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	nAPP2208846424
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: jim.raley@dvn.com	Incident # *(assigned by OCD)* nAPP2208846424
Contact mailing address: 5315 Buena Vista Dr., Carlsbad NM 88220	

Location of Release Source

Latitude 32.0072937 Longitude -103.9659729
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: PECOS FEDERAL #001Y	Site Type: Oil Production Site
Date Release Discovered: March 21st, 2022	API# *(if applicable) 30-015-24875*

Unit Letter	Section	Township	Range	County
P	27	26S	29E	Eddy

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)

☒ Crude Oil	Volume Released (bbls) 8	Volume Recovered (bbls) 3
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Tank overflow allowed the release of approx. 8 bbls of oil. Approx 6 bbls was released to secondary containment of which 3bbls was recovered. Winds allowed approx. 2 bbls to impact soils offsite.

$$bbl\ estimate = \frac{saturated\ soil\ volume(ft^3)}{4.21(\frac{ft^3}{bbl\ equivalent})} * estimated\ soil\ porosity\ (\%) + recoverd\ fluids\ (bbls)$$

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2208846424
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)	

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: ____James Raley_____ Title: Environmental Specialist _____

Signature: _____ _____ Date: ___3/29/2022_____

email: ___jim.raley@dvn.com_____ Telephone: ___575-689-7597_____

OCD Only

Received by: Jocelyn Harimon Date: 03/29/2022

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

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 93973
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	3/29/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2208846424
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?	51-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2208846424
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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 06/19/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2208846424
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] 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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 06/19/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: _____ Date: _____

- [ ] Approved
- [x] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: Jennifer Nobui Date: 09/20/2022

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

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 10 2014
RECEIVED

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

nAB1431605 D115

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company RKI E&P, LLC 246289	Contact Zack Laird
Address 210 Park Ave. – Ste. 900, OKC, OK 73102	Telephone No. 405-742-2696
Facility Name Pecos Federal 001Y	Facility Type Oil and Gas Well

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-24875

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	27	26S	29E		690 FSL		660FEL	Eddy

Latitude 32.0072945706848 Longitude -103.965986188431

NATURE OF RELEASE

Type of Release. Produced Water	Volume of Release 25Bbls	Volume Recovered 25Bbls
Source of Release Transfer Pump Suction Line Leak	Date and Hour of Occurrence 11/10/14 – prior to 0800hrs MT	Date and Hour of Discovery 11/10/14 – 0800hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Heather Patterson (Voicemail on mobile) X	
By Whom? Zack Laird – Sr. EHS Manager	Date and Hour 11/10/14 – 1727hrs (CT) 4:43pm * attached	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

Transfer pump suction line from tank battery developed a leak and released 25Bbls of produced water to lined secondary containment. A vacuum truck was used to recover free liquids. The suction line, formerly rubber hose construction, will be replaced with steel line.

Describe Area Affected and Cleanup Action Taken.*

All fluid remained in lined secondary containment and was able to be recovered with vacuum truck.

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: Zack Laird	Approved by Environmental Specialist:
Title: Sr. EHS Manager	Approval Date: 11/12/14 Expiration Date: NA
E-mail Address: ZLaird@rkixp.com	Conditions of Approval: Attached ☐
Date: 11/10/14 Phone: 405-987-2213	

* Attach Additional Sheets If Necessary

2RP-2595

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	NAB1431650115
District RP	2RP-2595
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party WPX Energy, Inc.	OGRID 246289
Contact Name Jim Raley	Contact Telephone (575)689-7597
Contact email jim.raley@dvn.com	Incident # *(assigned by OCD)* NAB1431650115
Contact mailing address 5315 Buena Vista Dr., Carlsbad, NM 88220	

Location of Release Source

Latitude 32.0072945706848 Longitude -103.965986188431
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Pecos Federal 001Y	Site Type Oil and Gas Well
Date Release Discovered 11/10/2014	API# *(if applicable)* 30-015-24875

Unit Letter	Section	Township	Range	County
P	27	26S	29E	Eddy

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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 25	Volume Recovered (bbls) 25
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Transfer pump suction line from tank battery developed a leak and released 25 bbls of produced water to lined secondary containment. A vacuum truck was used to recover free liquids. The suction line, formerly rubber hose construction, was replaced with steel line. All fluids remained in lined secondary containment and was able to be recovered with vacuum truck.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1431650115
District RP	2RP-2595
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 6/19/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NAB1431650115
District RP	2RP-2595
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?	51-100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAB1431650115
District RP	2RP-2595
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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 06/19/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1431650115
District RP	2RP-2595
Facility ID	
Application ID	

Remediation Plan

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

- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] 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: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 06/19/2022

email: jim.raley@dvn.com Telephone: 575-686-7597

OCD Only

Received by: _____ Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____ Date: _____

REMEDIATION WORK PLAN

Site Location:

Pecos Federal #001Y
Eddy County, New Mexico
Incident Numbers:
nAPP2208846424
nAB1431650115

June 16, 2022
Ensolum Project No. 03A1987014

Prepared for:

WPX Energy Permian, LLC
5315 Buena Vista Dr.
Carlsbad, New Mexico 88220
Attention: Jim Raley

Prepared by:

Joseph S. Hernandez
Senior Geologist

Daniel R. Moir, P.G.
Senior Managing Geologist

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Site Description & Releases Overview 1
1.2 Site Characterization 1-2
1.3 Project Objective 2
2.0 SOIL SAMPLING AND INITIAL REMEDIAL ACTIONS 2
2.1 Delineation Activities 2-3
3.0 SOIL SAMPLING RESULTS 3
4.0 REMEDIATION WORK PLAN 3-4
4.1 Proposed Schedule 4

APPENDICES

Appendix A: Figure 1 – Site Map
Figure 2 – Delineation Soil Sample Locations
Figure 3 – Area of Concern

Appendix B: Well Record

Appendix C: Lithologic Soil Sampling Logs

Appendix D: Photographic Log

Appendix E: Tables

Appendix F: Laboratory Analytical Reports & Chain-of-Custody Documentation

1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared this Remediation Work Plan Report (RWP) to document site assessment, soil sampling activities, and preliminary corrective actions performed to date by WPX Permian Energy, LLC (WPX) at the Pecos Federal #001Y (hereinafter referred to as the "Site") in Unit P, Section 27, Township 26 South, Range 30 East, in Eddy County, New Mexico **(Figure 1 in Appendix A).** Based on field observations, field screening activities, and review of the laboratory analytical results from delineation soil sampling activities at the Site, WPX respectfully submits this RWP, which summarizes soil sampling activities and initial response efforts that have occurred and proposes additional soil sampling activities to further investigate and address reportable releases of crude oil and produced water at the Site.

Additionally, WPX has provided relevant information for a historical release (Incident Number nAB1431650115) that is overlapped by the newer release (Incident Number nAPP2208846424) and requests to include in the deferral request once the releases are fully laterally delineated.

1.1 Site Description and Release Background

The Site is located within Eddy County, New Mexico (32.0072937° N, 103.9659729°W) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land **(Figure 1 in Appendix A)**.

nAPP2208846424

On March 21, 2022, a tank overflowed and allowed the release of approximately 6 barrels (bbls) of crude oil to the secondary containment and 2 bbls of overspray to the pasture. Approximately 3 bbls were able to be recovered successfully from the secondary containment. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) with a subsquent Corrective Action Form C-141 (Form C-141) dated March 29, 2022. The release was assigned Incident Number nAPP2208846424.

nAB1431650115

On November 10, 2014, the transfer pump suction line from the tank battery developed a leak and released approximately 25 bbls of produced water to the secondary containment. Approximately 25 bbls of crude oil were recovered via vacuum truck. The former operator, RKI E&P, LLC, reported the release to the NMOCD via phone and email, with a subsquent Form C-141, on November 10, 2014. WPX ultimately acquired the asset and assumed liability for remediation of the release. The release was assigned Incident Number nAB1431650115.

1.2 Site Characterization

Ensolum characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC).

Depth to groundwater at the Site is estimated to be between 51 and 100 feet below ground surface (bgs) based a United States Geological Survey (USGS) water well 320106103555301, located 0.50 miles northeast of the Site. The water well has a reported depth to groundwater of 53.46 feet bgs. The well record is provided in **Appendix B.**

The closest continuously flowing or significant watercourse to the Site is the Pecos River, located approximately 3,305 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high potential karst designation area). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on **Figure 1 in Appendix A.**

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum Hydrocarbon (TPH): 100 mg/kg
- Chloride: 600 mg/kg

1.3 Project Objective

The primary objectives of Ensolum's scope of services were to document soil characterization and delineation actions, which were completed in accordance with the applicable NMOCD regulatory guidelines, and to document those concentrations of constituents of concern (COCs) present in soil remaining on-Site for remediation.

2.0 SOIL SAMPLING AND INITIAL REMEDIAL ACTIONS

WPX conducted delineation soil sampling activities for Incident Numbers nAPP2208846424 and nAB1431650115 and performed intial response efforts to remove immediate impacts from the secondary containment associated with the more recent Incident Number nAPP2208846424 for off-Site disposal. During delineation soil sampling events to characterize vertical and lateral extent of impacts, WPX encountered additional areas requiring soil investigation. Below is a summary of those events.

On April 18, 2022 and May 18, 2022, delineation activities were conducted by Ensolum to confirm the presence or absence of impacted soil in areas associated with the subject release areas. Delineation samples were collected in potholes advanced with heavy equipment (samples designated PH). Delineation activites were directed by field sceening soil for volatile aromatic hydrocarbons utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A total of two soil samples were collected from each delineation soil sample location (PH01 through PH17): the sample with the highest observed field screening (0.5 foot bgs) and the greatest depth (ranging from 1-foot to 7 feet bgs). Since both releases occurred in and around the tank battery, delineation soil samples were collected to assess both releases at the same time. Soil sample location rationale are described below:

Sample Location Rationale:

- PH01 – in the vicinity of the two point of releases and inside the secondary containment

- PH02 through PH06 – vertical delineation sample points within the March 2022 release extent outside containment
- PH07 through PH17 – lateral delineation of COCs

The location of the delineation soil samples are shown in **Figure 2 in Appendix A**.

Field screening results and observations for each delineation soil sample were recorded on lithologic/soil sampling logs **(Appendix C).** The soil samples were placed directly into laboratory provided pre-cleaned glass jars and labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C), under strict chain-of-custody procedures, to Eurofins LLC (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0. Photographic documentation during delineation activities is included in **Appendix D.**

3.0 SOIL SAMPLING RESULTS

Laboratory analytical results of total depth delineation soil samples for PH11, PH15, and PH16 exceed the Closure Criteria. Soil sample PH01 was collected in the vicinity of the point of releases. Soil sample PH11 was advanced to laterally delineate soil sample PH01; however, the soil analytical results indicated COCs exceeded the Closure Criteria and as a result, soil samples PH15 through PH17 were advanced to fully define the lateral exent of soil impacts. Based on soil analytical results from soil samples PH12, PH13, and PH17, soil impacts have been laterally defined to the south, north and west of the tank battery. Based on the current extent of soil characterization at the Site, it appears vertical impacts associated with the subject releases does not extend beyond 7 feet bgs inside the secondary containment (PH01). Laboratory analytical results for delineation soil samples PH02 through PH10, PH14 and PH17 indicated COCs were within the applicable Closure Criteria.

Laboratory analytical results are summarized in the **Table 1** included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

4.0 REMEDIATION WORK PLAN

Based on the results documented in this report, the following findings and conclusions regarding the releases are presented:

- Laboratory analytical results of total depth delineation soil samples for PH11, PH15 and PH16 exceed the Closure Criteria.
- Based on laboratory analytical results for delineation samples collected from misting impacts (PH02 through PH06), no remediation efforts are required in these areas.
- Delineation soil samples off pad (PH07 through PH10 and PH14) were collected and additionally confirm horizontal delineation to COCs less than the Closure Criteria. Laboratory data associated with delineation soil sample location PH17 will be used to assist in determining a lateral boundary to the west of the Area of Concern (**Figure 3 in Appendix A)**.
- Incident Number nAPP2208846424 overlaps historical Incident Number nAB1431650115. WPX respectfully requests NMOCD to review current and future laboratory analytical data

as it can be applicable for this release to provide vertical and lateral definition of the historical release and will be used to supplement a deferral request due to the current site and equipment configuration. **Figure 3 in Appendix A** depicts the proposed deferral area.

Based on the conclusions presented above, the following remediation is proposed:

- Soil characterization and investigation will conducted to determine the lateral and vertical extent of the Area of Concern and to complete a deferral volume estimate for Incident Numbers nAPP2208846424 and nAB1431650115. Laboratory analytical results will be used to determine estimated soil volume to be remediated or deferred.

- Following review of the additional soil characterization at the Site, WPX will re-evaluate the Area of Concern and submit a revised RWP detailing specific options of remediation for NMOCD review.

4.1 Proposed Schedule

WPX believes the scope of work described above will meet requirements set forth in NMAC 19.15.29.13 and be protective of human health, the environment, and groundwater. As such, WPX respectfully requests approval of this RWP from NMOCD. WPX anticipates completing additional delineation activities within 90 days of NMOCD's approval of this RWP.

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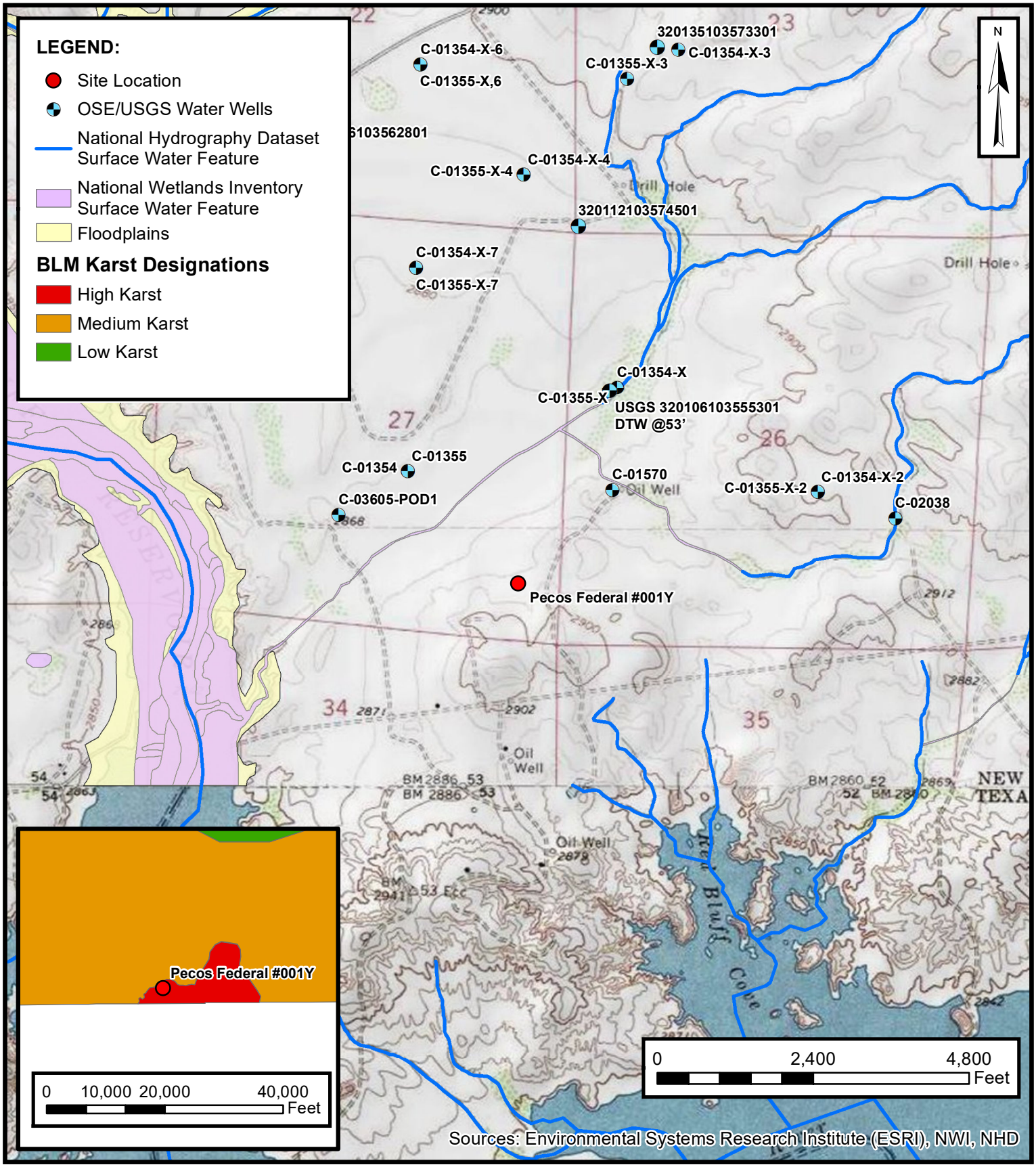
APPENDIX A

Figures

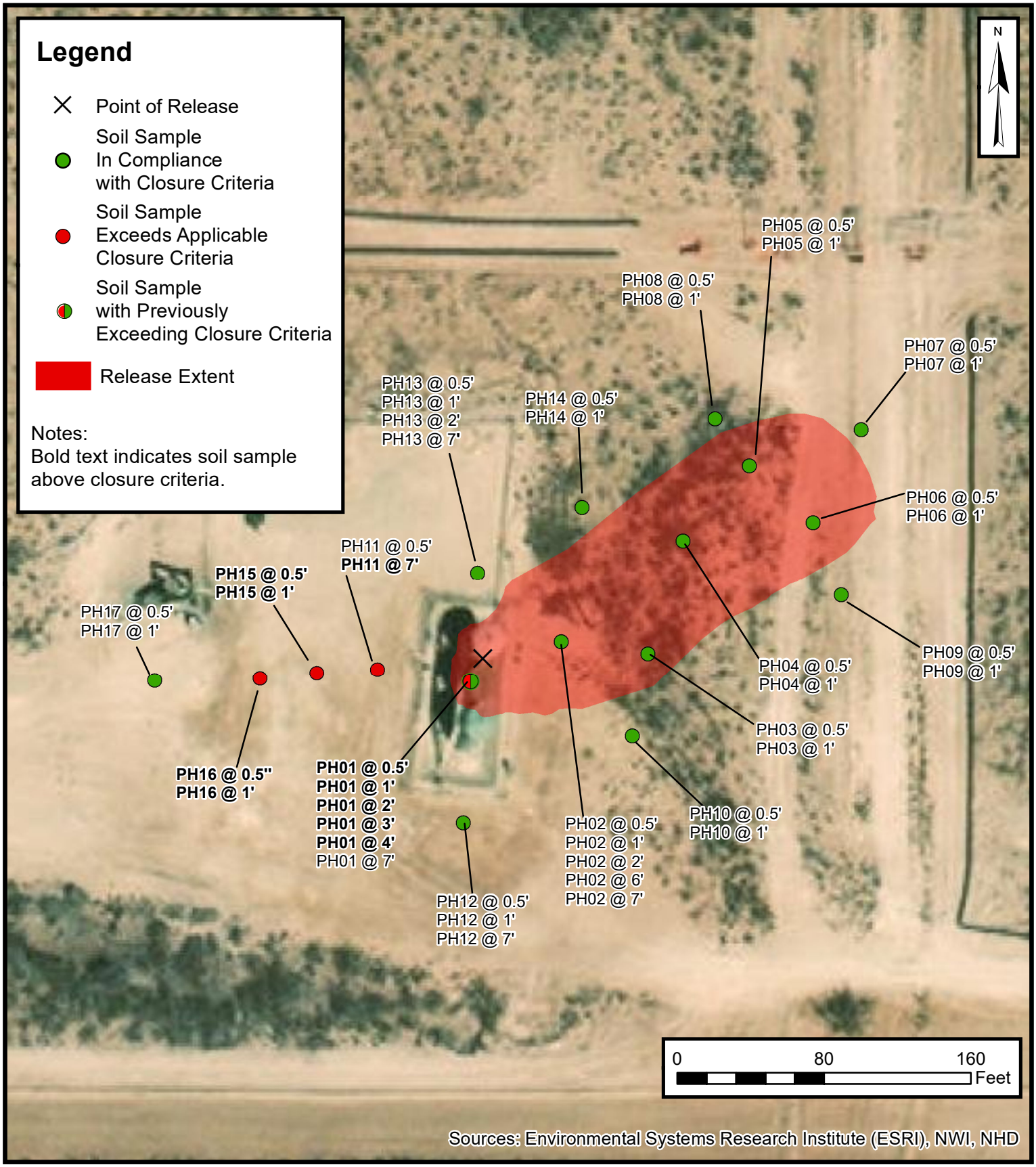


ENSOLUM
Environmental & Hydrogeologic Consultants

Site Location Map

Pecos Federal #001Y
WPX Energy Permian, LLC
32.0072937, -103.9659729
Eddy County, NM

FIGURE
#1

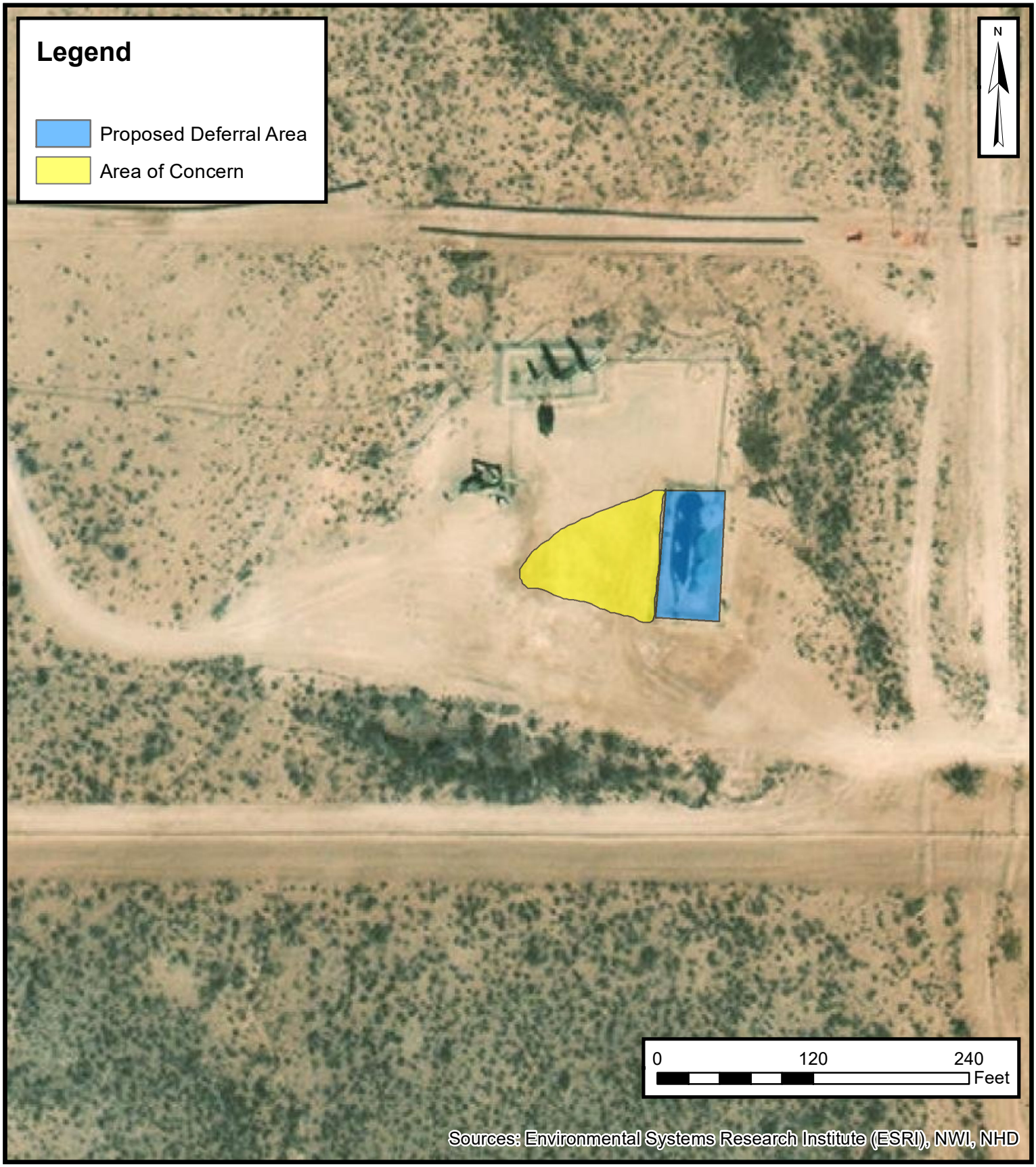


ENSOLUM
Environmental & Hydrogeologic Consultants

Delineation Soil Sample Locations

Percos Federal #001Y
WPX Energy Permian, LLC
32.0072937, -103.9659729
Eddy County, NM

FIGURE
#2



ENSOLUM
Environmental & Hydrogeologic Consultants

Area of Concern

Percos Federal #001Y
WPX Energy Permian, LLC
32.0072937, -103.9659729
Eddy County, NM

FIGURE
#3

ENSOLUM

APPENDIX B

Well Record

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320106103555301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320106103555301 26S.29E.26.13143

Eddy County, New Mexico
Latitude 32°00'51.3", Longitude 103°57'42.0" NAD83
Land-surface elevation 2,883.00 feet above NGVD29
The depth of the well is 140 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1983-01-26		D	62610		2828.70	NGVD29	1	Z		
1983-01-26		D	62611		2830.22	NAVD88	1	Z		
1983-01-26		D	72019	54.30			1	Z		
1987-10-14		D	62610		2847.71	NGVD29	1	Z		
1987-10-14		D	62611		2849.23	NAVD88	1	Z		
1987-10-14		D	72019	35.29			1	Z		
1992-11-04		D	62610		2838.94	NGVD29	1	S		
1992-11-04		D	62611		2840.46	NAVD88	1	S		
1992-11-04		D	72019	44.06			1	S		
1998-01-28		D	62610		2829.99	NGVD29	1	S		
1998-01-28		D	62611		2831.51	NAVD88	1	S		
1998-01-28		D	72019	53.01			1	S		
2003-01-27		D	62610		2827.07	NGVD29	1	S	USGS	
2003-01-27		D	62611		2828.59	NAVD88	1	S	USGS	
2003-01-27		D	72019	55.93			1	S	USGS	
2013-01-09	19:00 UTC	m	62610		2825.19	NGVD29	1	S	USGS	

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
2013-01-09	19:00 UTC	m	62611		2826.71	NAVD88	1	S	USGS	
2013-01-09	19:00 UTC	m	72019	57.81			1	S	USGS	
2021-02-24	21:10 UTC	m	62610		2829.54	NGVD29	1	S	USGS	
2021-02-24	21:10 UTC	m	62611		2831.06	NAVD88	1	S	USGS	
2021-02-24	21:10 UTC	m	72019	53.46			1	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

Sample Name: PH01	5/18/2022	
Site Name: Pecos Federal #001Y		
Incident Number: nAPP2208846424 and nAB1431650115		
Job Number: 03A1987014		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 7'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	252	21.3	N	PH01	0.5	0	SW-SM	0-7', SAND, dry, reddish brown, well graded with silt, very fine-fine, trace subround-subangular gravel, unknown odor, no staining.
D	252	114	N	PH01	1	1		
D	252	96.9	N	PH01	2			
D	<168	37.4	N	PH01	3			
D	369.6	97.8	N	PH01	4			
D	280	30.6	N		5	5		
D	<168	27.9	N		6			
D	<168	2.6	N	PH01	7		TD	Total depth @ 7' bgs.
						10		

ENSOLUM

	Sample Name: PH02	5/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 7'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	10.9	N	PH02	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	17.1	N	PH02	1	1		@5', color change to reddish-brown.
D	<168	0.7	N	PH02	2			@6', abundant silt.
D	<168	0.6	N		3			
D	<168	0.8	N		4			
D	168	0.4	N		5	5		
D	873.6	0.4	N	PH02	6			
D	532	1.2	N	PH02	7		TD	Total depth @ 7' bgs.
						10		

ENSOLUM

	Sample Name: PH03	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	1.2	N	PH03	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	0.3	N	PH03	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

	Sample Name: PH04	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.4	N	PH04	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	0.7	N	PH04	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

	Sample Name: PH05	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.3	N	PH05	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	0.2	N	PH05	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

	Sample Name: PH06	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.7	N	PH06	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	0	N	PH06	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

	Sample Name: PH07	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	1.3	N	PH07	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	1	N	PH07	1	1	TD	Total depth @ 1' bgs.

ENSOLUM	Sample Name: PH08	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.1	N	PH08	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	0.8	N	PH08	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

Sample Name: PH09	4/18/2022	
Site Name: Pecos Federal #001Y		
Incident Number: nAPP2208846424 and nAB1431650115		
Job Number: 03A1987014		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	1.2	N	PH09	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	1.5	N	PH09	1	1	TD	Total depth @ 1' bgs.

ENSOLUM	Sample Name: PH10	4/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.8	N	PH10	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	<168	1.5	N	PH10	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

Sample Name: PH11	5/18/2022
Site Name: Pecos Federal #001Y	
Incident Number: nAPP2208846424 and nAB1431650115	
Job Number: 03A1987014	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: GM	Method: Back-Hoe
Hole Diameter: N/A	Total Depth: 7'

Coordinates: 32.00677,-103.966761

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	3,406.4	0.7	N	PH11	0.5	0	SW-SM	0-7', SAND, dry, brown, well graded with silt, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	1,304.8	1.2	N		1	1		@3', color change to reddish-brown.
D	1,741.6	1.7	N		2			@4', color change to tan-brown.
D	1,304.8	2.8	N		3			
D	1,209.6	0.9	N		4			
D	1,209.6	1	N		5	5		
D	800.8	0.5	N		6			
D	280	0.4	N	PH11	7		TD	Total depth @ 7' bgs.
						10		

ENSOLUM

Sample Name: PH12	5/18/2022
Site Name: Pecos Federal #001Y	
Incident Number: nAPP2208846424 and nAB1431650115	
Job Number: 03A1987014	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: GM	Method: Back-Hoe
Hole Diameter: N/A	Total Depth: 7'

Coordinates: 32.00677,-103.966761

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	369.6	2.9	N	PH12	0.5	0	SW-SM	0-7', SAND, dry, brown, well graded with silt, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	728.0	3.3	N	PH12	1	1		@1', color change to tan-light brown.
D	420.0	1.9	N		2			@2', abundant silt.
D	476.0	2	N		3			
D	532.0	1.4	N		4			
D	324.8	0.9	N		5	5		
D	364.6	1.1	N		6			
D	420	1	N	PH12	7		TD	Total depth @ 7' bgs.
						10		

ENSOLUM

	Sample Name: PH13	5/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: GM	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 7'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	280	1.1	N	PH13	0.5	0	SP-SM	0-7', SAND, dry, brown, poorly graded with silt, fine, trace subround-subangular gravel, no odor, no staining.
D	280	1	N	PH13	1	1		@4', color change to light brown.
D	1,512	4.8	N	PH13	2			@6', color change to reddish-brown.
D	1,036	6	N		3			
D	1,304.8	3.5	N		4			
D	800.8	2	N		5	5		
D	532	0.7	N		6			
D	476	0.3	N	PH13	7		TD	Total depth @ 7' bgs.
						10		

ENSOLUM

	Sample Name: PH14	5/18/2022
	Site Name: Pecos Federal #001Y	
	Incident Number: nAPP2208846424 and nAB1431650115	
	Job Number: 03A1987014	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0	N	PH14	0.5	0	SW	0-7', SAND, dry, brown, well graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	280	0.2	N	PH14	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

Sample Name: PH15	5/18/2022	
Site Name: Pecos Federal #001Y		
Incident Number: nAPP2208846424 and nAB1431650115		
Job Number: 03A1987014		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	>3,466.4	0.7	N	PH15	0.5	0	SP	0-7', SAND, dry, brown, poorly graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	1,512	7.7	N	PH15	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

Sample Name: PH16	5/18/2022	
Site Name: Pecos Federal #001Y		
Incident Number: nAPP2208846424 and nAB1431650115		
Job Number: 03A1987014		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	3,466.4	0.2	N	PH16	0.5	0	SP	0-7', SAND, dry, brown, poorly graded, very fine-medium, trace subround-subangular gravel, no odor, no staining.
D	593.6	4.9	N	PH16	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

Sample Name: PH17	5/18/2022	
Site Name: Pecos Federal #001Y		
Incident Number: nAPP2208846424 and nAB1431650115		
Job Number: 03A1987014		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Back-Hoe
Coordinates: 32.00677,-103.966761	Hole Diameter: N/A	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included on chloride test.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	1.3	N	PH17	0.5	0	SP	0-7', SAND, dry, brown, poorly graded, very fine-fine, trace subround-subangular gravel, no odor, no staining.
D	<168	4.9	N	PH17	1	1	TD	Total depth @ 1' bgs.

ENSOLUM

APPENDIX D

Photographic Log

ENSOLUM

Photographic Log
WPX Energy Permian, LLC.
Pecos Federal #001Y
Incident Numbers nAPP2208846424 and nAB1431650115
Ensolum Job Number: 03A1987014

Photograph 1
Date: March 23, 2022
Description: Site Assessment Activities

Photograph 2
Date: March 23, 2022
Description: Site Assessment Activities

Photograph 3
Date: April 18, 2022
Description: Surface Scrape Activities

Photograph 4
Date: May 18, 2022
Description: Delineation Activities

ENSOLUM

Photographic Log
WPX Energy Permian, LLC.
Pecos Federal #001Y
Incident Numbers nAPP2208846424 and nAB1431650115
Ensolum Job Number: 03A1987014

Photograph 5
Date: May 18, 2022
Description: Delineation activities.

Photograph 6
Date: May 18, 2022
Description: Delineation activities.

Photograph 7
Date: May 19, 2022
Description: Surface Scrape activities

Photograph 8
Date: May 19, 2022
Description: Area after scrape

ENSOLUM

APPENDIX E

Tables

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC - Pecos Federal #001Y
Eddy County, New Mexico

Ensolum Project No. 03A1987014

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**100**	**600**
Delineation Soil Sample Analytical Results									
PH01	04/18/2022	0.5	<0.00200	<0.00399	<49.9	763	222	**985**	361
PH01	04/18/2022	1	<0.00199	<0.00398	51.7	1,470	241	**1,760**	288
PH01	04/18/2022	2	<0.00200	<0.00399	<50.0	786	221	**1,010**	258
PH01	04/18/2022	3	<0.00199	<0.00398	<50.0	2,990	554	**3,540**	**779**
PH01	05/18/2022	4	<0.00201	<0.00402	<49.9	230	<49.9	**230**	233
PH01	05/18/2022	7	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	116
PH02	04/18/2022	0.5	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	186
PH02	04/18/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	156
PH02	04/18/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	116
PH02	05/18/2022	6	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	594
PH02	05/18/2022	7	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	534
PH03	04/18/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	10.6
PH03	04/18/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	6.41
PH04	04/18/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<4.97
PH04	04/18/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<4.99
PH05	04/18/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	5.60
PH05	04/18/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	15.5
PH06	04/18/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	5.36
PH06	04/18/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	7.50
PH07	04/18/2022	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<4.95
PH07	04/18/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<5.04
PH08	04/18/2022	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<5.00
PH08	04/18/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	10.0

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC - Pecos Federal #001Y
Eddy County, New Mexico

Ensolum Project No. 03A1987014

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**100**	**600**
PH09	04/18/2022	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<4.97
PH09	04/18/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	6.71
PH10	04/18/2022	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	21.2
PH10	04/18/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	112
PH11	05/18/2022	0.5	<0.00200	<0.00200	<50.0	70.6	<50.0	70.6	537
PH11	05/18/2022	7	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	**4,740**
PH12	05/18/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	334
PH12	05/18/2022	1	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	382
PH12	05/18/2022	7	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	599
PH13	04/19/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	313
PH13	04/19/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	279
PH13	05/18/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	**1,460**
PH13	05/18/2022	7	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	456
PH14	04/19/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	93.3
PH14	04/19/2022	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	248
PH15	05/18/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	67.9	67.9	**8,780**
PH15	05/18/2022	1	<0.00198	<0.00396	147	<49.9	<49.9	**147**	**1,570**
PH16	05/18/2022	0.5	<0.00198	<0.00397	144	<50.0	<50.0	**144**	**7,560**
PH16	05/18/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	**673**

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
WPX Energy Permian, LLC - Pecos Federal #001Y
Eddy County, New Mexico

Ensolum Project No. 03A1987014

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**100**	**600**
PH17	05/18/2022	0.5	<0.00200	<0.00399	73.7	<49.9	<49.9	73.7	38.2
PH17	05/18/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	37.1

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

*Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria for Soils Impacted by a Release*

ENSOLUM

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2204-1
Laboratory Sample Delivery Group: 03A198701
Client Project/Site: Pecos Fed 1Y
Revision: 1

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Joseph Hernandez

JKramer

Authorized for release by:
5/19/2022 2:00:02 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Pecos Fed 1Y

Laboratory Job ID: 890-2204-1
SDG: 03A198701

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 15
QC Sample Results 17
QC Association Summary 25
Lab Chronicle 30
Certification Summary 34
Method Summary 35
Sample Summary 36
Chain of Custody 37
Receipt Checklists 41

Definitions/Glossary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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
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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Job ID: 890-2204-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2204-1

Receipt
The samples were received on 4/19/2022 1:33 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24266 and analytical batch 880-24447 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: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-23828 and analytical batch 880-23813 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample 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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH07

Date Collected: 04/18/22 12:55
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-1
Matrix: Solid

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		04/23/22 13:41	04/25/22 18:56	1
Toluene	<0.00200	U F2 F1	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:56	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:56	1
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.00401		mg/Kg		04/23/22 13:41	04/25/22 18:56	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:56	1
Xylenes, Total	<0.00401	U F2 F1	0.00401		mg/Kg		04/23/22 13:41	04/25/22 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*04/23/22 13:41*	*04/25/22 18:56*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/23/22 13:41*	*04/25/22 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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/20/22 23:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/20/22 23:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/20/22 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/20/22 11:30*	*04/20/22 23:21*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/20/22 11:30*	*04/20/22 23:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			04/28/22 00:17	1

Client Sample ID: PH07

Date Collected: 04/18/22 13:00
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-2
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		04/23/22 13:41	04/25/22 19:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 19:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 19:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/23/22 13:41	04/25/22 19:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 19:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/23/22 13:41	04/25/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/23/22 13:41*	*04/25/22 19:23*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH07

Date Collected: 04/18/22 13:00
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/23/22 13:41*	*04/25/22 19:23*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/20/22 23:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/20/22 23:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/20/22 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*04/20/22 11:30*	*04/20/22 23:42*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/20/22 11:30*	*04/20/22 23:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			04/28/22 00:23	1

Client Sample ID: PH08

Date Collected: 04/18/22 13:05
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-3
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		04/23/22 13:41	04/25/22 19:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/23/22 13:41	04/25/22 19:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/23/22 13:41	04/25/22 19:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/23/22 13:41	04/25/22 19:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/23/22 13:41	04/25/22 19:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/23/22 13:41	04/25/22 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*04/23/22 13:41*	*04/25/22 19:50*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*04/23/22 13:41*	*04/25/22 19:50*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH08
Date Collected: 04/18/22 13:05
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-3
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	<49.8	U	49.8		mg/Kg		04/20/22 11:30	04/21/22 00:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/20/22 11:30	04/21/22 00:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/20/22 11:30	04/21/22 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*04/20/22 11:30*	*04/21/22 00:02*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/20/22 11:30*	*04/21/22 00:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/28/22 00:29	1

Client Sample ID: PH08
Date Collected: 04/18/22 13:10
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-4
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		04/23/22 13:41	04/25/22 20:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/23/22 13:41	04/25/22 20:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/23/22 13:41	04/25/22 20:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/23/22 13:41	04/25/22 20:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/23/22 13:41	04/25/22 20:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/23/22 13:41	04/25/22 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*04/23/22 13:41*	*04/25/22 20:17*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*04/23/22 13:41*	*04/25/22 20:17*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 00:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 00:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/20/22 11:30*	*04/21/22 00:23*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/20/22 11:30*	*04/21/22 00:23*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH08

Date Collected: 04/18/22 13:10
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.0		5.01		mg/Kg			04/28/22 00:36	1

Client Sample ID: PH09

Date Collected: 04/18/22 13:20
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-5
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		04/26/22 15:48	04/29/22 02:22	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/26/22 15:48	04/29/22 02:22	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/26/22 15:48	04/29/22 02:22	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/26/22 15:48	04/29/22 02:22	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/26/22 15:48	04/29/22 02:22	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/26/22 15:48	04/29/22 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/26/22 15:48*	*04/29/22 02:22*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/26/22 15:48*	*04/29/22 02:22*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 00:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 00:43	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/20/22 11:30*	*04/21/22 00:43*	*1*
o-Terphenyl	*96*		*70 - 130*	*04/20/22 11:30*	*04/21/22 00:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			04/28/22 00:42	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH09

Date Collected: 04/18/22 13:25
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-6
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		04/29/22 09:06	04/29/22 17:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 17:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 17:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:06	04/29/22 17:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 17:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:06	04/29/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*04/29/22 09:06*	*04/29/22 17:19*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/29/22 09:06*	*04/29/22 17:19*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 01:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 01:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/20/22 11:30*	*04/21/22 01:25*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/20/22 11:30*	*04/21/22 01:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.71**		5.05		mg/Kg			04/28/22 01:01	1

Client Sample ID: PH10

Date Collected: 04/18/22 13:35
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-7
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		04/29/22 09:06	04/29/22 17:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 17:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 17:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/29/22 09:06	04/29/22 17:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 17:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/29/22 09:06	04/29/22 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/29/22 09:06*	*04/29/22 17:40*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH10
Date Collected: 04/18/22 13:35
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/29/22 09:06*	*04/29/22 17:40*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 01:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 01:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*04/20/22 11:30*	*04/21/22 01:45*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/20/22 11:30*	*04/21/22 01:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.2**		4.99		mg/Kg			04/28/22 01:07	1

Client Sample ID: PH10
Date Collected: 04/18/22 13:40
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-8
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		04/29/22 09:06	04/29/22 18:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 18:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 18:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/22 09:06	04/29/22 18:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 18:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/22 09:06	04/29/22 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*04/29/22 09:06*	*04/29/22 18:00*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/29/22 09:06*	*04/29/22 18:00*	*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			04/26/22 10:02	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			04/21/22 10:45	1

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH10

Date Collected: 04/18/22 13:40
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-8
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		04/20/22 11:30	04/21/22 02:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 02:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*04/20/22 11:30*	*04/21/22 02:06*	*1*
o-Terphenyl	*96*		*70 - 130*	*04/20/22 11:30*	*04/21/22 02:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**112**		5.00		mg/Kg			04/28/22 01:27	1

Client Sample ID: PH13

Date Collected: 04/19/22 08:55
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-9
Matrix: Solid

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		04/29/22 09:06	04/29/22 18:20	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/29/22 09:06	04/29/22 18:20	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/29/22 09:06	04/29/22 18:20	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/29/22 09:06	04/29/22 18:20	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/29/22 09:06	04/29/22 18:20	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/29/22 09:06	04/29/22 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/29/22 09:06*	*04/29/22 18:20*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/29/22 09:06*	*04/29/22 18:20*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 02:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 02:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*04/20/22 11:30*	*04/21/22 02:26*	*1*
o-Terphenyl	*98*		*70 - 130*	*04/20/22 11:30*	*04/21/22 02:26*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH13
Date Collected: 04/19/22 08:55
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	279		5.01		mg/Kg			04/28/22 01:33	1

Client Sample ID: PH13
Date Collected: 04/19/22 09:00
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-10
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		04/29/22 09:06	04/29/22 18:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 18:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 18:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/29/22 09:06	04/29/22 18:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 18:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/29/22 09:06	04/29/22 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/29/22 09:06*	*04/29/22 18:41*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/29/22 09:06*	*04/29/22 18:41*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 02:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 02:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*04/20/22 11:30*	*04/21/22 02:47*	*1*
o-Terphenyl	*100*		*70 - 130*	*04/20/22 11:30*	*04/21/22 02:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	313		5.00		mg/Kg			04/28/22 01:39	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH14
Date Collected: 04/19/22 08:25
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2205-11
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		04/23/22 12:31	04/27/22 20:01	1
Toluene	<0.00199	U *+	0.00199		mg/Kg		04/23/22 12:31	04/27/22 20:01	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		04/23/22 12:31	04/27/22 20:01	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		04/23/22 12:31	04/27/22 20:01	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		04/23/22 12:31	04/27/22 20:01	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		04/23/22 12:31	04/27/22 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/23/22 12:31*	*04/27/22 20:01*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/23/22 12:31*	*04/27/22 20:01*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 02:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/21/22 02:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/21/22 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*04/20/22 15:27*	*04/21/22 02:40*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 02:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**93.3**		4.99		mg/Kg			04/28/22 08:18	1

Client Sample ID: PH14
Date Collected: 04/19/22 08:30
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-12
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		04/23/22 12:31	04/27/22 20:21	1
Toluene	<0.00201	U *+	0.00201		mg/Kg		04/23/22 12:31	04/27/22 20:21	1
Ethylbenzene	<0.00201	U *+	0.00201		mg/Kg		04/23/22 12:31	04/27/22 20:21	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		04/23/22 12:31	04/27/22 20:21	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		04/23/22 12:31	04/27/22 20:21	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		04/23/22 12:31	04/27/22 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/23/22 12:31*	*04/27/22 20:21*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH14

Date Collected: 04/19/22 08:30
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-12

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*04/23/22 12:31*	*04/27/22 20:21*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 03:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 03:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*120*		*70 - 130*	*04/20/22 15:27*	*04/21/22 03:01*	*1*
o-Terphenyl	*148*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 03:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**248**		5.03		mg/Kg			04/28/22 08:25	1

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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)
880-14226-A-1-A MS	Matrix Spike	105	101
880-14226-A-1-B MSD	Matrix Spike Duplicate	98	97
880-14236-A-1-D MS	Matrix Spike	108	98
880-14236-A-1-E MSD	Matrix Spike Duplicate	104	91
890-2204-1	PH07	100	96
890-2204-1 MS	PH07	20 S1-	20 S1-
890-2204-1 MSD	PH07	91	87
890-2204-2	PH07	95	96
890-2204-3	PH08	88	91
890-2204-4	PH08	83	91
890-2204-5	PH09	103	98
890-2204-6	PH09	110	94
890-2204-7	PH10	107	98
890-2204-8	PH10	109	96
890-2204-9	PH13	107	94
890-2204-10	PH13	103	94
890-2205-11	PH14	101	104
890-2205-12	PH14	103	105
LCS 880-24102/1-A	Lab Control Sample	98	96
LCS 880-24266/1-A	Lab Control Sample	99	98
LCS 880-24473/1-A	Lab Control Sample	100	99
LCSD 880-24102/2-A	Lab Control Sample Dup	92	97
LCSD 880-24266/2-A	Lab Control Sample Dup	101	100
LCSD 880-24473/2-A	Lab Control Sample Dup	106	98
MB 880-24100/5-A	Method Blank	69 S1-	88
MB 880-24102/5-A	Method Blank	71	89
MB 880-24266/5-A	Method Blank	101	96
MB 880-24473/5-A	Method Blank	99	97

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)
890-2202-A-1-B MS	Matrix Spike	101	97
890-2202-A-1-C MSD	Matrix Spike Duplicate	95	92
890-2204-1	PH07	87	102
890-2204-2	PH07	86	97
890-2204-3	PH08	88	97
890-2204-4	PH08	87	97
890-2204-5	PH09	85	96
890-2204-6	PH09	85	97
890-2204-7	PH10	86	97
890-2204-8	PH10	86	96
890-2204-9	PH13	87	98

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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)
890-2204-10	PH13	88	100
890-2205-11	PH14	117	142 S1+
890-2205-12	PH14	120	148 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-23828/2-A	Lab Control Sample	99	117
LCSD 880-23828/3-A	Lab Control Sample Dup	109	130
MB 880-23828/1-A	Method Blank	85	102

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24100/5-A
Matrix: Solid
Analysis Batch: 24112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:32	04/25/22 02:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:32	04/25/22 02:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:32	04/25/22 02:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/23/22 12:32	04/25/22 02:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:32	04/25/22 02:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/23/22 12:32	04/25/22 02:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*04/23/22 12:32*	*04/25/22 02:37*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*04/23/22 12:32*	*04/25/22 02:37*	*1*

Lab Sample ID: MB 880-24102/5-A
Matrix: Solid
Analysis Batch: 24112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24102

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/23/22 13:41	04/25/22 18:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/23/22 13:41	04/25/22 18:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/23/22 13:41	04/25/22 18:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*04/23/22 13:41*	*04/25/22 18:29*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*04/23/22 13:41*	*04/25/22 18:29*	*1*

Lab Sample ID: LCS 880-24102/1-A
Matrix: Solid
Analysis Batch: 24112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1071		mg/Kg		107	70 - 130
Toluene	0.100	0.1043		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1020		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2047		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1063		mg/Kg		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-24102/2-A
Matrix: Solid
Analysis Batch: 24112

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24102

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09340		mg/Kg		93	70 - 130	14	35

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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

Lab Sample ID: LCSD 880-24102/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 24112 — **Prep Batch: 24102**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08626		mg/Kg		86	70 - 130	19	35
Ethylbenzene			0.100	0.08799		mg/Kg		88	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.1726		mg/Kg		86	70 - 130	17	35
o-Xylene			0.100	0.09023		mg/Kg		90	70 - 130	16	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-2204-1 MS — **Client Sample ID: PH07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 24112 — **Prep Batch: 24102**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F2 F1	0.0998	0.02558	F1	mg/Kg		26	70 - 130
Toluene	<0.00200	U F2 F1	0.0998	0.02244	F1	mg/Kg		22	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.0998	0.01998	F1	mg/Kg		20	70 - 130
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.200	0.04040	F1	mg/Kg		20	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0998	0.01752	F1	mg/Kg		18	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*20*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*20*	*S1-*	*70 - 130*

Lab Sample ID: 890-2204-1 MSD — **Client Sample ID: PH07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 24112 — **Prep Batch: 24102**

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	0.0996	0.03775	F2 F1	mg/Kg		38	70 - 130	38	35
Toluene	<0.00200	U F2 F1	0.0996	0.03415	F2 F1	mg/Kg		34	70 - 130	41	35
Ethylbenzene	<0.00200	U F2 F1	0.0996	0.03468	F2 F1	mg/Kg		35	70 - 130	54	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.199	0.07556	F2 F1	mg/Kg		38	70 - 130	61	35
o-Xylene	<0.00200	U F2 F1	0.0996	0.04149	F2 F1	mg/Kg		42	70 - 130	81	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: MB 880-24266/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 24447 — **Prep Batch: 24266**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/26/22 15:48	04/28/22 22:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/26/22 15:48	04/28/22 22:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/26/22 15:48	04/28/22 22:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/26/22 15:48	04/28/22 22:50	1

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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

Lab Sample ID: MB 880-24266/5-A
Matrix: Solid
Analysis Batch: 24447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/26/22 15:48	04/28/22 22:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/26/22 15:48	04/28/22 22:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*04/26/22 15:48*	*04/28/22 22:50*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/26/22 15:48*	*04/28/22 22:50*	*1*

Lab Sample ID: LCS 880-24266/1-A
Matrix: Solid
Analysis Batch: 24447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08488		mg/Kg		85	70 - 130
Toluene	0.100	0.08669		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08850		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1841		mg/Kg		92	70 - 130
o-Xylene	0.100	0.1000		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-24266/2-A
Matrix: Solid
Analysis Batch: 24447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07528		mg/Kg		75	70 - 130	12	35
Toluene	0.100	0.07426		mg/Kg		74	70 - 130	15	35
Ethylbenzene	0.100	0.07590		mg/Kg		76	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1578		mg/Kg		79	70 - 130	15	35
o-Xylene	0.100	0.08448		mg/Kg		84	70 - 130	17	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-14226-A-1-A MS
Matrix: Solid
Analysis Batch: 24447

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1	0.0998	0.08489		mg/Kg		85	70 - 130
Toluene	<0.00199	U F1	0.0998	0.08443		mg/Kg		84	70 - 130
Ethylbenzene	<0.00199	U F1	0.0998	0.08669		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1803		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.09714		mg/Kg		97	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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

Lab Sample ID: 880-14226-A-1-A MS
Matrix: Solid
Analysis Batch: 24447

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24266

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-14226-A-1-B MSD
Matrix: Solid
Analysis Batch: 24447

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 24266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00199	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00398	U F1	0.198	<0.00396	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00199	U F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-24473/5-A
Matrix: Solid
Analysis Batch: 24450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 11:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 11:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 11:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/29/22 09:06	04/29/22 11:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 11:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/29/22 09:06	04/29/22 11:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/29/22 09:06	04/29/22 11:56	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/29/22 09:06	04/29/22 11:56	1

Lab Sample ID: LCS 880-24473/1-A
Matrix: Solid
Analysis Batch: 24450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08917		mg/Kg		89	70 - 130
Toluene	0.100	0.08875		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09220		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1923		mg/Kg		96	70 - 130
o-Xylene	0.100	0.1035		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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

Lab Sample ID: LCS 880-24473/1-A
Matrix: Solid
Analysis Batch: 24450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24473

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-24473/2-A
Matrix: Solid
Analysis Batch: 24450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24473

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09182		mg/Kg		92	70 - 130	3	35
Toluene			0.100	0.09758		mg/Kg		98	70 - 130	9	35
Ethylbenzene			0.100	0.1017		mg/Kg		102	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.2142		mg/Kg		107	70 - 130	11	35
o-Xylene			0.100	0.1167		mg/Kg		117	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-14236-A-1-D MS
Matrix: Solid
Analysis Batch: 24450

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0998	0.07828		mg/Kg		78	70 - 130		
Toluene	<0.00200	U	0.0998	0.08213		mg/Kg		82	70 - 130		
Ethylbenzene	<0.00200	U	0.0998	0.08533		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1784		mg/Kg		89	70 - 130		
o-Xylene	<0.00200	U	0.0998	0.09675		mg/Kg		97	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-14236-A-1-E MSD
Matrix: Solid
Analysis Batch: 24450

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 24473

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.07066		mg/Kg		71	70 - 130	10	35
Toluene	<0.00200	U	0.0996	0.07891		mg/Kg		79	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.0996	0.08422		mg/Kg		83	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1778		mg/Kg		89	70 - 130	0	35
o-Xylene	<0.00200	U	0.0996	0.09628		mg/Kg		97	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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

Lab Sample ID: MB 880-23828/1-A
Matrix: Solid
Analysis Batch: 23813

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23828

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		04/20/22 11:30	04/20/22 19:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/20/22 19:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/20/22 19:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/20/22 11:30*	*04/20/22 19:51*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/20/22 11:30*	*04/20/22 19:51*	*1*

Lab Sample ID: LCS 880-23828/2-A
Matrix: Solid
Analysis Batch: 23813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1052		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	909.6		mg/Kg		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: LCSD 880-23828/3-A
Matrix: Solid
Analysis Batch: 23813

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23828

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1088		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	946.2		mg/Kg		95	70 - 130	4	20

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

Lab Sample ID: 890-2202-A-1-B MS
Matrix: Solid
Analysis Batch: 23813

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	148	F2	1000	1329		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	3210		1000	4394		mg/Kg		119	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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

Lab Sample ID: 890-2202-A-1-B MS
Matrix: Solid
Analysis Batch: 23813

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23828

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 890-2202-A-1-C MSD
Matrix: Solid
Analysis Batch: 23813

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23828

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	148	F2	998	930.3	F2	mg/Kg		78	70 - 130	35	20
Diesel Range Organics (Over C10-C28)	3210		998	4174		mg/Kg		97	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	92		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23841/1-A
Matrix: Solid
Analysis Batch: 24343

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			04/27/22 22:54	1

Lab Sample ID: LCS 880-23841/2-A
Matrix: Solid
Analysis Batch: 24343

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	233.9		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-23841/3-A
Matrix: Solid
Analysis Batch: 24343

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	248.6		mg/Kg		99	90 - 110	6	20

Lab Sample ID: 890-2204-5 MS
Matrix: Solid
Analysis Batch: 24343

Client Sample ID: PH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<4.97	U	249	241.6		mg/Kg		96	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2204-5 MSD
Matrix: Solid
Analysis Batch: 24343

Client Sample ID: PH09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<4.97	U	249	224.8		mg/Kg		90	90 - 110	7	20

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

GC VOA

Prep Batch: 24099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Total/NA	Solid	5035	
890-2205-12	PH14	Total/NA	Solid	5035	

Prep Batch: 24100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-24100/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 24102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Total/NA	Solid	5035	
890-2204-2	PH07	Total/NA	Solid	5035	
890-2204-3	PH08	Total/NA	Solid	5035	
890-2204-4	PH08	Total/NA	Solid	5035	
MB 880-24102/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24102/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24102/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2204-1 MS	PH07	Total/NA	Solid	5035	
890-2204-1 MSD	PH07	Total/NA	Solid	5035	

Analysis Batch: 24112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Total/NA	Solid	8021B	24102
890-2204-2	PH07	Total/NA	Solid	8021B	24102
890-2204-3	PH08	Total/NA	Solid	8021B	24102
890-2204-4	PH08	Total/NA	Solid	8021B	24102
MB 880-24100/5-A	Method Blank	Total/NA	Solid	8021B	24100
MB 880-24102/5-A	Method Blank	Total/NA	Solid	8021B	24102
LCS 880-24102/1-A	Lab Control Sample	Total/NA	Solid	8021B	24102
LCSD 880-24102/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24102
890-2204-1 MS	PH07	Total/NA	Solid	8021B	24102
890-2204-1 MSD	PH07	Total/NA	Solid	8021B	24102

Analysis Batch: 24248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Total/NA	Solid	Total BTEX	
890-2204-2	PH07	Total/NA	Solid	Total BTEX	
890-2204-3	PH08	Total/NA	Solid	Total BTEX	
890-2204-4	PH08	Total/NA	Solid	Total BTEX	
890-2204-5	PH09	Total/NA	Solid	Total BTEX	
890-2204-6	PH09	Total/NA	Solid	Total BTEX	
890-2204-7	PH10	Total/NA	Solid	Total BTEX	
890-2204-8	PH10	Total/NA	Solid	Total BTEX	
890-2204-9	PH13	Total/NA	Solid	Total BTEX	
890-2204-10	PH13	Total/NA	Solid	Total BTEX	

Prep Batch: 24266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-5	PH09	Total/NA	Solid	5035	
MB 880-24266/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24266/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24266/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

GC VOA (Continued)

Prep Batch: 24266 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14226-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-14226-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 24304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Total/NA	Solid	8021B	24099
890-2205-12	PH14	Total/NA	Solid	8021B	24099

Analysis Batch: 24426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Total/NA	Solid	Total BTEX	
890-2205-12	PH14	Total/NA	Solid	Total BTEX	

Analysis Batch: 24447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-5	PH09	Total/NA	Solid	8021B	24266
MB 880-24266/5-A	Method Blank	Total/NA	Solid	8021B	24266
LCS 880-24266/1-A	Lab Control Sample	Total/NA	Solid	8021B	24266
LCSD 880-24266/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24266
880-14226-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	24266
880-14226-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	24266

Analysis Batch: 24450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-6	PH09	Total/NA	Solid	8021B	24473
890-2204-7	PH10	Total/NA	Solid	8021B	24473
890-2204-8	PH10	Total/NA	Solid	8021B	24473
890-2204-9	PH13	Total/NA	Solid	8021B	24473
890-2204-10	PH13	Total/NA	Solid	8021B	24473
MB 880-24473/5-A	Method Blank	Total/NA	Solid	8021B	24473
LCS 880-24473/1-A	Lab Control Sample	Total/NA	Solid	8021B	24473
LCSD 880-24473/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24473
880-14236-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	24473
880-14236-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	24473

Prep Batch: 24473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-6	PH09	Total/NA	Solid	5035	
890-2204-7	PH10	Total/NA	Solid	5035	
890-2204-8	PH10	Total/NA	Solid	5035	
890-2204-9	PH13	Total/NA	Solid	5035	
890-2204-10	PH13	Total/NA	Solid	5035	
MB 880-24473/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24473/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24473/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-14236-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-14236-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

GC Semi VOA

Analysis Batch: 23813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Total/NA	Solid	8015B NM	23828
890-2204-2	PH07	Total/NA	Solid	8015B NM	23828
890-2204-3	PH08	Total/NA	Solid	8015B NM	23828
890-2204-4	PH08	Total/NA	Solid	8015B NM	23828
890-2204-5	PH09	Total/NA	Solid	8015B NM	23828
890-2204-6	PH09	Total/NA	Solid	8015B NM	23828
890-2204-7	PH10	Total/NA	Solid	8015B NM	23828
890-2204-8	PH10	Total/NA	Solid	8015B NM	23828
890-2204-9	PH13	Total/NA	Solid	8015B NM	23828
890-2204-10	PH13	Total/NA	Solid	8015B NM	23828
MB 880-23828/1-A	Method Blank	Total/NA	Solid	8015B NM	23828
LCS 880-23828/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23828
LCSD 880-23828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23828
890-2202-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	23828
890-2202-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	23828

Analysis Batch: 23817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Total/NA	Solid	8015B NM	23857
890-2205-12	PH14	Total/NA	Solid	8015B NM	23857

Prep Batch: 23828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Total/NA	Solid	8015NM Prep	
890-2204-2	PH07	Total/NA	Solid	8015NM Prep	
890-2204-3	PH08	Total/NA	Solid	8015NM Prep	
890-2204-4	PH08	Total/NA	Solid	8015NM Prep	
890-2204-5	PH09	Total/NA	Solid	8015NM Prep	
890-2204-6	PH09	Total/NA	Solid	8015NM Prep	
890-2204-7	PH10	Total/NA	Solid	8015NM Prep	
890-2204-8	PH10	Total/NA	Solid	8015NM Prep	
890-2204-9	PH13	Total/NA	Solid	8015NM Prep	
890-2204-10	PH13	Total/NA	Solid	8015NM Prep	
MB 880-23828/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23828/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23828/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2202-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2202-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 23857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Total/NA	Solid	8015NM Prep	
890-2205-12	PH14	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Total/NA	Solid	8015 NM	
890-2205-12	PH14	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

GC Semi VOA

Analysis Batch: 23931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Total/NA	Solid	8015 NM	
890-2204-2	PH07	Total/NA	Solid	8015 NM	
890-2204-3	PH08	Total/NA	Solid	8015 NM	
890-2204-4	PH08	Total/NA	Solid	8015 NM	
890-2204-5	PH09	Total/NA	Solid	8015 NM	
890-2204-6	PH09	Total/NA	Solid	8015 NM	
890-2204-7	PH10	Total/NA	Solid	8015 NM	
890-2204-8	PH10	Total/NA	Solid	8015 NM	
890-2204-9	PH13	Total/NA	Solid	8015 NM	
890-2204-10	PH13	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Soluble	Solid	DI Leach	
890-2204-2	PH07	Soluble	Solid	DI Leach	
890-2204-3	PH08	Soluble	Solid	DI Leach	
890-2204-4	PH08	Soluble	Solid	DI Leach	
890-2204-5	PH09	Soluble	Solid	DI Leach	
890-2204-6	PH09	Soluble	Solid	DI Leach	
890-2204-7	PH10	Soluble	Solid	DI Leach	
890-2204-8	PH10	Soluble	Solid	DI Leach	
890-2204-9	PH13	Soluble	Solid	DI Leach	
890-2204-10	PH13	Soluble	Solid	DI Leach	
MB 880-23841/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23841/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23841/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2204-5 MS	PH09	Soluble	Solid	DI Leach	
890-2204-5 MSD	PH09	Soluble	Solid	DI Leach	

Leach Batch: 23842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Soluble	Solid	DI Leach	
890-2205-12	PH14	Soluble	Solid	DI Leach	

Analysis Batch: 24343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-1	PH07	Soluble	Solid	300.0	23841
890-2204-2	PH07	Soluble	Solid	300.0	23841
890-2204-3	PH08	Soluble	Solid	300.0	23841
890-2204-4	PH08	Soluble	Solid	300.0	23841
890-2204-5	PH09	Soluble	Solid	300.0	23841
890-2204-6	PH09	Soluble	Solid	300.0	23841
890-2204-7	PH10	Soluble	Solid	300.0	23841
890-2204-8	PH10	Soluble	Solid	300.0	23841
890-2204-9	PH13	Soluble	Solid	300.0	23841
890-2204-10	PH13	Soluble	Solid	300.0	23841
MB 880-23841/1-A	Method Blank	Soluble	Solid	300.0	23841
LCS 880-23841/2-A	Lab Control Sample	Soluble	Solid	300.0	23841
LCSD 880-23841/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23841

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

HPLC/IC (Continued)

Analysis Batch: 24343 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-5 MS	PH09	Soluble	Solid	300.0	23841
890-2204-5 MSD	PH09	Soluble	Solid	300.0	23841

Analysis Batch: 24345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-11	PH14	Soluble	Solid	300.0	23842
890-2205-12	PH14	Soluble	Solid	300.0	23842

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH07
Date Collected: 04/18/22 12:55
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-1
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	24102	04/23/22 13:41	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24112	04/25/22 18:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/20/22 23:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 00:17	CH	XEN MID

Client Sample ID: PH07
Date Collected: 04/18/22 13:00
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-2
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			5.01 g	5 mL	24102	04/23/22 13:41	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24112	04/25/22 19:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/20/22 23:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 00:23	CH	XEN MID

Client Sample ID: PH08
Date Collected: 04/18/22 13:05
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-3
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	24102	04/23/22 13:41	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24112	04/25/22 19:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 00:02	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 00:29	CH	XEN MID

Client Sample ID: PH08
Date Collected: 04/18/22 13:10
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	24102	04/23/22 13:41	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24112	04/25/22 20:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH08
Date Collected: 04/18/22 13:10
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-4
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			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 00:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 00:36	CH	XEN MID

Client Sample ID: PH09
Date Collected: 04/18/22 13:20
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-5
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	24266	04/26/22 15:48	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24447	04/29/22 02:22	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 00:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 00:42	CH	XEN MID

Client Sample ID: PH09
Date Collected: 04/18/22 13:25
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-6
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 17:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 01:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:01	CH	XEN MID

Client Sample ID: PH10
Date Collected: 04/18/22 13:35
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-7
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 17:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 01:45	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH10
Date Collected: 04/18/22 13:35
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-7
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			5.01 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:07	CH	XEN MID

Client Sample ID: PH10
Date Collected: 04/18/22 13:40
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-8
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			5.01 g	5 mL	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 18:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 02:06	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:27	CH	XEN MID

Client Sample ID: PH13
Date Collected: 04/19/22 08:55
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-9
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 18:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 02:26	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:33	CH	XEN MID

Client Sample ID: PH13
Date Collected: 04/19/22 09:00
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-10
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 18:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 02:47	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:39	CH	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Client Sample ID: PH14
Date Collected: 04/19/22 08:25
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-11
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	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 20:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 02:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 08:18	CH	XEN MID

Client Sample ID: PH14
Date Collected: 04/19/22 08:30
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-12
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	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 20:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 03:01	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 08:25	CH	XEN MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-1
SDG: 03A198701

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2204-1	PH07	Solid	04/18/22 12:55	04/19/22 13:33	0.5
890-2204-2	PH07	Solid	04/18/22 13:00	04/19/22 13:33	1
890-2204-3	PH08	Solid	04/18/22 13:05	04/19/22 13:33	0.5
890-2204-4	PH08	Solid	04/18/22 13:10	04/19/22 13:33	1
890-2204-5	PH09	Solid	04/18/22 13:20	04/19/22 13:33	0.5
890-2204-6	PH09	Solid	04/18/22 13:25	04/19/22 13:33	1
890-2204-7	PH10	Solid	04/18/22 13:35	04/19/22 13:33	0.5
890-2204-8	PH10	Solid	04/18/22 13:40	04/19/22 13:33	1
890-2204-9	PH13	Solid	04/19/22 08:55	04/19/22 13:33	0.5
890-2204-10	PH13	Solid	04/19/22 09:00	04/19/22 13:33	1
890-2205-11	PH14	Solid	04/19/22 08:25	04/19/22 13:33	0.5
890-2205-12	PH14	Solid	04/19/22 08:30	04/19/22 13:33	1

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum LLC.	Company Name:	Devon energy corporation
Address:	2351 W Northwest Hwy Suite 12034	Address:	5315 Buena Vista Dr
City, State ZIP:	Dallas, TX, 75220	City, State ZIP:	Carlsbad NM, 88220
Phone:	989-854-6852	Email:	Jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Pecos Fed 1Y	Turn Around	
Project Number:	03A1987014	☑ Routine ☐ Rush	
Project Location:	CC: 10610847071	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR#007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.6 3.2
Total Containers:		Corrected Temperature:	3.0

Preservative Codes

None: NO; DI Water: H_2O
Cool: Cool; MeOH: Me
HCL: HC; HNO_3: HN
H_2SO_4: H_2; NaOH: Na
H_3PO_4: HP
NaHSO$_4$: NABIS
$Na_2S_2O_3$: NaSO$_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

ANALYSIS REQUEST

890-2204 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH	Chlorides	Sample Comments
PH07	S	04/18/22	1255	0.5'	G	1		X	X	X	
PH07			1300	1'							
PH08			1305	0.5'							
PH08			1310	1'							
PH09			1320	0.5'							
PH09			1325	1'							
PH10			1335	0.5'							
PH10			1340	1							
PH13		04/19/22	855	0.5'							
PH13		04/19/22	900	1							

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4.19.22 1333	2		
3			4		
5			6		

Revised Date: 08/ Rev. 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: ____________

www.xenco.com Page 2 of 2

Project Manager:		Bill to: (if different)	
Company Name:		Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:		Email:	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PecosFed 1Y	Turn Around	
Project Number:	03A1987014	☑ Routine	☐ Rush
Project Location:	Cc 2061074702	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	TPH	Chlorides	Sample Comments
PH 14	S	04/19/22	825	6.5'	G	1		X	X	X	
PH 14	S	04/19/22	830	7.0'	G	1		X	X	X	

Preservative Codes

None: NO	DI Water: H_2O
Cool: Cool	MeOH: Me
HCL: HC	HNO_3: HN
H_2SO_4: H_2	NaOH: Na
H_3PO_4: HP	
$NaHSO_4$: NABIS	
$Na_2S_2O_3$: $NaSO_3$	
Zn Acetate+NaOH: Zn	
NaOH+Ascorbic Acid: SAPC	

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	4.19.22 1333	2		
3			4		
5			6		

Revised Date: 08/[illegible] Rev. 2020.2

Eurofins 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)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-713 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2204-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PECOS FED 1X	Project #: 89000084			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_Calc	8015MOD_NM/8016NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH07 (890-2204-1)	4/18/22	12 55 Mountain		Solid			X	X	X	X	X	1	
PH07 (890-2204-2)	4/18/22	13 00 Mountain		Solid			X	X	X	X	X	1	
PH08 (890-2204-3)	4/18/22	13 05 Mountain		Solid			X	X	X	X	X	1	
PH08 (890-2204-4)	4/18/22	13 10 Mountain		Solid			X	X	X	X	X	1	
PH09 (890-2204-6)	4/18/22	13 20 Mountain		Solid			X	X	X	X	X	1	
PH09 (890-2204-6)	4/18/22	13 25 Mountain		Solid			X	X	X	X	X	1	
PH10 (890-2204-7)	4/18/22	13 35 Mountain		Solid			X	X	X	X	X	1	
PH10 (890-2204-8)	4/18/22	13 40 Mountain		Solid			X	X	X	X	X	1	
PH13 (890-2204-9)	4/19/22	08 55 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) 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	Company
1	Clint Guffo 4-19-22				4/20/22	
2						
3						

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-713 2
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2204-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PECOS FED 1X	Project #: 89000084			
Site	SSOW#:			

Preservation Codes

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_Calc	8015MOD_NM/8016NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
PH13 (890-2204-10)	4/19/22	09 00 Mountain		Solid			X	X	X	X	X	1	
PH04 (890-2204-11)	4/18/22	11 05 Mountain		Solid			X	X	X	X	X	1	
PH05 (890-2204-12)	4/18/22	11 25 Mountain		Solid			X	X	X	X	X	1	
PH05 (890-2204-13)	4/18/22	11 30 Mountain		Solid			X	X	X	X	X	1	
PH06 (890-2204-14)	4/18/22	11 45 Mountain		Solid			X	X	X	X	X	1	
PH06 (890-2204-15)	4/18/22	11 50 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) 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	Company
	Relinquished by: 4.19.22			Received by:	Date/Time: 4/20/22	
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2204-1
SDG Number: 03A198701

Login Number: 2204
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: Ensolum

Job Number: 890-2204-1
SDG Number: 03A198701

Login Number: 2204
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 04/20/22 10:37 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	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2204-2
Laboratory Sample Delivery Group: 03A198701
Client Project/Site: Pecos Fed 1Y
Revision: 1

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Joseph Hernandez

JKramer

Authorized for release by:
5/19/2022 1:48:12 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Pecos Fed 1Y

Laboratory Job ID: 890-2204-2
SDG: 03A198701

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 17
QC Sample Results 19
QC Association Summary 25
Lab Chronicle 30
Certification Summary 35
Method Summary 36
Sample Summary 37
Chain of Custody 38
Receipt Checklists 42

Definitions/Glossary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Job ID: 890-2205-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2205-1

Receipt
The samples were received on 4/19/2022 1:33 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: The laboratory control sample (LCS) associated with preparation batch 880-24099 and analytical batch 880-24304 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: The matrix spike duplicate (MSD) recoveries for preparation batch 880-24483 and analytical batch 880-24523 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
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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH04

Date Collected: 04/18/22 11:05
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-11
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		04/29/22 09:06	04/29/22 19:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/29/22 09:06	04/29/22 19:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/29/22 09:06	04/29/22 19:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/29/22 09:06	04/29/22 19:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/29/22 09:06	04/29/22 19:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/29/22 09:06	04/29/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/29/22 09:06*	*04/29/22 19:01*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/29/22 09:06*	*04/29/22 19:01*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 03:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 03:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*04/20/22 11:30*	*04/21/22 03:08*	*1*
o-Terphenyl	*98*		*70 - 130*	*04/20/22 11:30*	*04/21/22 03:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			04/28/22 01:46	1

Client Sample ID: PH05

Date Collected: 04/18/22 11:25
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-12
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		04/29/22 09:06	04/29/22 19:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 19:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 19:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:06	04/29/22 19:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 19:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:06	04/29/22 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/29/22 09:06*	*04/29/22 19:22*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH05
Date Collected: 04/18/22 11:25
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-12
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*04/29/22 09:06*	*04/29/22 19:22*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 03:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 03:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*04/20/22 11:30*	*04/21/22 03:28*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/20/22 11:30*	*04/21/22 03:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.60**		5.00		mg/Kg			04/28/22 01:52	1

Client Sample ID: PH05
Date Collected: 04/18/22 11:30
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-13
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		04/29/22 09:06	04/29/22 19:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 19:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 19:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/22 09:06	04/29/22 19:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 19:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/22 09:06	04/29/22 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*04/29/22 09:06*	*04/29/22 19:42*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/29/22 09:06*	*04/29/22 19:42*	*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			04/26/22 10:02	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			04/21/22 10:45	1

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH05
Date Collected: 04/18/22 11:30
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-13
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	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 03:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 03:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*04/20/22 11:30*	*04/21/22 03:49*	*1*
o-Terphenyl	*101*		*70 - 130*	*04/20/22 11:30*	*04/21/22 03:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.5**		4.96		mg/Kg			04/28/22 01:58	1

Client Sample ID: PH06
Date Collected: 04/18/22 11:45
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-14
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		04/29/22 09:06	04/29/22 20:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 20:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 20:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:06	04/29/22 20:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:06	04/29/22 20:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:06	04/29/22 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*04/29/22 09:06*	*04/29/22 20:03*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/29/22 09:06*	*04/29/22 20:03*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 04:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 04:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 11:30	04/21/22 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*04/20/22 11:30*	*04/21/22 04:09*	*1*
o-Terphenyl	*93*		*70 - 130*	*04/20/22 11:30*	*04/21/22 04:09*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH06
Date Collected: 04/18/22 11:45
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2204-14
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.36		5.00		mg/Kg			04/28/22 02:05	1

Client Sample ID: PH06
Date Collected: 04/18/22 11:50
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2204-15
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		04/29/22 09:06	04/29/22 20:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 20:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 20:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/22 09:06	04/29/22 20:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:06	04/29/22 20:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/22 09:06	04/29/22 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*04/29/22 09:06*	*04/29/22 20:23*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*04/29/22 09:06*	*04/29/22 20:23*	*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			04/26/22 10:02	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			04/21/22 10:45	1

Method: 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		04/20/22 11:30	04/21/22 04:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 04:30	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 11:30	04/21/22 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*04/20/22 11:30*	*04/21/22 04:30*	*1*
o-Terphenyl	*100*		*70 - 130*	*04/20/22 11:30*	*04/21/22 04:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.50		4.99		mg/Kg			04/28/22 06:31	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH01
Date Collected: 04/18/22 10:00
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2205-1
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		04/29/22 09:22	04/29/22 16:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/22 09:22	04/29/22 16:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/22 09:22	04/29/22 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/29/22 09:22*	*04/29/22 16:42*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*04/29/22 09:22*	*04/29/22 16:42*	*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			04/28/22 11:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**985**		49.9		mg/Kg			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 03:21	1
Diesel Range Organics (Over C10-C28)	**763**		49.9		mg/Kg		04/20/22 15:27	04/21/22 03:21	1
Oil Range Organics (Over C28-C36)	**222**		49.9		mg/Kg		04/20/22 15:27	04/21/22 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 03:21*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 03:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**361**		4.98		mg/Kg			04/28/22 06:50	1

Client Sample ID: PH01
Date Collected: 04/18/22 10:05
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-2
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		04/29/22 09:22	04/29/22 17:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 17:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 17:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 17:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 17:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 17:02	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH01
Date Collected: 04/18/22 10:05
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-2
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/29/22 09:22*	*04/29/22 17:02*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/29/22 09:22*	*04/29/22 17:02*	*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			04/28/22 11:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1760**		50.0		mg/Kg			04/21/22 09:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**51.7**		50.0		mg/Kg		04/20/22 15:27	04/21/22 03:41	1
Diesel Range Organics (Over C10-C28)	**1470**		50.0		mg/Kg		04/20/22 15:27	04/21/22 03:41	1
Oil Range Organics (Over C28-C36)	**241**		50.0		mg/Kg		04/20/22 15:27	04/21/22 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 03:41*	*1*
o-Terphenyl	*157*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 03:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**288**		5.00		mg/Kg			04/28/22 06:56	1

Client Sample ID: PH01
Date Collected: 04/18/22 10:10
Date Received: 04/19/22 13:33
Sample Depth: 2

Lab Sample ID: 890-2205-3
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		04/29/22 09:22	04/29/22 17:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 17:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 17:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/22 09:22	04/29/22 17:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 17:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/22 09:22	04/29/22 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/29/22 09:22*	*04/29/22 17:23*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/29/22 09:22*	*04/29/22 17:23*	*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			04/28/22 11:55	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH01
Date Collected: 04/18/22 10:10
Date Received: 04/19/22 13:33
Sample Depth: 2

Lab Sample ID: 890-2205-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1010**		50.0		mg/Kg			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 04:02	1
Diesel Range Organics (Over C10-C28)	**786**		50.0		mg/Kg		04/20/22 15:27	04/21/22 04:02	1
Oil Range Organics (Over C28-C36)	**221**		50.0		mg/Kg		04/20/22 15:27	04/21/22 04:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*134*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 04:02*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 04:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**258**		4.95		mg/Kg			04/28/22 07:02	1

Client Sample ID: PH01
Date Collected: 04/18/22 15:45
Date Received: 04/19/22 13:33
Sample Depth: 3

Lab Sample ID: 890-2205-4
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		04/29/22 09:22	04/29/22 17:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 17:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 17:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 17:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 17:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/29/22 09:22*	*04/29/22 17:43*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/29/22 09:22*	*04/29/22 17:43*	*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			04/28/22 11:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3540**		50.0		mg/Kg			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 04:22	1
Diesel Range Organics (Over C10-C28)	**2990**		50.0		mg/Kg		04/20/22 15:27	04/21/22 04:22	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH01

Date Collected: 04/18/22 15:45
Date Received: 04/19/22 13:33
Sample Depth: 3

Lab Sample ID: 890-2205-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	554		50.0		mg/Kg		04/20/22 15:27	04/21/22 04:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 04:22*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 04:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	779		4.99		mg/Kg			04/28/22 07:09	1

Client Sample ID: PH02

Date Collected: 04/18/22 10:20
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2205-5
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		04/29/22 09:22	04/29/22 18:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 18:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 18:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/29/22 09:22	04/29/22 18:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 18:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/29/22 09:22	04/29/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/29/22 09:22*	*04/29/22 18:04*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/29/22 09:22*	*04/29/22 18:04*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 00:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 00:18	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*04/20/22 15:27*	*04/21/22 00:18*	*1*
o-Terphenyl	*156*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 00:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	186		4.95		mg/Kg			04/28/22 07:28	1

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH02
Date Collected: 04/18/22 10:25
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-6
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		04/29/22 09:22	04/29/22 18:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 18:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 18:25	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/29/22 09:22	04/29/22 18:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 18:25	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/29/22 09:22	04/29/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/29/22 09:22*	*04/29/22 18:25*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*04/29/22 09:22*	*04/29/22 18:25*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 00:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/21/22 00:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/21/22 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*04/20/22 15:27*	*04/21/22 00:38*	*1*
o-Terphenyl	*151*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 00:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**156**		5.04		mg/Kg			04/28/22 07:34	1

Client Sample ID: PH02
Date Collected: 04/18/22 10:30
Date Received: 04/19/22 13:33
Sample Depth: 2

Lab Sample ID: 890-2205-7
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		04/29/22 09:22	04/29/22 18:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 18:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 18:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 18:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 18:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/29/22 09:22*	*04/29/22 18:45*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH02

Date Collected: 04/18/22 10:30
Date Received: 04/19/22 13:33
Sample Depth: 2

Lab Sample ID: 890-2205-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*04/29/22 09:22*	*04/29/22 18:45*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 00:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 00:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*04/20/22 15:27*	*04/21/22 00:58*	*1*
o-Terphenyl	*153*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 00:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**116**		4.96		mg/Kg			04/28/22 07:40	1

Client Sample ID: PH03

Date Collected: 04/18/22 10:45
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2205-8
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		04/29/22 09:22	04/29/22 19:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 19:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 19:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 19:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/29/22 09:22	04/29/22 19:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/29/22 09:22	04/29/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/29/22 09:22*	*04/29/22 19:06*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/29/22 09:22*	*04/29/22 19:06*	*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			04/28/22 11:55	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			04/21/22 09:38	1

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH03
Date Collected: 04/18/22 10:45
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2205-8
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		04/20/22 15:27	04/21/22 01:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 01:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*04/20/22 15:27*	*04/21/22 01:19*	*1*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 01:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.6**		5.01		mg/Kg			04/28/22 07:47	1

Client Sample ID: PH03
Date Collected: 04/18/22 10:50
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-9
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		04/29/22 09:22	04/29/22 19:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 19:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 19:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/29/22 09:22	04/29/22 19:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 19:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/29/22 09:22	04/29/22 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*04/29/22 09:22*	*04/29/22 19:26*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*04/29/22 09:22*	*04/29/22 19:26*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 01:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/21/22 01:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/21/22 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*04/20/22 15:27*	*04/21/22 01:39*	*1*
o-Terphenyl	*154*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 01:39*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH03
Date Collected: 04/18/22 10:50
Date Received: 04/19/22 13:33
Sample Depth: 1

Lab Sample ID: 890-2205-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.41		4.97		mg/Kg			04/28/22 07:53	1

Client Sample ID: PH04
Date Collected: 04/18/22 11:00
Date Received: 04/19/22 13:33
Sample Depth: 0.5

Lab Sample ID: 890-2205-10
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		04/23/22 12:31	04/27/22 19:41	1
Toluene	<0.00199	U *+	0.00199		mg/Kg		04/23/22 12:31	04/27/22 19:41	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		04/23/22 12:31	04/27/22 19:41	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		04/23/22 12:31	04/27/22 19:41	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		04/23/22 12:31	04/27/22 19:41	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		04/23/22 12:31	04/27/22 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/23/22 12:31*	*04/27/22 19:41*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/23/22 12:31*	*04/27/22 19:41*	*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			04/28/22 11:55	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			04/21/22 09:38	1

Method: 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		04/20/22 15:27	04/21/22 02:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 02:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/22 15:27	04/21/22 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*04/20/22 15:27*	*04/21/22 02:00*	*1*
o-Terphenyl	*147*	*S1+*	*70 - 130*	*04/20/22 15:27*	*04/21/22 02:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			04/28/22 07:59	1

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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)
880-13981-A-14-D MS	Matrix Spike	95	102
880-13981-A-14-E MSD	Matrix Spike Duplicate	97	102
880-14236-A-41-D MS	Matrix Spike	103	97
880-14236-A-41-E MSD	Matrix Spike Duplicate	105	99
890-2204-11	PH04	107	94
890-2204-12	PH05	104	92
890-2204-13	PH05	109	98
890-2204-14	PH06	109	95
890-2204-15	PH06	120	105
890-2205-1	PH01	102	83
890-2205-2	PH01	106	97
890-2205-3	PH01	104	95
890-2205-4	PH01	106	102
890-2205-5	PH02	104	97
890-2205-6	PH02	106	93
890-2205-7	PH02	103	93
890-2205-8	PH03	107	97
890-2205-9	PH03	106	96
890-2205-10	PH04	99	104
LCS 880-24099/1-A	Lab Control Sample	100	103
LCS 880-24483/1-A	Lab Control Sample	100	98
LCSD 880-24099/2-A	Lab Control Sample Dup	95	104
LCSD 880-24483/2-A	Lab Control Sample Dup	104	100
MB 880-24099/5-A	Method Blank	97	102
MB 880-24483/5-A	Method Blank	100	93

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)
890-2203-A-1-C MS	Matrix Spike	122	132 S1+
890-2203-A-1-D MSD	Matrix Spike Duplicate	122	133 S1+
890-2204-11	PH04	85	98
890-2204-12	PH05	93	102
890-2204-13	PH05	88	101
890-2204-14	PH06	88	93
890-2204-15	PH06	88	100
890-2205-1	PH01	136 S1+	152 S1+
890-2205-2	PH01	144 S1+	157 S1+
890-2205-3	PH01	134 S1+	145 S1+
890-2205-4	PH01	143 S1+	152 S1+
890-2205-5	PH02	125	156 S1+
890-2205-6	PH02	122	151 S1+
890-2205-7	PH02	123	153 S1+

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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)								
890-2205-8	PH03	124	150 S1+								
890-2205-9	PH03	124	154 S1+								
890-2205-10	PH04	121	147 S1+								
LCS 880-23857/2-A	Lab Control Sample	120	131 S1+								
LCSD 880-23857/3-A	Lab Control Sample Dup	145 S1+	161 S1+								
MB 880-23857/1-A	Method Blank	116	146 S1+								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-24099/5-A
Matrix: Solid
Analysis Batch: 24304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:31	04/27/22 14:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:31	04/27/22 14:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:31	04/27/22 14:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/23/22 12:31	04/27/22 14:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/23/22 12:31	04/27/22 14:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/23/22 12:31	04/27/22 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*04/23/22 12:31*	*04/27/22 14:18*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/23/22 12:31*	*04/27/22 14:18*	*1*

Lab Sample ID: LCS 880-24099/1-A
Matrix: Solid
Analysis Batch: 24304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24099

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1350	*+	mg/Kg		135	70 - 130		
Toluene			0.100	0.1526	*+	mg/Kg		153	70 - 130		
Ethylbenzene			0.100	0.1429	*+	mg/Kg		143	70 - 130		
m-Xylene & p-Xylene			0.200	0.2927	*+	mg/Kg		146	70 - 130		
o-Xylene			0.100	0.1348	*+	mg/Kg		135	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-24099/2-A
Matrix: Solid
Analysis Batch: 24304

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24099

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1185		mg/Kg		119	70 - 130	13	35
Toluene			0.100	0.1276		mg/Kg		128	70 - 130	18	35
Ethylbenzene			0.100	0.1177		mg/Kg		118	70 - 130	19	35
m-Xylene & p-Xylene			0.200	0.2405		mg/Kg		120	70 - 130	20	35
o-Xylene			0.100	0.1119		mg/Kg		112	70 - 130	19	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-13981-A-14-D MS
Matrix: Solid
Analysis Batch: 24304

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U *+	0.0996	0.08276		mg/Kg		83	70 - 130		
Toluene	<0.00200	U *+	0.0996	0.09680		mg/Kg		96	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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

Lab Sample ID: 880-13981-A-14-D MS
Matrix: Solid
Analysis Batch: 24304

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U *+	0.0996	0.1039		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	<0.00399	U *+	0.199	0.2056		mg/Kg		102	70 - 130
o-Xylene	<0.00200	U *+	0.0996	0.1009		mg/Kg		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-13981-A-14-E MSD
Matrix: Solid
Analysis Batch: 24304

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 24099

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	0.08406		mg/Kg		85	70 - 130	2	35
Toluene	<0.00200	U *+	0.0994	0.1018		mg/Kg		101	70 - 130	5	35
Ethylbenzene	<0.00200	U *+	0.0994	0.1085		mg/Kg		108	70 - 130	4	35
m-Xylene & p-Xylene	<0.00399	U *+	0.199	0.2148		mg/Kg		107	70 - 130	4	35
o-Xylene	<0.00200	U *+	0.0994	0.1056		mg/Kg		104	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-24483/5-A
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/29/22 09:22	04/29/22 16:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/29/22 09:22	04/29/22 16:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/29/22 09:22	04/29/22 16:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*04/29/22 09:22*	*04/29/22 16:00*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*04/29/22 09:22*	*04/29/22 16:00*	*1*

Lab Sample ID: LCS 880-24483/1-A
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08909		mg/Kg		89	70 - 130
Toluene	0.100	0.08931		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09118		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1865		mg/Kg		93	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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

Lab Sample ID: LCS 880-24483/1-A
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24483

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09369		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-24483/2-A
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24483

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1038		mg/Kg		104	70 - 130	15	35
Toluene			0.100	0.1032		mg/Kg		103	70 - 130	14	35
Ethylbenzene			0.100	0.1069		mg/Kg		107	70 - 130	16	35
m-Xylene & p-Xylene			0.200	0.2176		mg/Kg		109	70 - 130	15	35
o-Xylene			0.100	0.1085		mg/Kg		109	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-14236-A-41-D MS
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 24483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U F1	0.0998	0.07164		mg/Kg		72	70 - 130		
Toluene	<0.00202	U F1	0.0998	0.07241		mg/Kg		73	70 - 130		
Ethylbenzene	<0.00202	U F1	0.0998	0.07150		mg/Kg		72	70 - 130		
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1450		mg/Kg		73	70 - 130		
o-Xylene	<0.00202	U F1	0.0998	0.07327		mg/Kg		73	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-14236-A-41-E MSD
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 24483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.100	0.06616	F1	mg/Kg		66	70 - 130	8	35
Toluene	<0.00202	U F1	0.100	0.06600	F1	mg/Kg		66	70 - 130	9	35
Ethylbenzene	<0.00202	U F1	0.100	0.06417	F1	mg/Kg		64	70 - 130	11	35
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1290	F1	mg/Kg		64	70 - 130	12	35
o-Xylene	<0.00202	U F1	0.100	0.06558	F1	mg/Kg		65	70 - 130	11	35

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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

Lab Sample ID: 880-14236-A-41-E MSD
Matrix: Solid
Analysis Batch: 24523

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 24483

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

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

Lab Sample ID: MB 880-23857/1-A
Matrix: Solid
Analysis Batch: 23817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23857

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		04/20/22 15:27	04/20/22 21:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/20/22 21:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/22 15:27	04/20/22 21:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	04/20/22 15:27	04/20/22 21:08	1
o-Terphenyl	146	S1+	70 - 130	04/20/22 15:27	04/20/22 21:08	1

Lab Sample ID: LCS 880-23857/2-A
Matrix: Solid
Analysis Batch: 23817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	848.2		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1074		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-23857/3-A
Matrix: Solid
Analysis Batch: 23817

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 23857

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	897.9		mg/Kg		90	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1231		mg/Kg		123	70 - 130	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	145	S1+	70 - 130
o-Terphenyl	161	S1+	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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

Lab Sample ID: 890-2203-A-1-C MS
Matrix: Solid
Analysis Batch: 23817

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 23857

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	1000	1012		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	56.0		1000	1019		mg/Kg		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*132*	*S1+*	*70 - 130*

Lab Sample ID: 890-2203-A-1-D MSD
Matrix: Solid
Analysis Batch: 23817

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 23857

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	1147		mg/Kg		113	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	56.0		998	1026		mg/Kg		97	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*133*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23842/1-A
Matrix: Solid
Analysis Batch: 24345

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			04/28/22 06:12	1

Lab Sample ID: LCS 880-23842/2-A
Matrix: Solid
Analysis Batch: 24345

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.6		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-23842/3-A
Matrix: Solid
Analysis Batch: 24345

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	267.2		mg/Kg		107	90 - 110	9	20

QC Sample Results

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2204-15 MS
Matrix: Solid
Analysis Batch: 24345

Client Sample ID: PH06
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	7.50		250	266.0		mg/Kg		104	90 - 110		

Lab Sample ID: 890-2204-15 MSD
Matrix: Solid
Analysis Batch: 24345

Client Sample ID: PH06
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7.50		250	245.0		mg/Kg		95	90 - 110	8	20

Lab Sample ID: 890-2205-10 MS
Matrix: Solid
Analysis Batch: 24345

Client Sample ID: PH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<4.97	U	249	264.9		mg/Kg		107	90 - 110		

Lab Sample ID: 890-2205-10 MSD
Matrix: Solid
Analysis Batch: 24345

Client Sample ID: PH04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<4.97	U	249	247.6		mg/Kg		100	90 - 110	7	20

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

GC VOA

Prep Batch: 24099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-10	PH04	Total/NA	Solid	5035	
MB 880-24099/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24099/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24099/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13981-A-14-D MS	Matrix Spike	Total/NA	Solid	5035	
880-13981-A-14-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 24248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Total/NA	Solid	Total BTEX	
890-2204-12	PH05	Total/NA	Solid	Total BTEX	
890-2204-13	PH05	Total/NA	Solid	Total BTEX	
890-2204-14	PH06	Total/NA	Solid	Total BTEX	
890-2204-15	PH06	Total/NA	Solid	Total BTEX	

Analysis Batch: 24304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-10	PH04	Total/NA	Solid	8021B	24099
MB 880-24099/5-A	Method Blank	Total/NA	Solid	8021B	24099
LCS 880-24099/1-A	Lab Control Sample	Total/NA	Solid	8021B	24099
LCSD 880-24099/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24099
880-13981-A-14-D MS	Matrix Spike	Total/NA	Solid	8021B	24099
880-13981-A-14-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	24099

Analysis Batch: 24426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-1	PH01	Total/NA	Solid	Total BTEX	
890-2205-2	PH01	Total/NA	Solid	Total BTEX	
890-2205-3	PH01	Total/NA	Solid	Total BTEX	
890-2205-4	PH01	Total/NA	Solid	Total BTEX	
890-2205-5	PH02	Total/NA	Solid	Total BTEX	
890-2205-6	PH02	Total/NA	Solid	Total BTEX	
890-2205-7	PH02	Total/NA	Solid	Total BTEX	
890-2205-8	PH03	Total/NA	Solid	Total BTEX	
890-2205-9	PH03	Total/NA	Solid	Total BTEX	
890-2205-10	PH04	Total/NA	Solid	Total BTEX	

Analysis Batch: 24450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Total/NA	Solid	8021B	24473
890-2204-12	PH05	Total/NA	Solid	8021B	24473
890-2204-13	PH05	Total/NA	Solid	8021B	24473
890-2204-14	PH06	Total/NA	Solid	8021B	24473
890-2204-15	PH06	Total/NA	Solid	8021B	24473

Prep Batch: 24473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Total/NA	Solid	5035	
890-2204-12	PH05	Total/NA	Solid	5035	
890-2204-13	PH05	Total/NA	Solid	5035	
890-2204-14	PH06	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

GC VOA (Continued)

Prep Batch: 24473 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-15	PH06	Total/NA	Solid	5035	

Prep Batch: 24483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-1	PH01	Total/NA	Solid	5035	
890-2205-2	PH01	Total/NA	Solid	5035	
890-2205-3	PH01	Total/NA	Solid	5035	
890-2205-4	PH01	Total/NA	Solid	5035	
890-2205-5	PH02	Total/NA	Solid	5035	
890-2205-6	PH02	Total/NA	Solid	5035	
890-2205-7	PH02	Total/NA	Solid	5035	
890-2205-8	PH03	Total/NA	Solid	5035	
890-2205-9	PH03	Total/NA	Solid	5035	
MB 880-24483/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24483/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24483/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-14236-A-41-D MS	Matrix Spike	Total/NA	Solid	5035	
880-14236-A-41-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 24523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-1	PH01	Total/NA	Solid	8021B	24483
890-2205-2	PH01	Total/NA	Solid	8021B	24483
890-2205-3	PH01	Total/NA	Solid	8021B	24483
890-2205-4	PH01	Total/NA	Solid	8021B	24483
890-2205-5	PH02	Total/NA	Solid	8021B	24483
890-2205-6	PH02	Total/NA	Solid	8021B	24483
890-2205-7	PH02	Total/NA	Solid	8021B	24483
890-2205-8	PH03	Total/NA	Solid	8021B	24483
890-2205-9	PH03	Total/NA	Solid	8021B	24483
MB 880-24483/5-A	Method Blank	Total/NA	Solid	8021B	24483
LCS 880-24483/1-A	Lab Control Sample	Total/NA	Solid	8021B	24483
LCSD 880-24483/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24483
880-14236-A-41-D MS	Matrix Spike	Total/NA	Solid	8021B	24483
880-14236-A-41-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	24483

GC Semi VOA

Analysis Batch: 23813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Total/NA	Solid	8015B NM	23828
890-2204-12	PH05	Total/NA	Solid	8015B NM	23828
890-2204-13	PH05	Total/NA	Solid	8015B NM	23828
890-2204-14	PH06	Total/NA	Solid	8015B NM	23828
890-2204-15	PH06	Total/NA	Solid	8015B NM	23828

Analysis Batch: 23817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-1	PH01	Total/NA	Solid	8015B NM	23857
890-2205-2	PH01	Total/NA	Solid	8015B NM	23857
890-2205-3	PH01	Total/NA	Solid	8015B NM	23857

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

GC Semi VOA (Continued)

Analysis Batch: 23817 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-4	PH01	Total/NA	Solid	8015B NM	23857
890-2205-5	PH02	Total/NA	Solid	8015B NM	23857
890-2205-6	PH02	Total/NA	Solid	8015B NM	23857
890-2205-7	PH02	Total/NA	Solid	8015B NM	23857
890-2205-8	PH03	Total/NA	Solid	8015B NM	23857
890-2205-9	PH03	Total/NA	Solid	8015B NM	23857
890-2205-10	PH04	Total/NA	Solid	8015B NM	23857
MB 880-23857/1-A	Method Blank	Total/NA	Solid	8015B NM	23857
LCS 880-23857/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23857
LCSD 880-23857/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23857
890-2203-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	23857
890-2203-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	23857

Prep Batch: 23828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Total/NA	Solid	8015NM Prep	
890-2204-12	PH05	Total/NA	Solid	8015NM Prep	
890-2204-13	PH05	Total/NA	Solid	8015NM Prep	
890-2204-14	PH06	Total/NA	Solid	8015NM Prep	
890-2204-15	PH06	Total/NA	Solid	8015NM Prep	

Prep Batch: 23857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-1	PH01	Total/NA	Solid	8015NM Prep	
890-2205-2	PH01	Total/NA	Solid	8015NM Prep	
890-2205-3	PH01	Total/NA	Solid	8015NM Prep	
890-2205-4	PH01	Total/NA	Solid	8015NM Prep	
890-2205-5	PH02	Total/NA	Solid	8015NM Prep	
890-2205-6	PH02	Total/NA	Solid	8015NM Prep	
890-2205-7	PH02	Total/NA	Solid	8015NM Prep	
890-2205-8	PH03	Total/NA	Solid	8015NM Prep	
890-2205-9	PH03	Total/NA	Solid	8015NM Prep	
890-2205-10	PH04	Total/NA	Solid	8015NM Prep	
MB 880-23857/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23857/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23857/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2203-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2203-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-1	PH01	Total/NA	Solid	8015 NM	
890-2205-2	PH01	Total/NA	Solid	8015 NM	
890-2205-3	PH01	Total/NA	Solid	8015 NM	
890-2205-4	PH01	Total/NA	Solid	8015 NM	
890-2205-5	PH02	Total/NA	Solid	8015 NM	
890-2205-6	PH02	Total/NA	Solid	8015 NM	
890-2205-7	PH02	Total/NA	Solid	8015 NM	
890-2205-8	PH03	Total/NA	Solid	8015 NM	
890-2205-9	PH03	Total/NA	Solid	8015 NM	
890-2205-10	PH04	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

GC Semi VOA

Analysis Batch: 23931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Total/NA	Solid	8015 NM	
890-2204-12	PH05	Total/NA	Solid	8015 NM	
890-2204-13	PH05	Total/NA	Solid	8015 NM	
890-2204-14	PH06	Total/NA	Solid	8015 NM	
890-2204-15	PH06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Soluble	Solid	DI Leach	
890-2204-12	PH05	Soluble	Solid	DI Leach	
890-2204-13	PH05	Soluble	Solid	DI Leach	
890-2204-14	PH06	Soluble	Solid	DI Leach	

Leach Batch: 23842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-15	PH06	Soluble	Solid	DI Leach	
890-2205-1	PH01	Soluble	Solid	DI Leach	
890-2205-2	PH01	Soluble	Solid	DI Leach	
890-2205-3	PH01	Soluble	Solid	DI Leach	
890-2205-4	PH01	Soluble	Solid	DI Leach	
890-2205-5	PH02	Soluble	Solid	DI Leach	
890-2205-6	PH02	Soluble	Solid	DI Leach	
890-2205-7	PH02	Soluble	Solid	DI Leach	
890-2205-8	PH03	Soluble	Solid	DI Leach	
890-2205-9	PH03	Soluble	Solid	DI Leach	
890-2205-10	PH04	Soluble	Solid	DI Leach	
MB 880-23842/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23842/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23842/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2204-15 MS	PH06	Soluble	Solid	DI Leach	
890-2204-15 MSD	PH06	Soluble	Solid	DI Leach	
890-2205-10 MS	PH04	Soluble	Solid	DI Leach	
890-2205-10 MSD	PH04	Soluble	Solid	DI Leach	

Analysis Batch: 24343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-11	PH04	Soluble	Solid	300.0	23841
890-2204-12	PH05	Soluble	Solid	300.0	23841
890-2204-13	PH05	Soluble	Solid	300.0	23841
890-2204-14	PH06	Soluble	Solid	300.0	23841

Analysis Batch: 24345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2204-15	PH06	Soluble	Solid	300.0	23842
890-2205-1	PH01	Soluble	Solid	300.0	23842
890-2205-2	PH01	Soluble	Solid	300.0	23842
890-2205-3	PH01	Soluble	Solid	300.0	23842
890-2205-4	PH01	Soluble	Solid	300.0	23842
890-2205-5	PH02	Soluble	Solid	300.0	23842

QC Association Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

HPLC/IC (Continued)

Analysis Batch: 24345 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2205-6	PH02	Soluble	Solid	300.0	23842
890-2205-7	PH02	Soluble	Solid	300.0	23842
890-2205-8	PH03	Soluble	Solid	300.0	23842
890-2205-9	PH03	Soluble	Solid	300.0	23842
890-2205-10	PH04	Soluble	Solid	300.0	23842
MB 880-23842/1-A	Method Blank	Soluble	Solid	300.0	23842
LCS 880-23842/2-A	Lab Control Sample	Soluble	Solid	300.0	23842
LCSD 880-23842/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23842
890-2204-15 MS	PH06	Soluble	Solid	300.0	23842
890-2204-15 MSD	PH06	Soluble	Solid	300.0	23842
890-2205-10 MS	PH04	Soluble	Solid	300.0	23842
890-2205-10 MSD	PH04	Soluble	Solid	300.0	23842

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH04
Date Collected: 04/18/22 11:05
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-11
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 19:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 03:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:46	CH	XEN MID

Client Sample ID: PH05
Date Collected: 04/18/22 11:25
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-12
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 19:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 03:28	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:52	CH	XEN MID

Client Sample ID: PH05
Date Collected: 04/18/22 11:30
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-13
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 19:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 03:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 01:58	CH	XEN MID

Client Sample ID: PH06
Date Collected: 04/18/22 11:45
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-14
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 20:03	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH06
Date Collected: 04/18/22 11:45
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-14
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			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 04:09	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23841	04/20/22 12:40	SC	XEN MID
Soluble	Analysis	300.0		1			24343	04/28/22 02:05	CH	XEN MID

Client Sample ID: PH06
Date Collected: 04/18/22 11:50
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2204-15
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	24473	04/29/22 09:06	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24450	04/29/22 20:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24248	04/26/22 10:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23931	04/21/22 10:45	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23828	04/20/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23813	04/21/22 04:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 06:31	CH	XEN MID

Client Sample ID: PH01
Date Collected: 04/18/22 10:00
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-1
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	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 16:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 03:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 06:50	CH	XEN MID

Client Sample ID: PH01
Date Collected: 04/18/22 10:05
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-2
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			5.02 g	5 mL	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 17:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 03:41	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH01
Date Collected: 04/18/22 10:05
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-2
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 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 06:56	CH	XEN MID

Client Sample ID: PH01
Date Collected: 04/18/22 10:10
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-3
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	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 17:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 04:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:02	CH	XEN MID

Client Sample ID: PH01
Date Collected: 04/18/22 15:45
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 17:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 04:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:09	CH	XEN MID

Client Sample ID: PH02
Date Collected: 04/18/22 10:20
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-5
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	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 18:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 00:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:28	CH	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH02
Date Collected: 04/18/22 10:25
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-6
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	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 18:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 00:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:34	CH	XEN MID

Client Sample ID: PH02
Date Collected: 04/18/22 10:30
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-7
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	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 18:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 00:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:40	CH	XEN MID

Client Sample ID: PH03
Date Collected: 04/18/22 10:45
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-8
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			5.02 g	5 mL	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 19:06	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 01:19	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:47	CH	XEN MID

Client Sample ID: PH03
Date Collected: 04/18/22 10:50
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-9
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	24483	04/29/22 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1			24523	04/29/22 19:26	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Client Sample ID: PH03
Date Collected: 04/18/22 10:50
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-9
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			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 01:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:53	CH	XEN MID

Client Sample ID: PH04
Date Collected: 04/18/22 11:00
Date Received: 04/19/22 13:33

Lab Sample ID: 890-2205-10
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	24099	04/23/22 12:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24304	04/27/22 19:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24426	04/28/22 11:55	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23902	04/21/22 09:38	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23857	04/20/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23817	04/21/22 02:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23842	04/20/22 12:42	SC	XEN MID
Soluble	Analysis	300.0		1			24345	04/28/22 07:59	CH	XEN MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

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: Ensolum
Project/Site: Pecos Fed 1Y

Job ID: 890-2204-2
SDG: 03A198701

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2204-11	PH04	Solid	04/18/22 11:05	04/19/22 13:33	1
890-2204-12	PH05	Solid	04/18/22 11:25	04/19/22 13:33	0.5
890-2204-13	PH05	Solid	04/18/22 11:30	04/19/22 13:33	1
890-2204-14	PH06	Solid	04/18/22 11:45	04/19/22 13:33	0.5
890-2204-15	PH06	Solid	04/18/22 11:50	04/19/22 13:33	1
890-2205-1	PH01	Solid	04/18/22 10:00	04/19/22 13:33	0.5
890-2205-2	PH01	Solid	04/18/22 10:05	04/19/22 13:33	1
890-2205-3	PH01	Solid	04/18/22 10:10	04/19/22 13:33	2
890-2205-4	PH01	Solid	04/18/22 15:45	04/19/22 13:33	3
890-2205-5	PH02	Solid	04/18/22 10:20	04/19/22 13:33	0.5
890-2205-6	PH02	Solid	04/18/22 10:25	04/19/22 13:33	1
890-2205-7	PH02	Solid	04/18/22 10:30	04/19/22 13:33	2
890-2205-8	PH03	Solid	04/18/22 10:45	04/19/22 13:33	0.5
890-2205-9	PH03	Solid	04/18/22 10:50	04/19/22 13:33	1
890-2205-10	PH04	Solid	04/18/22 11:00	04/19/22 13:33	0.5

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	2351 W Northwest Hwy Suite 1203A	Address:	5315 Buena vista Dr.
City, State ZIP:	Dallas, Tx 75220	City, State ZIP:	Carlsbad NM 88220
Phone:	281-702-2379	Email:	Jim.raley@dvn.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Recos Fed 1Y	Turn Around	
Project Number:	03A1987014	☒ Routine ☐ Rush	
Project Location:	CC: 10610E4701	Due Date:	
Sampler's Name:	Conner Short	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Samples Received Intact:	Yes No	Temp Blank:	Yes No
Cooler Custody Seals:	Yes No N/A	Thermometer ID:	TNM-007
Sample Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Total Containers:		Temperature Reading:	3.2
		Corrected Temperature:	3.0

Wet Ice: Yes No

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX	TPH	Chlorides
PH01	S	04/18/22	1000	0.5'	G	1		X	X	X
PH01			1005	1'						
PH01			1010	2'						
PH01			1545	3'						
PH02			1020	0.5'						
PH02			1025	1'						
PH02			1030	2'						
PH03			1045	0.5'						
PH03			1050	1'						
PH04			1100	0.5'						

890-2205 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4-19-22 1333	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:		Bill to: (if different)	
Company Name:		Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:		

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Pecos Fed 1Y	Turn Around	
Project Number:	03A1985014	☒Routine ☐Rush	
Project Location:	LC: 1061084707	Due Date:	
Sampler's Name:	Conner Shoir	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No		Thermometer ID:	
Cooler Custody Seals:	Yes No N/A		Correction Factor:	
Sample Custody Seals:	Yes No N/A		Temperature Reading:	
Total Containers:			Corrected Temperature:	

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: BTEX	TPH	Chlorides	Sample Comments
PH04	S	04/18/22	1105	1'	G	1	x	x	x	
PH05			1125	0.5'						
PH05			1130	1'						
PH06			1145	0.5'						
PH06	↓	↓	1150	1'	↓	↓	↓	↓	↓	

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4.19.22 1333	2		
3			4		
5			6		

Revised Date: 08[illegible]20 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-713 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2205-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #			
Project Name: PECOS FED 14	Project #: 89000084			
Site	SSOW#:			

Analysis Requested

Preservation Codes

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, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
PH01 (890-2205-1)	4/18/22	10 00 Mountain		Solid			X	X	X	X	X	1	
PH01 (890-2205-2)	4/18/22	10 05 Mountain		Solid			X	X	X	X	X	1	
PH01 (890-2205-3)	4/18/22	10 10 Mountain		Solid			X	X	X	X	X	1	
PH01 (890-2205-4)	4/18/22	15.45 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2205-5)	4/18/22	10 20 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2205-6)	4/18/22	10 25 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2205-7)	4/18/22	10 30 Mountain		Solid			X	X	X	X	X	1	
PH03 (890-2205-8)	4/18/22	10 45 Mountain		Solid			X	X	X	X	X	1	
PH03 (890-2205-9)	4/18/22	10 50 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment.

Relinquished by: Joe 4.19.22	Date/Time.	Company	Received by:	Date/Time: 4/20/22	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-713 2
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2205-1
Address: 1211 W Florida Ave	Due Date Requested: 4/25/2022			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: PECOS FED 14	Project #: 89000084			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH04 (890-2205-10)	4/18/22	11 00 Mountain		Solid			X	X	X	X	X	1	
PH14 (890-2205-11)	4/19/22	08 25 Mountain		Solid			X	X	X	X	X	1	
PH14 (890-2205-12)	4/19/22	08 30 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) 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	Company
1	Cruz 4.19.22			Rachel	4/20/22	
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2205-1
SDG Number: 03A1987014

Login Number: 2205
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: Ensolum

Job Number: 890-2205-1
SDG Number: 03A1987014

Login Number: 2205
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 04/20/22 10:37 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	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2323-1
Laboratory Sample Delivery Group: 03A1987014
Client Project/Site: Pecos Federal #001Y
Revision: 1

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKRAMER

Authorized for release by:
6/15/2022 11:24:03 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Pecos Federal #001Y

Laboratory Job ID: 890-2323-1
SDG: 03A1987014

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 13
QC Sample Results 14
QC Association Summary 19
Lab Chronicle 23
Certification Summary 27
Method Summary 28
Sample Summary 29
Chain of Custody 30
Receipt Checklists 33

Definitions/Glossary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

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.
F2	MS/MSD RPD exceeds control limits
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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Job ID: 890-2323-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2323-1

REVISION

The report being provided is a revision of the original report sent on 5/25/2022. The report (revision 1) is being revised due to Per client email, requesting RUSH re run on sample PH02 @ 7' and PH12 @ 7'.

Report revision history

Receipt
The samples were received on 5/19/2022 4:11 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 0.8°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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-26028 and analytical batch 880-26024 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 880-27511 and analytical batch 880-27545 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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH01
Date Collected: 05/18/22 10:55
Date Received: 05/19/22 16:11
Sample Depth: 4

Lab Sample ID: 890-2323-1
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		05/23/22 11:13	05/23/22 13:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 13:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 13:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/23/22 11:13	05/23/22 13:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 13:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/23/22 11:13	05/23/22 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/23/22 11:13*	*05/23/22 13:02*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/23/22 11:13*	*05/23/22 13:02*	*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			05/23/22 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**230**		49.9		mg/Kg			05/24/22 08:44	1

Method: 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		05/23/22 08:23	05/23/22 12:34	1
Diesel Range Organics (Over C10-C28)	**230**		49.9		mg/Kg		05/23/22 08:23	05/23/22 12:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*05/23/22 08:23*	*05/23/22 12:34*	*1*
o-Terphenyl	*119*		*70 - 130*	*05/23/22 08:23*	*05/23/22 12:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**233**		4.98		mg/Kg			05/25/22 05:23	1

Client Sample ID: PH01
Date Collected: 05/18/22 11:00
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-2
Matrix: Solid

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		05/23/22 11:13	05/23/22 13:43	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 13:43	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 13:43	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/23/22 11:13	05/23/22 13:43	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 13:43	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/23/22 11:13	05/23/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/23/22 11:13*	*05/23/22 13:43*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH01
Date Collected: 05/18/22 11:00
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/23/22 11:13*	*05/23/22 13:43*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Method: 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 F1 F2	50.0		mg/Kg		05/23/22 08:23	05/23/22 11:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 11:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/23/22 08:23*	*05/23/22 11:07*	*1*
o-Terphenyl	*97*		*70 - 130*	*05/23/22 08:23*	*05/23/22 11:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**116**		4.95		mg/Kg			05/25/22 05:51	1

Client Sample ID: PH02
Date Collected: 05/18/22 14:00
Date Received: 05/19/22 16:11
Sample Depth: 6

Lab Sample ID: 890-2323-3
Matrix: Solid

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		05/23/22 11:13	05/23/22 14:04	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 14:04	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 14:04	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/23/22 11:13	05/23/22 14:04	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 14:04	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/23/22 11:13	05/23/22 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*05/23/22 11:13*	*05/23/22 14:04*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/23/22 11:13*	*05/23/22 14:04*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH02
Date Collected: 05/18/22 14:00
Date Received: 05/19/22 16:11
Sample Depth: 6

Lab Sample ID: 890-2323-3
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	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 13:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 13:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/23/22 08:23*	*05/23/22 13:18*	*1*
o-Terphenyl	*106*		*70 - 130*	*05/23/22 08:23*	*05/23/22 13:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**594**		4.96		mg/Kg			05/25/22 06:00	1

Client Sample ID: PH02
Date Collected: 05/18/22 14:05
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-4
Matrix: Solid

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		05/23/22 11:13	05/23/22 14:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 14:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 14:24	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/23/22 11:13	05/23/22 14:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 14:24	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/23/22 11:13	05/23/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/23/22 11:13*	*05/23/22 14:24*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/23/22 11:13*	*05/23/22 14:24*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Method: 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		05/23/22 08:23	05/23/22 13:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/23/22 08:23	05/23/22 13:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/23/22 08:23	05/23/22 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*05/23/22 08:23*	*05/23/22 13:40*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/23/22 08:23*	*05/23/22 13:40*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH02
Date Collected: 05/18/22 14:05
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**534**		4.98		mg/Kg			06/15/22 05:05	1

Client Sample ID: PH11
Date Collected: 05/18/22 11:05
Date Received: 05/19/22 16:11
Sample Depth: 0.5

Lab Sample ID: 890-2323-5
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		05/23/22 11:13	05/23/22 14:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 14:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 14:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/23/22 11:13	05/23/22 14:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 14:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/23/22 11:13	05/23/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/23/22 11:13*	*05/23/22 14:44*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/23/22 11:13*	*05/23/22 14:44*	*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			05/23/22 17:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**70.6**		50.0		mg/Kg			05/24/22 08:44	1

Method: 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		05/23/22 08:23	05/23/22 12:12	1
Diesel Range Organics (Over C10-C28)	**70.6**		50.0		mg/Kg		05/23/22 08:23	05/23/22 12:12	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/23/22 08:23*	*05/23/22 12:12*	*1*
o-Terphenyl	*106*		*70 - 130*	*05/23/22 08:23*	*05/23/22 12:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**537**		4.99		mg/Kg			05/25/22 06:18	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH11

Date Collected: 05/18/22 11:10
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-6
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		05/23/22 11:13	05/23/22 15:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 15:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 15:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 15:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 15:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/23/22 11:13*	*05/23/22 15:05*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/23/22 11:13*	*05/23/22 15:05*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Method: 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		05/23/22 08:23	05/23/22 14:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 14:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/23/22 08:23*	*05/23/22 14:02*	*1*
o-Terphenyl	*107*		*70 - 130*	*05/23/22 08:23*	*05/23/22 14:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4740**		49.8		mg/Kg			05/25/22 06:46	10

Client Sample ID: PH12

Date Collected: 05/18/22 12:15
Date Received: 05/19/22 16:11
Sample Depth: 1

Lab Sample ID: 890-2323-7
Matrix: Solid

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		05/23/22 11:13	05/23/22 13:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 13:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 13:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/23/22 11:13	05/23/22 13:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 13:22	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/23/22 11:13	05/23/22 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/23/22 11:13*	*05/23/22 13:22*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH12
Date Collected: 05/18/22 12:15
Date Received: 05/19/22 16:11
Sample Depth: 1

Lab Sample ID: 890-2323-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/23/22 11:13*	*05/23/22 13:22*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Method: 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		05/23/22 08:23	05/23/22 14:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 14:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:23	05/23/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/23/22 08:23*	*05/23/22 14:24*	*1*
o-Terphenyl	*107*		*70 - 130*	*05/23/22 08:23*	*05/23/22 14:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**382**		5.05		mg/Kg			05/23/22 13:35	1

Client Sample ID: PH12
Date Collected: 05/18/22 12:20
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-8
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		05/23/22 11:13	05/23/22 15:25	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 15:25	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 15:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/23/22 11:13	05/23/22 15:25	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 15:25	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/23/22 11:13	05/23/22 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*05/23/22 11:13*	*05/23/22 15:25*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/23/22 11:13*	*05/23/22 15:25*	*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			05/23/22 17:01	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			05/24/22 08:44	1

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH12
Date Collected: 05/18/22 12:20
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-8
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	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 12:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 12:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/23/22 08:23*	*05/23/22 12:56*	*1*
o-Terphenyl	*110*		*70 - 130*	*05/23/22 08:23*	*05/23/22 12:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**599**		4.95		mg/Kg			06/15/22 05:14	1

Client Sample ID: PH13
Date Collected: 05/18/22 12:30
Date Received: 05/19/22 16:11
Sample Depth: 2

Lab Sample ID: 890-2323-9
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		05/23/22 11:13	05/23/22 17:29	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/23/22 11:13	05/23/22 17:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/23/22 11:13	05/23/22 17:29	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/23/22 11:13	05/23/22 17:29	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/23/22 11:13	05/23/22 17:29	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/23/22 11:13	05/23/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*05/23/22 11:13*	*05/23/22 17:29*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/23/22 11:13*	*05/23/22 17:29*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Method: 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		05/23/22 08:24	05/23/22 14:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:24	05/23/22 14:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:24	05/23/22 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/23/22 08:24*	*05/23/22 14:46*	*1*
o-Terphenyl	*111*		*70 - 130*	*05/23/22 08:24*	*05/23/22 14:46*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH13
Date Collected: 05/18/22 12:30
Date Received: 05/19/22 16:11
Sample Depth: 2

Lab Sample ID: 890-2323-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1460		24.8		mg/Kg			05/25/22 07:04	5

Client Sample ID: PH13
Date Collected: 05/18/22 12:35
Date Received: 05/19/22 16:11
Sample Depth: 7

Lab Sample ID: 890-2323-10
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		05/23/22 11:13	05/23/22 17:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 17:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 17:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 17:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 17:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*05/23/22 11:13*	*05/23/22 17:50*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/23/22 11:13*	*05/23/22 17:50*	*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			05/23/22 17:01	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			05/24/22 08:44	1

Method: 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		05/23/22 08:24	05/23/22 15:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 15:08	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/23/22 08:24*	*05/23/22 15:08*	*1*
o-Terphenyl	*111*		*70 - 130*	*05/23/22 08:24*	*05/23/22 15:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	456		5.00		mg/Kg			05/25/22 07:14	1

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

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)
890-2323-1	PH01	109	93
890-2323-1 MS	PH01	118	91
890-2323-1 MSD	PH01	110	95
890-2323-2	PH01	111	97
890-2323-3	PH02	108	95
890-2323-4	PH02	111	96
890-2323-5	PH11	109	95
890-2323-6	PH11	110	95
890-2323-7	PH12	110	96
890-2323-8	PH12	112	96
890-2323-9	PH13	112	97
890-2323-10	PH13	113	99
LCS 880-26086/1-A	Lab Control Sample	108	92
LCSD 880-26086/2-A	Lab Control Sample Dup	113	90
MB 880-26086/5-A	Method Blank	107	89

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)
890-2323-1	PH01	109	119
890-2323-2	PH01	88	97
890-2323-2 MS	PH01	101	102
890-2323-2 MSD	PH01	93	93
890-2323-3	PH02	97	106
890-2323-4	PH02	77	85
890-2323-5	PH11	97	106
890-2323-6	PH11	97	107
890-2323-7	PH12	98	107
890-2323-8	PH12	98	110
890-2323-9	PH13	100	111
890-2323-10	PH13	98	111
LCS 880-26028/2-A	Lab Control Sample	103	107
LCSD 880-26028/3-A	Lab Control Sample Dup	109	113
MB 880-26028/1-A	Method Blank	107	122

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26086/5-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/23/22 11:13*	*05/23/22 12:40*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*05/23/22 11:13*	*05/23/22 12:40*	*1*

Lab Sample ID: LCS 880-26086/1-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07806		mg/Kg		78	70 - 130		
Toluene			0.100	0.09288		mg/Kg		93	70 - 130		
Ethylbenzene			0.100	0.09738		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2011		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.1007		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-26086/2-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26086

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07770		mg/Kg		78	70 - 130	0	35
Toluene			0.100	0.09565		mg/Kg		96	70 - 130	3	35
Ethylbenzene			0.100	0.1006		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2095		mg/Kg		105	70 - 130	4	35
o-Xylene			0.100	0.1055		mg/Kg		105	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 890-2323-1 MS
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 26086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.07463		mg/Kg		74	70 - 130		
Toluene	<0.00201	U	0.101	0.08606		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

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

Lab Sample ID: 890-2323-1 MS
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 26086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.08076		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1659		mg/Kg		82	70 - 130
o-Xylene	<0.00201	U	0.101	0.08089		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-2323-1 MSD
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 26086

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	0.07739		mg/Kg		78	70 - 130	4	35
Toluene	<0.00201	U	0.0990	0.08395		mg/Kg		85	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.07464		mg/Kg		75	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1500		mg/Kg		76	70 - 130	10	35
o-Xylene	<0.00201	U	0.0990	0.07520		mg/Kg		76	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-26028/1-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26028

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		05/23/22 08:23	05/23/22 09:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 09:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 09:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*05/23/22 08:23*	*05/23/22 09:53*	*1*
o-Terphenyl	*122*		*70 - 130*	*05/23/22 08:23*	*05/23/22 09:53*	*1*

Lab Sample ID: LCS 880-26028/2-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26028

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	888.2		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	800.7		mg/Kg		80	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

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

Lab Sample ID: LCS 880-26028/2-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26028

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-26028/3-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26028

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	908.6		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	914.8		mg/Kg		91	70 - 130	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-2323-2 MS
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 26028

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 F1 F2	1000	1466	F1	mg/Kg		144	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	948.2		mg/Kg		95	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-2323-2 MSD
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 26028

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 F1 F2	999	1176	F2	mg/Kg		116	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	871.0		mg/Kg		87	70 - 130	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	93		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-26083/1-A
Matrix: Solid
Analysis Batch: 26099

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			05/23/22 13:07	1

Lab Sample ID: LCS 880-26083/2-A
Matrix: Solid
Analysis Batch: 26099

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	236.5		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-26083/3-A
Matrix: Solid
Analysis Batch: 26099

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	236.2		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 890-2323-7 MS
Matrix: Solid
Analysis Batch: 26099

Client Sample ID: PH12
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	382		253	634.6		mg/Kg		100	90 - 110

Lab Sample ID: 890-2323-7 MSD
Matrix: Solid
Analysis Batch: 26099

Client Sample ID: PH12
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	382		253	614.2		mg/Kg		92	90 - 110	3	20

Lab Sample ID: MB 880-26084/1-A
Matrix: Solid
Analysis Batch: 26199

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			05/25/22 04:55	1

Lab Sample ID: LCS 880-26084/2-A
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.4		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-26084/3-A
Matrix: Solid
Analysis Batch: 26199

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	255.6		mg/Kg		102	90 - 110	3	20

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2323-1 MS
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	233		249	458.2		mg/Kg		91	90 - 110

Lab Sample ID: 890-2323-1 MSD
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: PH01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	233		249	477.2		mg/Kg		98	90 - 110	4	20

Lab Sample ID: MB 880-27511/1-A
Matrix: Solid
Analysis Batch: 27545

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			06/15/22 00:47	1

Lab Sample ID: LCS 880-27511/2-A
Matrix: Solid
Analysis Batch: 27545

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.1		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-27511/3-A
Matrix: Solid
Analysis Batch: 27545

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	260.1		mg/Kg		104	90 - 110	2	20

Lab Sample ID: 880-15827-A-9-B MS
Matrix: Solid
Analysis Batch: 27545

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	5000	F1	5010	10950	F1	mg/Kg		119	90 - 110

Lab Sample ID: 880-15827-A-9-C MSD
Matrix: Solid
Analysis Batch: 27545

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	5000	F1	4990	10970	F1	mg/Kg		120	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

GC VOA

Analysis Batch: 26017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Total/NA	Solid	8021B	26086
890-2323-2	PH01	Total/NA	Solid	8021B	26086
890-2323-3	PH02	Total/NA	Solid	8021B	26086
890-2323-4	PH02	Total/NA	Solid	8021B	26086
890-2323-5	PH11	Total/NA	Solid	8021B	26086
890-2323-6	PH11	Total/NA	Solid	8021B	26086
890-2323-7	PH12	Total/NA	Solid	8021B	26086
890-2323-8	PH12	Total/NA	Solid	8021B	26086
890-2323-9	PH13	Total/NA	Solid	8021B	26086
890-2323-10	PH13	Total/NA	Solid	8021B	26086
MB 880-26086/5-A	Method Blank	Total/NA	Solid	8021B	26086
LCS 880-26086/1-A	Lab Control Sample	Total/NA	Solid	8021B	26086
LCSD 880-26086/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26086
890-2323-1 MS	PH01	Total/NA	Solid	8021B	26086
890-2323-1 MSD	PH01	Total/NA	Solid	8021B	26086

Prep Batch: 26086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Total/NA	Solid	5035	
890-2323-2	PH01	Total/NA	Solid	5035	
890-2323-3	PH02	Total/NA	Solid	5035	
890-2323-4	PH02	Total/NA	Solid	5035	
890-2323-5	PH11	Total/NA	Solid	5035	
890-2323-6	PH11	Total/NA	Solid	5035	
890-2323-7	PH12	Total/NA	Solid	5035	
890-2323-8	PH12	Total/NA	Solid	5035	
890-2323-9	PH13	Total/NA	Solid	5035	
890-2323-10	PH13	Total/NA	Solid	5035	
MB 880-26086/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2323-1 MS	PH01	Total/NA	Solid	5035	
890-2323-1 MSD	PH01	Total/NA	Solid	5035	

Analysis Batch: 26109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Total/NA	Solid	Total BTEX	
890-2323-2	PH01	Total/NA	Solid	Total BTEX	
890-2323-3	PH02	Total/NA	Solid	Total BTEX	
890-2323-4	PH02	Total/NA	Solid	Total BTEX	
890-2323-5	PH11	Total/NA	Solid	Total BTEX	
890-2323-6	PH11	Total/NA	Solid	Total BTEX	
890-2323-8	PH12	Total/NA	Solid	Total BTEX	
890-2323-9	PH13	Total/NA	Solid	Total BTEX	
890-2323-10	PH13	Total/NA	Solid	Total BTEX	

Analysis Batch: 26110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-7	PH12	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

GC Semi VOA

Analysis Batch: 26024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Total/NA	Solid	8015B NM	26028
890-2323-2	PH01	Total/NA	Solid	8015B NM	26028
890-2323-3	PH02	Total/NA	Solid	8015B NM	26028
890-2323-4	PH02	Total/NA	Solid	8015B NM	26028
890-2323-5	PH11	Total/NA	Solid	8015B NM	26028
890-2323-6	PH11	Total/NA	Solid	8015B NM	26028
890-2323-7	PH12	Total/NA	Solid	8015B NM	26028
890-2323-8	PH12	Total/NA	Solid	8015B NM	26028
890-2323-9	PH13	Total/NA	Solid	8015B NM	26028
890-2323-10	PH13	Total/NA	Solid	8015B NM	26028
MB 880-26028/1-A	Method Blank	Total/NA	Solid	8015B NM	26028
LCS 880-26028/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26028
LCSD 880-26028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26028
890-2323-2 MS	PH01	Total/NA	Solid	8015B NM	26028
890-2323-2 MSD	PH01	Total/NA	Solid	8015B NM	26028

Prep Batch: 26028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Total/NA	Solid	8015NM Prep	
890-2323-2	PH01	Total/NA	Solid	8015NM Prep	
890-2323-3	PH02	Total/NA	Solid	8015NM Prep	
890-2323-4	PH02	Total/NA	Solid	8015NM Prep	
890-2323-5	PH11	Total/NA	Solid	8015NM Prep	
890-2323-6	PH11	Total/NA	Solid	8015NM Prep	
890-2323-7	PH12	Total/NA	Solid	8015NM Prep	
890-2323-8	PH12	Total/NA	Solid	8015NM Prep	
890-2323-9	PH13	Total/NA	Solid	8015NM Prep	
890-2323-10	PH13	Total/NA	Solid	8015NM Prep	
MB 880-26028/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26028/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2323-2 MS	PH01	Total/NA	Solid	8015NM Prep	
890-2323-2 MSD	PH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 26125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Total/NA	Solid	8015 NM	
890-2323-2	PH01	Total/NA	Solid	8015 NM	
890-2323-3	PH02	Total/NA	Solid	8015 NM	
890-2323-4	PH02	Total/NA	Solid	8015 NM	
890-2323-5	PH11	Total/NA	Solid	8015 NM	
890-2323-6	PH11	Total/NA	Solid	8015 NM	
890-2323-8	PH12	Total/NA	Solid	8015 NM	
890-2323-9	PH13	Total/NA	Solid	8015 NM	
890-2323-10	PH13	Total/NA	Solid	8015 NM	

Analysis Batch: 26126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-7	PH12	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

HPLC/IC

Leach Batch: 26083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-7	PH12	Soluble	Solid	DI Leach	
MB 880-26083/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26083/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26083/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2323-7 MS	PH12	Soluble	Solid	DI Leach	
890-2323-7 MSD	PH12	Soluble	Solid	DI Leach	

Leach Batch: 26084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Soluble	Solid	DI Leach	
890-2323-2	PH01	Soluble	Solid	DI Leach	
890-2323-3	PH02	Soluble	Solid	DI Leach	
890-2323-5	PH11	Soluble	Solid	DI Leach	
890-2323-6	PH11	Soluble	Solid	DI Leach	
890-2323-9	PH13	Soluble	Solid	DI Leach	
890-2323-10	PH13	Soluble	Solid	DI Leach	
MB 880-26084/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26084/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26084/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2323-1 MS	PH01	Soluble	Solid	DI Leach	
890-2323-1 MSD	PH01	Soluble	Solid	DI Leach	

Analysis Batch: 26099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-7	PH12	Soluble	Solid	300.0	26083
MB 880-26083/1-A	Method Blank	Soluble	Solid	300.0	26083
LCS 880-26083/2-A	Lab Control Sample	Soluble	Solid	300.0	26083
LCSD 880-26083/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26083
890-2323-7 MS	PH12	Soluble	Solid	300.0	26083
890-2323-7 MSD	PH12	Soluble	Solid	300.0	26083

Analysis Batch: 26199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-1	PH01	Soluble	Solid	300.0	26084
890-2323-2	PH01	Soluble	Solid	300.0	26084
890-2323-3	PH02	Soluble	Solid	300.0	26084
890-2323-5	PH11	Soluble	Solid	300.0	26084
890-2323-6	PH11	Soluble	Solid	300.0	26084
890-2323-9	PH13	Soluble	Solid	300.0	26084
890-2323-10	PH13	Soluble	Solid	300.0	26084
MB 880-26084/1-A	Method Blank	Soluble	Solid	300.0	26084
LCS 880-26084/2-A	Lab Control Sample	Soluble	Solid	300.0	26084
LCSD 880-26084/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26084
890-2323-1 MS	PH01	Soluble	Solid	300.0	26084
890-2323-1 MSD	PH01	Soluble	Solid	300.0	26084

Leach Batch: 27511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-4	PH02	Soluble	Solid	DI Leach	
890-2323-8	PH12	Soluble	Solid	DI Leach	
MB 880-27511/1-A	Method Blank	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

HPLC/IC (Continued)

Leach Batch: 27511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-27511/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27511/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-15827-A-9-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-15827-A-9-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 27545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-4	PH02	Soluble	Solid	300.0	27511
890-2323-8	PH12	Soluble	Solid	300.0	27511
MB 880-27511/1-A	Method Blank	Soluble	Solid	300.0	27511
LCS 880-27511/2-A	Lab Control Sample	Soluble	Solid	300.0	27511
LCSD 880-27511/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27511
880-15827-A-9-B MS	Matrix Spike	Soluble	Solid	300.0	27511
880-15827-A-9-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27511

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH01
Date Collected: 05/18/22 10:55
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-1
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 13:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 12:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 05:23	CH	XEN MID

Client Sample ID: PH01
Date Collected: 05/18/22 11:00
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-2
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			5.05 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 13:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 11:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 05:51	CH	XEN MID

Client Sample ID: PH02
Date Collected: 05/18/22 14:00
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-3
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 14:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 13:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 06:00	CH	XEN MID

Client Sample ID: PH02
Date Collected: 05/18/22 14:05
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 14:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH02
Date Collected: 05/18/22 14:05
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-4
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			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 13:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	27511	06/14/22 13:24	SC	XEN MID
Soluble	Analysis	300.0		1			27545	06/15/22 05:05	CH	XEN MID

Client Sample ID: PH11
Date Collected: 05/18/22 11:05
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-5
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 14:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 12:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 06:18	CH	XEN MID

Client Sample ID: PH11
Date Collected: 05/18/22 11:10
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-6
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 15:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 14:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		10			26199	05/25/22 06:46	CH	XEN MID

Client Sample ID: PH12
Date Collected: 05/18/22 12:15
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-7
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			5.04 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 13:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26110	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26126	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 14:24	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Client Sample ID: PH12
Date Collected: 05/18/22 12:15
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-7
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			4.95 g	50 mL	26083	05/23/22 10:58	SC	XEN MID
Soluble	Analysis	300.0		1			26099	05/23/22 13:35	CH	XEN MID

Client Sample ID: PH12
Date Collected: 05/18/22 12:20
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-8
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			4.98 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 15:25	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26028	05/23/22 08:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 12:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	27511	06/14/22 13:24	SC	XEN MID
Soluble	Analysis	300.0		1			27545	06/15/22 05:14	CH	XEN MID

Client Sample ID: PH13
Date Collected: 05/18/22 12:30
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-9
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 17:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 14:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		5			26199	05/25/22 07:04	CH	XEN MID

Client Sample ID: PH13
Date Collected: 05/18/22 12:35
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2323-10
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 17:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26109	05/23/22 17:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			26125	05/24/22 08:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 15:08	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 07:14	CH	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2323-1
SDG: 03A1987014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2323-1	PH01	Solid	05/18/22 10:55	05/19/22 16:11	4
890-2323-2	PH01	Solid	05/18/22 11:00	05/19/22 16:11	7
890-2323-3	PH02	Solid	05/18/22 14:00	05/19/22 16:11	6
890-2323-4	PH02	Solid	05/18/22 14:05	05/19/22 16:11	7
890-2323-5	PH11	Solid	05/18/22 11:05	05/19/22 16:11	0.5
890-2323-6	PH11	Solid	05/18/22 11:10	05/19/22 16:11	7
890-2323-7	PH12	Solid	05/18/22 12:15	05/19/22 16:11	1
890-2323-8	PH12	Solid	05/18/22 12:20	05/19/22 16:11	7
890-2323-9	PH13	Solid	05/18/22 12:30	05/19/22 16:11	2
890-2323-10	PH13	Solid	05/18/22 12:35	05/19/22 16:11	7

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	3122 National Parks Hwy	Address:	5315 Buena Vista Dr.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	jim.raley@dvn.com, bbelill@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Pecos Federal #001Y	Turn Around	
Project Number:	03A1987014	☑ Routine ☐ Rush	
Project Location:	Rural Eddy	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC: 106118350T 10610847201		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	T-1M-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.0	
Total Containers:	6	Corrected Temperature:	0.8	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0	Sample Comments
PH01	S	5.18.22	10:55	4'	Comp	1		X	X	X	Incident ID
PH01	S	5.18.22	11:00	7'	Comp	1		X	X	X	nAPP2208846424
PH02	S	5.18.22	14:00	6'	Comp	1		X	X	X	
PH02	S	5.18.22	14:05	7'	Comp	1		X	X	X	
PH11	S	5.18.22	11:05	0.5'	Comp	1		X	X	X	
PH11	S	5.18.22	11:10	7'	Comp	1		X	X	X	PH 12 (1')
RUSH PH12	S	5.18.22	12:15	1'	Comp	1		X	X	X	*RUSH 24 HR *
PH12	S	5.18.22	12:20	7'	Comp	1		X	X	X	
PH13	S	5.18.22	12:30	2'	Comp	1		X	X	X	
PH13	S	5.18.22	12:35	7'	Comp	1		X	X	X	

890-2323 Chain of Custody

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		5/19/22 4:11	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone. 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-764 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2323-1
Address: 1211 W Florida Ave	Due Date Requested: 5/25/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Pecos Federal #001Y	Project #: 89000084			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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, M Hexane, N - None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W - pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note.
			Preservation Code:										
PH01 (890-2323-1)	5/18/22	10 55 Mountain		Solid			X	X	X	X	X	1	
PH01 (890-2323-2)	5/18/22	11 00 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2323-3)	5/18/22	14 00 Mountain		Solid			X	X	X	X	X	1	
PH02 (890-2323-4)	5/18/22	14 05 Mountain		Solid			X	X	X	X	X	1	
PH11 (890-2323-5)	5/18/22	11 05 Mountain		Solid			X	X	X	X	X	1	
PH11 (890-2323-6)	5/18/22	11 10 Mountain		Solid			X	X	X	X	X	1	
PH12 (890-2323-8)	5/18/22	12 20 Mountain		Solid			X	X	X	X	X	1	
PH13 (890-2323-9)	5/18/22	12 30 Mountain		Solid			X	X	X	X	X	1	
PH13 (890-2323-10)	5/18/22	12 35 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II, III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time	Method of Shipment.

Relinquished by: N Olivas 5.20.22	Date/Time	Company	Received by: [signature]	Date/Time: 5/23/22 800	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time.	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 2 1/1 Cy

Ver 06/08/2021

Eurofins 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)	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Shipping/Receiving	Phone	Kramer Jessica		890-764 1
Company: Eurofins Environment Testing South Centr		E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Address: 1211 W Florida Ave, ,	Due Date Requested: 5/23/2022	Accreditations Required (See note): NELAP - Texas		Job #: 890-2323-2
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Pecos Federal #001Y	Project #: 89000084			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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, M - Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_Calc	8016MOD_NM/8016NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH12 (890-2323-7)	5/18/22	12 15 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) 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	Company
1	NOlivas 5.20.22			JKramer	5/23/22 800	
2	Relinquished by:	Date/Time.	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.1 | 9

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2323-1
SDG Number: 03A1987014

Login Number: 2323
List Number: 1
Creator: Olivas, Nathaniel

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: Ensolum

Job Number: 890-2323-1
SDG Number: 03A1987014

Login Number: 2323
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 05/23/22 08:18 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	2.1/1.9
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2324-1
Laboratory Sample Delivery Group: 03A1987014
Client Project/Site: Pecos Federal #001Y

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
5/25/2022 10:48:18 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Pecos Federal #001Y

Laboratory Job ID: 890-2324-1
SDG: 03A1987014

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 6
QC Sample Results 7
QC Association Summary 11
Lab Chronicle 13
Certification Summary 14
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 19

Definitions/Glossary

Client: Ensolum Job ID: 890-2324-1
Project/Site: Pecos Federal #001Y SDG: 03A1987014

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.
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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Job ID: 890-2324-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2324-1

Receipt
The sample was received on 5/19/2022 4:11 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 0.8°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: (890-2327-A-21-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-26030 and analytical batch 880-26020 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10. The MS/MSD RPD passes therefore shows recovery for the batch.

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Client Sample ID: PH12

Date Collected: 05/18/22 11:45
Date Received: 05/19/22 16:11
Sample Depth: 0.5

Lab Sample ID: 890-2324-1

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		05/23/22 11:13	05/23/22 18:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 18:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 18:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 18:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 18:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*05/23/22 11:13*	*05/23/22 18:10*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/23/22 11:13*	*05/23/22 18:10*	*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			05/24/22 11:05	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			05/24/22 09:49	1

Method: 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		05/23/22 08:26	05/23/22 16:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:26	05/23/22 16:13	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:26	05/23/22 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*05/23/22 08:26*	*05/23/22 16:13*	*1*
o-Terphenyl	*115*		*70 - 130*	*05/23/22 08:26*	*05/23/22 16:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**334**		4.99		mg/Kg			05/25/22 07:23	1

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2323-A-1-E MS	Matrix Spike	118	91
890-2323-A-1-F MSD	Matrix Spike Duplicate	110	95
890-2324-1	PH12	114	98
LCS 880-26086/1-A	Lab Control Sample	108	92
LCSD 880-26086/2-A	Lab Control Sample Dup	113	90
MB 880-26086/5-A	Method Blank	107	89

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2324-1	PH12	107	115
890-2327-A-21-B MS	Matrix Spike	115	114
890-2327-A-21-C MSD	Matrix Spike Duplicate	103	101
LCS 880-26030/2-A	Lab Control Sample	130	130
LCSD 880-26030/3-A	Lab Control Sample Dup	110	110
MB 880-26030/1-A	Method Blank	107	114

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26086/5-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/23/22 11:13*	*05/23/22 12:40*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*05/23/22 11:13*	*05/23/22 12:40*	*1*

Lab Sample ID: LCS 880-26086/1-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07806		mg/Kg		78	70 - 130		
Toluene			0.100	0.09288		mg/Kg		93	70 - 130		
Ethylbenzene			0.100	0.09738		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2011		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.1007		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-26086/2-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26086

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07770		mg/Kg		78	70 - 130	0	35
Toluene			0.100	0.09565		mg/Kg		96	70 - 130	3	35
Ethylbenzene			0.100	0.1006		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2095		mg/Kg		105	70 - 130	4	35
o-Xylene			0.100	0.1055		mg/Kg		105	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 890-2323-A-1-E MS
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.07463		mg/Kg		74	70 - 130		
Toluene	<0.00201	U	0.101	0.08606		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

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

Lab Sample ID: 890-2323-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 26017 — **Prep Batch: 26086**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.08076		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1659		mg/Kg		82	70 - 130
o-Xylene	<0.00201	U	0.101	0.08089		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-2323-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 26017 — **Prep Batch: 26086**

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	0.07739		mg/Kg		78	70 - 130	4	35
Toluene	<0.00201	U	0.0990	0.08395		mg/Kg		85	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.07464		mg/Kg		75	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1500		mg/Kg		76	70 - 130	10	35
o-Xylene	<0.00201	U	0.0990	0.07520		mg/Kg		76	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-26030/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 26020 — **Prep Batch: 26030**

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		05/23/22 08:26	05/23/22 10:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:26	05/23/22 10:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:26	05/23/22 10:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*05/23/22 08:26*	*05/23/22 10:03*	*1*
o-Terphenyl	*114*		*70 - 130*	*05/23/22 08:26*	*05/23/22 10:03*	*1*

Lab Sample ID: LCS 880-26030/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 26020 — **Prep Batch: 26030**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1073		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1058		mg/Kg		106	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

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

Lab Sample ID: LCS 880-26030/2-A
Matrix: Solid
Analysis Batch: 26020

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26030

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

Lab Sample ID: LCSD 880-26030/3-A
Matrix: Solid
Analysis Batch: 26020

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26030

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	844.8	*1	mg/Kg		84	70 - 130	24	20
Diesel Range Organics (Over C10-C28)			1000	877.5		mg/Kg		88	70 - 130	19	20

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

Lab Sample ID: 890-2327-A-21-B MS
Matrix: Solid
Analysis Batch: 26020

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26030

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 *1	1000	1181		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1228		mg/Kg		123	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 890-2327-A-21-C MSD
Matrix: Solid
Analysis Batch: 26020

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 26030

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 *1	999	1023		mg/Kg		100	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1081		mg/Kg		108	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	101		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-26084/1-A
Matrix: Solid
Analysis Batch: 26199

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			05/25/22 04:55	1

Lab Sample ID: LCS 880-26084/2-A
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.4		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-26084/3-A
Matrix: Solid
Analysis Batch: 26199

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	255.6		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 890-2323-A-1-C MS
Matrix: Solid
Analysis Batch: 26199

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	233		249	458.2		mg/Kg		91	90 - 110		

Lab Sample ID: 890-2323-A-1-D MSD
Matrix: Solid
Analysis Batch: 26199

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	233		249	477.2		mg/Kg		98	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

GC VOA

Analysis Batch: 26017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Total/NA	Solid	8021B	26086
MB 880-26086/5-A	Method Blank	Total/NA	Solid	8021B	26086
LCS 880-26086/1-A	Lab Control Sample	Total/NA	Solid	8021B	26086
LCSD 880-26086/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26086
890-2323-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	26086
890-2323-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	26086

Prep Batch: 26086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Total/NA	Solid	5035	
MB 880-26086/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2323-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2323-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 26171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 26020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Total/NA	Solid	8015B NM	26030
MB 880-26030/1-A	Method Blank	Total/NA	Solid	8015B NM	26030
LCS 880-26030/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26030
LCSD 880-26030/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26030
890-2327-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	26030
890-2327-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26030

Prep Batch: 26030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Total/NA	Solid	8015NM Prep	
MB 880-26030/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26030/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26030/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2327-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2327-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 26154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 26084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Soluble	Solid	DI Leach	
MB 880-26084/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26084/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26084/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

HPLC/IC (Continued)

Leach Batch: 26084 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2323-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2323-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 26199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2324-1	PH12	Soluble	Solid	300.0	26084
MB 880-26084/1-A	Method Blank	Soluble	Solid	300.0	26084
LCS 880-26084/2-A	Lab Control Sample	Soluble	Solid	300.0	26084
LCSD 880-26084/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26084
890-2323-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	26084
890-2323-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	26084

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Client Sample ID: PH12

Date Collected: 05/18/22 11:45
Date Received: 05/19/22 16:11

Lab Sample ID: 890-2324-1

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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 18:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26171	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26154	05/24/22 09:49	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26030	05/23/22 08:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26020	05/23/22 16:13	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 07:23	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2324-1
SDG: 03A1987014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2324-1	PH12	Solid	05/18/22 11:45	05/19/22 16:11	0.5

Chain of Custody

eurofins | Environment Testing Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	3122 National Parks Hwy	Address:	5315 Buena Vista Dr.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	jim.raley@dvn.com, bbelill@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Pecos Federal #001Y	Turn Around	
Project Number:	03A1987014	☑ Routine ☐ Rush	
Project Location:	Rural Eddy	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC: 10611835O1 10610847C1		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TNM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.0	
Total Containers:		Corrected Temperature:	0.8	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0
PH12	S	5.18.22	11:45	0.5'	~~Comp~~ GRAB	1	X	X	X

Parameters

ANALYSIS REQUEST

890-2324 Chain of Custody

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID
nAPP2208846424

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		5/19/22 4:11	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-764 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2324-1
Address: 1211 W Florida Ave	Due Date Requested: 5/25/2022			
City: Midland	TAT Requested (days)			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #			
Project Name: Pecos Federal #001Y	Project #: 89000084			
Site.	SSOW#			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
PH12 (890-2324-1)	5/18/22	11 45 Mountain		Solid			X	X	X	X	X	1	

Preservation Codes

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 Na2S2O3		
G - Amchlor	S H2SO4		
H Ascorbic Acid	T TSP Dodecahydrate		
I Ice	U Acetone		
J DI Water	V MCAA		
K EDTA	W pH 4-5		
L - EDA	Y Trizma		
	Z other (specify)		

Other:

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC 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 complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested I II III IV Other (specify) 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	Company
	N Olivas 5.20.22				5/23/22 900	
	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		2.1 | 9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2324-1
SDG Number: 03A1987014

Login Number: 2324
List Number: 1
Creator: Olivas, Nathaniel

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: Ensolum

Job Number: 890-2324-1
SDG Number: 03A1987014

Login Number: 2324
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 05/23/22 08:18 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	2.1/1.9
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	

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ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-2326-1
Laboratory Sample Delivery Group: 03A1987014
Client Project/Site: Pecos Federal #001Y

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
5/25/2022 10:48:52 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Pecos Federal #001Y

Laboratory Job ID: 890-2326-1
SDG: 03A1987014

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 17
Lab Chronicle 20
Certification Summary 22
Method Summary 23
Sample Summary 24
Chain of Custody 25
Receipt Checklists 27

Definitions/Glossary

Client: Ensolum Job ID: 890-2326-1
Project/Site: Pecos Federal #001Y SDG: 03A1987014

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.
¤	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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Job ID: 890-2326-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2326-1

Receipt
The samples were received on 5/19/2022 4:12 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 0.8°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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-26028 and analytical batch 880-26024 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 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-26124/2-A). 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 880-26124 and analytical batch 880-26134 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28). The MS/MSD RPD passed within limits and therefore shows recovery for the batch.

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 880-26084 and 880-26084 and analytical batch 880-26199 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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH15

Lab Sample ID: 890-2326-1
Matrix: Solid
Date Collected: 05/18/22 11:15
Date Received: 05/19/22 16:12
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		05/23/22 11:13	05/23/22 18:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 18:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 18:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/23/22 11:13	05/23/22 18:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 18:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/23/22 11:13	05/23/22 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/23/22 11:13*	*05/23/22 18:31*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/23/22 11:13*	*05/23/22 18:31*	*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			05/24/22 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**67.9**		50.0		mg/Kg			05/24/22 09:21	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		05/23/22 08:24	05/23/22 16:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 16:59	1
Oil Range Organics (Over C28-C36)	**67.9**		50.0		mg/Kg		05/23/22 08:24	05/23/22 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/23/22 08:24*	*05/23/22 16:59*	*1*
o-Terphenyl	*110*		*70 - 130*	*05/23/22 08:24*	*05/23/22 16:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8780**	**F1**	101		mg/Kg			05/25/22 07:32	20

Client Sample ID: PH15

Lab Sample ID: 890-2326-2
Matrix: Solid
Date Collected: 05/18/22 11:20
Date Received: 05/19/22 16:12
Sample Depth: 1

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		05/23/22 11:13	05/23/22 18:51	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 18:51	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 18:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/23/22 11:13	05/23/22 18:51	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 18:51	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/23/22 11:13	05/23/22 18:51	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH15

Lab Sample ID: 890-2326-2
Matrix: Solid
Date Collected: 05/18/22 11:20
Date Received: 05/19/22 16:12
Sample Depth: 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*05/23/22 11:13*	*05/23/22 18:51*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/23/22 11:13*	*05/23/22 18:51*	*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			05/24/22 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**147**		49.9		mg/Kg			05/24/22 09:21	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	**147**		49.9		mg/Kg		05/23/22 08:24	05/23/22 17:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:24	05/23/22 17:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:24	05/23/22 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*101*		*70 - 130*	*05/23/22 08:24*	*05/23/22 17:21*	*1*
o-Terphenyl	*110*		*70 - 130*	*05/23/22 08:24*	*05/23/22 17:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1570**		25.0		mg/Kg			05/25/22 08:00	5

Client Sample ID: PH16

Lab Sample ID: 890-2326-3
Matrix: Solid
Date Collected: 05/18/22 11:25
Date Received: 05/19/22 16:12
Sample Depth: 0.5

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		05/23/22 11:13	05/23/22 19:12	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 19:12	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 19:12	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/23/22 11:13	05/23/22 19:12	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/22 11:13	05/23/22 19:12	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/23/22 11:13	05/23/22 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/23/22 11:13*	*05/23/22 19:12*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/23/22 11:13*	*05/23/22 19:12*	*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			05/24/22 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**144**		50.0		mg/Kg			05/24/22 09:21	1

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Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH16

Lab Sample ID: 890-2326-3
Matrix: Solid
Date Collected: 05/18/22 11:25
Date Received: 05/19/22 16:12
Sample Depth: 0.5

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	144		50.0		mg/Kg		05/23/22 08:24	05/23/22 17:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 17:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*05/23/22 08:24*	*05/23/22 17:42*	*1*
o-Terphenyl	*109*		*70 - 130*	*05/23/22 08:24*	*05/23/22 17:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7560		101		mg/Kg			05/25/22 08:09	20

Client Sample ID: PH16

Lab Sample ID: 890-2326-4
Matrix: Solid
Date Collected: 05/18/22 11:30
Date Received: 05/19/22 16:12
Sample Depth: 1

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		05/23/22 11:13	05/23/22 19:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 19:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 19:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/23/22 11:13	05/23/22 19:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/23/22 11:13	05/23/22 19:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/23/22 11:13	05/23/22 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*05/23/22 11:13*	*05/23/22 19:32*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/23/22 11:13*	*05/23/22 19:32*	*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			05/24/22 11:05	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			05/24/22 09:21	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		05/23/22 08:24	05/23/22 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:24	05/23/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*05/23/22 08:24*	*05/23/22 18:03*	*1*
o-Terphenyl	*94*		*70 - 130*	*05/23/22 08:24*	*05/23/22 18:03*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH16

Lab Sample ID: 890-2326-4
Matrix: Solid
Date Collected: 05/18/22 11:30
Date Received: 05/19/22 16:12
Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**673**		24.9		mg/Kg			05/25/22 08:36	5

Client Sample ID: PH17

Lab Sample ID: 890-2326-5
Matrix: Solid
Date Collected: 05/18/22 11:35
Date Received: 05/19/22 16:12
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		05/23/22 11:13	05/23/22 19:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 19:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 19:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/23/22 11:13	05/23/22 19:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 19:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/23/22 11:13	05/23/22 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*05/23/22 11:13*	*05/23/22 19:53*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/23/22 11:13*	*05/23/22 19:53*	*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			05/24/22 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**73.7**		49.9		mg/Kg			05/24/22 09:21	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	**73.7**		49.9		mg/Kg		05/23/22 08:24	05/23/22 18:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/23/22 08:24	05/23/22 18:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/22 08:24	05/23/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*05/23/22 08:24*	*05/23/22 18:25*	*1*
o-Terphenyl	*118*		*70 - 130*	*05/23/22 08:24*	*05/23/22 18:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.2**		4.95		mg/Kg			05/25/22 08:46	1

Client Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH17

Date Collected: 05/18/22 11:40
Date Received: 05/19/22 16:12
Sample Depth: 1

Lab Sample ID: 890-2326-6

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		05/23/22 11:13	05/23/22 20:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 20:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 20:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 20:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/23/22 11:13	05/23/22 20:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/23/22 11:13	05/23/22 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*05/23/22 11:13*	*05/23/22 20:13*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/23/22 11:13*	*05/23/22 20:13*	*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			05/24/22 11:05	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			05/24/22 09:21	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 *1	49.9		mg/Kg		05/24/22 08:22	05/24/22 17:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		05/24/22 08:22	05/24/22 17:50	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/24/22 08:22	05/24/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*05/24/22 08:22*	*05/24/22 17:50*	*1*
o-Terphenyl	*106*		*70 - 130*	*05/24/22 08:22*	*05/24/22 17:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.1**		4.99		mg/Kg			05/25/22 08:55	1

Surrogate Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2323-A-1-E MS	Matrix Spike	118	91
890-2323-A-1-F MSD	Matrix Spike Duplicate	110	95
890-2326-1	PH15	111	98
890-2326-2	PH15	111	96
890-2326-3	PH16	110	96
890-2326-4	PH16	110	93
890-2326-5	PH17	115	96
890-2326-6	PH17	114	94
LCS 880-26086/1-A	Lab Control Sample	108	92
LCSD 880-26086/2-A	Lab Control Sample Dup	113	90
MB 880-26086/5-A	Method Blank	107	89

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-15067-A-21-C MS	Matrix Spike	88	75
880-15067-A-21-D MSD	Matrix Spike Duplicate	100	85
890-2323-A-2-B MS	Matrix Spike	101	102
890-2323-A-2-C MSD	Matrix Spike Duplicate	93	93
890-2326-1	PH15	100	110
890-2326-2	PH15	101	110
890-2326-3	PH16	102	109
890-2326-4	PH16	89	94
890-2326-5	PH17	105	118
890-2326-6	PH17	113	106
LCS 880-26028/2-A	Lab Control Sample	103	107
LCS 880-26124/2-A	Lab Control Sample	147 S1+	127
LCSD 880-26028/3-A	Lab Control Sample Dup	109	113
LCSD 880-26124/3-A	Lab Control Sample Dup	115	102
MB 880-26028/1-A	Method Blank	107	122
MB 880-26124/1-A	Method Blank	122	119

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-26086/5-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/22 11:13	05/23/22 12:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/23/22 11:13	05/23/22 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/23/22 11:13*	*05/23/22 12:40*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*05/23/22 11:13*	*05/23/22 12:40*	*1*

Lab Sample ID: LCS 880-26086/1-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07806		mg/Kg		78	70 - 130		
Toluene			0.100	0.09288		mg/Kg		93	70 - 130		
Ethylbenzene			0.100	0.09738		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2011		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.1007		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-26086/2-A
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26086

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07770		mg/Kg		78	70 - 130	0	35
Toluene			0.100	0.09565		mg/Kg		96	70 - 130	3	35
Ethylbenzene			0.100	0.1006		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2095		mg/Kg		105	70 - 130	4	35
o-Xylene			0.100	0.1055		mg/Kg		105	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 890-2323-A-1-E MS
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.07463		mg/Kg		74	70 - 130		
Toluene	<0.00201	U	0.101	0.08606		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

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

Lab Sample ID: 890-2323-A-1-E MS
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.08076		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1659		mg/Kg		82	70 - 130
o-Xylene	<0.00201	U	0.101	0.08089		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-2323-A-1-F MSD
Matrix: Solid
Analysis Batch: 26017

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 26086

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	0.07739		mg/Kg		78	70 - 130	4	35
Toluene	<0.00201	U	0.0990	0.08395		mg/Kg		85	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.07464		mg/Kg		75	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1500		mg/Kg		76	70 - 130	10	35
o-Xylene	<0.00201	U	0.0990	0.07520		mg/Kg		76	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-26028/1-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26028

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		05/23/22 08:23	05/23/22 09:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 09:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/22 08:23	05/23/22 09:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*05/23/22 08:23*	*05/23/22 09:53*	*1*
o-Terphenyl	*122*		*70 - 130*	*05/23/22 08:23*	*05/23/22 09:53*	*1*

Lab Sample ID: LCS 880-26028/2-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26028

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	888.2		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	800.7		mg/Kg		80	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

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

Lab Sample ID: LCS 880-26028/2-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26028

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-26028/3-A
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26028

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	908.6		mg/Kg		91	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	914.8		mg/Kg		91	70 - 130	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 890-2323-A-2-B MS
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26028

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 F1 F2	1000	1466	F1	mg/Kg		144	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	948.2		mg/Kg		95	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-2323-A-2-C MSD
Matrix: Solid
Analysis Batch: 26024

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 26028

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 F1 F2	999	1176	F2	mg/Kg		116	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	871.0		mg/Kg		87	70 - 130	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	93		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

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

Lab Sample ID: MB 880-26124/1-A
Matrix: Solid
Analysis Batch: 26134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 26124

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		05/24/22 08:22	05/24/22 10:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/24/22 08:22	05/24/22 10:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/24/22 08:22	05/24/22 10:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*05/24/22 08:22*	*05/24/22 10:11*	*1*
o-Terphenyl	*119*		*70 - 130*	*05/24/22 08:22*	*05/24/22 10:11*	*1*

Lab Sample ID: LCS 880-26124/2-A
Matrix: Solid
Analysis Batch: 26134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 26124

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1118		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	972.6		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*147*	*S1+*	*70 - 130*
o-Terphenyl	*127*		*70 - 130*

Lab Sample ID: LCSD 880-26124/3-A
Matrix: Solid
Analysis Batch: 26134

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 26124

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	814.5	*1	mg/Kg		81	70 - 130	31	20
Diesel Range Organics (Over C10-C28)			1000	776.9	*1	mg/Kg		78	70 - 130	22	20

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

Lab Sample ID: 880-15067-A-21-C MS
Matrix: Solid
Analysis Batch: 26134

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26124

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	55.3	*1	1000	778.9		mg/Kg		72	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U *1	1000	799.3		mg/Kg		78	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

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

Lab Sample ID: 880-15067-A-21-C MS
Matrix: Solid
Analysis Batch: 26134

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 26124

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: 880-15067-A-21-D MSD
Matrix: Solid
Analysis Batch: 26134

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 26124

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	55.3	*1	999	925.3		mg/Kg		87	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	999	906.2		mg/Kg		89	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	85		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-26084/1-A
Matrix: Solid
Analysis Batch: 26199

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			05/25/22 04:55	1

Lab Sample ID: LCS 880-26084/2-A
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.4		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-26084/3-A
Matrix: Solid
Analysis Batch: 26199

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	255.6		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 890-2326-1 MS
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: PH15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8780	F1	5050	15820	F1	mg/Kg		139	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2326-1 MSD
Matrix: Solid
Analysis Batch: 26199

Client Sample ID: PH15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8780	F1	5050	16220	F1	mg/Kg		147	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

GC VOA

Analysis Batch: 26017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Total/NA	Solid	8021B	26086
890-2326-2	PH15	Total/NA	Solid	8021B	26086
890-2326-3	PH16	Total/NA	Solid	8021B	26086
890-2326-4	PH16	Total/NA	Solid	8021B	26086
890-2326-5	PH17	Total/NA	Solid	8021B	26086
890-2326-6	PH17	Total/NA	Solid	8021B	26086
MB 880-26086/5-A	Method Blank	Total/NA	Solid	8021B	26086
LCS 880-26086/1-A	Lab Control Sample	Total/NA	Solid	8021B	26086
LCSD 880-26086/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	26086
890-2323-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	26086
890-2323-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	26086

Prep Batch: 26086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Total/NA	Solid	5035	
890-2326-2	PH15	Total/NA	Solid	5035	
890-2326-3	PH16	Total/NA	Solid	5035	
890-2326-4	PH16	Total/NA	Solid	5035	
890-2326-5	PH17	Total/NA	Solid	5035	
890-2326-6	PH17	Total/NA	Solid	5035	
MB 880-26086/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-26086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-26086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2323-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2323-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 26172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Total/NA	Solid	Total BTEX	
890-2326-2	PH15	Total/NA	Solid	Total BTEX	
890-2326-3	PH16	Total/NA	Solid	Total BTEX	
890-2326-4	PH16	Total/NA	Solid	Total BTEX	
890-2326-5	PH17	Total/NA	Solid	Total BTEX	
890-2326-6	PH17	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 26024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Total/NA	Solid	8015B NM	26028
890-2326-2	PH15	Total/NA	Solid	8015B NM	26028
890-2326-3	PH16	Total/NA	Solid	8015B NM	26028
890-2326-4	PH16	Total/NA	Solid	8015B NM	26028
890-2326-5	PH17	Total/NA	Solid	8015B NM	26028
MB 880-26028/1-A	Method Blank	Total/NA	Solid	8015B NM	26028
LCS 880-26028/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26028
LCSD 880-26028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26028
890-2323-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	26028
890-2323-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26028

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

GC Semi VOA

Prep Batch: 26028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Total/NA	Solid	8015NM Prep	
890-2326-2	PH15	Total/NA	Solid	8015NM Prep	
890-2326-3	PH16	Total/NA	Solid	8015NM Prep	
890-2326-4	PH16	Total/NA	Solid	8015NM Prep	
890-2326-5	PH17	Total/NA	Solid	8015NM Prep	
MB 880-26028/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26028/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2323-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2323-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 26124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-6	PH17	Total/NA	Solid	8015NM Prep	
MB 880-26124/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-26124/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-26124/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-15067-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-15067-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 26130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Total/NA	Solid	8015 NM	
890-2326-2	PH15	Total/NA	Solid	8015 NM	
890-2326-3	PH16	Total/NA	Solid	8015 NM	
890-2326-4	PH16	Total/NA	Solid	8015 NM	
890-2326-5	PH17	Total/NA	Solid	8015 NM	
890-2326-6	PH17	Total/NA	Solid	8015 NM	

Analysis Batch: 26134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-6	PH17	Total/NA	Solid	8015B NM	26124
MB 880-26124/1-A	Method Blank	Total/NA	Solid	8015B NM	26124
LCS 880-26124/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26124
LCSD 880-26124/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26124
880-15067-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	26124
880-15067-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	26124

HPLC/IC

Leach Batch: 26084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Soluble	Solid	DI Leach	
890-2326-2	PH15	Soluble	Solid	DI Leach	
890-2326-3	PH16	Soluble	Solid	DI Leach	
890-2326-4	PH16	Soluble	Solid	DI Leach	
890-2326-5	PH17	Soluble	Solid	DI Leach	
890-2326-6	PH17	Soluble	Solid	DI Leach	
MB 880-26084/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-26084/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-26084/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

HPLC/IC (Continued)

Leach Batch: 26084 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1 MS	PH15	Soluble	Solid	DI Leach	
890-2326-1 MSD	PH15	Soluble	Solid	DI Leach	

Analysis Batch: 26199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2326-1	PH15	Soluble	Solid	300.0	26084
890-2326-2	PH15	Soluble	Solid	300.0	26084
890-2326-3	PH16	Soluble	Solid	300.0	26084
890-2326-4	PH16	Soluble	Solid	300.0	26084
890-2326-5	PH17	Soluble	Solid	300.0	26084
890-2326-6	PH17	Soluble	Solid	300.0	26084
MB 880-26084/1-A	Method Blank	Soluble	Solid	300.0	26084
LCS 880-26084/2-A	Lab Control Sample	Soluble	Solid	300.0	26084
LCSD 880-26084/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	26084
890-2326-1 MS	PH15	Soluble	Solid	300.0	26084
890-2326-1 MSD	PH15	Soluble	Solid	300.0	26084

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH15
Date Collected: 05/18/22 11:15
Date Received: 05/19/22 16:12

Lab Sample ID: 890-2326-1
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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 18:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26172	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26130	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 16:59	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		20			26199	05/25/22 07:32	CH	XEN MID

Client Sample ID: PH15
Date Collected: 05/18/22 11:20
Date Received: 05/19/22 16:12

Lab Sample ID: 890-2326-2
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			5.05 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 18:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26172	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26130	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 17:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		5			26199	05/25/22 08:00	CH	XEN MID

Client Sample ID: PH16
Date Collected: 05/18/22 11:25
Date Received: 05/19/22 16:12

Lab Sample ID: 890-2326-3
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			5.04 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 19:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26172	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26130	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 17:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		20			26199	05/25/22 08:09	CH	XEN MID

Client Sample ID: PH16
Date Collected: 05/18/22 11:30
Date Received: 05/19/22 16:12

Lab Sample ID: 890-2326-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 19:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26172	05/24/22 11:05	SM	XEN MID

Lab Chronicle

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Client Sample ID: PH16

Lab Sample ID: 890-2326-4
Matrix: Solid
Date Collected: 05/18/22 11:30
Date Received: 05/19/22 16:12

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			26130	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 18:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		5			26199	05/25/22 08:36	CH	XEN MID

Client Sample ID: PH17

Lab Sample ID: 890-2326-5
Matrix: Solid
Date Collected: 05/18/22 11:35
Date Received: 05/19/22 16:12

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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 19:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26172	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26130	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26028	05/23/22 08:24	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26024	05/23/22 18:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 08:46	CH	XEN MID

Client Sample ID: PH17

Lab Sample ID: 890-2326-6
Matrix: Solid
Date Collected: 05/18/22 11:40
Date Received: 05/19/22 16:12

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	26086	05/23/22 11:13	MR	XEN MID
Total/NA	Analysis	8021B		1			26017	05/23/22 20:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			26172	05/24/22 11:05	SM	XEN MID
Total/NA	Analysis	8015 NM		1			26130	05/24/22 09:21	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26124	05/24/22 08:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			26134	05/24/22 17:50	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	26084	05/23/22 11:02	SC	XEN MID
Soluble	Analysis	300.0		1			26199	05/25/22 08:55	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

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: Ensolum
Project/Site: Pecos Federal #001Y

Job ID: 890-2326-1
SDG: 03A1987014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2326-1	PH15	Solid	05/18/22 11:15	05/19/22 16:12	0.5
890-2326-2	PH15	Solid	05/18/22 11:20	05/19/22 16:12	1
890-2326-3	PH16	Solid	05/18/22 11:25	05/19/22 16:12	0.5
890-2326-4	PH16	Solid	05/18/22 11:30	05/19/22 16:12	1
890-2326-5	PH17	Solid	05/18/22 11:35	05/19/22 16:12	0.5
890-2326-6	PH17	Solid	05/18/22 11:40	05/19/22 16:12	1

eurofins

Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Jim Raley
Company Name:	Ensolum, LLC.	Company Name:	Devon Energy Corporation
Address:	3122 National Parks Hwy	Address:	5315 Buena Vista Dr.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	jim.raley@dvn.com, bbelill@ensolum.com

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Pecos Federal #001Y	**Turn Around**	
Project Number:	03A1987014	☑ Routine ☐ Rush	
Project Location:	Rural Eddy	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	CC: 1061183501 10610847901		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	T-NM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.0
Total Containers:		Corrected Temperature:	0.8

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	BTEX - EPA METHOD 8021B	TPH - EPA METHOD 8015M/D	CHLORIDE - EPA METHOD 300.0	Sample Comments
PH15	S	5.18.22	11:15	0.5'	Comp	1		X	X	X	Incident ID
PH15	S	5.18.22	11:20	1'	Comp			X	X	X	nAPP2208846424
PH16	S	5.18.22	11:25	0.5'	Comp			X	X	X	
PH16	S	5.18.22	11:30	1'	Comp			X	X	X	
PH17	S	5.18.22	11:35	0.5'	Comp			X	X	X	
PH17	S	5.18.22	11:40	1'	Comp			X	X	X	
					GRAB						

890-2326 Chain of Custody

Total 200.7 / 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_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		5/19/22 4:12	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Eurofins 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)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-764 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2326-1
Address: 1211 W Florida Ave	Due Date Requested: 5/25/2022			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Pecos Federal #001Y	Project #: 89000084			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH15 (890-2326-1)	5/18/22	11 15 Mountain		Solid			X	X	X	X	X	1	
PH15 (890-2326-2)	5/18/22	11 20 Mountain		Solid			X	X	X	X	X	1	
PH16 (890-2326-3)	5/18/22	11 25 Mountain		Solid			X	X	X	X	X	1	
PH16 (890-2326-4)	5/18/22	11 30 Mountain		Solid			X	X	X	X	X	1	
PH17 (890-2326-5)	5/18/22	11 35 Mountain		Solid			X	X	X	X	X	1	
PH17 (890-2326-6)	5/18/22	11 40 Mountain		Solid			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 out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any 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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) 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	Company
1	N Olivas 5.20.22			Kramer	5/23/22 900	
2	Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time.	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2 1/1.9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2326-1
SDG Number: 03A1987014

Login Number: 2326
List Number: 1
Creator: Olivas, Nathaniel

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: Ensolum

Job Number: 890-2326-1
SDG Number: 03A1987014

Login Number: 2326
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 05/23/22 08:18 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	2.1/1.9
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	

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 118553

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	246289
	Action Number: 118553
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Please address chloride concentrations in PH-13 at 2' (1,460 mg/kg).	9/20/2022