/28/22 14:52	10/01/22 07:33	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/28/22 14:52	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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-35620/2-A

Matrix: Solid

Analysis Batch: 35744

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35620

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08642		mg/Kg		86	70 - 130	7	35
Toluene	0.100	0.08244		mg/Kg		82	70 - 130	2	35
Ethylbenzene	0.100	0.09331		mg/Kg		93	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1962		mg/Kg		98	70 - 130	5	35
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.101	0.09638		mg/Kg		96	70 - 130
Toluene	<0.00201	U	0.101	0.08691		mg/Kg		86	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 880-19424-A-41-F MSD

Matrix: Solid

Analysis Batch: 35744

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35620

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD Qualifier	MSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	MB 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

Analyte	MB Result	MB 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 08:32	09/22/22 19:31	1

Eurofins Carlsbad



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35018

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 08:32	09/22/22 19:31	1
Surrogate	MB %Recovery	MB 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 880-35018/2-A

Matrix: Solid

Analysis Batch: 35120

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35018

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1066		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1068		mg/Kg		107	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	113		70 - 130				
o-Terphenyl	105		70 - 130				

Lab Sample ID: LCSD 880-35018/3-A

Matrix: Solid

Analysis Batch: 35120

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35018

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	821.3	*1	mg/Kg		82	70 - 130	26	20
Diesel Range Organics (Over C10-C28)	1000	889.0		mg/Kg		89	70 - 130	18	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	86		70 - 130						

Lab Sample ID: 880-19424-A-53-C MS

Matrix: Solid

Analysis Batch: 35120

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	76		70 - 130						

Eurofins Carlsbad

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-19424-A-53-D MSD

Matrix: Solid

Analysis Batch: 35120

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35018

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	786.3		mg/Kg		79	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	872.5		mg/Kg		87	70 - 130	0	20
Surrogate	MSD %Recovery	MSD 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

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/23/22 22:29	1

Lab Sample ID: LCS 880-35023/2-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.3		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-35023/3-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	247.2		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-3009-1 MS

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: BH-185 (13')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	591		1240	1868		mg/Kg		103	90 - 110

Lab Sample ID: 890-3009-1 MSD

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: BH-185 (13')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	591		1240	1873		mg/Kg		103	90 - 110	0	20

Eurofins Carlsbad

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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

Eurofins Carlsbad

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

## GC Semi VOA

## Analysis Batch: 35298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Total/NA	Solid	8015 NM	
890-3009-2	BH-186 (13')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 35023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Soluble	Solid	DI Leach	
890-3009-2	BH-186 (13')	Soluble	Solid	DI Leach	
MB 880-35023/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3009-1 MS	BH-185 (13')	Soluble	Solid	DI Leach	
890-3009-1 MSD	BH-185 (13')	Soluble	Solid	DI Leach	

## Analysis Batch: 35314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3009-1	BH-185 (13')	Soluble	Solid	300.0	35023
890-3009-2	BH-186 (13')	Soluble	Solid	300.0	35023
MB 880-35023/1-A	Method Blank	Soluble	Solid	300.0	35023
LCS 880-35023/2-A	Lab Control Sample	Soluble	Solid	300.0	35023
LCSD 880-35023/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35023
890-3009-1 MS	BH-185 (13')	Soluble	Solid	300.0	35023
890-3009-1 MSD	BH-185 (13')	Soluble	Solid	300.0	35023

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

Client Sample ID: BH-185 (13')  
Date Collected: 09/19/22 00:00  
Date Received: 09/20/22 10:22

Lab Sample ID: 890-3009-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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')  
Date Collected: 09/19/22 00:00  
Date Received: 09/20/22 10:22

Lab Sample ID: 890-3009-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3009-1  
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: 890-3009-1  
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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
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- 10
- 11
- 12
- 13
- 14



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3009-1

SDG Number: Lea County NM

Login Number: 3009

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.	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: 890-3009-1

SDG Number: Lea County NM

Login Number: 3009

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

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: 890-3010-1

Laboratory Sample Delivery Group: Lea County NM  
Client Project/Site: Kaiser SWD

For:

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

Authorized for release by:

10/3/2022 6:53:25 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.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.



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.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
*-	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.

## GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

Client Sample ID: Trench-1 (10')

Lab Sample ID: 890-3010-1

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 10

## Method: 8021B - Volatile Organic Compounds (GC)

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 BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	85.8		0.402		mg/Kg			10/02/22 08:53	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	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 Range Organics (DRO) (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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	991		25.2		mg/Kg			09/23/22 23:03	5

Client Sample ID: Trench-2 (5')

Lab Sample ID: 890-3010-2

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 5

## 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		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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

Client Sample ID: Trench-2 (5')

Lab Sample ID: 890-3010-2

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 5

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 (DRO) (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 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		09/22/22 11:26	09/23/22 21:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 11:26	09/23/22 21:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 11:26	09/23/22 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				09/22/22 11:26	09/23/22 21:40	1
o-Terphenyl	103		70 - 130				09/22/22 11:26	09/23/22 21:40	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4770		50.4		mg/Kg			09/23/22 23:08	10

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-19417-A-1-E MS	Matrix Spike	109	105
880-19417-A-1-F MSD	Matrix Spike Duplicate	112	100
890-3010-1	Trench-1 (10')	196 S1+	82
890-3010-2	Trench-2 (5')	116	104
890-3015-A-1-E MS	Matrix Spike	101	94
890-3015-A-1-F MSD	Matrix Spike Duplicate	108	107
LCS 880-35625/1-A	Lab Control Sample	109	100
LCS 880-35724/1-A	Lab Control Sample	76	73
LCSD 880-35625/2-A	Lab Control Sample Dup	104	99
LCSD 880-35724/2-A	Lab Control Sample Dup	128	123
MB 880-35625/5-A	Method Blank	101	114
MB 880-35628/5-A	Method Blank	105	105
MB 880-35692/5-A	Method Blank	99	83
MB 880-35724/5-A	Method Blank	100	76
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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+
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			



## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35625/5-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35625

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06312	*-	mg/Kg		63	70 - 130
Toluene	0.100	0.07231		mg/Kg		72	70 - 130
Ethylbenzene	0.100	0.07030		mg/Kg		70	70 - 130
m-Xylene & p-Xylene	0.200	0.1471		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07531		mg/Kg		75	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-35625/2-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35625

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-19417-A-1-E MS

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35625

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-19417-A-1-F MSD

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35625

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-35628/5-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35628

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/28/22 16:25	10/01/22 06:46	1
1,4-Difluorobenzene (Surr)	105		70 - 130	09/28/22 16:25	10/01/22 06:46	1

Lab Sample ID: MB 880-35692/5-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35692

Analyte	MB Result	MB 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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB 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 880-35724/5-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35724

Analyte	MB Result	MB 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
Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	76		70 - 130				
1,4-Difluorobenzene (Surr)	73		70 - 130				

Lab Sample ID: LCSD 880-35724/2-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35724

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
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

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Matrix Spike

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	

	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

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35724

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00200	U ** *1	0.0990	0.09916		mg/Kg		100	70 - 130	9	35	
Toluene	<0.00200	U ** *1	0.0990	0.1009		mg/Kg		102	70 - 130	5	35	
Ethylbenzene	<0.00200	U ** *1	0.0990	0.08894		mg/Kg		90	70 - 130	5	35	
m-Xylene & p-Xylene	<0.00401	U ** *1	0.198	0.1820		mg/Kg		92	70 - 130	4	35	
o-Xylene	<0.00200	U ** *1	0.0990	0.09773		mg/Kg		99	70 - 130	4	35	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35172/1-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35172

	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		09/22/22 11:26	09/23/22 20:35	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1	

	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				

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-35172/2-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35172

Analyte			Spike	LCS	LCS	Unit	D	%Rec		
			Added	Result	Qualifier			%Rec		
Gasoline Range Organics (GRO)-C6-C10			1000	960.3		mg/Kg		96	70 - 130	
Diesel Range Organics (Over C10-C28)			1000	891.9		mg/Kg		89	70 - 130	
Surrogate	LCS	LCS	Limits							
	%Recovery	Qualifier								
1-Chlorooctane	99		70 - 130							
o-Terphenyl	105		70 - 130							

Lab Sample ID: LCSD 880-35172/3-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35172

Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
			Added	Result	Qualifier			Limits	Limits		Limit
Gasoline Range Organics (GRO)-C6-C10			1000	960.5		mg/Kg		96	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	951.2		mg/Kg		95	70 - 130	6	20
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	106		70 - 130								
o-Terphenyl	108		70 - 130								

Lab Sample ID: 890-3010-2 MS

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Trench-2 (5')

Prep Type: Total/NA

Prep Batch: 35172

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	887.9		mg/Kg		87	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.9	U	996	998.1		mg/Kg		100	70 - 130			
Surrogate	MS	MS	Limits									
	%Recovery	Qualifier										
1-Chlorooctane	90		70 - 130									
o-Terphenyl	88		70 - 130									

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

	Sample	Sample	Spike	MSD	MSD			%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1050		mg/Kg		103	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1135		mg/Kg		114	70 - 130	13	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	103		70 - 130								

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3010-2 MSD

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Trench-2 (5')

Prep Type: Total/NA

Prep Batch: 35172

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	99		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35023/1-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			09/23/22 22:29	1	

Lab Sample ID: LCS 880-35023/2-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			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

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			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-A-1-C MS

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Matrix Spike

Prep Type: Soluble

	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-A-1-D MSD

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

	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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

## GC VOA

## Prep Batch: 35625

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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
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

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Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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')  
Date Collected: 09/19/22 00:00  
Date Received: 09/20/22 10:22

Lab Sample ID: 890-3010-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/01/22 21:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35881	10/02/22 08:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35412	09/26/22 13:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/23/22 21:40	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		10			35314	09/23/22 23:08	CH	EET MID

Laboratory References:  
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3010-1  
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: 890-3010-1  
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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14





## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3010-1

SDG Number: Lea County NM

Login Number: 3010

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.	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: 890-3010-1

SDG Number: Lea County NM

Login Number: 3010

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

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: 890-3011-1

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

Authorized for release by:

10/3/2022 6:54:20 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-3011-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

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 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)	110		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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel Range 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		09/22/22 08:45	09/22/22 20:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 20:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 20:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	09/22/22 08:45	09/22/22 20:34	1
o-Terphenyl	101		70 - 130	09/22/22 08:45	09/22/22 20:34	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.0		4.99		mg/Kg			09/23/22 23:13	1

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

Sample Depth: 0 - 2

## 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		09/28/22 14:59	10/01/22 07:16	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 07:16	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/28/22 14:59	10/01/22 07:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/28/22 14:59	10/01/22 07:16	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

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

Sample Depth: 0 - 2

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	09/28/22 14:59	10/01/22 07:16	1

## Method: 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	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 (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 21:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 21:39	1
Oil 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
o-Terphenyl	94		70 - 130				09/22/22 08:45	09/22/22 21:39	1

## Method: 300.0 - Anions, Ion Chromatography - 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

Matrix: Solid

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 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 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 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Client Sample ID: H-3 (0-2')

## Lab Sample ID: 890-3011-3

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

## 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		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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.3		5.00		mg/Kg			09/23/22 23:32	1

## Client Sample ID: H-4 (0-2')

## Lab Sample ID: 890-3011-4

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

## 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		09/28/22 14:59	10/01/22 08:08	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/28/22 14:59	10/01/22 08:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				09/28/22 14:59	10/01/22 08:08	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:59	10/01/22 08:08	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel Range 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		09/22/22 08:45	09/22/22 22:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 22:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/22/22 22:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				09/22/22 08:45	09/22/22 22:22	1
o-Terphenyl	115		70 - 130				09/22/22 08:45	09/22/22 22:22	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Client Sample ID: H-4 (0-2')

## Lab Sample ID: 890-3011-4

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 2

## Method: 300.0 - Anions, Ion 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')

## Lab Sample ID: 890-3011-5

Date Collected: 09/19/22 00:00

Matrix: Solid

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 Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 14:59	10/01/22 08:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				09/28/22 14:59	10/01/22 08:35	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/28/22 14:59	10/01/22 08:35	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range 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

## 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		09/22/22 08:45	09/22/22 22:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 22:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				09/22/22 08:45	09/22/22 22:43	1
o-Terphenyl	104		70 - 130				09/22/22 08:45	09/22/22 22:43	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.0		5.03		mg/Kg			09/23/22 23:42	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

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

Sample Depth: 0 - 2

## 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		09/28/22 14:59	10/01/22 09:01	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 09:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 09:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/28/22 14:59	10/01/22 09:01	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/28/22 14:59	10/01/22 09:01	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (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

## 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		09/22/22 08:45	09/22/22 23:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 23:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 23:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/22/22 08:45	09/22/22 23:05	1
o-Terphenyl	126		70 - 130	09/22/22 08:45	09/22/22 23:05	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.1		4.98		mg/Kg			09/23/22 23:47	1

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

Sample Depth: 0 - 2

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 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)	122		70 - 130	09/28/22 14:59	10/01/22 09:37	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

Sample Depth: 0 - 2

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	09/28/22 14:59	10/01/22 09:37	1

## Method: 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/22/22 23:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/22/22 08:45	09/22/22 23:26	1
o-Terphenyl	93		70 - 130				09/22/22 08:45	09/22/22 23:26	1

## Method: 300.0 - Anions, Ion Chromatography - 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')

Lab Sample ID: 890-3011-8

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

## 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		09/28/22 14:59	10/01/22 10:04	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 10:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/28/22 14:59	10/01/22 10:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 14:59	10/01/22 10:04	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/28/22 14:59	10/01/22 10:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/28/22 14:59	10/01/22 10:04	1
1,4-Difluorobenzene (Surr)	90		70 - 130	09/28/22 14:59	10/01/22 10:04	1

## 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	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	94.3		50.0		mg/Kg			09/23/22 12:25	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## 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

Sample Depth: 8

## 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		09/22/22 08:45	09/23/22 02:18	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>94.3</b>		50.0		mg/Kg		09/22/22 08:45	09/23/22 02:18	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	267		4.99		mg/Kg			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

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

## 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		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 (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

## 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		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
Oil 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Client Sample ID: BH-192 (8')

## Lab Sample ID: 890-3011-9

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	249		4.99		mg/Kg			09/24/22 00:12	1

## Client Sample ID: BH-193 (8')

## Lab Sample ID: 890-3011-10

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

## 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		09/28/22 14:59	10/01/22 10:57	1
Toluene	<0.00201	U *	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 14:59	10/01/22 10:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				09/28/22 14:59	10/01/22 10:57	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/28/22 14:59	10/01/22 10:57	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	64.0		50.0		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel 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		09/22/22 08:45	09/23/22 01:56	1
Diesel Range Organics (Over C10-C28)	64.0		50.0		mg/Kg		09/22/22 08:45	09/23/22 01:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/23/22 01:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/22/22 08:45	09/23/22 01:56	1
o-Terphenyl	94		70 - 130				09/22/22 08:45	09/23/22 01:56	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.4		4.96		mg/Kg			09/24/22 00:26	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-194 (8')

Lab Sample ID: 890-3011-11

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Toluene	<0.00199	U *-	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/28/22 14:59	10/01/22 12:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 14:59	10/01/22 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/28/22 14:59	10/01/22 12:42	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/28/22 14:59	10/01/22 12:42	1

## Method: Total BTEX - Total 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	986		49.9		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel 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		09/22/22 08:45	09/23/22 02:40	1
Diesel Range Organics (Over C10-C28)	817		49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	1
Oil Range Organics (Over C28-C36)	169		49.9		mg/Kg		09/22/22 08:45	09/23/22 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	09/22/22 08:45	09/23/22 02:40	1
o-Terphenyl	117		70 - 130	09/22/22 08:45	09/23/22 02:40	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.8		5.00		mg/Kg			09/24/22 00:31	1

Client Sample ID: BH-195 (8')

Lab Sample ID: 890-3011-12

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

## Method: 8021B - Volatile Organic Compounds (GC)

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 Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-195 (8')

Lab Sample ID: 890-3011-12

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	09/28/22 14:59	10/01/22 13:08	1
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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel Range 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		09/22/22 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
Oil 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
1-Chlorooctane	87		70 - 130				09/22/22 08:45	09/23/22 00:09	1
o-Terphenyl	94		70 - 130				09/22/22 08:45	09/23/22 00:09	1

## Method: 300.0 - Anions, Ion Chromatography - 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

## 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		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 BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/23/22 12:25	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

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

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 00:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 00:30	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1110		25.2		mg/Kg			09/24/22 00:41	5

Client Sample ID: BH-197 (4.5')

Lab Sample ID: 890-3011-14

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

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 (DRO) (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 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		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
Oil 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-197 (4.5')

Lab Sample ID: 890-3011-14

Date Collected: 09/19/22 00:00

Matrix: Solid

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

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	1
Toluene	<0.00202	U *	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/28/22 14:59	10/01/22 14:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/28/22 14:59	10/01/22 14:26	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/28/22 14:59	10/01/22 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130				09/28/22 14:59	10/01/22 14:26	1
1,4-Difluorobenzene (Surr)	94		70 - 130				09/28/22 14:59	10/01/22 14:26	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			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	<49.8	U	49.8		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	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 01:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 01:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/22 08:45	09/23/22 01:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/22/22 08:45	09/23/22 01:13	1
o-Terphenyl	95		70 - 130				09/22/22 08:45	09/23/22 01:13	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4900		25.0		mg/Kg			09/24/22 00:51	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-199 (4.5')

Lab Sample ID: 890-3011-16

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

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 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 (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel Range 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		09/22/22 08:45	09/23/22 01:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 01:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/22 08:45	09/23/22 01:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	09/22/22 08:45	09/23/22 01:35	1
o-Terphenyl	100		70 - 130	09/22/22 08:45	09/23/22 01:35	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	528		5.03		mg/Kg			09/24/22 00:55	1

Client Sample ID: BH-200 (4.5')

Lab Sample ID: 890-3011-17

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

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ANALYSIS TABLE

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0201	U	0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Toluene	<0.0201	U *	0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Ethylbenzene	0.0529		0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
m-Xylene & p-Xylene	0.116		0.0402		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		09/28/22 14:59	10/01/22 16:10	10
Xylenes, Total	0.116		0.0402		mg/Kg		09/28/22 14:59	10/01/22 16:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	09/28/22 14:59	10/01/22 16:10	10

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-200 (4.5')

Lab Sample ID: 890-3011-17

Date Collected: 09/19/22 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87		70 - 130	09/28/22 14:59	10/01/22 16:10	10

## Method: Total BTEX - Total BTEX Calculation

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

## Method: 8015 NM - Diesel Range 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

## 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		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
Oil 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 - 130				09/22/22 08:45	09/23/22 03:23	1
o-Terphenyl	90		70 - 130				09/22/22 08:45	09/23/22 03:23	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

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')

Lab Sample ID: 890-3011-18

Date Collected: 09/19/22 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0230		0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Toluene	<0.0200	U *-	0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Ethylbenzene	0.374		0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
m-Xylene & p-Xylene	1.01		0.0399		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
o-Xylene	0.368		0.0200		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Xylenes, Total	1.38		0.0399		mg/Kg		09/28/22 14:59	10/01/22 16:36	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	230	S1+	70 - 130				09/28/22 14:59	10/01/22 16:36	10
1,4-Difluorobenzene (Surr)	98		70 - 130				09/28/22 14:59	10/01/22 16:36	10

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.78		0.0399		mg/Kg			10/01/22 19:48	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

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

Sample Depth: 4.5

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ANALYSIS TABLE

Matrix: Solid

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

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 Range Organics (DRO) (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
Oil 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 Chromatography - 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')

Lab Sample ID: 890-3011-19

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 4.5

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		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 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 11:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 11:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 11:43	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Client Sample ID: BH-202 (4.5')

Lab Sample ID: 890-3011-19

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

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	5

## Client Sample ID: BH-203 (4.5')

Lab Sample ID: 890-3011-20

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

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	1
Toluene	<0.00198	U *-	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/28/22 14:59	10/01/22 15:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/28/22 14:59	10/01/22 15:44	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/28/22 14:59	10/01/22 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	09/28/22 14:59	10/01/22 15:44	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/28/22 14:59	10/01/22 15:44	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			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	<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		09/23/22 11:03	09/24/22 12:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/23/22 11:03	09/24/22 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	09/23/22 11:03	09/24/22 12:48	1
o-Terphenyl	110		70 - 130	09/23/22 11:03	09/24/22 12:48	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		4.99		mg/Kg			09/23/22 20:22	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-204 (4.5')

Lab Sample ID: 890-3011-21

Date Collected: 09/19/22 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U *	0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Toluene	<0.0200	U	0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
m-Xylene & p-Xylene	0.0689		0.0399		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
o-Xylene	0.170		0.0200		mg/Kg		09/28/22 16:17	10/01/22 22:31	10
Xylenes, Total	0.239		0.0399		mg/Kg		09/28/22 16:17	10/01/22 22:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	789	S1+	70 - 130	09/28/22 16:17	10/01/22 22:31	10
1,4-Difluorobenzene (Surr)	96		70 - 130	09/28/22 16:17	10/01/22 22:31	10

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.239		0.0399		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	857		50.0		mg/Kg			09/23/22 12:25	1

## Method: 8015B NM - Diesel 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		09/22/22 11:26	09/24/22 05:14	1
Diesel Range Organics (Over C10-C28)	739		50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	1
Oil Range Organics (Over C28-C36)	118		50.0		mg/Kg		09/22/22 11:26	09/24/22 05:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	09/22/22 11:26	09/24/22 05:14	1
o-Terphenyl	94		70 - 130	09/22/22 11:26	09/24/22 05:14	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2870		24.9		mg/Kg			09/23/22 20:27	5

Client Sample ID: BH-205 (4.5')

Lab Sample ID: 890-3011-22

Date Collected: 09/19/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-205 (4.5')

Lab Sample ID: 890-3011-22

Date Collected: 09/19/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130				09/29/22 16:18	10/03/22 19:15	100
1,4-Difluorobenzene (Surr)	84		70 - 130				09/29/22 16:18	10/03/22 19:15	100
<b>Method: Total BTEX - Total BTEX Calculation</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	30.8		0.399		mg/Kg			10/01/22 19:48	1
<b>Method: 8015 NM - Diesel Range Organics (DRO) (GC)</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3640		49.9		mg/Kg			09/23/22 12:25	1
<b>Method: 8015B NM - Diesel Range Organics (DRO) (GC)</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	582		49.9		mg/Kg		09/22/22 11:26	09/24/22 04:09	1
Diesel Range Organics (Over C10-C28)	2690		49.9		mg/Kg		09/22/22 11:26	09/24/22 04:09	1
Oil Range Organics (Over C28-C36)	372		49.9		mg/Kg		09/22/22 11:26	09/24/22 04:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				09/22/22 11:26	09/24/22 04:09	1
o-Terphenyl	115		70 - 130				09/22/22 11:26	09/24/22 04:09	1
<b>Method: 300.0 - Anions, Ion Chromatography - Soluble</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1410		25.0		mg/Kg			09/23/22 20:41	5

Client Sample ID: BH-206 (4.5')

Lab Sample ID: 890-3011-23

Date Collected: 09/19/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

<b>Method: 8021B - Volatile Organic Compounds (GC)</b>									
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
<b>Method: Total BTEX - Total BTEX Calculation</b>									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.24		0.0398		mg/Kg			10/01/22 19:48	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-206 (4.5')

Lab Sample ID: 890-3011-23

Date Collected: 09/19/22 00:00

REMOVED FROM  
ANALYSIS TABLE

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

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 Range Organics (DRO) (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
Oil 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 Chromatography - 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')

Lab Sample ID: 890-3011-24

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *	0.00202		mg/Kg		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 Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			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

## 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		09/22/22 11:26	09/24/22 03:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 03:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/24/22 03:26	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## 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

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
Chloride	4000		49.7		mg/Kg			09/23/22 20:51	10

## 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

Sample Depth: 8 - 13

## 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		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 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

## 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		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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		4.96		mg/Kg			09/23/22 20:56	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: SW-72 (0-8')

Lab Sample ID: 890-3011-26

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 8

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *	0.00199		mg/Kg		09/28/22 16:17	10/02/22 01:22	1
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	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 01:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 01:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 01:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/28/22 16:17	10/02/22 01:22	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/28/22 16:17	10/02/22 01:22	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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	436		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		09/22/22 11:26	09/24/22 04:53	1
Diesel Range Organics (Over C10-C28)	348		49.9		mg/Kg		09/22/22 11:26	09/24/22 04:53	1
Oil Range Organics (Over C28-C36)	87.6		49.9		mg/Kg		09/22/22 11:26	09/24/22 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/22/22 11:26	09/24/22 04:53	1
o-Terphenyl	121		70 - 130	09/22/22 11:26	09/24/22 04:53	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.1		4.97		mg/Kg			09/23/22 21:01	1

Client Sample ID: SW-73 (6-13')

Lab Sample ID: 890-3011-27

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 6 - 13

## 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		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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: SW-73 (6-13')

Lab Sample ID: 890-3011-27

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 6 - 13

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/28/22 16:17	10/02/22 01:42	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/28/22 16:17	10/02/22 01:42	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			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	<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
Oil 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
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')

Lab Sample ID: 890-3011-28

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/28/22 16:17	10/02/22 02:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/28/22 16:17	10/02/22 02:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/28/22 16:17	10/02/22 02:03	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/28/22 16:17	10/02/22 02:03	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 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: SW-74 (8-13')

Lab Sample ID: 890-3011-28

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 8 - 13

## 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		09/21/22 15:33	09/22/22 03:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 03:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 03:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				09/21/22 15:33	09/22/22 03:32	1
o-Terphenyl	132	S1+	70 - 130				09/21/22 15:33	09/22/22 03:32	1

## Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800		25.2		mg/Kg			09/23/22 21:20	5

Client Sample ID: SW-75 (0-4.5')

Lab Sample ID: 890-3011-29

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 4.5

REMOVED FROM  
ANALYSIS TABLE

## 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	10/02/22 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 BTEX 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 Range Organics (DRO) (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 Range Organics (DRO) (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 C10-C28)	1020		49.9		mg/Kg		09/21/22 15:33	09/22/22 03:53	1
Oil 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
o-Terphenyl	110		70 - 130				09/21/22 15:33	09/22/22 03:53	1

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## Client Sample Results

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

Lab Sample ID: 890-3011-29

Matrix: Solid

REMOVED FROM  
ANALYSIS TABLE

## 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')

Date Collected: 09/19/22 00:00

Date Received: 09/20/22 10:22

Sample Depth: 0 - 4.5

Lab Sample ID: 890-3011-30

Matrix: Solid

REMOVED FROM  
ANALYSIS TABLE

## 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		09/28/22 16:17	10/02/22 02:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/28/22 16:17	10/02/22 02:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/28/22 16:17	10/02/22 02:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/28/22 16:17	10/02/22 02:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/28/22 16:17	10/02/22 02:23	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/28/22 16:17	10/02/22 02:23	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/22 19:48	1

## Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.1		50.0		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	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/22/22 04:14	1
Diesel Range Organics (Over C10-C28)	60.1		50.0		mg/Kg		09/21/22 15:33	09/22/22 04:14	1
Oil 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: SW-77 (0-4.5')

Lab Sample ID: 890-3011-31

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Sample Depth: 0 - 4.5

## Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		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
Total BTEX	<0.00399	U	0.00399		mg/Kg			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	81.7		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 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
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3710		24.8		mg/Kg			09/23/22 21:44	5

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (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
890-3011-16	BH-199 (4.5')	126	93
890-3011-17	BH-200 (4.5')	135 S1+	87
890-3011-18	BH-201 (4.5')	230 S1+	98
890-3011-19	BH-202 (4.5')	126	94
890-3011-20	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
890-3011-23	BH-206 (4.5')	126	65 S1-
890-3011-24	BH-207 (4.5')	117	104
890-3011-25	SW-62 (8-13')	112	105
890-3011-26	SW-72 (0-8')	108	96
890-3011-27	SW-73 (6-13')	108	98
890-3011-28	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
890-3015-A-1-E MS	Matrix Spike	101	94
890-3015-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
LCS 880-35724/1-A	Lab Control Sample	76	73
LCSD 880-35621/2-A	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	89
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.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Surrogate Legend

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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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	H-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	BH-199 (4.5')	90	100
890-3011-17	BH-200 (4.5')	89	90
890-3011-18	BH-201 (4.5')	96	94
890-3011-19	BH-202 (4.5')	105	98
890-3011-19 MS	BH-202 (4.5')	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

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Surrogate Summary

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)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35621/5-A

Matrix: Solid

Analysis Batch: 35814

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35621

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	09/28/22 14:59	10/01/22 06:24	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/28/22 14:59	10/01/22 06:24	1

Lab Sample ID: LCS 880-35621/1-A

Matrix: Solid

Analysis Batch: 35814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35621

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-35621/2-A

Matrix: Solid

Analysis Batch: 35814

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35621

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 890-3011-1 MSD

Matrix: Solid

Analysis Batch: 35814

Client Sample ID: H-1 (0-2')

Prep Type: Total/NA

Prep Batch: 35621

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD Qualifier	MSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.07531		mg/Kg		75	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-35625/2-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35625

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-19417-A-1-E MS

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35625

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-19417-A-1-F MSD

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35625

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-35628/5-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35628

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1	
Toluene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/28/22 16:25	10/01/22 06:46	1	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/28/22 16:25	10/01/22 06:46	1	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/28/22 16:25	10/01/22 06:46	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	105		70 - 130				09/28/22 16:25	10/01/22 06:46	1	
1,4-Difluorobenzene (Surr)	105		70 - 130				09/28/22 16:25	10/01/22 06:46	1	

Lab Sample ID: MB 880-35692/5-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35692

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1	
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/22 11:56	10/02/22 22:18	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/22 11:56	10/02/22 22:18	1	
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	
	MB	MB								
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

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	

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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
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

	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

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						

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-35724/2-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35724

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,4-Difluorobenzene (Surr)	123		70 - 130

Lab Sample ID: 890-3015-A-1-E MS

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Matrix Spike

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

	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

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35724

	Sample	Sample	Spike	MSD	MSD			%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U ** *1	0.0990	0.09916		mg/Kg		100	70 - 130	9	35
Toluene	<0.00200	U ** *1	0.0990	0.1009		mg/Kg		102	70 - 130	5	35
Ethylbenzene	<0.00200	U ** *1	0.0990	0.08894		mg/Kg		90	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U ** *1	0.198	0.1820		mg/Kg		92	70 - 130	4	35
o-Xylene	<0.00200	U ** *1	0.0990	0.09773		mg/Kg		99	70 - 130	4	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35103/1-A

Matrix: Solid

Analysis Batch: 35007

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35103

	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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/22 15:33	09/21/22 19:44		1

	MB	MB								
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			

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## QC Sample Results

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: LCS 880-35103/2-A

Matrix: Solid

Analysis Batch: 35007

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35103

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1038		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	978.2		mg/Kg		98	70 - 130		

Lab Sample ID: LCSD 880-35103/3-A

Matrix: Solid

Analysis Batch: 35007

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35103

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	946.6		mg/Kg		95	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1014		mg/Kg		101	70 - 130	4	20
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	93		70 - 130								
o-Terphenyl	105		70 - 130								

Lab Sample ID: 880-19485-A-21-F MS

Matrix: Solid

Analysis Batch: 35007

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35103

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	962.8		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1097		mg/Kg		108	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
o-Terphenyl	102		70 - 130								

Lab Sample ID: 880-19485-A-21-G MSD

Matrix: Solid

Analysis Batch: 35007

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

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 (GRO)-C6-C10	<49.9	U	999	912.2		mg/Kg		89	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1095		mg/Kg		108	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-19485-A-21-G MSD

Matrix: Solid

Analysis Batch: 35007

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35103

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	101		70 - 130

Lab Sample ID: MB 880-35130/1-A

Matrix: Solid

Analysis Batch: 35122

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35130

	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		09/22/22 08:45	09/22/22 19:31	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 19:31	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 08:45	09/22/22 19:31	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
1-Chlorooctane	110		70 - 130				09/22/22 08:45	09/22/22 19:31	1	
<i>o</i> -Terphenyl	124		70 - 130				09/22/22 08:45	09/22/22 19:31	1	

Lab Sample ID: LCS 880-35130/2-A

Matrix: Solid

Analysis Batch: 35122

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35130

		Spike	LCS	LCS				%Rec		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10		1000	914.4		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)		1000	844.8		mg/Kg		84	70 - 130		
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	95		70 - 130							
<i>o</i> -Terphenyl	96		70 - 130							

Lab Sample ID: LCSD 880-35130/3-A

Matrix: Solid

Analysis Batch: 35122

Client Sample ID: Lab Control Sample Dup

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 (GRO)-C6-C10			1000	883.3		mg/Kg		88	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	908.3		mg/Kg		91	70 - 130	7	20
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	100		70 - 130								
o-Terphenyl	103		70 - 130								

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## QC Sample Results

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: 890-3011-1 MS

Matrix: Solid

Analysis Batch: 35122

Client Sample ID: H-1 (0-2')

Prep Type: Total/NA

Prep Batch: 35130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	923.1		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1069		mg/Kg		107	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: 890-3011-1 MSD

Matrix: Solid

Analysis Batch: 35122

Client Sample ID: H-1 (0-2')

Prep Type: Total/NA

Prep Batch: 35130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	93		70 - 130								

Lab Sample ID: MB 880-35172/1-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/22 11:26	09/23/22 20:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				09/22/22 11:26	09/23/22 20:35	1
o-Terphenyl	139	S1+	70 - 130				09/22/22 11:26	09/23/22 20:35	1

Lab Sample ID: LCS 880-35172/2-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	960.3		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	891.9		mg/Kg		89	70 - 130

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## QC Sample Results

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: LCS 880-35172/2-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35172

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-35172/3-A

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35172

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	960.5		mg/Kg		96	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	951.2		mg/Kg		95	70 - 130	6	20

	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

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	887.9		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	998.1		mg/Kg		100	70 - 130		

	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

Matrix: Solid

Analysis Batch: 35220

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1050		mg/Kg		103	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1135		mg/Kg		114	70 - 130	13	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	99		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-35262/1-A

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/23/22 11:03	09/24/22 10:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/23/22 11:03	09/24/22 10:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/23/22 11:03	09/24/22 10:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				09/23/22 11:03	09/24/22 10:38	1
o-Terphenyl	124		70 - 130				09/23/22 11:03	09/24/22 10:38	1

Lab Sample ID: LCS 880-35262/2-A

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	887.2		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1002		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	921.2		mg/Kg		92	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	973.8		mg/Kg		97	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	861.2		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	965.0		mg/Kg		92	70 - 130

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## QC Sample Results

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: 890-3011-19 MS

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: BH-202 (4.5')

Prep Type: Total/NA

Prep Batch: 35262

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-3011-19 MSD

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: BH-202 (4.5')

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
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	892.1		mg/Kg		89	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	971.0		mg/Kg		93	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	112		70 - 130								
o-Terphenyl	89		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35024/1-A

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			09/23/22 19:42	1	

Lab Sample ID: LCS 880-35024/2-A

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	246.5		mg/Kg		99	90 - 110			

Lab Sample ID: LCSD 880-35024/3-A

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	247.9		mg/Kg		99	90 - 110	1	20	

Lab Sample ID: 890-3011-17 MS

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: BH-200 (4.5')

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	3220		1260	4518		mg/Kg		104	90 - 110		

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3011-17 MSD

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: BH-200 (4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3220		1260	4521		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-3011-27 MS

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: SW-73 (6-13')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	394		252	632.7		mg/Kg		95	90 - 110		

Lab Sample ID: 890-3011-27 MSD

Matrix: Solid

Analysis Batch: 35313

Client Sample ID: SW-73 (6-13')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	394		252	632.9		mg/Kg		95	90 - 110	0	20

Lab Sample ID: MB 880-35023/1-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/23/22 22:29	1

Lab Sample ID: LCS 880-35023/2-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	246.3		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-35023/3-A

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	247.2		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-3011-7 MS

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: H-7 (0-2')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	26.7		252	284.1		mg/Kg		102	90 - 110		

Lab Sample ID: 890-3011-7 MSD

Matrix: Solid

Analysis Batch: 35314

Client Sample ID: H-7 (0-2')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	26.7		252	284.2		mg/Kg		102	90 - 110	0	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## GC VOA

## Prep Batch: 35621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	
890-3011-28	SW-74 (8-13')	Total/NA	Solid	5035	
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	5035	
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	5035	
890-3011-31	SW-77 (0-4.5')	Total/NA	Solid	5035	
MB 880-35625/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35625/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35625/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19417-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19417-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 35628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35628/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 35692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35692/5-A	Method Blank	Total/NA	Solid	5035	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## GC VOA

## Prep Batch: 35720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35720/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 35724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-22	BH-205 (4.5')	Total/NA	Solid	5035	
MB 880-35724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 35814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Total/NA	Solid	8021B	35621
890-3011-2	H-2 (0-2')	Total/NA	Solid	8021B	35621
890-3011-3	H-3 (0-2')	Total/NA	Solid	8021B	35621
890-3011-4	H-4 (0-2')	Total/NA	Solid	8021B	35621
890-3011-5	H-5 (0-2')	Total/NA	Solid	8021B	35621
890-3011-6	H-6 (0-2')	Total/NA	Solid	8021B	35621
890-3011-7	H-7 (0-2')	Total/NA	Solid	8021B	35621
890-3011-8	BH-191 (8')	Total/NA	Solid	8021B	35621
890-3011-9	BH-192 (8')	Total/NA	Solid	8021B	35621
890-3011-10	BH-193 (8')	Total/NA	Solid	8021B	35621
890-3011-11	BH-194 (8')	Total/NA	Solid	8021B	35621
890-3011-12	BH-195 (8')	Total/NA	Solid	8021B	35621
890-3011-13	BH-196 (4.5')	Total/NA	Solid	8021B	35621
890-3011-14	BH-197 (4.5')	Total/NA	Solid	8021B	35621
890-3011-15	BH-198 (4.5')	Total/NA	Solid	8021B	35621
890-3011-16	BH-199 (4.5')	Total/NA	Solid	8021B	35621
890-3011-17	BH-200 (4.5')	Total/NA	Solid	8021B	35621
890-3011-18	BH-201 (4.5')	Total/NA	Solid	8021B	35621
890-3011-19	BH-202 (4.5')	Total/NA	Solid	8021B	35621
890-3011-20	BH-203 (4.5')	Total/NA	Solid	8021B	35621
MB 880-35621/5-A	Method Blank	Total/NA	Solid	8021B	35621
MB 880-35720/5-A	Method Blank	Total/NA	Solid	8021B	35720
LCS 880-35621/1-A	Lab Control Sample	Total/NA	Solid	8021B	35621
LCSD 880-35621/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35621
890-3011-1 MS	H-1 (0-2')	Total/NA	Solid	8021B	35621
890-3011-1 MSD	H-1 (0-2')	Total/NA	Solid	8021B	35621

## Analysis Batch: 35815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-21	BH-204 (4.5')	Total/NA	Solid	8021B	35625
890-3011-23	BH-206 (4.5')	Total/NA	Solid	8021B	35625
890-3011-24	BH-207 (4.5')	Total/NA	Solid	8021B	35625
890-3011-25	SW-62 (8-13')	Total/NA	Solid	8021B	35625
890-3011-26	SW-72 (0-8')	Total/NA	Solid	8021B	35625
890-3011-27	SW-73 (6-13')	Total/NA	Solid	8021B	35625
890-3011-28	SW-74 (8-13')	Total/NA	Solid	8021B	35625
890-3011-29	SW-75 (0-4.5')	Total/NA	Solid	8021B	35625
890-3011-30	SW-76 (0-4.5')	Total/NA	Solid	8021B	35625

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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 Batch
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## GC Semi VOA

## Prep Batch: 35130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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

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## QC Association Summary

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

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## HPLC/IC

## Leach Batch: 35023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-1	H-1 (0-2')	Soluble	Solid	DI Leach	
890-3011-2	H-2 (0-2')	Soluble	Solid	DI Leach	
890-3011-3	H-3 (0-2')	Soluble	Solid	DI Leach	
890-3011-4	H-4 (0-2')	Soluble	Solid	DI Leach	
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 Batch
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	
890-3011-26	SW-72 (0-8')	Soluble	Solid	DI Leach	
890-3011-27	SW-73 (6-13')	Soluble	Solid	DI Leach	
890-3011-28	SW-74 (8-13')	Soluble	Solid	DI Leach	
890-3011-29	SW-75 (0-4.5')	Soluble	Solid	DI Leach	
890-3011-30	SW-76 (0-4.5')	Soluble	Solid	DI Leach	
890-3011-31	SW-77 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-35024/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35024/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35024/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3011-17 MS	BH-200 (4.5')	Soluble	Solid	DI Leach	
890-3011-17 MSD	BH-200 (4.5')	Soluble	Solid	DI Leach	
890-3011-27 MS	SW-73 (6-13')	Soluble	Solid	DI Leach	
890-3011-27 MSD	SW-73 (6-13')	Soluble	Solid	DI Leach	

## Analysis Batch: 35313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3011-17	BH-200 (4.5')	Soluble	Solid	300.0	35024
890-3011-18	BH-201 (4.5')	Soluble	Solid	300.0	35024

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 06:49	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 20:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:13	CH	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 07:16	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 21:39	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:27	CH	EET MID

Client Sample ID: H-3 (0-2')

Lab Sample ID: 890-3011-3

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 07:42	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/22/22 22:00	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/23/22 23:32	CH	EET MID

Client Sample ID: H-4 (0-2')

Lab Sample ID: 890-3011-4

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Client Sample ID: H-4 (0-2')

## Lab Sample ID: 890-3011-4

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	CH	EET MID

## Client Sample ID: H-5 (0-2')

## Lab Sample ID: 890-3011-5

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 10:04	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 02:18	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:07	CH	EET MID

**Client Sample ID: BH-192 (8')****Lab Sample ID: 890-3011-9****Date Collected: 09/19/22 00:00****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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**

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	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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-194 (8')

Lab Sample ID: 890-3011-11

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 12:42	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 02:40	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:31	CH	EET MID

Client Sample ID: BH-195 (8')

Lab Sample ID: 890-3011-12

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 MID
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

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 13:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 00:30	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		5			35314	09/24/22 00:41	CH	EET MID

Client Sample ID: BH-197 (4.5')

Lab Sample ID: 890-3011-14

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-197 (4.5')

Lab Sample ID: 890-3011-14

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 03:01	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		5			35314	09/24/22 00:46	CH	EET MID

Client Sample ID: BH-198 (4.5')

Lab Sample ID: 890-3011-15

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 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

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 14:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 01:35	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35023	09/21/22 10:05	SMC	EET MID
Soluble	Analysis	300.0		1			35314	09/24/22 00:55	CH	EET MID

Client Sample ID: BH-200 (4.5')

Lab Sample ID: 890-3011-17

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

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	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	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 03:23	SM	EET MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

**Client Sample ID: BH-200 (4.5')****Lab Sample ID: 890-3011-17****Date Collected: 09/19/22 00:00****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 19:57	CH	EET MID

**Client Sample ID: BH-201 (4.5')****Lab Sample ID: 890-3011-18****Date Collected: 09/19/22 00:00****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35814	10/01/22 16:36	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35130	09/22/22 08:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35122	09/23/22 03:44	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:11	CH	EET MID

**Client Sample ID: BH-202 (4.5')****Lab Sample ID: 890-3011-19****Date Collected: 09/19/22 00:00****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	35621	09/28/22 14:59	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 15:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35262	09/23/22 11:03	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35322	09/24/22 12:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		1			35313	09/23/22 20:22	CH	EET MID

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Client Sample ID: BH-204 (4.5')

Lab Sample ID: 890-3011-21

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35724	09/29/22 16:18	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	35890	10/03/22 19:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 04:09	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:41	CH	EET MID

Client Sample ID: BH-206 (4.5')

Lab Sample ID: 890-3011-23

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35815	10/01/22 23:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 04:31	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 20:46	CH	EET MID

Client Sample ID: BH-207 (4.5')

Lab Sample ID: 890-3011-24

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/01/22 21:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

**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**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35172	09/22/22 11:26	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35220	09/24/22 03:26	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		10			35313	09/23/22 20:51	CH	EET MID

**Client Sample ID: SW-62 (8-13')****Lab Sample ID: 890-3011-25****Date Collected: 09/19/22 00:00****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 09/20/22 10:22**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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	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 03:11	SM	EET MID

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

## Client Sample ID: SW-73 (6-13')

## Lab Sample ID: 890-3011-27

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35625	09/28/22 16:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/02/22 02:03	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35879	10/01/22 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35274	09/23/22 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35103	09/21/22 15:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35007	09/22/22 03:32	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35024	09/22/22 11:54	SMC	EET MID
Soluble	Analysis	300.0		5			35313	09/23/22 21:20	CH	EET MID

## Client Sample ID: SW-75 (0-4.5')

## Lab Sample ID: 890-3011-29

Date Collected: 09/19/22 00:00

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 09/20/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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



Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3011-1  
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: 890-3011-1  
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
890-3011-31	SW-77 (0-4.5')	Solid	09/19/22 00:00	09/20/22 10:22	0 - 4.5

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

BOTW Wall Street 36100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-5966

Client Name:	Permian Water Solutions	Site Manager:	Clair Gonzales
Project Name:	Kaiser SWD	Project #:	212C-MD-02230
Project Location: (county, state)	Lea County, NM	Project #:	212C-MD-02230
Invoice to:	Permian Water Solutions - Dusty McInturf	Sampler Signature:	Peyton Oliver
Receiving Laboratory:	Eurofins Xenco	Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING	MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	ANALYSIS
H-1 (0-2)	9/19/2022		X	X			BTEX 8021B BTEX 8260B
H-2 (0-2)	9/19/2022		X	X			TPH TX1005 (Ext to C35)
H-3 (0-2)	9/19/2022		X	X			TPH 8015M ( GRO - DRO - ORO - MRO)
H-4 (0-2)	9/19/2022		X	X			PAH 8270C
H-5 (0-2)	9/19/2022		X	X			Total Metals Ag As Ba Cd Cr Pb Se Hg
H-6 (0-2)	9/19/2022		X	X			TCLP Metals Ag As Ba Cd Cr Pb Se Hg
H-7 (0-2)	9/19/2022		X	X			TCLP Volatiles
BH-191 (8)	9/19/2022		X	X			TCLP Semi Volatiles
BH-192 (8)	9/19/2022		X	X			RCI
BH-193 (8)	9/19/2022		X	X			GC/MS Vol. 8260B / 624
							GC/MS Semi. Vol. 8270C/625
							PCB's 8082 / 608
							NORM
							PLM (Asbestos)
							Chloride
							Chloride Sulfate TDS
							General Water Chemistry (see attached list)
							Anion/Cation Balance
							Hold

ORIGINAL COPY

### Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79705

Tel (432) 682-4559

11:35:17.000

**Client Name:** Permian Water Solutions

**Site Manager:**  
**Clair Gonzales**

Project Name: Kaiser SMD

Clair.Gonzales@tetrattech.com

**Project Location:**  
(county, state)      **Lea County, NM**

Project #: 212C-MD-02230

**Invoice to:**

**Permian Water Solutions - Dusty McInturff**

**Receiving Laboratory:**

Eurotins Xenco

**Sampler Signature:**

**Peyton Oliver**

## Comments

[illegible]

## ANALYSIS REQUEST

(Circle or Specify Method No.)

**LAB USE ONLY**

REMARKS:

STANDARD

Camilla Tammemäe

**RUSH:** Same Day 24 hr 48 hr 72 hr

**Rush Charges Authorized**

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

ORIGINAL COPY



Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

3010 W. Main Street, Suite 100  
Midland, Texas 79705  
Tel: (432) 682-4559  
Fax: (432) 682-3946

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: Clair.Gonzales@tetratech.com	
Project Location: Lea County, NM		212C-MD-02230	
Invoice to: Permian Water Solutions - Dusty McIntuff		Sampler Signature: Peyton Oliver	
Receiving Laboratory: Eurofins Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX					# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	PRESERVATIVE METHOD				
						HCL	HNO <sub>3</sub>	ICE		
	BH-204 (4.5)	9/19/2022		X		X				
	BH-205 (4.5)	9/19/2022		X		X				
	BH-206 (4.5)	9/19/2022		X		X				
	BH-207 (4.5)	9/19/2022		X		X				
	SW-62 (8-13)	9/19/2022		X		X				
	SW-72 (0-8)	9/19/2022		X		X				
	SW-73 (6-13)	9/19/2022		X		X				
	SW-74 (8-13)	9/19/2022		X		X				
	SW-75 (0-4.5)	9/19/2022		X		X				
	SW-76 (0-4.5)	9/19/2022		X		X				

Relinquished by: [Signature]	Date: [Blank]	Time: [Blank]	Received by: [Signature]	Date: 9-20-22	Time: [Blank]
Relinquished by: [Blank]	Date: [Blank]	Time: [Blank]	Received by: [Blank]	Date: [Blank]	Time: [Blank]

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY	REMARKS:	<input checked="" type="checkbox"/> STANDARD
	Sample Temperature	<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
	<input type="checkbox"/> Rush Charges Authorized	
	<input type="checkbox"/> Special Report Limits or TRRP Report	
	(Circle) HAND DELIVERED FEDEX UPS Tracking #:	
	BTEX 8021B BTEX 8260B	
	TPH TX1005 (Ext to C35)	
	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	
	TCLP Volatiles	
	TCLP Semi Volatiles	
	RCI	
	GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625		
PCB's 8082 / 608		
NORM		
PLM (Asbestos)		
Chloride		
Chloride Sulfate TDS		
General Water Chemistry (see attached list)		
Anion/Cation Balance		
Hold		

ORIGINAL COPY





## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3011-1

SDG Number: Lea County NM

Login Number: 3011

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3011-1

SDG Number: Lea County NM

Login Number: 3011

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/21/22 11:23 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



## Environment Testing

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3411-1

Laboratory Sample Delivery Group: Lea County NM  
Client Project/Site: Kaiser SWD

**For:**

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

11/14/2022 3:38:41 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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.
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 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 - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/14/22 16:13	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.9		50.0		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	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 13:54	1
Diesel Range Organics (Over C10-C28)	74.9		50.0		mg/Kg		11/09/22 15:38	11/11/22 13:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 13:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	11/09/22 15:38	11/11/22 13:54	1
o-Terphenyl	104		70 - 130	11/09/22 15:38	11/11/22 13:54	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2280	F1	25.3		mg/Kg			11/12/22 01:19	5

Client Sample ID: BH-201 (10')

Lab Sample ID: 890-3411-2

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 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

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: BH-201 (10')

Lab Sample ID: 890-3411-2

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	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	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	74.3		50.0		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	<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
Oil 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
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')

Lab Sample ID: 890-3411-3

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 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

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/14/22 16:13	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

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Client Sample ID: BH-204 (10')

## Lab Sample ID: 890-3411-3

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## 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	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:37	1
Oil 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	113		70 - 130				11/09/22 15:38	11/11/22 14:37	1
o-Terphenyl	118		70 - 130				11/09/22 15:38	11/11/22 14:37	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2010		25.0		mg/Kg			11/12/22 01:47	5

## Client Sample ID: BH-205 (10')

## Lab Sample ID: 890-3411-4

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 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 - Total BTEX Calculation

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

## 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

## 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	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 14:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				11/09/22 15:38	11/11/22 14:59	1
o-Terphenyl	94		70 - 130				11/09/22 15:38	11/11/22 14:59	1

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## Client Sample Results

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

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1480		25.1		mg/Kg			11/12/22 01:54	5

## Client Sample ID: BH-206 (10')

Lab Sample ID: 890-3411-5

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/12/22 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				11/09/22 15:36	11/12/22 23:37	1
1,4-Difluorobenzene (Surr)	116		70 - 130				11/09/22 15:36	11/12/22 23:37	1

## Method: TAL SOP Total BTEX - Total BTEX 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 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
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				11/09/22 15:38	11/11/22 15:21	1
o-Terphenyl	109		70 - 130				11/09/22 15:38	11/11/22 15:21	1

## Method: MCAWW 300.0 - Anions, 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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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

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

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 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 - 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 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 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
Oil 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	Dil Fac
1-Chlorooctane	94		70 - 130	11/09/22 15:38	11/11/22 15:43	1
o-Terphenyl	102		70 - 130	11/09/22 15:38	11/11/22 15:43	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6190		49.6		mg/Kg			11/12/22 02:23	10

Client Sample ID: BH-209 (10')

Lab Sample ID: 890-3411-7

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 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)	111		70 - 130	11/09/22 15:36	11/13/22 00:19	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: BH-209 (10')

Lab Sample ID: 890-3411-7

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	115		70 - 130	11/09/22 15:36	11/13/22 00:19	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 16:13	1

## 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

## 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	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 16:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 16:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				11/09/22 15:38	11/11/22 16:26	1
o-Terphenyl	124		70 - 130				11/09/22 15:38	11/11/22 16:26	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4470		49.6		mg/Kg			11/12/22 02:30	10

Client Sample ID: BH-210 (10')

Lab Sample ID: 890-3411-8

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

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ANALYSIS TABLE

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Toluene	0.0775		0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Ethylbenzene	0.0695		0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
m-Xylene & p-Xylene	0.135		0.00399		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
o-Xylene	0.0758		0.00200		mg/Kg		11/09/22 15:36	11/13/22 00:40	1
Xylenes, Total	0.211		0.00399		mg/Kg		11/09/22 15:36	11/13/22 00:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	11/09/22 15:36	11/13/22 00:40	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/09/22 15:36	11/13/22 00:40	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.358		0.00399		mg/Kg			11/14/22 16:13	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2430		50.0		mg/Kg			11/14/22 14:30	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: BH-210 (10')

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 10

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ANALYSIS TABLE

Lab Sample ID: 890-3411-8

Matrix: Solid

## 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	61.9		50.0		mg/Kg		11/09/22 15:38	11/11/22 16:48	1
Diesel Range Organics (Over C10-C28)	2130		50.0		mg/Kg		11/09/22 15:38	11/11/22 16:48	1
Oil Range Organics (Over C28-C36)	237		50.0		mg/Kg		11/09/22 15:38	11/11/22 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				11/09/22 15:38	11/11/22 16:48	1
o-Terphenyl	111		70 - 130				11/09/22 15:38	11/11/22 16:48	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2270		25.0		mg/Kg			11/12/22 02:37	5

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: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				11/09/22 15:36	11/13/22 01:00	1
1,4-Difluorobenzene (Surr)	115		70 - 130				11/09/22 15:36	11/13/22 01:00	1

## Method: TAL SOP Total BTEX - 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 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

## 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	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				11/09/22 15:38	11/11/22 17:09	1
o-Terphenyl	129		70 - 130				11/09/22 15:38	11/11/22 17:09	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Client Sample ID: BH-211 (10')

## Lab Sample ID: 890-3411-9

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## 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

## Client Sample ID: BH-212 (10')

## Lab Sample ID: 890-3411-10

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
m-Xylene & p-Xylene	0.0209		0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
o-Xylene	0.0186		0.00199		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Xylenes, Total	0.0395		0.00398		mg/Kg		11/09/22 15:36	11/13/22 01:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 01:21	1
1,4-Difluorobenzene (Surr)	101		70 - 130				11/09/22 15:36	11/13/22 01:21	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0395		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	228		50.0		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	<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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				11/09/22 15:38	11/11/22 17:32	1
o-Terphenyl	102		70 - 130				11/09/22 15:38	11/11/22 17:32	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2970		25.2		mg/Kg			11/12/22 02:51	5

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

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ANALYSIS TABLE

Lab Sample ID: 890-3411-11

Matrix: Solid

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/09/22 15:36	11/13/22 02:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/09/22 15:36	11/13/22 02:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	11/09/22 15:36	11/13/22 02:45	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 15:36	11/13/22 02:45	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/14/22 16:13	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

## 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	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	11/09/22 15:38	11/11/22 17:54	1
o-Terphenyl	98		70 - 130	11/09/22 15:38	11/11/22 17:54	1

## 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)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/09/22 15:36	11/13/22 03:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/09/22 15:36	11/13/22 03:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/09/22 15:36	11/13/22 03:05	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

REMOVED FROM  
ANALYSIS TABLE

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

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
Oil 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
1-Chlorooctane	111		70 - 130				11/09/22 15:38	11/11/22 18:15	1
o-Terphenyl	121		70 - 130				11/09/22 15:38	11/11/22 18:15	1

## 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

Lab Sample ID: 890-3411-13

Matrix: Solid

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ANALYSIS TABLE

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/09/22 15:36	11/13/22 03:26	1
1,4-Difluorobenzene (Surr)	114		70 - 130	11/09/22 15:36	11/13/22 03:26	1

## Method: TAL SOP Total BTEX - Total BTEX 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: SW-79 (4-10')

Lab Sample ID: 890-3411-13

Date Collected: 11/07/22 00:00

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ANALYSIS TABLE

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 4 - 10

## 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 18:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 18:37	1
Oil 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	110		70 - 130				11/09/22 15:38	11/11/22 18:37	1
o-Terphenyl	116		70 - 130				11/09/22 15:38	11/11/22 18:37	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		24.8		mg/Kg			11/12/22 03:27	5

Client Sample ID: SW-80 (4.5-10')

Lab Sample ID: 890-3411-14

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/09/22 15:36	11/13/22 03:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				11/09/22 15:36	11/13/22 03:47	1
1,4-Difluorobenzene (Surr)	107		70 - 130				11/09/22 15:36	11/13/22 03:47	1

## Method: TAL SOP Total BTEX - 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	263		50.0		mg/Kg			11/14/22 14:30	1

## Method: SW846 8015B NM - 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		11/09/22 15:38	11/11/22 18:59	1
Diesel Range Organics (Over C10-C28)	263		50.0		mg/Kg		11/09/22 15:38	11/11/22 18:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				11/09/22 15:38	11/11/22 18:59	1
o-Terphenyl	98		70 - 130				11/09/22 15:38	11/11/22 18:59	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: SW-80 (4.5-10')

Lab Sample ID: 890-3411-14

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8690		101		mg/Kg			11/12/22 03:48	20

Client Sample ID: SW-81 (4.5-10')

Lab Sample ID: 890-3411-15

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 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 - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/14/22 16:13	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	192		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 19:21	1
Diesel Range Organics (Over C10-C28)	192		49.9		mg/Kg		11/09/22 15:38	11/11/22 19:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/09/22 15:38	11/11/22 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				11/09/22 15:38	11/11/22 19:21	1
o-Terphenyl	101		70 - 130				11/09/22 15:38	11/11/22 19:21	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8120		100		mg/Kg			11/12/22 03:55	20

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: SW-82 (4.5-10')

Lab Sample ID: 890-3411-16

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 4.5 - 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/09/22 15:36	11/13/22 04:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/09/22 15:36	11/13/22 04:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	11/09/22 15:36	11/13/22 04:28	1
1,4-Difluorobenzene (Surr)	111		70 - 130	11/09/22 15:36	11/13/22 04:28	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	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 - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/09/22 15:38	11/11/22 19:43	1
Diesel Range Organics (Over C10-C28)	216		49.8		mg/Kg		11/09/22 15:38	11/11/22 19:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/09/22 15:38	11/11/22 19:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	11/09/22 15:38	11/11/22 19:43	1
o-Terphenyl	95		70 - 130	11/09/22 15:38	11/11/22 19:43	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9100		99.4		mg/Kg			11/12/22 04:02	20

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

Sample Depth: 4 - 10

## Method: SW846 8021B - Volatile Organic Compounds (GC)

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	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: SW-83 (4-10)

Lab Sample ID: 890-3411-17

Date Collected: 11/07/22 00:00

Date Received: 11/07/22 14:58

Sample Depth: 4 - 10

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ANALYSIS TABLE

Matrix: Solid

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

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 - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/14/22 16:13	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/14/22 09:30	1

## 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 *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:00	1
Oil 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 Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	714		4.96		mg/Kg			11/12/22 04:09	1

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3411-14	SW-80 (4.5-10')	93	98
890-3411-15	SW-81 (4.5-10')	95	101
890-3411-16	SW-82 (4.5-10')	90	95
890-3411-17	SW-83 (4-10)	88	87
LCS 880-39141/2-A	Lab Control Sample	104	116
LCS 880-39172/2-A	Lab Control Sample	94	97
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			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/09/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3411-1 MS

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: BH-200 (10')

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-3411-1 MSD

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: BH-200 (10')

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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 880-39141/1-A

Matrix: Solid

Analysis Batch: 39275

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39141

Analyte	MB Result	MB 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 09:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 09:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/09/22 15:38	11/11/22 09:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	11/09/22 15:38	11/11/22 09:13	1
o-Terphenyl	136	S1+	70 - 130	11/09/22 15:38	11/11/22 09:13	1

Lab Sample ID: LCS 880-39141/2-A

Matrix: Solid

Analysis Batch: 39275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39141

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	971.0		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	884.0		mg/Kg		88	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-39141/2-A

Matrix: Solid

Analysis Batch: 39275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39141

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: LCSD 880-39141/3-A

Matrix: Solid

Analysis Batch: 39275

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39141

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1108		mg/Kg		111	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	910.3		mg/Kg		91	70 - 130	3	20

	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

Matrix: Solid

Analysis Batch: 39275

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39141

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	182		997	969.9		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)	1820	F1	997	2679		mg/Kg		86	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-21336-A-28-E MSD

Matrix: Solid

Analysis Batch: 39275

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39141

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	182		999	1151		mg/Kg		97	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1820	F1	999	2326	F1	mg/Kg		51	70 - 130	14	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	80		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1
Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	815.5		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	846.7		mg/Kg		85	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	94		70 - 130				
o-Terphenyl	97		70 - 130				

Lab Sample ID: LCSD 880-39172/3-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1003	*1	mg/Kg		100	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	950.2		mg/Kg		95	70 - 130	12	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	107		70 - 130						
o-Terphenyl	109		70 - 130						

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	997	1007		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	861.7		mg/Kg		84	70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

	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

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
1-Chlorooctane	82		70 - 130
o-Terphenyl	73		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/12/22 00:57	1

Lab Sample ID: LCS 880-39128/2-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	268.3		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-39128/3-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	268.7		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-3411-1 MS

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: BH-200 (10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2280	F1	1260	3520		mg/Kg		98	90 - 110

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3411-1 MSD

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: BH-200 (10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2280	F1	1260	3707	F1	mg/Kg		113	90 - 110	5	20

Lab Sample ID: 890-3411-11 MS

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: SW-75 (4-10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	14500	F1	5010	21010	F1	mg/Kg		130	90 - 110		

Lab Sample ID: 890-3411-11 MSD

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: SW-75 (4-10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	14500	F1	5010	20560	F1	mg/Kg		121	90 - 110	2	20

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

## GC Semi VOA

## Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-17	SW-83 (4-10)	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

## Analysis Batch: 39275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3411-1	BH-200 (10')	Total/NA	Solid	8015B NM	39141
890-3411-2	BH-201 (10')	Total/NA	Solid	8015B NM	39141
890-3411-3	BH-204 (10')	Total/NA	Solid	8015B NM	39141
890-3411-4	BH-205 (10')	Total/NA	Solid	8015B NM	39141
890-3411-5	BH-206 (10')	Total/NA	Solid	8015B NM	39141
890-3411-6	BH-208 (10')	Total/NA	Solid	8015B NM	39141
890-3411-7	BH-209 (10')	Total/NA	Solid	8015B NM	39141
890-3411-8	BH-210 (10')	Total/NA	Solid	8015B NM	39141
890-3411-9	BH-211 (10')	Total/NA	Solid	8015B NM	39141
890-3411-10	BH-212 (10')	Total/NA	Solid	8015B NM	39141
890-3411-11	SW-75 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-12	SW-78 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-13	SW-79 (4-10')	Total/NA	Solid	8015B NM	39141
890-3411-14	SW-80 (4.5-10')	Total/NA	Solid	8015B NM	39141
890-3411-15	SW-81 (4.5-10')	Total/NA	Solid	8015B NM	39141
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8015B NM	39141
MB 880-39141/1-A	Method Blank	Total/NA	Solid	8015B NM	39141
LCS 880-39141/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39141
LCSD 880-39141/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39141
880-21336-A-28-D MS	Matrix Spike	Total/NA	Solid	8015B NM	39141
880-21336-A-28-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39141

## Analysis Batch: 39406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	
890-3411-4	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	
890-3411-8	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	
890-3411-11	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	
890-3411-16	SW-82 (4.5-10')	Total/NA	Solid	8015 NM	
890-3411-17	SW-83 (4-10)	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 22:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 14:16	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		10			39334	11/12/22 01:40	CH	EET MID

Client Sample ID: BH-204 (10')

Lab Sample ID: 890-3411-3

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 22:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 14:37	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 01:47	CH	EET MID

Client Sample ID: BH-205 (10')

Lab Sample ID: 890-3411-4

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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## Lab Chronicle

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

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Client Sample ID: BH-206 (10')

Lab Sample ID: 890-3411-5

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

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	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/12/22 23:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 15:43	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		10			39334	11/12/22 02:23	CH	EET MID

Client Sample ID: BH-209 (10')

Lab Sample ID: 890-3411-7

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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	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 16:26	SM	EET MID

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## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

**Client Sample ID: BH-209 (10')****Lab Sample ID: 890-3411-7****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		10			39334	11/12/22 02:30	CH	EET MID

**Client Sample ID: BH-210 (10')****Lab Sample ID: 890-3411-8****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 00:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 16:48	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 02:37	CH	EET MID

**Client Sample ID: BH-211 (10')****Lab Sample ID: 890-3411-9****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 01:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 17:09	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		5			39334	11/12/22 02:44	CH	EET MID

**Client Sample ID: BH-212 (10')****Lab Sample ID: 890-3411-10****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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



## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

**Client Sample ID: SW-75 (4-10')****Lab Sample ID: 890-3411-11****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 02:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 17:54	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 02:58	CH	EET MID

**Client Sample ID: SW-78 (4-10')****Lab Sample ID: 890-3411-12****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 03:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 18:15	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		50			39334	11/12/22 03:20	CH	EET MID

**Client Sample ID: SW-79 (4-10')****Lab Sample ID: 890-3411-13****Date Collected: 11/07/22 00:00****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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****Matrix: Solid****Date Received: 11/07/22 14:58**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 03:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID

Eurofins Carlsbad

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Client Sample ID: SW-80 (4.5-10')

Lab Sample ID: 890-3411-14

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 18:59	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 03:48	CH	EET MID

Client Sample ID: SW-81 (4.5-10')

Lab Sample ID: 890-3411-15

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 04:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39551	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39406	11/14/22 14:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39141	11/09/22 15:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39275	11/11/22 19:43	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		20			39334	11/12/22 04:02	CH	EET MID

Client Sample ID: SW-83 (4-10)

Lab Sample ID: 890-3411-17

Date Collected: 11/07/22 00:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 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	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 18:00	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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

Lab Sample ID: 890-3411-17  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	39128	11/09/22 15:08	KS	EET MID
Soluble	Analysis	300.0		1			39334	11/12/22 04:09	CH	EET MID

Laboratory References:  
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

- 1
- 2
- 3
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- 7
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- 10
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Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3411-1  
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: 890-3411-1  
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



### Analysis Request of Chain of Custody Record

# Tetra Tech, Inc.

Southern Plains Division  
Midland, Texas 79705  
Tel (432) 852-4559

Fax (432) 852-3946

Client Name:

Pernian Water Solutions

Site Manager:

Clair Gonzales

Project Name:

Kaiser SWD

[Clair.Gonzales@tetratech.com](mailto:Clair.Gonzales@tetratech.com)

Project Location:

Lea County, NM

Project #:

212C-MD-02230

Invoice to:

Pernian Water Solutions - Dusty McInturf

Receiving Laboratory:

Eurofins Xenco

Sampler Signature:

Peyton Oliver

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		YEAR 2020		DATE	TIME	WATER	SOIL		
							HCL	HNO <sub>3</sub>	ICE

	BH-200 (10')			11/7/2022			X		X				
	BH-201 (10')			11/7/2022			X		X				
	BH-204 (10')			11/7/2022			X		X				
	BH-205 (10')			11/7/2022			X		X				
	BH-206 (10')			11/7/2022			X		X				
	BH-208 (10')			11/7/2022			X		X				
	BH-209 (10')			11/7/2022			X		X				
	BH-210 (10')			11/7/2022			X		X				
	BH-211 (10')			11/7/2022			X		X				
	BH-212 (10')			11/7/2022			X		X				

Relinquished by: *Lee A. L.* Date: *11/7/22* Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: *Lee A. L.* Date: *11/7/22* Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: *Lee A. L.* Date: *11/7/22* Time: *1458* Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

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890-3411 Chain of Custody



10.

**LAB USE ONLY**

REMARKS:

STANDARD

Sample Temperature

☐ **RUSH:** Same Day    24 hr    48 hr    72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

### **Analysis Request of Chain of Custody Record**



**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559

FAV 16R210:V235E1:

**Client Name:** Permian Water Solutions

Site Manager:

Clair Gonzales

**Project Name:** Kaiser SWD

Clair.Gonzales@tetrattech.com

**Project Location:**  
(county, state)      **Lea County, NM**

Project #: 212C-MD-02230

**Invoice to:**

## Permian Water Solutions - Dusty McInturff

**Receiving Laboratory:**

Eurofins Xenco

**Sampler Signature:**

Peyton Oliver

**Comments:**

[illegible]

## ANALYSIS REQUEST

(Circle or Specify Method No.)

**LAB USE ONLY**

Sample Temperature

五

(Circle)	HAND DELIVERED	FEDEX	UPS	Tracking #

Page 2 of 2

## 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

Login Number: 3411

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	





## Environment Testing

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3412-1

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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

11/14/2022 3:39:39 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
U	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
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

Client Sample ID: H-9 (5')

Lab Sample ID: 890-3412-1

Date Collected: 11/07/22 12:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 5'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/09/22 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 Calculation

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

## 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	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	11/10/22 08:48	11/11/22 18:21	1
o-Terphenyl	92		70 - 130	11/10/22 08:48	11/11/22 18:21	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	672		25.0		mg/Kg			11/12/22 04:17	5

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## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3402-A-1-G MS	Matrix Spike	86	79
890-3402-A-1-H MSD	Matrix Spike Duplicate	82	73
890-3412-1	H-9 (5')	93	92
LCS 880-39172/2-A	Lab Control Sample	94	97
LCSD 880-39172/3-A	Lab Control Sample Dup	107	109
MB 880-39172/1-A	Method Blank	119	134 S1+
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/09/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

## 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-3411-A-1-E MSD

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	815.5		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	846.7		mg/Kg		85	70 - 130

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## QC Sample Results

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  
Matrix: Solid  
Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 39172

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1003	*1	mg/Kg		100	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	950.2		mg/Kg		95	70 - 130	12	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 890-3402-A-1-G MS  
Matrix: Solid  
Analysis Batch: 39269

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	997	1007		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	861.7		mg/Kg		84	70 - 130		

	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  
Matrix: Solid  
Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
1-Chlorooctane	82		70 - 130
o-Terphenyl	73		70 - 130

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/12/22 00:57	1

Lab Sample ID: LCS 880-39128/2-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	268.3		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-39128/3-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	268.7		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-3411-A-1-B MS

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2280	F1	1260	3520		mg/Kg		98	90 - 110

Lab Sample ID: 890-3411-A-1-C MSD

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2280	F1	1260	3707	F1	mg/Kg		113	90 - 110	5	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
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	

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QC Association Summary

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

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

Client Sample ID: H-9 (5')  
Date Collected: 11/07/22 12:00  
Date Received: 11/07/22 14:58

Lab Sample ID: 890-3412-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3412-1  
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: 890-3412-1  
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'

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

3077 W. Wall,  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-2946



Client Name:		Permian Water Solutions		Site Manager:		Clair Gonzales	
Project Name:		Kaiser SWD		Project #:		212C-MD-02230	
Project Location: (county, state)		Lea County, NM		Project #:		212C-MD-02230	
Invoice to:		Permian Water Solutions - Dusty McInturf		Sampler Signature:		Peyton Oliver	
Receiving Laboratory:		Eurofins Xenco		Comments:			
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION		SAMPLING		MATRIX	
H-9 (5)		DATE		TIME		WATER	
		11/17/2022				SOIL	
						HCL	
						HNO <sub>3</sub>	
						ICE	
						None	
						# CONTAINERS	
						FILTERED (Y/N)	
						BTX 8021B BTX 8260B	
						TPH TX1005 (Ext to C35)	
						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	
						TCLP Volatiles	
						TCLP Semi Volatiles	
						RCI	
						GC/MS Vol. 8260B / 624	
						GC/MS Semi. Vol. 8270C/625	
						PCB's 8082 / 608	
						NORM	
						PLM (Asbestos)	
						Chloride	
						Chloride Sulfate TDS	
						General Water Chemistry (see attached list)	
						Anion/Cation Balance	
						Hold	
Relinquished by:		Date:		Time:		Received by:	
11/17/22		11/17/22				Date:	
Time:		Time:				Time:	
Relinquished by:		Date:		Time:		Received by:	
11/17/22		11/17/22				Date:	
Time:		Time:				Time:	
Relinquished by:		Date:		Time:		Received by:	
11/17/22		11/17/22				Date:	
Time:		Time:				Time:	

LAB USE ONLY

REMARKS:

☒ STANDARD

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature

30.2 AS

24.8 AS

-0.2

TIN-007

ORIGINAL COPY

## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3412-1

SDG Number: Lea County NM

Login Number: 3412

List Number: 1

Creator: Stutzman, Amanda

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: 890-3412-1

SDG Number: Lea County NM

Login Number: 3412

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



## Environment Testing

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3413-1

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

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

11/14/2022 3:40:55 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
U	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
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

Client Sample ID: H-8 (5')

Lab Sample ID: 890-3413-1

Date Collected: 11/07/22 12:00

Matrix: Solid

Date Received: 11/07/22 14:58

Sample Depth: 5'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 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 - 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 Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/14/22 09:30	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	<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
Oil 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
o-Terphenyl	87		70 - 130	11/10/22 08:48	11/11/22 18:41	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.8		4.96		mg/Kg			11/12/22 04:24	1

Eurofins Carlsbad

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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+
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39140

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/09/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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



## QC Sample Results

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-3411-A-1-E MSD

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	815.5		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	846.7		mg/Kg		85	70 - 130

Eurofins Carlsbad

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

## 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

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1003	*1	mg/Kg		100	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	950.2		mg/Kg		95	70 - 130	12	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	997	1007		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	861.7		mg/Kg		84	70 - 130

	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

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
1-Chlorooctane	82		70 - 130
o-Terphenyl	73		70 - 130

Eurofins Carlsbad

## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39128/1-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/12/22 00:57	1

Lab Sample ID: LCS 880-39128/2-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	268.3		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-39128/3-A

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	268.7		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-3411-A-11-B MS

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	14500	F1	5010	21010	F1	mg/Kg		130	90 - 110

Lab Sample ID: 890-3411-A-11-C MSD

Matrix: Solid

Analysis Batch: 39334

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	14500	F1	5010	20560	F1	mg/Kg		121	90 - 110	2	20

Eurofins Carlsbad

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

## GC VOA

## Prep Batch: 39140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	5035	
MB 880-39140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 39369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8021B	39140
MB 880-39140/5-A	Method Blank	Total/NA	Solid	8021B	39140
LCS 880-39140/1-A	Lab Control Sample	Total/NA	Solid	8021B	39140
LCSD 880-39140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39140
890-3411-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	39140
890-3411-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39140

## Analysis Batch: 39553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 39172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

## Analysis Batch: 39408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 39128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3413-1	H-8 (5')	Soluble	Solid	DI Leach	
MB 880-39128/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39128/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39128/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Carlsbad

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

Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

Client Sample ID: H-8 (5')  
Date Collected: 11/07/22 12:00  
Date Received: 11/07/22 14:58

Lab Sample ID: 890-3413-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
SDG: 212C-MD-02230

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3413-1  
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

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'

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3413-1

SDG Number: 212C-MD-02230

Login Number: 3413

List Number: 1

Creator: Stutzman, Amanda

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: 890-3413-1

SDG Number: 212C-MD-02230

Login Number: 3413

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	





## Environment Testing

# ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3414-1

Laboratory Sample Delivery Group: 212C-MD-02230

Client Project/Site: Kaiser SWD

### For:

Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

11/14/2022 3:40:57 PM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



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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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-3414-1  
SDG: 212C-MD-02230

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## 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

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
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

## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 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	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 09:30	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 *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 14:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 14:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	11/10/22 08:48	11/11/22 14:04	1
o-Terphenyl	96		70 - 130	11/10/22 08:48	11/11/22 14:04	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2370		25.1		mg/Kg			11/12/22 04:10	5

Client Sample ID: SW-78 (0-4')

Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

Sample Depth: 0-4'

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-3414-2

Matrix: Solid

## Method: SW846 8021B - Volatile Organic Compounds (GC)

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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

Client Sample ID: SW-78 (0-4')

Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

Sample Depth: 0-4'

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-3414-2

Matrix: Solid

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	11/09/22 16:01	11/14/22 13:48	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/14/22 16:19	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	161		50.0		mg/Kg			11/14/22 09:30	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		11/10/22 08:48	11/11/22 13:43	1
Diesel Range Organics (Over C10-C28)	54.3		50.0		mg/Kg		11/10/22 08:48	11/11/22 13:43	1
Oil Range Organics (Over C28-C36)	107		50.0		mg/Kg		11/10/22 08:48	11/11/22 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/10/22 08:48	11/11/22 13:43	1
o-Terphenyl	94		70 - 130				11/10/22 08:48	11/11/22 13:43	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3500		24.9		mg/Kg			11/12/22 04:15	5

Client Sample ID: SW-79 (0-4')

Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

Sample Depth: 0-4'

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-3414-3

Matrix: Solid

## Method: SW846 8021B - Volatile Organic Compounds (GC)

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 Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 16:19	1

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		11/10/22 08:48	11/11/22 14:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 14:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/10/22 08:48	11/11/22 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/10/22 08:48	11/11/22 14:26	1
o-Terphenyl	107		70 - 130				11/10/22 08:48	11/11/22 14:26	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1520	F1	25.2		mg/Kg			11/12/22 04:20	5

Client Sample ID: SW-83 (0-4')

Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:58

Sample Depth: 0-4'

REMOVED FROM  
ANALYSIS TABLE

Lab Sample ID: 890-3414-4

Matrix: Solid

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/09/22 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 Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/14/22 16:19	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 09:30	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	<50.0	U *1	50.0		mg/Kg		11/10/22 08:48	11/11/22 14:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 14:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 14:47	1

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Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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  
Sample Depth: 0-4'

REMOVED FROM ANALYSIS TABLE

Lab Sample ID: 890-3414-4  
Matrix: Solid

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

## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB1	DFBZ1						
		(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						
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						
<b>Surrogate Legend</b>									
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)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(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+				
<b>Surrogate Legend</b>							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39140/5-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39140

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	11/09/22 15:36	11/12/22 21:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 15:36	11/12/22 21:52	1

Lab Sample ID: LCS 880-39140/1-A

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	LCS %Recovery	LCS 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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%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

Surrogate	LCSD %Recovery	LCSD 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3411-A-1-D MS

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-3411-A-1-E MSD

Matrix: Solid

Analysis Batch: 39369

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	11/09/22 16:01	11/14/22 13:20	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/09/22 16:01	11/14/22 13:20	1

Lab Sample ID: LCS 880-39148/1-A

Matrix: Solid

Analysis Batch: 39393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-39148/1-A

Matrix: Solid

Analysis Batch: 39393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.08684		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-39148/2-A

Matrix: Solid

Analysis Batch: 39393

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39148

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-3414-2 MS

Matrix: Solid

Analysis Batch: 39393

Client Sample ID: SW-78 (0-4')

Prep Type: Total/NA

Prep Batch: 39148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.08043		mg/Kg		80	70 - 130
Toluene	<0.00201	U	0.100	0.08943		mg/Kg		89	70 - 130
Ethylbenzene	<0.00201	U F1	0.100	0.08382		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1547		mg/Kg		77	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.07599		mg/Kg		75	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3414-2 MSD

Matrix: Solid

Analysis Batch: 39393

Client Sample ID: SW-78 (0-4')

Prep Type: Total/NA

Prep Batch: 39148

	MSD	MSD	
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

	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	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/10/22 08:48	11/11/22 09:30	1	
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 (GRO)-C6-C10			1000	815.5		mg/Kg		82	70 - 130	
Diesel Range Organics (Over C10-C28)			1000	846.7		mg/Kg		85	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	94		70 - 130							
o-Terphenyl	97		70 - 130							

Lab Sample ID: LCSD 880-39172/3-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1003	*1	mg/Kg		100	70 - 130	21	20	
Diesel Range Organics (Over C10-C28)			1000	950.2		mg/Kg		95	70 - 130	12	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	107		70 - 130									
o-Terphenyl	109		70 - 130									

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	997	1007		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	861.7		mg/Kg		84	70 - 130		

Lab Sample ID: 890-3402-A-1-H MSD

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	82		70 - 130								
o-Terphenyl	73		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/12/22 02:56	1

Lab Sample ID: LCS 880-39126/2-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	266.1		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-39126/3-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	258.9		mg/Kg		104	90 - 110	3	20

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QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3414-3 MS											Client Sample ID: SW-79 (0-4')	
Matrix: Solid											Prep Type: Soluble	
Analysis Batch: 39335												
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD	RPD Limit
Chloride	1520	F1	1260	3027	F1	mg/Kg		120	90 - 110		5	20

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

## GC Semi VOA (Continued)

## Prep Batch: 39172 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8015NM Prep	
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	8015B NM	39172
890-3414-2	SW-78 (0-4')	Total/NA	Solid	8015B NM	39172
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8015B NM	39172
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172

## Analysis Batch: 39398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Total/NA	Solid	8015 NM	
890-3414-2	SW-78 (0-4')	Total/NA	Solid	8015 NM	
890-3414-3	SW-79 (0-4')	Total/NA	Solid	8015 NM	
890-3414-4	SW-83 (0-4')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 39126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Soluble	Solid	DI Leach	
890-3414-2	SW-78 (0-4')	Soluble	Solid	DI Leach	
890-3414-3	SW-79 (0-4')	Soluble	Solid	DI Leach	
890-3414-4	SW-83 (0-4')	Soluble	Solid	DI Leach	
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3414-3 MS	SW-79 (0-4')	Soluble	Solid	DI Leach	
890-3414-3 MSD	SW-79 (0-4')	Soluble	Solid	DI Leach	

## Analysis Batch: 39335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-1	SW-75 (0-4')	Soluble	Solid	300.0	39126
890-3414-2	SW-78 (0-4')	Soluble	Solid	300.0	39126
890-3414-3	SW-79 (0-4')	Soluble	Solid	300.0	39126
890-3414-4	SW-83 (0-4')	Soluble	Solid	300.0	39126
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126
890-3414-3 MS	SW-79 (0-4')	Soluble	Solid	300.0	39126

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QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

HPLC/IC (Continued)

Analysis Batch: 39335 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3414-3 MSD	SW-79 (0-4')	Soluble	Solid	300.0	39126

- 1
- 2
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- 10
- 11
- 12
- 13
- 14



## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

Client Sample ID: SW-75 (0-4')

Lab Sample ID: 890-3414-1

Date Collected: 11/07/22 12:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39140	11/09/22 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39369	11/13/22 05:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39554	11/14/22 16:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			39398	11/14/22 09:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39172	11/10/22 08:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 14:04	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39126	11/09/22 15:04	KS	EET MID
Soluble	Analysis	300.0		5	0 mL	1.0 mL	39335	11/12/22 04:10	CH	EET MID

Client Sample ID: SW-78 (0-4')

Lab Sample ID: 890-3414-2

Date Collected: 11/07/22 12:00

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 11/07/22 14:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

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Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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

Lab Sample ID: 890-3414-4  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
SDG: 212C-MD-02230

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3414-1  
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

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'

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### Analysis Request of Chain of Custody Record

[illegible]



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3414-1

SDG Number: 212C-MD-02230

Login Number: 3414

List Number: 1

Creator: Stutzman, Amanda

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: 890-3414-1

SDG Number: 212C-MD-02230

Login Number: 3414

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

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

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# 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

See page two for job notes and contact information.

**Eurofins Carlsbad****Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

**Authorization**

Generated  
12/27/2022 9:17:54 AM

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Laboratory Job ID: 890-3652-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



## Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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.

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

Client Sample ID: BH-210 (11')

Lab Sample ID: 890-3652-1

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/22/22 12:14	12/27/22 02:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/22/22 12:14	12/27/22 02:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	12/22/22 12:14	12/27/22 02:15	1
1,4-Difluorobenzene (Surr)	102		70 - 130	12/22/22 12:14	12/27/22 02:15	1

## Method: 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			12/27/22 09:32	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/19/22 15:23	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	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:01	1
Oil 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
o-Terphenyl	80		70 - 130	12/16/22 09:37	12/18/22 19:01	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

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

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 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

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

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

## 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			12/27/22 09:32	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/19/22 15:23	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	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				12/16/22 09:37	12/18/22 19:23	1
o-Terphenyl	97		70 - 130				12/16/22 09:37	12/18/22 19:23	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1020		5.04		mg/Kg			12/23/22 22:24	1

Client Sample ID: SW-75 (4-10')

Lab Sample ID: 890-3652-3

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 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)	99		70 - 130				12/22/22 12:14	12/27/22 02:56	1

## Method: TAL SOP 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			12/27/22 09:32	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/19/22 15:23	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		12/16/22 09:37	12/18/22 19:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/16/22 09:37	12/18/22 19:46	1

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## 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

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/16/22 09:37	12/18/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				12/16/22 09:37	12/18/22 19:46	1
o-Terphenyl	94		70 - 130				12/16/22 09:37	12/18/22 19:46	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

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')

## Lab Sample ID: 890-3652-4

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/22/22 12:14	12/27/22 04:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				12/22/22 12:14	12/27/22 04:00	1
1,4-Difluorobenzene (Surr)	93		70 - 130				12/22/22 12:14	12/27/22 04:00	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/27/22 09:32	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/19/22 15:35	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		12/15/22 15:21	12/18/22 07:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:12	1
Oil 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

Eurofins Carlsbad

## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 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 Calculation

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 - 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			12/19/22 15:35	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		12/15/22 15:21	12/18/22 07:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	12/15/22 15:21	12/18/22 07:34	1
o-Terphenyl	122		70 - 130	12/15/22 15:21	12/18/22 07:34	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	613		4.95		mg/Kg			12/23/22 22:50	1

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

## Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 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

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## Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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

Date Received: 12/14/22 12:37

## 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			12/27/22 09:32	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/19/22 15:35	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		12/15/22 15:21	12/18/22 07:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/15/22 15:21	12/18/22 07:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				12/15/22 15:21	12/18/22 07:56	1
o-Terphenyl	125		70 - 130				12/15/22 15:21	12/18/22 07:56	1

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1070		5.03		mg/Kg			12/23/22 23:16	1



## Surrogate Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3652-1	BH-210 (11')	115	102
890-3652-2	SW-75 (0-4')	116	103
890-3652-3	SW-75 (4-10')	95	99
890-3652-4	SW-76 (0-4.5')	111	93
890-3652-5	SW-79 (0-4')	120	102
890-3652-6	SW-83 (0-4')	128	102
890-3662-A-1-H MS	Matrix Spike	114	101
890-3662-A-1-I MSD	Matrix Spike Duplicate	99	94
LCS 880-42514/1-A	Lab Control Sample	96	93
LCSD 880-42514/2-A	Lab Control Sample Dup	98	93
MB 880-42487/5-A	Method Blank	97	92
MB 880-42514/5-A	Method Blank	107	97
<b>Surrogate Legend</b>			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3638-A-1-D MS	Matrix Spike	92	72
890-3638-A-1-E MSD	Matrix Spike Duplicate	106	81
890-3644-A-1-E MS	Matrix Spike	104	104
890-3644-A-1-F MSD	Matrix Spike Duplicate	104	103
890-3652-1	BH-210 (11')	86	80
890-3652-2	SW-75 (0-4')	110	97
890-3652-3	SW-75 (4-10')	103	94
890-3652-4	SW-76 (0-4.5')	110	126
890-3652-5	SW-79 (0-4')	109	122
890-3652-6	SW-83 (0-4')	113	125
LCS 880-41942/2-A	Lab Control Sample	109	118
LCS 880-42002/2-A	Lab Control Sample	82	91
LCSD 880-41942/3-A	Lab Control Sample Dup	108	118
LCSD 880-42002/3-A	Lab Control Sample Dup	108	99
MB 880-41942/1-A	Method Blank	126	142 S1+
MB 880-42002/1-A	Method Blank	139 S1+	131 S1+
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	12/22/22 10:36	12/26/22 13:51	1
1,4-Difluorobenzene (Surr)	92		70 - 130	12/22/22 10:36	12/26/22 13:51	1

Lab Sample ID: MB 880-42514/5-A

Matrix: Solid

Analysis Batch: 42596

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42514

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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-Xylene	0.100	0.09703		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-42514/2-A

Matrix: Solid

Analysis Batch: 42596

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 42514

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09605		mg/Kg		96	70 - 130	2	35

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09288		mg/Kg		93	70 - 130	2	35
Ethylbenzene	0.100	0.08850		mg/Kg		89	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1984		mg/Kg		99	70 - 130	3	35
o-Xylene	0.100	0.1003		mg/Kg		100	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-3662-A-1-H MS

Matrix: Solid

Analysis Batch: 42596

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 42514

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.08976		mg/Kg		90	70 - 130
Toluene	<0.00201	U F1	0.100	0.07517		mg/Kg		75	70 - 130
Ethylbenzene	<0.00201	U F1	0.100	0.05923	F1	mg/Kg		59	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1329	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.06702	F1	mg/Kg		67	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-3662-A-1-I MSD

Matrix: Solid

Analysis Batch: 42596

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 42514

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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	MSD %Recovery	MSD 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

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 41942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/15/22 15:21	12/17/22 22:54	1

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-41942/1-A

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 41942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/15/22 15:21	12/17/22 22:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/15/22 15:21	12/17/22 22:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				12/15/22 15:21	12/17/22 22:54	1
o-Terphenyl	142	S1+	70 - 130				12/15/22 15:21	12/17/22 22:54	1

Lab Sample ID: LCS 880-41942/2-A

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 41942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	848.4		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1024		mg/Kg		102	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	109		70 - 130						
o-Terphenyl	118		70 - 130						

Lab Sample ID: LCSD 880-41942/3-A

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 41942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	118		70 - 130						

Lab Sample ID: 890-3644-A-1-E MS

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 41942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	104		70 - 130								

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3644-A-1-F MSD

Matrix: Solid

Analysis Batch: 42078

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 41942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1038		mg/Kg		102	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1144		mg/Kg		113	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	104		70 - 130								
o-Terphenyl	103		70 - 130								

Lab Sample ID: MB 880-42002/1-A

Matrix: Solid

Analysis Batch: 42108

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 42002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 09:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 09:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/16/22 09:37	12/18/22 09:55	1
Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	843.1		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	745.4		mg/Kg		75	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	82		70 - 130						
o-Terphenyl	91		70 - 130						

Lab Sample ID: LCSD 880-42002/3-A

Matrix: Solid

Analysis Batch: 42108

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 42002

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	871.7		mg/Kg		87	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	818.2		mg/Kg		82	70 - 130	9	20

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## QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-42002/3-A

Matrix: Solid

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

Matrix: Solid

Analysis Batch: 42108

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 42002

	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	774.5		mg/Kg		74	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	999	908.6		mg/Kg		91	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	92		70 - 130							
o-Terphenyl	72		70 - 130							

Lab Sample ID: 890-3638-A-1-E MSD

Matrix: Solid

Analysis Batch: 42108

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 42002

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	885.1		mg/Kg		86	70 - 130	13	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1027		mg/Kg		103	70 - 130	12	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	106		70 - 130									
o-Terphenyl	81		70 - 130									

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41931/1-A

Matrix: Solid

Analysis Batch: 42334

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			12/23/22 21:31	1	

Lab Sample ID: LCS 880-41931/2-A

Matrix: Solid

Analysis Batch: 42334

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	268.3		mg/Kg		107	90 - 110		

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QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	264.7		mg/Kg		106	90 - 110	1	20

Lab Sample ID: 890-3652-1 MS				Client Sample ID: BH-210 (11')							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 42334											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	699		250	961.0		mg/Kg		105	90 - 110	3	20

## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

## HPLC/IC (Continued)

## Leach Batch: 41931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-4	SW-76 (0-4.5')	Soluble	Solid	DI Leach	
890-3652-5	SW-79 (0-4')	Soluble	Solid	DI Leach	
890-3652-6	SW-83 (0-4')	Soluble	Solid	DI Leach	
MB 880-41931/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41931/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41931/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3652-1 MS	BH-210 (11')	Soluble	Solid	DI Leach	
890-3652-1 MSD	BH-210 (11')	Soluble	Solid	DI Leach	

## Analysis Batch: 42334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3652-1	BH-210 (11')	Soluble	Solid	300.0	41931
890-3652-2	SW-75 (0-4')	Soluble	Solid	300.0	41931
890-3652-3	SW-75 (4-10')	Soluble	Solid	300.0	41931
890-3652-4	SW-76 (0-4.5')	Soluble	Solid	300.0	41931
890-3652-5	SW-79 (0-4')	Soluble	Solid	300.0	41931
890-3652-6	SW-83 (0-4')	Soluble	Solid	300.0	41931
MB 880-41931/1-A	Method Blank	Soluble	Solid	300.0	41931
LCS 880-41931/2-A	Lab Control Sample	Soluble	Solid	300.0	41931
LCSD 880-41931/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41931
890-3652-1 MS	BH-210 (11')	Soluble	Solid	300.0	41931
890-3652-1 MSD	BH-210 (11')	Soluble	Solid	300.0	41931

## Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

Client Sample ID: BH-210 (11')

Lab Sample ID: 890-3652-1

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 02:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 19:01	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 21:57	CH	EET MID

Client Sample ID: SW-75 (0-4')

Lab Sample ID: 890-3652-2

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	42514	12/22/22 12:14	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42596	12/27/22 02:36	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42651	12/27/22 09:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42208	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 19:23	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	41931	12/15/22 14:24	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42334	12/23/22 22:24	CH	EET MID

Client Sample ID: SW-75 (4-10')

Lab Sample ID: 890-3652-3

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-3652-4

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 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 Chronicle

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

Client Sample ID: SW-76 (0-4.5')

Lab Sample ID: 890-3652-4

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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')

Lab Sample ID: 890-3652-6

Date Collected: 12/14/22 12:00

Matrix: Solid

Date Received: 12/14/22 12:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Eurofins Carlsbad



Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
SDG: Lea County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Tetra Tech, Inc.  
Project/Site: Kaiser SWD

Job ID: 890-3652-1  
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: 890-3652-1  
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

**Tetra Tech, Inc.**901W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

890-3652 Chain of Custody

Page 1 of 1

Client Name: Permian Water Solutions		Site Manager: Clair Gonzales	
Project Name: Kaiser SWD		Project #: Clair.Gonzales@tetratech.com	
Project Location: (county) Lea County, NM		Project #: 212C-MD-02230	
Invoice to: Permian Water Solutions - Dusty McInturf		Sampler Signature: Peyton Oliver	
Receiving Laboratory: Eurofins Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	None					
										YEAR: 2020				
BH-210 (11)		12/14/2022		X				X					X	BTEX 8021B BTEX 8260B
SW-75 (0-4)		12/14/2022		X				X					X	TPH TX1005 (Ext to C35)
SW-75 (4-10)		12/14/2022		X				X					X	TPH 8015M ( GRO - DRO - ORO - MRO)
SW-76 (0-4.5)		12/14/2022		X				X					X	PAH 8270C
SW-79 (0-4)		12/14/2022		X				X					X	Total Metals Ag As Ba Cd Cr Pb Se Hg
SW-83 (0-4)		12/14/2022		X				X					X	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
														TCLP Volatiles
														TCLP Semi Volatiles
														RCI
														GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														Hold

Relinquished by: <i>[Signature]</i> Date: 12/14/22 Time: 1337	Received by: <i>[Signature]</i> Date: 12/14/22 Time: 1337
Relinquished by: <i>[Signature]</i> Date: 12/14/22 Time: 1337	Received by: <i>[Signature]</i> Date: 12/14/22 Time: 1337

Relinquished by: <i>[Signature]</i> Date: 12/14/22 Time: 1337	Received by: <i>[Signature]</i> Date: 12/14/22 Time: 1337
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LAB USE ONLY	REMARKS:
Sample Temperature	<input checked="" type="checkbox"/> STANDARD
10.2	<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
10.0	<input type="checkbox"/> Rush Charges Authorized
	<input type="checkbox"/> Special Report Limits or TRRP Report

ORIGINAL COPY

Tm-007  
-0.2

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

## Eurofins Carlsbad

1089 N Canal St  
Carlsbad, NM 88220  
Phone. 575-988-3199 Fax 575-988-3199

## Chain of Custody Record

 eurofins

## Environment Testing

Client Information (Sub Contract Lab)				Sampler	Lab PM	Center Tracking No(s)	COC No							
Client Contact:		Phone		Kramer, Jessica			890-1064 1							
Shipping/Receiving				E-Mail: Jessica.Kramer@et.eurofins.com		State of Origin: New Mexico	Page 1 of 1							
Company				Accreditations Required (See note): NELAP - Texas			Lab #							
Eurofins Environment Testing South Cent							890-3652-1							
Address		Due Date Requested	Analysis Requested											
1211 W. Florida Ave.		12/20/2022												
City		TAT Requested (days):												
Midland														
State/Zip														
TX, 79701														
Phone		PO #												
432-704-5440(Tel)														
Email		WO #												
Project Name		Project #												
Kaiser SMD		88001259												
Site:		SSOV#												
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=material, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/5035FP_Calc BTEX	Total BTEX_GCV	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
BH-210 (11)	(890-3652-1)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	1	
SW-75 (0-4)	(890-3652-2)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	1	
SW-75 (4-10)	(890-3652-3)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	1	
SW-76 (0-4 5)	(890-3652-4)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	1	
SW-79 (0-4)	(890-3652-5)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	1	
SW-83 (0-4)	(890-3652-6)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	1	

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/test/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.

**Possible Hazard Identification**

Unconfirmed

Deliverable Requested I, II, III, IV, Other (specify) \_\_\_\_\_ Primary Deliverable Rank 2 \_\_\_\_\_

Empty Kit Relinquished by \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Method of Shipment \_\_\_\_\_

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Company \_\_\_\_\_

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Company \_\_\_\_\_

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Company \_\_\_\_\_

Custody Seals Intact: \_\_\_\_\_ Custody Seal No \_\_\_\_\_

Δ Yes Δ No

Cooler Temperature(s) °C and Other Remarks \_\_\_\_\_

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**

☐ Return To Client ☐ Disposal By Lab ☐ Archive For \_\_\_\_\_ Months


**Preservation Codes**

A - HCL	M Hexane
B NaOH	N None
C Zn Acetate	O AsNaO2
D Nitric Acid	P - Na2OAS
E NaHSO4	Q - Na2SO3
F MeOH	R - Na2S2O3
G Amchlor	S - H2SO4
H Ascorbic Acid	T TSP Dodecylalate
I Ice	U - Acetone
J - DI Water	V MCAA
K EDTA	W pH 4.5
L EDA	Y Trizma
Other _____	Z other (specify)



- 1 Eurofins Carlsbad
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Chain of Custody Record


**eurofins**

## Environment Testline

**LaDonna Carlsbad**  
1089 N Canal St  
Carlsbad, NM 88220  
Phone 575-988-3199 Fax 575-988-3199

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM	Carrier Tracking No(s)	COC No:									
Client Contact:		Phone:	Kramer, Jessica		890-1064 1									
Shipping/Receiving		E-Mail	Jessica.Kramer@et.eurofinsus.com	State of Origin:	Page: 1 of 1									
Company	Eurofins Environment Testing South Cent		Accreditations Required (See note):	New Mexico	Job #:									
Address	1211 W. Florida Ave	Due Date Requested	12/20/2022	Analysis Requested	890-3652-1									
City	Midland	TAT Requested (days):												
State Zip	TX, 79701	PO #												
Phone:	432-704-5440(Tel)	W/O #:												
Email		Project #:												
Project Name:	Kaiser SWD	SSOV#:												
Site:														
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=grab)</b>	<b>Matrix (W=Water, S=Soil, O=Organic, A=Air)</b>	<b>Field Filtered Sample (Yes or No)</b>	<b>Perform MS/MSD (Yes or No)</b>	<b>8021B/6035FP_Calc BTEX</b>	<b>Total_BTEX_GCV</b>	<b>8015MOD_Calc</b>	<b>8015MOD_NM/8015NM_S_Prep Full TPH</b>	<b>300_ORGFM_28D/DI_LEACH Chloride</b>	<b>Total Number of Containers</b>	<b>Special Instructions/Note:</b>
BH-210 (1*) (890-3652-1)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
SW-75 (0-4) (890-3652-2)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
SW-75 (4-10) (890-3652-3)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
SW-76 (0-4 5) (890-3652-4)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
SW-79 (0-4) (890-3652-5)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
SW-83 (0-4) (890-3652-6)	12/14/22	12 00	Mountain	Solid		X	X	X	X	X	X	X	1	
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/test/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.														
<b>Possible Hazard Identification</b>														
<b>Unconfirmed</b>														
Deliverable Requested I, II, III, IV Other (specify) Primary Deliverable Rank 2														
Empty Kit Relinquished by: Date/Time: Company: Time: Method of Shipment: Date/Time: Company:														
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:														
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:														
Custody Seals Intact: Custody Seal No: Cooler Temperature(s) °C and Other Remarks:														
Δ Yes Δ No														



## Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-3652-1

SDG Number: Lea County NM

Login Number: 3652

List Number: 1

Creator: Stutzman, Amanda

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: 890-3652-1

SDG Number: Lea County NM

Login Number: 3652

List Number: 2

Creator: Teel, Brianna

List Source: Eurofins Midland

List Creation: 12/15/22 11:29 AM

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 <6mm (1/4").	True	

**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  
**District IV**  
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 258924

CONDITIONS

Operator: Permian Water Solutions, LLC PO Box 2106 Midland, TX 79702	OGRID: 373626
	Action Number: 258924
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/1/2023