

May 10, 2024

New Mexico Energy Minerals and Natural Resources Department New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Closure Request LVP SWD #001

Incident Number nAPP2135033453

Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of WPX Energy Permian, LLC. (WPX), has prepared this *Closure Request* to document remedial actions and soil sampling activities at the LVP SWD #001 (Site) in Unit I, Section 4, Township 23, South, Range 28 East, in Eddy County, New Mexico (Figure 1). The Site (32.33309°, -104.08503°) and is associated with oil and gas exploration and production operations on private land.

The purpose of the remedial actions and soil sampling activities was to fulfill proposed remediation actions presented in the December 4, 2023, *Remediation Work Plan Addendum* following a release of produced water within a lined secondary containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, WPX is submitting this *Closure Request* describing excavation activities that have occurred and requesting closure for Incident Number nAPP2135033453.

BACKGROUND

On December 3, 2021, a connection point on an underground produced water transfer line failed and resulted in the release of approximately 200 barrels (bbls) of produced water to the well pad. No free-standing fluids were recovered. WPX immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email and with a Corrective Action Form C-141 (Form C-141) on December 16, 2021 (Appendix A). The release was assigned Incident Number nAPP2135033453.

Following the release, Site assessment and delineation activities were completed, which identified chloride-impacted soil. Excavation activities were completed but were limited due to well-cemented conglomerate soil and indurated caliche. An estimated 1,136 cubic yards of impacted soil was removed from the release area and hauled to an approved disposal facility. Ensolum personnel conducted confirmation samples activities following excavation; however, the final excavation extent only measured approximately 5,668 square feet instead of the anticipated 13,000 square feet. In order to comply with a NMOCD-approved sampling variance, Ensolum personnel collected a 5-point confirmation sample every 500 square feet for the floor of the excavation and from the sidewalls. A total of 12 composite confirmation floor samples and three composite confirmation sidewall soil samples were collected. Laboratory analytical results indicated eight out of the 15 confirmation samples collected during the

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Parks Highway | Carlsbad, New Mexico 88220 | ensolum.com

WPX Energy Permian, LLC Closure Request LVP SWD #001



excavation activities listed above were in compliance with the Closure Criteria at the Site, including all sidewalls. The seven failing floor soil samples were due to the difficult soil conditions to continue to remove with the available mechanical equipment.

Based on Site challenges, specifically the well-cemented conglomerates and indurated caliche, WPX submitted a *Remediation Work Plan Addendum* on December 4, 2023, proposing to level the entire excavation floor to a depth of 4 feet below ground surface (bgs) and installing a 20-mil impermeable liner. The liner would have acted as a physical barrier and retard further migration of chloride impacts into the subsurface. Once completed, WPX would backfill the remaining excavation with non-waste containing soil. An estimated 1,550 cubic yards of impacted soil was proposed to be left in place beneath the 20-mil impermeable liner. Details regarding Site assessment, delineation, and initial excavation efforts are presented in the *Remediation Work Plan Addendum*, which is included in Appendix B.

NMOCD denied the Remediation Work Plan Addendum on February 28, 2024, for the following reasons:

Remediation plan denied. OCD will no longer approve liner installations for contaminant mitigation. The site must be remediated to the most stringent criteria in Table 1. WPX Energy Permian must collect at least 26 five-point confirmation samples from the walls and the base of excavation as stated in your remediation plan that was accepted by OCD on 8/9/2022. In the data you submitted with this report only 15 samples were collected. Submit remediation closure plan to OCD by May 28, 2024.

Correspondence with the NMOCD is included in Appendix C.

Following the denial of the *Remediation Work Plan Addendum*, WPX proceeded to excavate impacted soil with other mechanical means as described below.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). 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.

Based on the results of the Site Characterization and approval of a previous *Remediation Work Plan by* the NMOCD, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

ADDITIONAL EXCAVATION ACTIVITIES

Ensolum personnel remobilized to the Site on April 18, 2024, to further advance the excavation with a larger track hoe and hydraulic hammer head attachment to excavate and dispose of residual chloride-impacted soil. Following field screening results for chloride, utilizing the Mohr method titration, indicating

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impacted soil was removed, recollection of composite floor confirmation soil samples within the failing confirmation soil sample aliquots was completed between April 18 and April 24, 2024.

Confirmation floor soil sampling included the collection of 5-point composite soil samples at the approved variance frequency of one composite sample for every 500 square feet of excavation along the floor of the excavation in those areas that were not in compliance with the Closure Criteria. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing.

Below is a list of final depths for confirmation sampling associated with those samples that previously exceeded the Closure Criteria at shallower depths:

- FS05 9.5 bgs;
- FS06 8 feet bgs;
- FS07 10 feet bgs;
- FS08 11 feet bgs;
- FS09 12.5 feet bgs (included the removal of soil in vicinity of pothole PH01);
- FS10 5.5 feet bgs; and
- FS11 8 feet bgs.

The composite soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500.

Composite soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted in Figure 2. Photographic documentation was completed during excavation activities and a photographic log is included as Appendix D.

The final excavation footprint of the excavation was 5,668 square feet and an additional 560 cubic yards of impacted soil was transported and disposed of at the R360 Facility in Hobbs New Mexico.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for final confirmation floor soil samples FS05 through FS11, ranging in depths from 5.5 feet to 12. 5 feet bgs, indicated concentrations of all COCs were compliant with the Closure Criteria. All previous soil samples, both assessment/delineation and confirmation samples, have been properly excavated, transported, and disposed of at the [insert landfill name]. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix E.

CLOSURE REQUEST

Following a produced water release at the Site in December 2021, Site assessment, delineation, and excavation activities were completed to properly address impacts to soil. Initial limitations of vertical excavation within the release extent due to the presence of well-cemented conglomerates and indurated caliche was surpassed with the help of a much larger track hoe and hammer attachment.

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Based on the final laboratory analytical results for all floor and sidewall composite soil samples from the final excavation, all impacted soil has been removed. As such, remedial actions completed at the Site appear to have been protective of human health, the environment, and groundwater and therefore WPX respectfully requests closure for Incident Number nAPP2135033453. Notifications submitted to the NMOCD are included in Appendix C.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or agiovengo@ensolum.com.

Sincerely, **Ensolum, LLC**

Ashley Giovengo Senior Scientist Daniel R. Moir, PG Senior Managing Geologist

cc: Jim Raley, WPX

Appendices:

Figure 1 Site Receptor Map

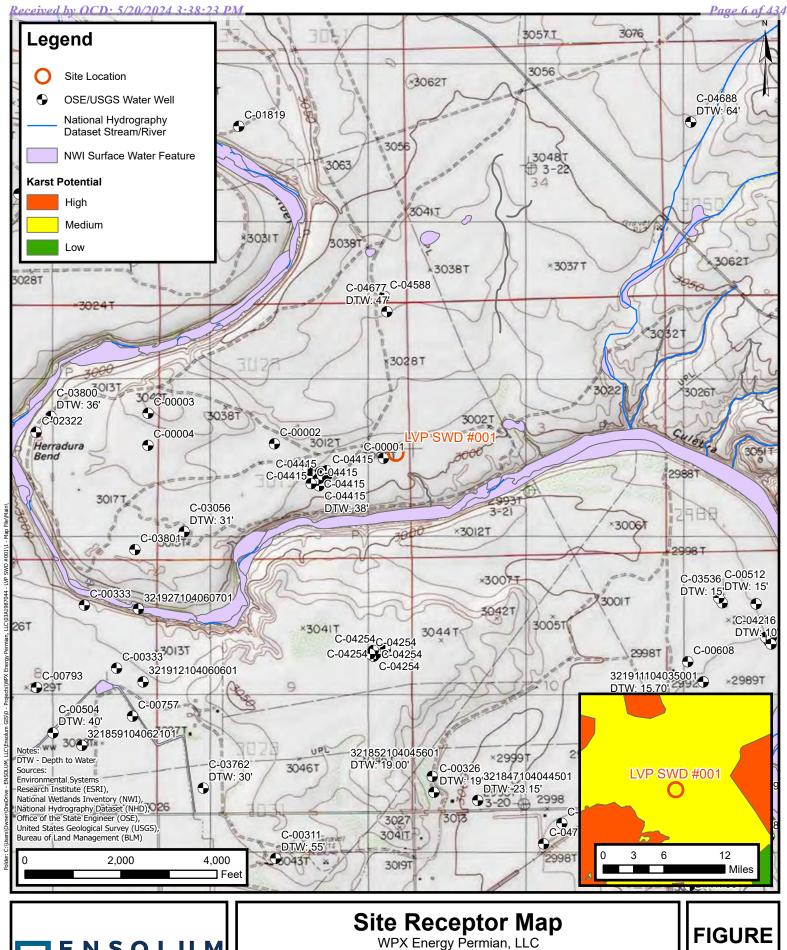
Figure 2 Excavation Soil Sample Locations
Table 1 Soil Sample Analytical Results
Appendix A Corrective Action Form C-141
Appendix B Remediation Work Plan Addendum

Appendix C Email Correspondence Appendix D Photographic Log

Appendix E Laboratory Analytical Reports & Chain-of-Custody Documentation



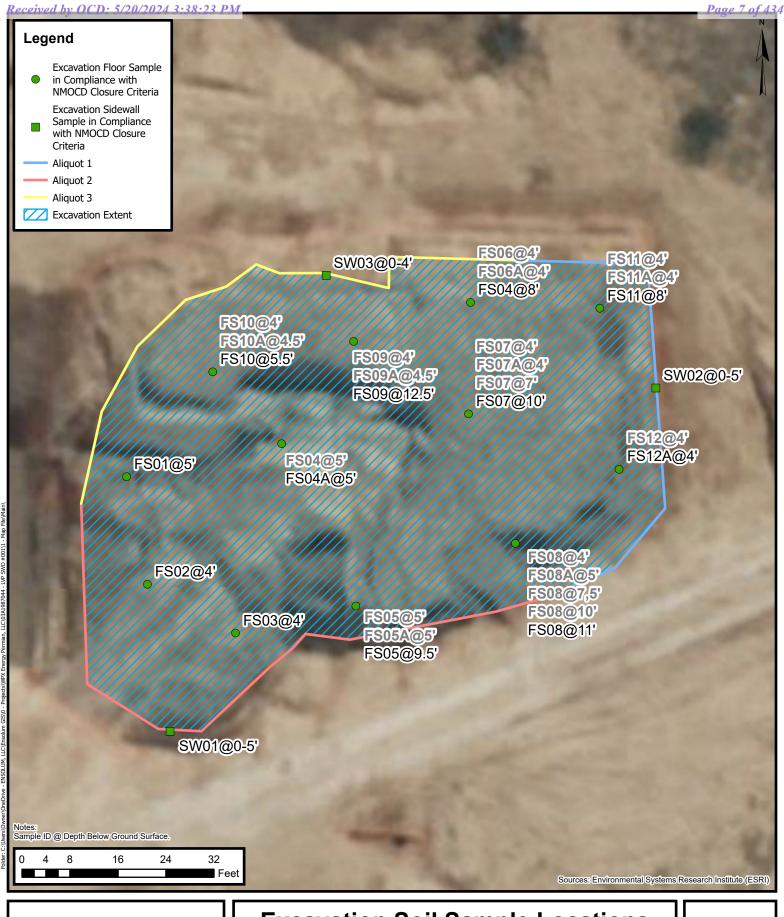
Figures





WPX Energy Permian, LLC LVP SWD #001 Incident Number: nAPP2135033453 Unit I, Sec 4, T23S R28E Eddy County, New Mexico FIGURE 1

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Excavation Soil Sample Locations

WPX Energy Permian, LLC LVP SWD #001 Incident Number: nAPP2135033453 Unit I, Sec 4, T23S R28E Eddy County, New Mexico FIGURE 2



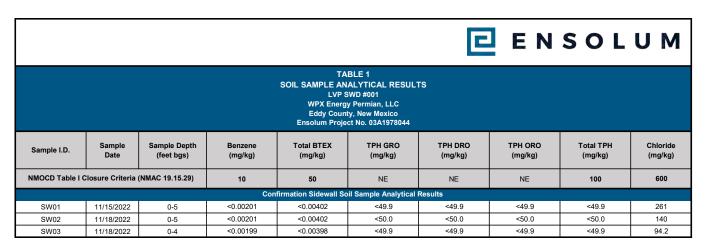
Table



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS LVP SWD #001 WPX Energy Permian, LLC Eddy County, New Mexico

Eddy County, New Mexico Ensolum Project No. 03A1978044									
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)	Chlorid (mg/kg
NMOCD Table I	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	100	600
		ı			nple Analytical Resu				
SS01A	12/28/2023	0	<0.250	<0.250	<20.0	<25.0	<50.0	<50.0	206
SS02	12/11/2023	0	<0.250	<0.250	<20.0	<25.0	<50.0	<50.0	501
SS03	12/11/2023	0	<0.250	<0.250	<200	<25.0	52.5	52.5	655
SS03	5/7/2024	0	<0.250	<0.250	<20.0	<25.0	<50.0	<50.0	152
SS04	12/11/2023	0	<0.250	<0.250	<200	<25.0	<50.0	<50.0	262
SS07	3/17/2022	8.5	<0.250	<0.250	<200	<25.0	< 50.0	<200	328
SS08	3/17/2022	9	<0.250	<0.250	<200	<25.0	< 50.0	<200	956
BF01**	4/23/2024		<0.250	<0.250	<200	<25.0	<50.0	<20.0	80.7
BH01	12/11/2023	0	<0.250	<0.250	<200	<25.0	<50.0	<50.0	303
BH01	12/14/2023	4	<0.250	<0.250	<20.0	<25.0	< 50.0	<50.0	656
BH01	12/14/2023	2	<0.250	<0.250	< 20.0	<25.0	<50.0	<50.0	435
BH02	12/11/2023	0	<0.250	<0.250	<200	<25.0	<50.0	<50.0	9,860
BH02	12/14/2023	4	< 0.250	<0.250	<20.0	<25.0	<50.0	<50.0	3,120
BH02	12/14/2023	2	< 0.250	<0.250	<20.0	<25.0	<50.0	<50.0	2,270
BH02	12/14/2023	2.5	< 0.250	<0.250	< 20.0	<25.0	<50.0	<50.0	1,800
PH01	11/22/2022	11	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	48.8
			C	onfirmation Floor Soil	Sample Analytical R	esults			
FS01	11/15/2022	5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	105
FS02	11/15/2022	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	178
FS03	11/16/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	164
FS04	11/16/2022	5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	5,920
FS04A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	385
FS05	11/16/2022	5	<0.00199	<0.00398	< 50.0	<50.0	<50.0	<50.0	9,270
FS05A	10/11/2023	5	<0.0250	< 0.0250	<20.0	<25.0	< 50.0	<20.0	1,540
FS05	4/22/2024	9.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	553
FS06	11/17/2022	4	<0.00200	0.123	<50.0	<50.0	< 50.0	<50.0	14,50
FS06A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	3,010
FS06	4/19/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	330
FS07	11/17/2022	4	<0.00202	<0.00403	57.1	<49.9	<49.9	57.1	12,80
FS07A	10/11/2023	4	<0.0250	<0.0250	< 20.0	<25.0	<50.0	<20.0	2,160
FS07	4/19/2024	7	NA.	NA.	NA.	NA.	NA	NA	5,400
FS07	4/22/2024	10	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	488
FS08	11/17/2022	4	<0.00199	<0.00398	<50.0	<50.0	< 50.0	<50.0	9,190
FS08A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	< 50.0	<20.0	3,680
FS08	4/23/2024	7.5	NA	NA	NA.	NA	NA	NA	1,530
FS08	4/23/2024	10	NA	NA	AA.	NA	AA	NA	1,710
FS08	4/24/2024	11	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	539
FS09	11/17/2022	4	<0.00199	<0.00398	<50.0	<50.0	< 50.0	<50.0	5,790
FS09A	10/11/2023	4.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,750
FS09	4/24/2024	12.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0
FS10	11/18/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	893
FS10A	10/11/2023	4.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,970
FS10	4/24/2024	5.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	331
FS11	11/18/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	2,370
FS11A	10/11/2023	4	<0.0250	<0.0250	< 20.0	<25.0	< 50.0	<20.0	763
	4/19/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	317
FS11									
FS11 FS12	11/18/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	11,900

Ensolum 1 of 2



bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

"<": Laboratory Analytical result is less than reporting limit Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable. GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

**Backfill material sample

^{*} Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.



APPENDIX A

Corrective Action Form C-141

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

Contact Name: Jim Raley

Responsible Party: WPX Energy Permian, LLC

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	nAPP2135033453
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

OGRID: 246289

Contact Telephone: 575-689-7597

Contact email: jim.raley@dvn.com				Incident # (assigned by OCD) nAPP2135033453			
Contact mailing 88220	address:	5315 Buena Vist	a Dr., Carlsbad N	NM			
			Locatio	n of Re	lease Sou	rce	
atitude 32.3330	0917		(NAD 83 in c		ongitude -10- ees to 5 decimal j	4.0850372 <u> </u>	
Site Name: LVP	SWD #0	01		5	Site Type: SW	VD	
Date Release Dis	scovered:	December 3 rd , 2 rd	021	1	API# (if applica	able) 30-015-422.	34
Unit Letter S	Section	Township	Range		County		
04	4	23S	28E	Eddy			
☐ Crude Oil		Volume Releas Volume Releas	ed (bbls) 0		V	Volume Recov	vered (bbls) 0
Crude Oil	Material			ach calculation			volumes provided below) Vered (bbls) 0
			ntion of dissolved	d chloride i		Yes No	` '
		produced water	>10,000 mg/l?				
Condensate		Volume Releas	` ′			Volume Recovered (bbls)	
Natural Gas		Volume Releas				olume Recov	. ,
Other (descri	ibe)	Volume/Weigh	t Released (provi	ide units)	\	/olume/Weigl	ht Recovered (provide units)
Tause of Release	e: Connec	ction point on un	derground produ	iced water t	ransfer line f	ailed Line wa	as uncovered for repair and extent
of release deline	eated.	tion point on un	aergrouna produ	icea water t	idiisici iiic i	aned. Eine wa	is uncovered for repair and extent
	aturated s	oil volume(ft^3).)/(4.21((ft^3)/(bb	l eauivalen	t)))*estimated	d soil porosity	y (%)+recoverd fluids (bbls)
obl estimate=(sa		0 //	((0) (1	///	1	
obl estimate=(sa	iiii aica s						
bbl estimate=(sa	iiii aica s						

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Incident ID	nAPP2135033453
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release? Exceeds 25bbls of Produced Water released.
19.15.29.7(A) NMAC?	
⊠ Yes □ No	
	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)
	Initial Response
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
M The service of the male	acce has been stormed
	ease has been stopped.
	s been secured to protect human health and the environment. we been contained via the use of berms or dikes, absorbent pads, or other containment devices.
	ecoverable materials have been removed and managed appropriately.
	d above have not been undertaken, explain why:
if all the actions described	a above have <u>not</u> been undertaken, explain why.
has begun, please attach	AC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and
	required to report and/or file certain release notifications and perform corrective actions for releases which may endanger nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have
failed to adequately investig	ate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
and/or regulations.	ra C-141 report does not reneve the operator of responsibility for comphance with any other federal, state, of local laws
Printed Name:James	s Raley Title: Environmental Specialist
/	OI.
Signature:	Date:12/16/2021
	
email:jim.raley@dvn	.com Telephone:575-689-7597
OCD Only	
Received by:Ramo	ona Marcus Date:12/20/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 67514

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	67514
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

L	Created By	Condition	Condition Date
	rmarcus	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-	12/20/2021

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Incident ID	nAPP2135033453
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?	<50 (ft bgs)		
Did this release impact groundwater or surface water?			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?			
Are the lateral extents of the release within a 100-year floodplain?	☐ 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil		
Characterization Report Checklist: Each of the following items must be included in the report.			
 \infty Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well \infty Field data 	ls.		
Data table of soil contaminant concentration data			
Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release			
Boring or excavation logs			
Photographs including date and GIS information			
☐ Topographic/Aerial maps			
☐ Laboratory data including chain of custody			

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

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

Printed Name: <u>Jim Raley</u>	Title: Environmental Specialist
Signature:	Date: <u>5/6/2024</u>
email: jim.raley@dvn.com	Telephone: <u>575-689-7597</u>
OCD Only	
Received by:	Date:

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District RP
Facility ID
Application ID

Closure

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

	items must be included in the closure report.			
A scaled site and sampling diagram as described in 19.15.29	.11 NMAC			
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)				
□ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)				
Description of remediation activities				
and regulations all operators are required to report and/or file certamay endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rehuman health or the environment. In addition, OCD acceptance of	lations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.			
OCD Only				
OCD Only				
Received by:	_ Date:			
Received by: Closure approval by the OCD does not relieve the responsible part	y of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible			
Received by: Closure approval by the OCD does not relieve the responsible part remediate contamination that poses a threat to groundwater, surface	y of liability should their operations have failed to adequately investigate and e water, human health, or the environment nor does not relieve the responsible l/or regulations.			



APPENDIX B

Remediation Work Plan Addendum



REMEDIATION WORK PLAN ADDENDUM

Site Location:

LVP SWD #001 Eddy County, New Mexico Incident Number: nAPP2135033453

December 4, 2023 Ensolum Project No. 03A1987044

Prepared for:

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

Prepared by:

Ashley Giovengo Senior Engineer

Daniel R. Moir, PG Senior Managing Geologist

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1.0 INTRODUCTION

1.1 Site Description

Ensolum, LLC (Ensolum) has prepared this updated Remediation Work Plan Addendum (RWPA) to summarize additional soil sampling activities and corrective actions performed to date by WPX Energy Permian, LLC (WPX) at the LVP SWD #001 (Site) in Unit I, Section 4, Township 23 South, Range 28 East, in Eddy County, New Mexico (**Figure 1** in **Appendix A**). All previous remediation activities and soil sample analytical results can be referenced in the original Remediation Plan (RP) prepared by Wescom, Inc. (Wescom), subsequent RWPA by Ensolum, and other submitted deliverable documents to the New Mexico Oil and Conservation Division (NMOCD).

As documented in the RP, results from a core drilling assessment identified a poorly cemented to well cemented conglomerate stratum from approximately 4.5 feet to 8.5 feet below ground surface (bgs). The lithology transitioned to an indurated caliche and core drill refusal was encountered at approximately 9 feet bgs. The RP was approved by NMOCD on August 9, 2022, and proposed continued vertical assessment in the vicinity of soil sample location SS07/SS08 (referenced in the RP) to further characterize residual chloride impacts associated with the subject release and excavate residually impacted soil. Based on the current Site status and summaries of the original RP, WPX respectfully submits this updated RWPA, which summarizes continued remedial efforts that have occurred and proposes the installation of a 20-mil impermeable liner in the subsurface to mitigate the migration of residual chloride impacts associated with a reportable release of produced water at the Site.

1.2 Release Background

The Site is located within Eddy County, New Mexico (32.33309° N, 104.08503° W) and is associated with oil and gas exploration and production operations on private land (**Figure 1 in Appendix A**).

On December 3, 2021, a connection point on an underground produced water transfer line failed and resulted in the release of approximately 200 barrels (bbls) of produced water to the well pad. No free-standing fluids were recovered. The release extent was mapped and is provided in **Figure 2** in **Appendix A.** WPX immediately reported the release to the NMOCD via email and with a Corrective Action Form C-141 (Form C-141) on December 16, 2021. The release was assigned Incident Number nAPP2135033453.

1.3 Site Characterization

The RP assigned the Site characterization according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Based on the review of nearby Site receptors and depth to groundwater determination at the Site (well record included in Appendix B), the following Closure Criteria for constituents of concern (COCs) were applied:

- 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



2.0 REMEDIATION ACTIONS

2.1 Excavation Activities

From November 11 through November 18, 2022, Ensolum oversaw the excavation of impacted soil within the subject release to the maximum extent practicable (MEP) based on the subsurface lithology at the Site and facility configuration. Excavation activities were directed via heavy equipment by referencing laboratory analytical results provided in the RP and field screening for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following removal of impacted soil, Ensolum collected 5-point composite excavation confirmation soil samples at the approved variance frequency of one composite sample for every 500 square feet of excavation along the sidewalls and from floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation soil samples FS01 through FS12 were collected from the floor of the excavation at depths ranging from 4 feet to 5 feet bgs. Confirmation soil samples SW01 through SW03 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 5 feet bgs. The excavation and confirmation soil samples are depicted on **Figure 2** included in **Appendix A**.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis and immediately placed on ice. The soil samples were transported and chilled under strict chain-of-custody procedures to Eurofins LLC (Eurofins) in Carlsbad, New Mexico, and Envirotech Inc. (Envirotech) in Farmington, New Mexico, for analyses of the following COCs: BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline rang organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Approximately 1,136 cubic yards of impacted soil were excavated and hauled to R360 Environmental Solutions in Hobbs, New Mexico under WPX-approved manifests in accordance with state and federal regulations. A photographic log of excavation activities is included as **Appendix C**.

Ensolum returned to site on October 11, 2023, to advance the excavation and to recollect confirmation samples FS04 through FS12 via hydrovac along the floor bottom. This was completed to remove loose soil that appeared to be containing chloride and not reflective of the actual excavation floor, which is predominately comprised of poorly to well cemented conglomerates. Samples were collected, handled, and analyzed as previously described. Photographic documentation during delineation activities is included in **Appendix C**.

2.2 Delineation Activities

On November 22, 2022, Ensolum conducted delineation activities concurrently with excavation activities via mechanical equipment to further characterize residual chloride impacts within the subject release. Delineation activities were directed by field screening soil for VOCs and chloride as previously described. Due to limited access within the release area, pothole soil sample PH01 was advanced in the vicinity of SS07/SS08 to approximately 11 feet bgs. The location of pothole soil sample PH01 is shown in **Figure 3** in **Appendix A**. Field screening results and observations were recorded on a lithologic soil sampling log (**Appendix D**). The soil sample was collected, handled, and analyzed as previously described. Photographic documentation during delineation activities is included in **Appendix C**.



Incident Number nAPP2135033453

2.3 Laboratory Analytical Results

Laboratory analytical results indicated all concentrations of COCs were in compliance with the Closure Criteria for confirmation soil samples FS01 through FS03 and SW01 through SW03. Laboratory analytical results for confirmation soil samples FS05 through FS12 initially indicated chloride concentrations exceeded Closure Criteria. Following additional excavation in the vicinity of confirmation samples FS04 through FS12, laboratory analytical results indicated the chloride concentrations in samples FS04 through FS12 continue to exceed the Closure Criteria; however, the concentrations were reduced, indicating gross impacts have been removed.

Laboratory analytical results for PH01, taken at 11 feet bgs, indicated all COC concentrations were compliant with Closure Criteria, providing vertical delineation of impacts to soil.

Laboratory analytical results are summarized on **Table 1** in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**. **Appendix G** provides correspondence email notification receipts associated with the subject release.

3.0 REMEDIATION WORK PLAN

The primary objectives of Ensolum's scope of services were to document remediation efforts at the Site in accordance with the approved RWPA and applicable NMOCD regulatory guidelines, further characterize concentrations of COCs present in soil remaining on-Site and propose additional remedial action(s) to address residual chloride in soil present at concentrations that exceed the Closure Criteria.

Based on the data and remedial summary described in this updated RWPA, the following findings and conclusions are presented:

- The lateral extent of the release was defined via confirmation sidewall soil samples SW01 through SW03;
- The subsurface soil profile was consistent throughout and around the area of concern. As a result, delineation pothole PH01 is believed to be representative of the entire area of concern;
- Vertical migration of impacts appears to have ceased at or above 11 feet bgs. Residual chloride impacts are present in soil left in place between 4 feet and approximately 11 feet bgs, which consists of poorly to well-cemented conglomerates and indurated caliche;
- An estimated 1,136 cubic yards of impacted soil have been excavated from the subject release area;
- BTEX and TPH concentrations were in compliance with the Closure Criteria in soil currently left in-situ and as a result, are not considered COCs as they relate to this release; and
- Excavation and delineation soil sample laboratory analytical results provide representative lateral and vertical delineation of the remaining impacted soil. Remaining impacts within the subject release are characterized by chloride concentrations (ranging from 763 mg/kg to 3,680 mg/kg) associated with excavation soil samples FS05 through FS11 and soil samples collected from SS07/SS08 above 11 feet bgs.



Based on the conclusions presented above, WPX proposes leveling the entire excavation floor to a depth of 4 feet bgs and installing a 20-mil impermeable liner. The liner will act as a physical barrier and retard further migration of chloride impacts into the subsurface. Once complete, WPX will backfill the remaining excavation with non-waste containing soil. The proposed liner extent and excavation extent is shown on **Figure 4 in Appendix A**. Approximately 1,136 cubic yards were excavated from the Site and an estimated 1,550 cubic yards of impacted soil will be left insitu beneath the 20-mil impermeable liner.

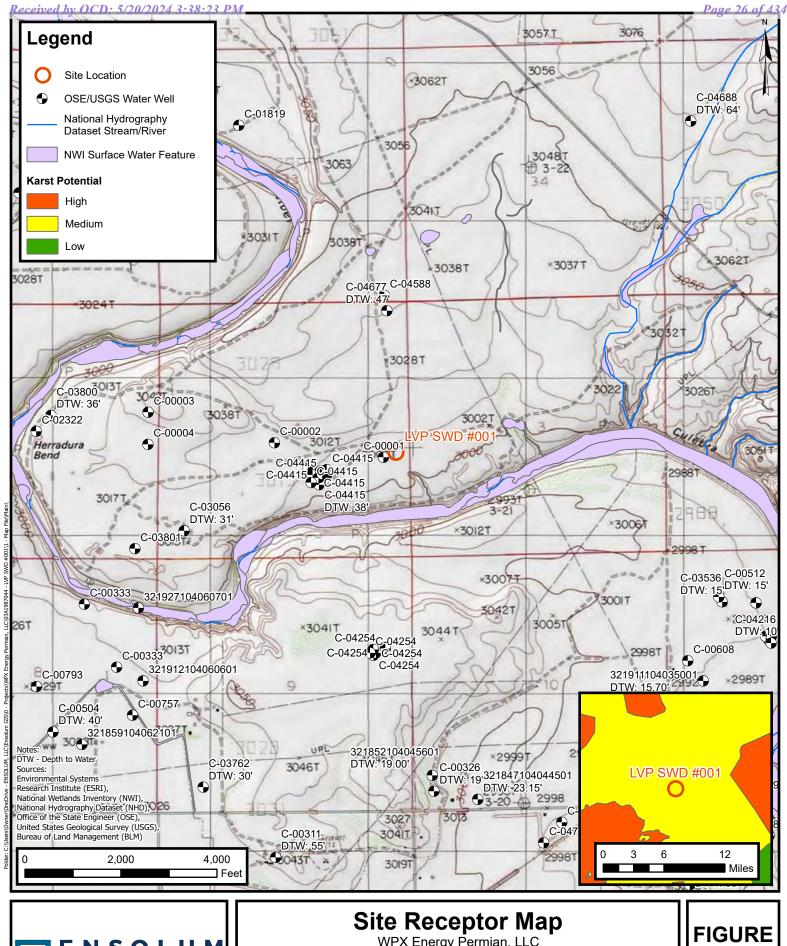
WPX believes the scope of work described above will meet requirements set forth in 19.15.29 NMAC and be protective of human health, the environment, and groundwater. As such, WPX respectfully requests approval of this RWPA from NMOCD. Email correspondences with NMOCD are presented in **Appendix G**. The final C-141 is included in **Appendix H**.





APPENDIX A

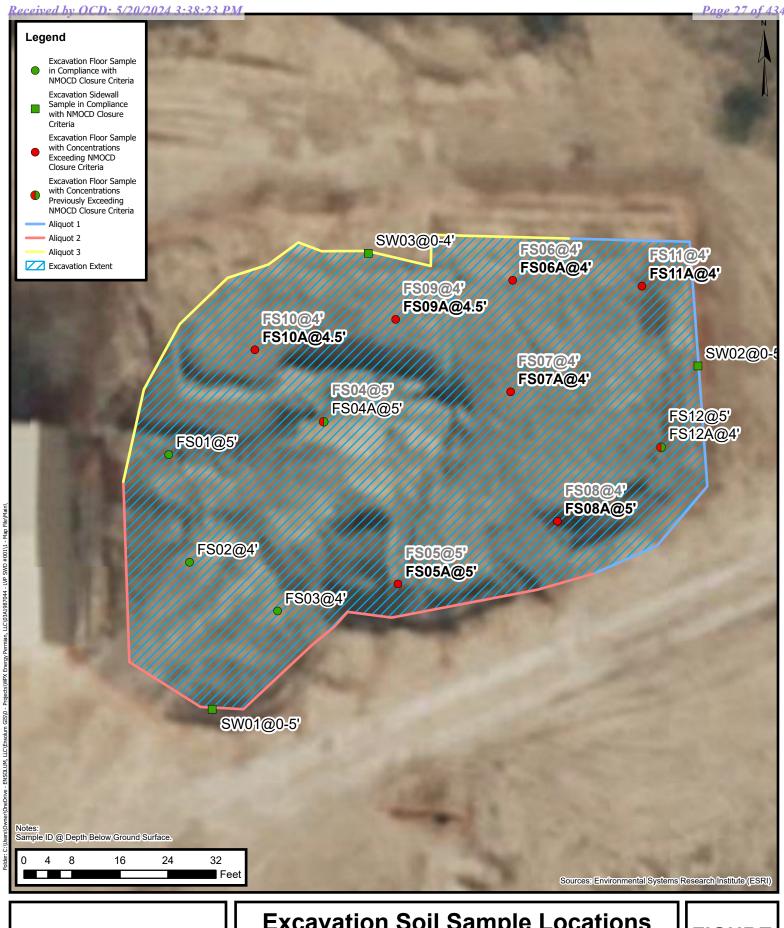
Figures





WPX Energy Permian, LLC LVP SWD #001 Incident Number: nAPP2135033453 Unit I, Sec 4, T23S R28E Eddy County, New Mexico FIGURE 1

Released to Imaging: 5/21/2024 1:54:30 PM

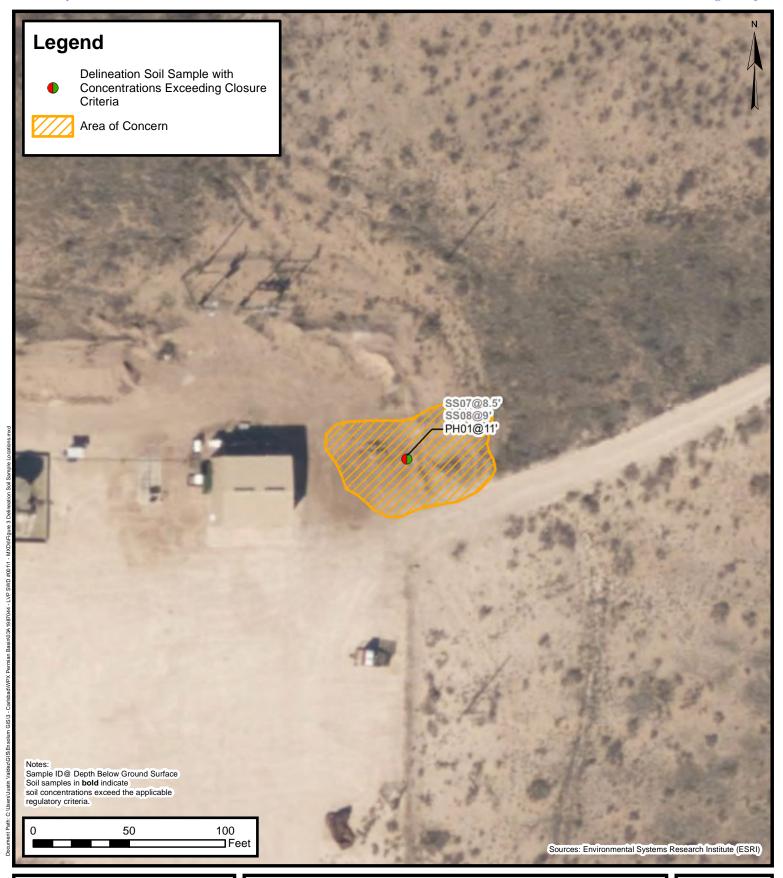




Excavation Soil Sample Locations

WPX Energy Permian, LLC LVP SWD #001 Incident Number: nAPP2135033453 Unit I, Sec 4, T23S R28E Eddy County, New Mexico

FIGURE 2



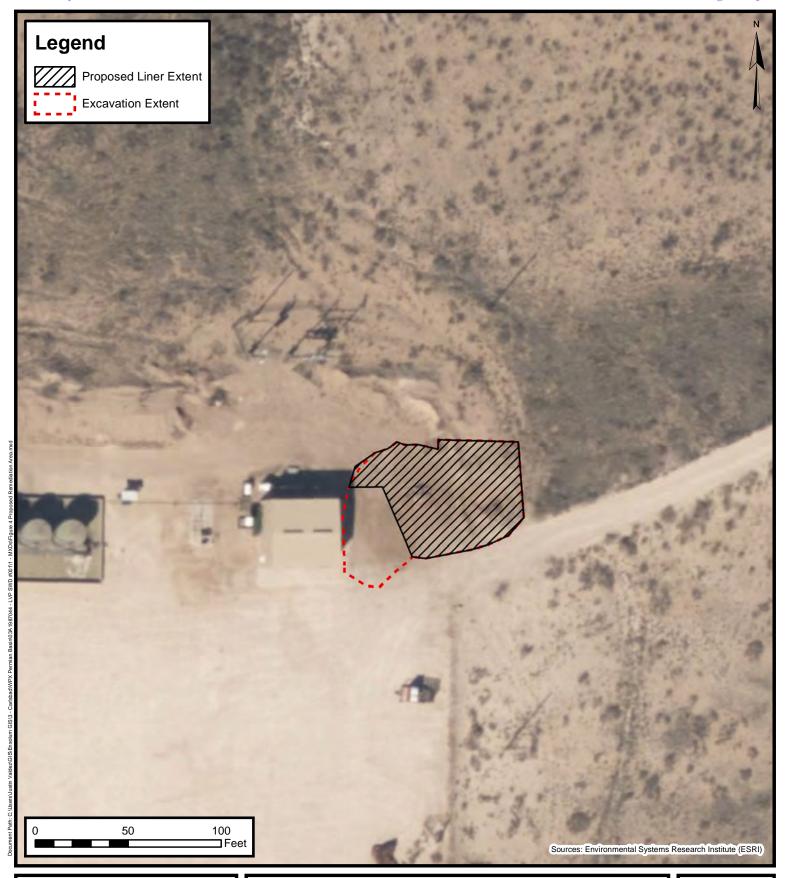


Delineation Soil Sample Locations

LVP SWD #001
WPX Energy Permian, LLC
Incident Number: nAPP2135033453
Unit Letter I, Section 04, Township 23S, Range 28E
Eddy County, New Mexico

FIGURE

3





Proposed Liner Extent

LVP SWD #001 WPX Energy Permian, LLC Incident Number: nAPP2135033453 Unit Letter I, Section 04, Township 23S, Range 28E Eddy County, New Mexico FIGURE

4



APPENDIX B

Referenced Wells



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number**

Q64 Q16 Q4 Sec Tws Rng

NA

C 04415 POD7

23S 28E

3577518 585628

Driller License: 1186

Driller Company:

NOT FOR HIRE

Driller Name:

HAMMER, RODNEY S.WARDENER

Drill Start Date:

2.00

07/15/2021

Drill Finish Date:

07/16/2021

Plug Date:

07/16/2021

Log File Date:

10/05/2021

PCW Rcv Date:

Depth Well:

Source:

Shallow

Pump Type: Casing Size:

Pipe Discharge Size:

55 feet

Estimated Yield: Depth Water:

38 feet

Water Bearing Stratifications:

Top

Bottom Description

0

55 Shale/Mudstone/Siltstone

Casing Perforations:

Bottom Top

38 43

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

11/14/23 8:33 AM

POINT OF DIVERSION SUMMARY

Received by OCD: 5/20/2024 3:38:23 PM



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** Q64 Q16 Q4 Sec Tws Rng

NA

C 04415 POD9

23S 28E

585714

3572094

Driller License: 1186

Driller Company:

NOT FOR HIRE

Driller Name:

071521

07/15/2021

Drill Finish Date:

07/16/2021

Plug Date:

Source:

07/16/2021

Log File Date:

Drill Start Date:

10/05/2021

PCW Rcv Date:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

36 feet

Casing Size:

2.00

Depth Well:

40 feet

Depth Water:

Water Bearing Stratifications:

Bottom Description Top

40 Shale/Mudstone/Siltstone

Casing Perforations:

Bottom Top

30 40

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

0

11/14/23 8:29 AM

POINT OF DIVERSION SUMMARY

Received by OCD: 5/20/2024 3:38:23 PM



APPENDIX C

Email Correspondence

 From:
 Raley, Jim

 To:
 Ashley Giovengo

 Cc:
 Cole Burton; Israel Estrella

Subject: RE: [EXTERNAL] 48-hour Confirmation Sampling Notification - LVP SWD #001 - Incident Number nAPP2135033453

Date: Monday, April 22, 2024 9:16:29 AM

Attachments: image001.png image002.png

image003.png image004.png image005.png

[**EXTERNAL EMAIL**]

Sampling notification made on 04/22/2024 for following dates at nAPP2135033453 (LVP).

04/24

04/25

04/26

04/28

04/29

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.raley@dvn.com



From: Raley, Jim

Sent: Tuesday, April 16, 2024 3:42 PM

To: Ashley Giovengo <agiovengo@ensolum.com>

Cc: Cole Burton <cburton@ensolum.com>; Israel Estrella <iestrella@ensolum.com>

Subject: RE: [EXTERNAL] 48-hour Confirmation Sampling Notification - LVP SWD #001 - Incident Number nAPP2135033453

Submitted 4/18, 4/19, 4/20, 4/22, 4/23

Let me know if need more time by Monday 4/22/2024

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



From: Ashley Giovengo <a giovengo@ensolum.com>

Sent: Tuesday, April 16, 2024 1:29 PM

To: Enviro, OCD, EMNRD <<u>ocd.enviro@emnrd.nm.gov</u>>; Hamlet, Robert, EMNRD <<u>Robert.Hamlet@emnrd.nm.gov</u>>; Raley, Jim <<u>Jim.Raley@dvn.com</u>>

Cc: Cole Burton < cburton@ensolum.com >; Chad Hamilton < chamilton@ensolum.com >; Israel Estrella@ensolum.com >

Subject: [EXTERNAL] 48-hour Confirmation Sampling Notification - LVP SWD #001 - Incident Number nAPP2135033453

Hello,

Please see the 48-hour confirmation sampling notification for the LVP SWD #001 Site (Incident Number nAPP2135033453)

What is the sampling surface area in square feet	5,668 sq. ft.
What is the estimated number of samples that will be gathered	7
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection	
D of 19.15.29.12 NMAC	04/18/2024
Time sampling will commence	09:00am MST.

Please provide any information necessary for observers to contact samplers	Sampler: Cole Burton (575)-706-5056
Please provide any information necessary for navigation to sampling site	
	32.3330917, -104.0850372

NMOCD District II,

Please see the 48-hour notice for the LVP SWD #001, WPX will enter this information into NMOCD web portal.

Thanks,



"Your authenticity is your superpower." – Unknown

Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

From: <u>Cole Burton</u>

To: <u>Enviro, OCD, EMNRD</u>

Cc: Ashley Giovengo; Raley, Jim; Chad Hamilton

Subject: 48-hour Confirmation Sampling Notification Email - LVP SWD #001 - Incident Number nAPP2135033453

Date: Tuesday, October 10, 2023 7:32:00 AM

Attachments: image001.png image002.png

image002.png image003.png image004.png

Hello,

We intend to collect confirmation samples at Devon Energy's, LVP SWD #001 site (Incident Number *nAPP2135033453*) beginning on Wednesday, October 11, 2023, at 09:00 am MST through Thursday, October 12, 2023.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,



From: Raley, Jim

To: <u>Ashley Giovengo</u>; <u>Cole Burton</u>

Subject: FW: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 292677

Date: Thursday, February 29, 2024 6:59:12 AM

Attachments: <u>image001.png</u>

[**EXTERNAL EMAIL**]

Ashley,

Denial on LVP SWD. Figure out what they are talking about on the sampling. We might just get a hammer hoe out there and finish it up, but lets talk about it first.

Setup call with me in near future.

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



From: OCDOnline@state.nm.us < OCDOnline@state.nm.us >

Sent: Wednesday, February 28, 2024 1:17 PM

To: Raley, Jim <Jim.Raley@dvn.com>

Subject: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application

ID: 292677

To whom it may concern (c/o James Raley for WPX Energy Permian, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2135033453, for the following reasons:

Remediation plan denied. OCD will no longer approve liner installations for contaminant mitigation. The site must be remediated to the most stringent criteria in Table 1. WPX Energy Permian must collect at least 26 five-point confirmation samples from the walls and the base of excavation as stated in your remediation plan that was accepted by OCD on 8/9/2022. In the data you submitted with this report only 15 samples were collected. Submit remediation closure plan to OCD by May 28, 2024.

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 292677.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,

Shelly Wells Environmental Specialist-A 505-469-7520 Shelly.Wells@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

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From: <u>Hamlet, Robert, EMNRD</u>

To: Ashley Giovengo; clinton.talley@matadorresources.com; Jason Touchet

Cc: Chad Hamilton; Cole Burton; Israel Estrella; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson,

EMNRD

Subject: (Final Extension) - Matador Production Company - George Well Pad - Incident Number nAPP2333038378

Date: Monday, April 22, 2024 3:36:11 PM

Attachments: <u>image006.png</u>

image007.png image008.png image009.png

[**EXTERNAL EMAIL**]

RE: Incident #NAPP2333038378

Ashley,

Your request for a 90 day extension to **July 22nd, 2024** is approved. This will be the **final extension** for this release. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us

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



From: Ashley Giovengo <agiovengo@ensolum.com>

Sent: Monday, April 22, 2024 11:34 AM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; clinton.talley@matadorresources.com; Jason Touchet <jason.touchet@matadorresources.com>

Cc: Chad Hamilton <chamilton@ensolum.com>; Cole Burton <cburton@ensolum.com>; Israel Estrella <iestrella@ensolum.com>

Subject: [EXTERNAL] Extension Request - Matador Production Company - George Well Pad - Incident Number nAPP2333038378

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

All,

Matador Production Company (Matador) is requesting a 2nd extension for the current deadline of April 30, 2024, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the George Well Pad (Incident Number nAPP2333038378). The release occurred on November 26, 2023, and initial site assessment and delineation activities have been completed. Matador was able to secure landowner permission on March 26, 2024, for the purpose of establishing depth to water (DTW) within a 0.5-mile radius of the Site, however Matador is currently waiting on approval from the New Mexico Office of the State Engineer (NMOSE) for the WR-07 permit (Application for Permit to Drill a Well). Once Matador receives the approved drilling permit, the DTW determination will be completed, and remediation/confirmation sampling of the impacted area will begin. Matador intends to submit a remediation work plan or closure report, following remediation efforts and confirmation sampling. Matador respectfully requests an extension until June 29, 2024.

Matador will upload this extension request to the NMOCD web portal following this email submission.

Thanks,



"Your authenticity is your superpower." - Unknown

From: Enviro, OCD, EMNRD

To: Joseph Hernandez

Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD

Subject: RE: [EXTERNAL] WPX Site Sampling Activity Update (11/21 - 11/23)

Date: Thursday, November 17, 2022 9:05:00 AM

Attachments: <u>image006.png</u> <u>image007.png</u>

image008.png image009.png

[**EXTERNAL EMAIL**]

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov

http://www.emnrd.nm.gov



From: Joseph Hernandez < jhernandez@ensolum.com>

Sent: Wednesday, November 16, 2022 4:40 PM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; 'CFO_Spill, BLM_NM'

<blm_nm_cfo_spill@blm.gov>

Cc: Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@ensolum.com>

Subject: [EXTERNAL] WPX Site Sampling Activity Update (11/21 - 11/23)

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

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between November 21^{st} – November 23^{rd} , 2022:

Site Name: LVP #001 API: 30-015-42234

Incident Number: nAPP2135033453

Joseph S. Hernandez



PLEASE NOTE OUR NEW CORPORATE ADDRESS:

Ensolum, LLC 8330 LBJ Freeway, Ste. B830 Dallas, TX 75243

Erick Herrera

From: Erick Herrera

Sent: Wednesday, October 26, 2022 3:01 PM

To: OCD.Enviro@emnrd.nm.gov; 'CFO_Spill, BLM_NM'

Cc: Raley, Jim

Subject: WPX Site Sampling Activity Update (10/31 - 11/4)

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between October 31 – November 4, 2022:

Site Name: RDX 9-1 API: 30-015-36211

Incident Number: nAB1728635377

Site Name: RDX 17-2 API: 30-015-36464

Incident Number: nAB1633449255

Site Name: LVP SWD #001

API: 30-015-42234

Incident Number: nAPP2135033453

Site Name: RDX Federal 21-44

API: 30-015-41193

Incident Number: nAPP2115533694

Site Name: RDU 54 API: 30-015-41975

Incident Number: nAB1722953239

Site Name: Electrolux 21 State Com #001

API: 30-025-35769

Incident Number: nTO1424150643

Site Name: EP USA 3 API: 30-015-24249

Incident Number: nAB1622531873

Thank you,



PLEASE NOTE OUR NEW CORPORATE ADDRESS:

Ensolum, LLC 8330 LBJ Freeway, Ste. B830 Dallas, TX 75243

Erick Herrera

From: Erick Herrera

Sent: Wednesday, November 9, 2022 3:44 PM

To: OCD.Enviro@emnrd.nm.gov; 'CFO_Spill, BLM_NM'

Cc: Raley, Jim; Devon-Team

Subject: WPX Site Sampling Activity Update (11/14 - 11/18)

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between November 14th – November 18th, 2022:

Site Name: LVP #001 API: 30-015-42234

Incident Number: nAPP2135033453

Thank you,



PLEASE NOTE OUR NEW CORPORATE ADDRESS:

Ensolum, LLC 8330 LBJ Freeway, Ste. B830 Dallas, TX 75243



APPENDIX D

Photographic Log



Photographic Log

WPX Energy Permian, LLC. LVP SWD #001 nAPP2135033453





Photograph: 1 Date: 11/7/22

Description: Line spotting with hydrovac

View: Southeast

Photograph: 2 Date: 11/14/22

Description: Excavation Activities

View: Northwest





Photograph: 3 Date: 11/14/22

Description: Excavation Activities

View: Northeast

Photograph: 4 Date: 11/16/22

Description: Excavation Activities

View: Northeast



Photographic Log

WPX Energy Permian, LLC. LVP SWD #001 nAPP2135033453





Photograph: 5 Date: 11/17/22

Description: Excavation Activities

View: Northwest

Photograph: 6 Date: 11/17/22

Description: Excavation Activities

View: Northeast





Photograph: 7 Date: 11/17/22

Description: Excavation activities

View: Southwest

Photograph: 8 Date: 11/22/22

Description: Delineation activities

View: Northeast



Photographic Log

WPX Energy Permian, LLC. LVP SWD #001 nAPP2135033453





Photograph: 9 Date: 10/11/23

Description: Confirmation sampling FS09

View: Northeast

Photograph: 10 Date: 10/11/23

Description: Confirmation sampling FS06

View: Northeast





Photograph: 11 Date: 10/11/23

Description: Confirmation Sampling FS05

View: Northeast

Photograph: 12 Date: 10/11/23

Description: Confirmation sampling FS07

View: West



APPENDIX E

Lithologic Soil Sampling Logs

								Sample Name: PH01	Date: 11/22/2022
		NI	C					Site Name: LVP SWD #001	Date. 11/22/2022
	E	N	3	U		J IV		Incident Number: naPP21350334.	
								Job Number: 03A1987044	
	LITU	OI OGIC	/ 50	II SA	MPLING L	OG			Method: Trackhoe
Coordina	tes: 32.33387			IL JA	IVIPLING	.00		Logged By: GM Hole Diameter: N/A	Total Depth: 11'
		-		with L	JACH Chlori	do Tost Stri	nc and DID	for chloride and vapor, respective	· ·
	dilution factor	_					•	• • • •	iy. Chloride test performed
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	·
						0	SW	abundant subround no odor. @6' transitioned to carbon @8' moderate cemented walarge gravel.	und gravel. no stain. n, well graded, fine- o odor. ravel. , dry, tan-brown, well- ium grained sand with small gravel, no stain, eate cementation, with subround small-
М	3,404.8	0.0	Ν		9.5 _	- - - - - -	CL	(9-10'), CLAY, moist, Reddis cohesive, abundant gr spots, no stain, no od (10-11'), CALICHE, dry, tan, consolidated, fine-m subround small-large	eyish yellow reduction or. moderately edium grain, trace e gravel.
D	3605.2	0	N		10	10	CCHE	NOTE: refusal @11' using trackhoe m	ounted
					_	†		jack hammer.	
D	<168	0.0	N	PH01	11	Τ			
						Total De	epth: 11 f	eet	



APPENDIX E

Table 1



TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS** LVP SWD #001 WPX Energy Permian, LLC **Eddy County, New Mexico** Ensolum Project No. 03A1978044

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 I	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	100	600
				Delineation Soil Sai	nple Analytical Resu	lts			
SS07	3/17/2022	8.5	<0.250	<0.250	<200	<25.0	<50.0	<200	328
SS08	3/17/2022	9	<0.250	<0.250	<200	<25.0	<50.0	<200	956
PH01	11/22/2022	11	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	48.8
			Co	onfirmation Floor Soil	Sample Analytical R	esults			
FS01	11/15/2022	5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	105
FS02	11/15/2022	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	178
FS03	11/16/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	164
FS04	11/16/2022	5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	5,920
FS04A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	385
FS05	11/16/2022	5	<0.00199	<0.00398	< 50.0	<50.0	< 50.0	<50.0	9,270
FS05A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,540
FS06	11/17/2022	4	<0.00200	0.123	< 50.0	<50.0	<50.0	< 50.0	14,500
FS06A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	3,010
FS07	11/17/2022	4	<0.00202	<0.00403	57.1	<49.9	<49.9	57.1	12,800
FS07A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	2,160
FS08	11/17/2022	4	<0.00199	<0.00398	< 50.0	<50.0	<50.0	< 50.0	9,190
FS08A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	3,680
FS09	11/17/2022	4	<0.00199	<0.00398	< 50.0	<50.0	<50.0	< 50.0	5,790
FS09A	10/11/2023	4.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,750
FS10	11/18/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	893
FS10A	10/11/2023	4.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,970
FS11	11/18/2022	4	<0.00200	<0.00399	< 50.0	< 50.0	< 50.0	< 50.0	2,370
FS11A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	763
FS12	11/18/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	11,900
FS12A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	361

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

"<": Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics DRO: Diesel Range Organics



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS LVP SWD #001 WPX Energy Permian, LLC

	Eddy County, New Mexico Ensolum Project No. 03A1978044											
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 I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	100	600			
			Con	firmation Sidewall Sc	oil Sample Analytical	Results						
SW01	11/15/2022	0-5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	261			
SW02	11/18/2022	0-5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	140			
SW03	11/18/2022	0-4	< 0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	94.2			

Notes:

bgs: below ground surface mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

[&]quot;<": Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable. * Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics



APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Generated 11/28/2022 4:27:42 PM

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3481-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 11/28/2022 4:27:42 PM

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440

12

13

14

11/28/2022

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3481-1
SDG: 03A1987044

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Definitions/Glossary

Client: Ensolum Job ID: 890-3481-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC VOA

U

RL

RPD

TEF

TEQ

TNTC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Indicates the analyte was analyzed for but not detected.

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

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

GC Semi VOA

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

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)

Case Narrative

 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Job ID: 890-3481-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3481-1

Receipt

The samples were received on 11/15/2022 3:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following samples analyzed were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3481-1) and FS02 (890-3481-2).

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 samples were outside control limits: (LCS 880-39882/2-A) and (LCSD 880-39882/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-21715-A-1-H MS). 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 880-39882 and analytical batch 880-39958 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39882 and analytical batch 880-39958 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

HPLC/IC

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

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Job ID: 890-3481-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS01 Lab Sample ID: 890-3481-1

Date Collected: 11/15/22 13:00 Matrix: Solid Date Received: 11/15/22 15:23

Sample Depth: 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:31	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:31	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:31	1
m-Xylene & p-Xylene	< 0.00396	U	0.00396		mg/Kg		11/22/22 17:45	11/23/22 17:31	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:31	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/22/22 17:45	11/23/22 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				11/22/22 17:45	11/23/22 17:31	1
1,4-Difluorobenzene (Surr)	91		70 - 130				11/22/22 17:45	11/23/22 17:31	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/28/22 16:23	1
Mathadi CMO4C 2045 NM Diag	al Banna Orman	:aa (DDO) (00)						
Method: SW846 8015 NM - Diese	ei Kange Organ	ics (DRO) (i	(JC)						
Analyto	Pocult	Qualifier	•	MDI	Unit	n	Dropared	Analyzod	Dil Eac
		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	
Analyte Total TPH	Result <49.9		•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/21/22 11:18	Dil Fac
	<49.9	U	RL 49.9	MDL		<u>D</u>	Prepared		
Total TPH	<49.9	U	RL 49.9			<u>D</u>	Prepared Prepared		1
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	<49.9	nics (DRO) Qualifier	RL 49.9 (GC)		mg/Kg			11/21/22 11:18	1
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.9 sel Range Orga Result	nics (DRO) Qualifier U*1	RL 49.9 (GC)		mg/Kg		Prepared	11/21/22 11:18 Analyzed	Dil Fac
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	<49.9 sel Range Orga Result <49.9	nics (DRO) Qualifier U*1	RL 49.9 (GC) RL 49.9		mg/Kg Unit mg/Kg		Prepared 11/18/22 07:28	11/21/22 11:18 Analyzed 11/19/22 19:18	Dil Fac
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9 sel Range Orga Result <49.9 <49.9	Oualifier U*1 U	RL 49.9 (GC) RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/18/22 07:28 11/18/22 07:28	11/21/22 11:18 Analyzed 11/19/22 19:18 11/19/22 19:18	1 Dil Fac
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 sel Range Orga Result <49.9 <49.9 <49.9	Oualifier U*1 U	RL 49.9 (GC) RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/18/22 07:28 11/18/22 07:28 11/18/22 07:28	Analyzed 11/19/22 19:18 11/19/22 19:18 11/19/22 19:18	Dil Fac
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.9 sel Range Orga Result <49.9 <49.9 <49.9 %Recovery	Oualifier U*1 U	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/18/22 07:28 11/18/22 07:28 11/18/22 07:28 Prepared	Analyzed 11/19/22 19:18 11/19/22 19:18 11/19/22 19:18 11/19/22 19:18 Analyzed	Dil Fac
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	\$\text{sel Range Orga}\$ Result <49.9 <49.9 <49.9 %Recovery 93 107	Oualifier U*1 U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/18/22 07:28 11/18/22 07:28 11/18/22 07:28 Prepared 11/18/22 07:28	Analyzed 11/19/22 19:18 11/19/22 19:18 11/19/22 19:18 Analyzed 11/19/22 19:18	1 Dil Fac 1 1
Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	sel Range Orga Result <49.9 <49.9 <49.9 %Recovery 93 107 s, Ion Chromato	Oualifier U*1 U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/18/22 07:28 11/18/22 07:28 11/18/22 07:28 Prepared 11/18/22 07:28	Analyzed 11/19/22 19:18 11/19/22 19:18 11/19/22 19:18 Analyzed 11/19/22 19:18	Dil Fac 1 1 1 Dil Fac 1

Client Sample ID: FS02 Lab Sample ID: 890-3481-2

Date Collected: 11/15/22 13:30 Date Received: 11/15/22 15:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:51	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:51	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:51	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/22/22 17:45	11/23/22 17:51	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:45	11/23/22 17:51	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/22/22 17:45	11/23/22 17:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				11/22/22 17:45	11/23/22 17:51	

Eurofins Carlsbad

Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS02 Lab Sample ID: 890-3481-2

Date Collected: 11/15/22 13:30 Matrix: Solid
Date Received: 11/15/22 15:23

Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	99		70 - 130				11/22/22 17:45	11/23/22 17:51	
Method: TAL SOP Total BTEX - 1	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/28/22 16:23	
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			11/21/22 11:18	
Gasoline Range Organics (GRO)-C6-C10	<50.0		50.0		mg/Kg		11/18/22 07:28	11/19/22 19:40	
Method: SW846 8015B NM - Dies	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/18/22 07:28	11/19/22 19:40	
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 07:28	11/19/22 19:40	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	100		70 - 130				11/18/22 07:28	11/19/22 19:40	
o-Terphenyl	116		70 - 130				11/18/22 07:28	11/19/22 19:40	
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Surrogate Summary

 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21911-A-1-A MS	Matrix Spike	101	119	
880-21911-A-1-B MSD	Matrix Spike Duplicate	95	112	
890-3481-1	FS01	107	91	
890-3481-2	FS02	97	99	
LCS 880-40254/1-A	Lab Control Sample	108	114	
LCSD 880-40254/2-A	Lab Control Sample Dup	100	111	
MB 880-40254/5-A	Method Blank	85	101	

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-21715-A-1-H MS	Matrix Spike	66 S1-	67 S1-
880-21715-A-1-I MSD	Matrix Spike Duplicate	84	86
890-3481-1	FS01	93	107
890-3481-2	FS02	100	116
LCS 880-39882/2-A	Lab Control Sample	198 S1+	226 S1+
LCSD 880-39882/3-A	Lab Control Sample Dup	214 S1+	241 S1+
MB 880-39882/1-A	Method Blank	95	111

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3481-1 SDG: 03A1987044 Project/Site: LVP SWD #001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40254/5-A

Lab Sample ID: LCS 880-40254/1-A

Matrix: Solid

Analysis Batch: 40265

Matrix: Solid Analysis Batch: 40265 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40254

MB MB			

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/22 17:45	11/23/22 12:42	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	P	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/2	22/22 17:45	11/23/22 12:42	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/2	22/22 17:45	11/23/22 12:42	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40254

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1107		mg/Kg		111	70 - 130	
Toluene	0.100	0.09513		mg/Kg		95	70 - 130	
Ethylbenzene	0.100	0.1057		mg/Kg		106	70 - 130	
m-Xylene & p-Xylene	0.200	0.2135		mg/Kg		107	70 - 130	
o-Xylene	0.100	0.1038		mg/Kg		104	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	108	70 - 130
1,4-Difluorobenzene (Surr)	114	70 - 130

Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 40265 Prep Batch: 40254

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1083		mg/Kg		108	70 - 130	2	35	
Toluene	0.100	0.09803		mg/Kg		98	70 - 130	3	35	
Ethylbenzene	0.100	0.09819		mg/Kg		98	70 - 130	7	35	
m-Xylene & p-Xylene	0.200	0.2067		mg/Kg		103	70 - 130	3	35	
o-Xylene	0.100	0.1011		mg/Kg		101	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1.4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-21911-A-1-A MS

Lab Sample ID: LCSD 880-40254/2-A

Matrix: Solid

Analysis Batch: 40265

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

Prep Batch: 40254

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.1164		mg/Kg	_	115	70 - 130	
Toluene	<0.00202	U	0.101	0.09673		mg/Kg		96	70 - 130	

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39882

Prep Type: Total/NA

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Job ID: 890-3481-1 SDG: 03A1987044 Project/Site: LVP SWD #001

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

Lab Sample ID: 880-21911-A-1-A MS

Analysis Batch: 40265

Matrix: Solid

Analysis Batch: 40265									Prep	Batch: 40254
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U	0.101	0.09883		mg/Kg		98	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.202	0.1966		mg/Kg		97	70 - 130	
o-Xylene	<0.00202	U	0.101	0.09491		mg/Kg		94	70 - 130	

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

Lab Sample ID: 880-21911-A-1-B MSD

Analysis Batch: 40265

Matrix: Solid

J 2 54	Batch: 4	Prep									Analysis Batch: 40265
RPD		%Rec				MSD	MSD	Spike	Sample	Sample	
Limit	RPD	Limits	%Rec	D	Unit	Qualifier	Result	Added	Qualifier	Result	Analyte
35	11	70 - 130	105		mg/Kg		0.1045	0.0994	U	<0.00202	Benzene
35	9	70 - 130	89		mg/Kg		0.08845	0.0994	U	<0.00202	Toluene
35	10	70 - 130	90		mg/Kg		0.08907	0.0994	U	<0.00202	Ethylbenzene
35	12	70 - 130	88		mg/Kg		0.1744	0.199	U	<0.00403	m-Xylene & p-Xylene
35	12	70 - 130	84		mg/Kg		0.08420	0.0994	U	<0.00202	o-Xylene
_	11 9 10	70 - 130 70 - 130 70 - 130 70 - 130	105 89 90 88	<u>b</u>	mg/Kg mg/Kg mg/Kg mg/Kg	Quaimer	0.1045 0.08845 0.08907 0.1744	0.0994 0.0994 0.0994 0.199	U U U	<0.00202 <0.00202 <0.00202 <0.00403	Benzene Toluene Ethylbenzene m-Xylene & p-Xylene

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

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

Lab Sample ID: MB 880-39882/1-A

Matrix: Solid

Analysis Batch: 39958

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/18/22 07:28	11/19/22 09:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 07:28	11/19/22 09:07	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 07:28	11/19/22 09:07	1

	MB MB				
Surrogate %	%Recovery Qualit	ifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95	70 - 130	11/18/22 07:28	11/19/22 09:07	1
o-Terphenyl	111	70 - 130	11/18/22 07:28	11/19/22 09:07	1

Lab Sample ID: LCS 880-39882/2-A

Matrix: Solid

Matrix: Solid							Prep Typ	oe: Total/NA
Analysis Batch: 39958							Prep B	atch: 39882
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	874.4		mg/Kg		87	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1088		mg/Kg		109	70 - 130	
C10-C28)								

Job ID: 890-3481-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

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

LCS LCS

Lab Sample ID: LCS 880-39882/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 39958

Prep Type: Total/NA

Prep Batch: 39882

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 198 S1+ 70 - 130 o-Terphenyl 226 S1+ 70 - 130

Lab Sample ID: LCSD 880-39882/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 39958

Prep Type: Total/NA

Prep Batch: 39882

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1134 *1 113 70 - 13026 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1280 mg/Kg 128 70 - 13016 20 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 214 S1+ 70 - 130 1-Chlorooctane 241 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 880-21715-A-1-H MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 39958

Prep Type: Total/NA

Prep Batch: 39882

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U *1 999 793.6 mg/Kg 79 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 220 F1 F2 999 741.0 F1 mg/Kg 52 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits S1-70 - 130 1-Chlorooctane 66 70 - 130 o-Terphenyl 67 S1-

Lab Sample ID: 880-21715-A-1-I MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 39958

Prep Type: Total/NA

Prep Batch: 39882

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Gasoline Range Organics <50.0 U *1 997 902.1 90 mg/Kg 70 - 130 13 20 (GRO)-C6-C10 Diesel Range Organics (Over 220 F1 F2 997 943.2 F2 mg/Kg 72 70 - 130 24 20

C10-C28)

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	84	70 - 130
o-Terphenyl	86	70 - 130

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: FS01

Client Sample ID: FS01

Prep Type: Soluble

Prep Type: Soluble

Job ID: 890-3481-1 SDG: 03A1987044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39830/1-A

Matrix: Solid

Analysis Batch: 40139

Project/Site: LVP SWD #001

Client: Ensolum

MB MB

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 11/21/22 23:52
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Lab Sample ID: LCS 880-39830/2-A

Matrix: Solid

Analysis Batch: 40139

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 256.0 mg/Kg 102 90 - 110

Lab Sample ID: LCSD 880-39830/3-A

Matrix: Solid

Analysis Batch: 40139

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 256.0 mg/Kg 102 90 - 110

Lab Sample ID: 890-3481-1 MS

Matrix: Solid

Analysis Batch: 40139

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 105 250 373.7 108 90 - 110 mg/Kg

Lab Sample ID: 890-3481-1 MSD

Matrix: Solid

Analysis Batch: 40139

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 105 373.5 mg/Kg 108 90 - 110 0 20

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QC Association Summary

Client: Ensolum Job ID: 890-3481-1 Project/Site: LVP SWD #001 SDG: 03A1987044

GC VOA

Prep Batch: 40254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Total/NA	Solid	5035	
890-3481-2	FS02	Total/NA	Solid	5035	
MB 880-40254/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40254/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40254/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21911-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-21911-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Total/NA	Solid	8021B	40254
890-3481-2	FS02	Total/NA	Solid	8021B	40254
MB 880-40254/5-A	Method Blank	Total/NA	Solid	8021B	40254
LCS 880-40254/1-A	Lab Control Sample	Total/NA	Solid	8021B	40254
LCSD 880-40254/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40254
880-21911-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	40254
880-21911-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40254

Analysis Batch: 40504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Total/NA	Solid	Total BTEX	
890-3481-2	FS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 39882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Total/NA	Solid	8015NM Prep	
890-3481-2	FS02	Total/NA	Solid	8015NM Prep	
MB 880-39882/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39882/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21715-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21715-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Total/NA	Solid	8015B NM	39882
890-3481-2	FS02	Total/NA	Solid	8015B NM	39882
MB 880-39882/1-A	Method Blank	Total/NA	Solid	8015B NM	39882
LCS 880-39882/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39882
LCSD 880-39882/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39882
880-21715-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	39882
880-21715-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39882

Analysis Batch: 40098

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Total/NA	Solid	8015 NM	
890-3481-2	FS02	Total/NA	Solid	8015 NM	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

HPLC/IC

Leach Batch: 39830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Soluble	Solid	DI Leach	
890-3481-2	FS02	Soluble	Solid	DI Leach	
MB 880-39830/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39830/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39830/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3481-1 MS	FS01	Soluble	Solid	DI Leach	
890-3481-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 40139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3481-1	FS01	Soluble	Solid	300.0	39830
890-3481-2	FS02	Soluble	Solid	300.0	39830
MB 880-39830/1-A	Method Blank	Soluble	Solid	300.0	39830
LCS 880-39830/2-A	Lab Control Sample	Soluble	Solid	300.0	39830
LCSD 880-39830/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39830
890-3481-1 MS	FS01	Soluble	Solid	300.0	39830
890-3481-1 MSD	FS01	Soluble	Solid	300.0	39830

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 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS01 Lab Sample ID: 890-3481-1

Date Collected: 11/15/22 13:00 Matrix: Solid
Date Received: 11/15/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	40254	11/22/22 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/23/22 17:31	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40504	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40098	11/21/22 11:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39882	11/18/22 07:28	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39958	11/19/22 19:18	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39830	11/17/22 14:36	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 00:09	CH	EET MID

Client Sample ID: FS02 Lab Sample ID: 890-3481-2

Date Collected: 11/15/22 13:30 Matrix: Solid
Date Received: 11/15/22 15:23

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 5.04 g 5 mL 40254 11/22/22 17:45 EL EET MID Total/NA 8021B 11/23/22 17:51 **EET MID** Analysis 1 5 mL 5 mL 40265 EL Total/NA Total BTEX 40504 11/28/22 16:23 SM Analysis 1 **EET MID** Total/NA Analysis 8015 NM 40098 11/21/22 11:18 SM **EET MID** 39882 11/18/22 07:28 Total/NA Prep 8015NM Prep 10.01 g 10 mL DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 39958 11/19/22 19:40 SM **EET MID**

5 g

50 mL

50 mL

50 mL

39830

40139

11/17/22 14:36

11/22/22 00:26

СН

СН

EET MID

EET MID

Laboratory References:

Leach

Analysis

Soluble

Soluble

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

DI Leach

300.0

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Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Laboratory: Eurofins Midland

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

Authority I		rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-22-24	06-30-23
The following analytes the agency does not of		ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
	ci cci illoation.			
Analysis Method	Prep Method	Matrix	Analyte	
9 ,		Matrix Solid	Analyte Total TPH	

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Method Summary

 Client: Ensolum
 Job ID: 890-3481-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3481-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	De
890-3481-1	FS01	Solid	11/15/22 13:00	11/15/22 15:23	5
890-3481-2	FS02	Solid	11/15/22 13:30	11/15/22 15:23	4

eurofins Xenco **Environment Testing**

Chain of Custody

Houston, TX (261) 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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3481-1

SDG Number: 03A1987044

Login Number: 3481 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3481-1

SDG Number: 03A1987044

Login Number: 3481 **List Source: Eurofins Midland** List Number: 2 List Creation: 11/17/22 02:07 PM

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Generated 11/28/2022 4:28:30 PM

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3482-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 11/28/2022 4:28:30 PM

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

Companies

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3482-1
SDG: 03A1987044

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Definitions/Glossary

Job ID: 890-3482-1 Client: Ensolum Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Description Qualifier

Indicates the analyte was analyzed for but not detected.

HPLC/IC

U

Qualifier **Qualifier Description**

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable.

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)

Method Detection Limit MDL Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit PRES Presumptive

Quality Control QC

Relative Error Ratio (Radiochemistry) **RER**

RL Reporting Limit or Requested Limit (Radiochemistry)

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

Toxicity Equivalent Factor (Dioxin) TEF **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-3482-1

Project/Site: LVP SWD #001 SDG: 03A1987044

Job ID: 890-3482-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3482-1

Receipt

The sample was received on 11/15/2022 3:23 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 2.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW01 (890-3482-1).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-21689-A-4-B). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-40184 and analytical batch 880-40168 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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 880-39829 and analytical batch 880-40152 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Client Sample Results

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: SW01 Lab Sample ID: 890-3482-1

Date Collected: 11/15/22 12:30

Date Received: 11/15/22 15:23

Matrix: Solid

Sample Depth: 0 - 6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				11/22/22 17:45	11/23/22 18:12	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/22/22 17:45	11/23/22 18:12	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/28/22 16:23	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) ((GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9		mg/Kg			11/23/22 11:46	1
Method: SW846 8015B NM - Dies	ol Pango Orga	nice (DPO)	(GC)						
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 19:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 19:04	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/22/22 09:39	11/22/22 19:04	1
o-Terphenyl	89		70 - 130				11/22/22 09:39	11/22/22 19:04	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	261		5.00		mg/Kg			11/22/22 01:10	

Surrogate Summary

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21911-A-1-A MS	Matrix Spike	101	119	
880-21911-A-1-B MSD	Matrix Spike Duplicate	95	112	
890-3482-1	SW01	98	98	
LCS 880-40254/1-A	Lab Control Sample	108	114	
LCSD 880-40254/2-A	Lab Control Sample Dup	100	111	
MB 880-40254/5-A	Method Blank	85	101	
Surrogate Legend				
BFB = 4-Bromofluorobenz	ene (Surr)			
DFBZ = 1,4-Difluorobenze	ne (Surr)			

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21689-A-4-C MS	Matrix Spike	104	82	
880-21689-A-4-D MSD	Matrix Spike Duplicate	112	86	
890-3482-1	SW01	92	89	
_CS 880-40184/2-A	Lab Control Sample	117	105	
LCSD 880-40184/3-A	Lab Control Sample Dup	98	102	
MB 880-40184/1-A	Method Blank	112	107	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40254/5-A

Matrix: Solid Analysis Batch: 40265 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40254

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		11/22/22 17:45	11/23/22 12:42	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85	70 - 130	11/2.	2/22 17:45	11/23/22 12:42	1
1,4-Difluorobenzene (Surr)	101	70 - 130	11/2.	2/22 17:45	11/23/22 12:42	1

Lab Sample ID: LCS 880-40254/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 40265

Prep Type: Total/NA Prep Batch: 40254

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1107 mg/Kg 111 70 - 130 Toluene 0.100 0.09513 mg/Kg 95 70 - 130 0.100 Ethylbenzene 0.1057 mg/Kg 106 70 - 130 0.200 107 70 - 130 m-Xylene & p-Xylene 0.2135 mg/Kg 0.100 0.1038 70 - 130 o-Xylene mg/Kg 104

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-40254/2-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40254

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1083		mg/Kg		108	70 - 130	2	35	
Toluene	0.100	0.09803		mg/Kg		98	70 - 130	3	35	
Ethylbenzene	0.100	0.09819		mg/Kg		98	70 - 130	7	35	
m-Xylene & p-Xylene	0.200	0.2067		mg/Kg		103	70 - 130	3	35	
o-Xylene	0.100	0.1011		mg/Kg		101	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	100	70 - 130
1,4-Difluorobenzene (Surr)	111	70 - 130

Lab Sample ID: 880-21911-A-1-A MS

Matrix: Solid

Analysis Batch: 40265

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

Prep Batch: 40254

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.1164		mg/Kg	_	115	70 - 130	
Toluene	<0.00202	U	0.101	0.09673		mg/Kg		96	70 - 130	

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 40254

Client: Ensolum

Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 880-21911-A-1-A MS **Matrix: Solid**

Analysis Batch: 40265

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U	0.101	0.09883		mg/Kg		98	70 - 130	
m-Xylene & p-Xylene	<0.00403	U	0.202	0.1966		mg/Kg		97	70 - 130	
o-Xylene	<0.00202	U	0.101	0.09491		mg/Kg		94	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 101 1,4-Difluorobenzene (Surr) 70 - 130 119

Lab Sample ID: 880-21911-A-1-B MSD

Matrix: Solid

Analysis Batch: 40265									Prep	Batch:	40254
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.0994	0.1045		mg/Kg		105	70 - 130	11	35
Toluene	<0.00202	U	0.0994	0.08845		mg/Kg		89	70 - 130	9	35
Ethylbenzene	<0.00202	U	0.0994	0.08907		mg/Kg		90	70 - 130	10	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1744		mg/Kg		88	70 - 130	12	35
o-Xylene	<0.00202	U	0.0994	0.08420		mg/Kg		84	70 - 130	12	35

MSD MSD Qualifier Limits Surrogate %Recovery 95 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 112 70 - 130

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

Lab Sample ID: MB 880-40184/1-A

Matrix: Solid

Analysis Batch: 40168

-	MB	MB					•	
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/22/22 08:19	11/22/22 08:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/22/22 08:19	11/22/22 08:21	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/22/22 08:19	11/22/22 08:21	1

MB MB Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 112

Prepared Analyzed Dil Fac 11/22/22 08:19 11/22/22 08:21 70 - 130 o-Terphenyl 107 11/22/22 08:19 11/22/22 08:21

Lab Sample ID: LCS 880-40184/2-A

Matrix: Solid

Analysis Batch: 40168							Prep	Batch: 40184	ŧ,
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	863.4		mg/Kg		86	70 - 130		-
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	979.4		mg/Kg		98	70 - 130		
C10-C28)									

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

Prep Batch: 40184

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

Prep Batch: 40184

Client Sample ID: Matrix Spike

Job ID: 890-3482-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: LCS 880-40184/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 40168

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-40184/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 40168							Prep	Batch:	40184
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	886.1		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	938.8		mg/Kg		94	70 - 130	4	20

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 - 130 o-Terphenyl 102 70 - 130

Lab Sample ID: 880-21689-A-4-C MS

Matrix: Solid

Matrix: Solid									Prep Type: Total/NA
Analysis Batch: 40168									Prep Batch: 40184
	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	habbA	Regult	Qualifier	Unit	n	%Rec	l imite

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.8	U	998	751.2		mg/Kg		75	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.8	U	998	888.4		mg/Kg		89	70 - 130	
C10-C28)										

ı		IVIS	IVIS	
	Surrogate	%Recovery	Qualifier	Limits
	1-Chlorooctane	104		70 - 130
	o-Terphenvl	82		70 - 130

Lab Sample ID: 880-21689-A-4-D MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

C10-C28)

Released to Imaging: 5/21/2024 1:54:50 PM

Analysis Batch: 40168									Prep	Batch:	40184
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.8	U	996	809.0		mg/Kg		81	70 - 130	7	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.8	U	996	937.4		mg/Kg		94	70 - 130	5	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	86		70 - 130

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39829/1-A

Matrix: Solid

Analyte

Chloride

Analysis Batch: 40152

Prep Type: Soluble

MB MB Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <5.00 U 5.00 mg/Kg 11/21/22 21:36

Lab Sample ID: LCS 880-39829/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40152

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 241.6 mg/Kg 97 90 - 110

Lab Sample ID: LCSD 880-39829/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40152

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.5 mg/Kg 101 90 - 110

Lab Sample ID: 890-3479-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40152

MS MS Sample Sample Spike %Rec Analyte Qualifier Added Result Qualifier Result Unit %Rec Limits Chloride 1220 253 1408 90 - 110 mg/Kg

Lab Sample ID: 890-3479-A-1-C MSD

Matrix: Solid

Analysis Batch: 40152

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 1417 Chloride 1220 253 4 mg/Kg 79 90 - 110 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC VOA

Prep Batch: 40254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	5035	
MB 880-40254/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40254/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40254/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21911-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-21911-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	8021B	40254
MB 880-40254/5-A	Method Blank	Total/NA	Solid	8021B	40254
LCS 880-40254/1-A	Lab Control Sample	Total/NA	Solid	8021B	40254
LCSD 880-40254/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40254
880-21911-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	40254
880-21911-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40254

Analysis Batch: 40505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	8015B NM	40184
MB 880-40184/1-A	Method Blank	Total/NA	Solid	8015B NM	40184
LCS 880-40184/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40184
LCSD 880-40184/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40184
880-21689-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40184
880-21689-A-4-D MSI	D Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40184

Prep Batch: 40184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	8015NM Prep	
MB 880-40184/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40184/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40184/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21689-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21689-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Soluble	Solid	DI Leach	<u> </u>
MB 880-39829/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39829/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39829/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

HPLC/IC (Continued)

Leach Batch: 39829 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3479-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3479-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Soluble	Solid	300.0	39829
MB 880-39829/1-A	Method Blank	Soluble	Solid	300.0	39829
LCS 880-39829/2-A	Lab Control Sample	Soluble	Solid	300.0	39829
LCSD 880-39829/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39829
890-3479-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	39829
890-3479-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39829

Lab Chronicle

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: SW01 Lab Sample ID: 890-3482-1

Date Collected: 11/15/22 12:30 Matrix: Solid
Date Received: 11/15/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	40254	11/22/22 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/23/22 18:12	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40505	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40299	11/23/22 11:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40184	11/22/22 09:39	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40168	11/22/22 19:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39829	11/17/22 14:33	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40152	11/22/22 01:10	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for	
the agency does not of	fer certification.	•	, , ,	·, ·····	
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	,	
0 ,		Matrix Solid	, , ,		

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Method Summary

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3482-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3482-1	SW01	Solid	11/15/22 12:30	11/15/22 15:23	0 - 6

Work Order No:

eurofins

Project Manager:

Joseph Hernandez

Company Name: ddress:

Ensolum

3122 National Parks HWY

Carlsbad, NM 88220

City, State ZIP:

Carlsbad, NM 88220 5315 Buena Vista Dr

Deliverables: EDD

ADaPT 🗆

Reporting: Level II Level III PST/UST TRRP

Level IV

State of Project:

Program: UST/PST [] PRP [] Brownfields [] RRC [] Superfund []

Work Order Comments

www.xenco.com

Company Name: Bill to: (if different)

WPX

Jim Raley

City, State ZIP:

Environment Testing Xenco

Chain of Custody

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 Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300

Rejinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature)		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 \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na 9 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 Ti U Hg: 1631 / 24			0 11.15.22			SW01 S 11.15.22 12:30 0-6' Comp 1 X X X	Sample Identification Matrix Sampled Date Time Depth Comp Cont Time Comp Cont Time Comp Cont Time Depth Comp Cont Time Comp Cont Cime Cime	802	S (E 890-3482 Chairl or Carry	Yes No (N/A Correction Factor: - Q ,) PA:	300			TAT starts the day received by	Project Location: Rural Eddy, NM Due Date: 5 Day TAT	Project Number: 03A1987044 Routine Rush Code N	Project Name: LVP SWD #001 Turn Around ANALYSIS REQUEST	Phone: [281-702-2329 Email:] hernandez@Ensolum.com, im.raley@dvn.com Phone: [281-702-2329 Phone: [281-702-
	ceived by: (Signature)	terms and conditions ces beyond the control ss previously negotiated.	K Se Ag SiO ₂ Na Sr Tl Sn U V Z Hg: 1631/245.1/7470/7471				nAPP2135033453	Incident ID		Sample Comments	NaOH+Ascorbic Acid: SAPC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ : NaSO ₃	NaHSO ₄ : NABIS	H ₃ PO ₄ : HP	H ₂ SO ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	Preservative Codes	

11/28/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3482-1 SDG Number: 03A1987044

Login Number: 3482 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum Job Nur

Job Number: 890-3482-1 SDG Number: 03A1987044

Login Number: 3482
List Source: Eurofins Midland
List Number: 2
List Creation: 11/17/22 02:07 PM

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

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<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Generated 11/30/2022 9:48:37 AM

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3493-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 11/30/2022 9:48:37 AM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

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Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3493-1
SDG: 03A1987044

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Definitions/Glossary

Job ID: 890-3493-1 Client: Ensolum Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC VOA Qualifier

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

S1-Surrogate recovery exceeds control limits, low biased.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report. Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery

CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

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

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-3493-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Job ID: 890-3493-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3493-1

Receipt

The sample was received on 11/16/2022 3:31 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 2.6°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: FS03 (890-3493-1).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3493-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-40432 and analytical batch 880-40541 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-21689-A-4-B). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: The method blank for preparation batch 880-40184 and analytical batch 880-40168 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

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

Job ID: 890-3493-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS03 Lab Sample ID: 890-3493-1 Date Collected: 11/16/22 13:00 Matrix: Solid

Date Received: 11/16/22 15:31

|--|

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1 F2	0.00201		mg/Kg		11/28/22 10:35	11/30/22 00:19	1
Toluene	<0.00201	U F1 F2	0.00201		mg/Kg		11/28/22 10:35	11/30/22 00:19	1
Ethylbenzene	<0.00201	U F1 F2	0.00201		mg/Kg		11/28/22 10:35	11/30/22 00:19	1
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.00402		mg/Kg		11/28/22 10:35	11/30/22 00:19	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		11/28/22 10:35	11/30/22 00:19	1
Xylenes, Total	<0.00402	U F1 F2	0.00402		mg/Kg		11/28/22 10:35	11/30/22 00:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130				11/28/22 10:35	11/30/22 00:19	1
1,4-Difluorobenzene (Surr)	104		70 - 130				11/28/22 10:35	11/30/22 00:19	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/30/22 09:51	1
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/23/22 11:46	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 17:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 17:59	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				11/22/22 09:39	11/22/22 17:59	1
o-Terphenyl	106		70 - 130				11/22/22 09:39	11/22/22 17:59	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	164		4.96		mg/Kg			11/22/22 05:20	1

Surrogate Summary

Client: Ensolum Job ID: 890-3493-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3493-1	FS03	72	104	
890-3493-1 MS	FS03	72	104	
890-3493-1 MSD	FS03	69 S1-	102	
LCS 880-40432/1-A	Lab Control Sample	91	109	
LCSD 880-40432/2-A	Lab Control Sample Dup	87	109	
MB 880-40432/5-A	Method Blank	73	110	
MB 880-40470/5-A	Method Blank	72	109	

BFB = 4-Bromofluorobenzene (Surr) DFBZ = 1,4-Difluorobenzene (Surr)

OTPH = o-Terphenyl

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

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

-				Percent Surro
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21689-A-4-C MS	Matrix Spike	104	82	
880-21689-A-4-D MSD	Matrix Spike Duplicate	112	86	
890-3493-1	FS03	108	106	
LCS 880-40184/2-A	Lab Control Sample	117	105	
LCSD 880-40184/3-A	Lab Control Sample Dup	98	102	
MB 880-40184/1-A	Method Blank	112	107	
Surrogate Legend				
1CO = 1-Chlorooctane				

Client: Ensolum Job ID: 890-3493-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40432/5-A

Matrix: Solid Analysis Batch: 40541 Client Sample ID: Method Blank Prep Type: Total/NA

mg/Kg

Prep Batch: 40432

MR MR

	IND	1110							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 10:35	11/29/22 23:50	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prep	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73	70 - 130	11/28/2	2 10:35	11/29/22 23:50	1
1,4-Difluorobenzene (Surr)	110	70 - 130	11/28/2	2 10:35	11/29/22 23:50	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-40432/1-A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 40541 Prep Batch: 40432

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09748 mg/Kg 97 70 - 130 Toluene 0.100 0.1040 mg/Kg 104 70 - 130 0.100 0.09734 Ethylbenzene mg/Kg 97 70 - 130 0.200 0.1695 85 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.08489 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-40432/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

o-Xylene

Analysis Batch: 40541

Prep Type: Total/NA Prep Batch: 40432

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1091		mg/Kg		109	70 - 130	11	35	
Toluene	0.100	0.1113		mg/Kg		111	70 - 130	7	35	
Ethylbenzene	0.100	0.1029		mg/Kg		103	70 - 130	6	35	
m-Xylene & p-Xylene	0.200	0.1785		mg/Kg		89	70 - 130	5	35	
o-Xylene	0.100	0.08844		mg/Kg		88	70 - 130	4	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	87	70 - 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: 890-3493-1 MS

Matrix: Solid

Analysis Batch: 40541

Client Sample ID: FS03 Prep Type: Total/NA

Prep Batch: 40432

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1 F2	0.0996	0.02627	F1	mg/Kg		26	70 - 130	
Toluene	<0.00201	U F1 F2	0.0996	0.02749	F1	mg/Kg		28	70 - 130	

QC Sample Results

Client: Ensolum Job ID: 890-3493-1 SDG: 03A1987044 Project/Site: LVP SWD #001

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

Lab Sample ID: 890-3493-1 MS **Matrix: Solid**

Analysis Batch: 40541

Client Sample ID: FS03 Prep Type: Total/NA

Prep Batch: 40432

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1 F2	0.0996	0.03012	F1	mg/Kg		30	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.05464	F1	mg/Kg		27	70 - 130	
o-Xylene	<0.00201	U F1	0.0996	0.03019	F1	mg/Kg		30	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	72		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3493-1 MSD

Matrix: Solid

Analysis Batch: 40541

Client Sample ID: FS03 Prep Type: Total/NA

Prep Batch: 40432

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F1 F2	0.100	0.04789	F1 F2	mg/Kg		48	70 - 130	58	35
Toluene	<0.00201	U F1 F2	0.100	0.04517	F1 F2	mg/Kg		45	70 - 130	49	35
Ethylbenzene	<0.00201	U F1 F2	0.100	0.04427	F1 F2	mg/Kg		44	70 - 130	38	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.08197	F1 F2	mg/Kg		41	70 - 130	40	35
o-Xylene	<0.00201	U F1	0.100	0.04193	F1	mg/Kg		41	70 - 130	33	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-40470/5-A

Matrix: Solid

Analysis Batch: 40541

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

Prep Batch: 40470

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 14:18	11/29/22 12:12	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	11/28/22 14:18	11/29/22 12:12	1
1,4-Difluorobenzene (Surr)	109		70 - 130	11/28/22 14:18	11/29/22 12:12	1

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

Lab Sample ID: MB 880-40184/1-A

Matrix: Solid

Analysis Batch: 40168

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

Prep Batch: 40184

	MB	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/22/22 08:19	11/22/22 08:21	1	
(GRO)-C6-C10										

 Client: Ensolum
 Job ID: 890-3493-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

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

Lab Sample ID: MB 880-40184/1-A Matrix: Solid

Lab Sample ID: LCS 880-40184/2-A

Matrix: Solid

Analysis Batch: 40168

Analysis Batch: 40168

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 40184

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		11/22/22 08:19	11/22/22 08:21	1
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/22/22 08:19	11/22/22 08:21	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	11/22/22 08:19	11/22/22 08:21	1
o-Terphenyl	107		70 - 130	11/22/22 08:19	11/22/22 08:21	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40184

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 863.4 86 70 - 130 mg/Kg (GRO)-C6-C10 1000 979.4 Diesel Range Organics (Over mg/Kg 98 70 - 130C10-C28)

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
1-Chlorooctane	117	70 - 130
o-Terphenyl	105	70 - 130

Lab Sample ID: LCSD 880-40184/3-A

Matrix: Solid Analysis Batch: 40168 Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Prep Batch: 40184

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier %Rec Limits RPD Limit Unit D Gasoline Range Organics 1000 886.1 mg/Kg 89 70 - 130 3 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 938.8 mg/Kg 94 70 - 130 4 20 C10-C28)

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 98
 70 - 130

 o-Terphenyl
 102
 70 - 130

Lab Sample ID: 880-21689-A-4-C MS

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 40184

or

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	751.2		mg/Kg		75	70 - 130	
Diesel Range Organics (Over	<49.8	U	998	888.4		mg/Kg		89	70 - 130	

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	82		70 - 130

Eurofins Carlsbad

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Client: Ensolum Job ID: 890-3493-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 880-21689-A-4-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 40168 Prep Batch: 40184

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.8	U	996	809.0		mg/Kg		81	70 - 130	7	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.8	U	996	937.4		mg/Kg		94	70 - 130	5	20
C10-C28)											

	MSD	MSD		
Surrogate	%Recovery	Qualifier	Limits	
1-Chlorooctane	112		70 - 130	
o-Terphenyl	86		70 - 130	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39832/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40153

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/22/22 01:46	1

Lab Sample ID: LCS 880-39832/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble Matrix: Solid**

Analysis Batch: 40153

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	245.8		mg/Kg		98	90 - 110	

Lab Sample ID: LCSD 880-39832/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40153

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	241.8		mg/Kg		97	90 - 110	2	20	

Lab Sample ID: 890-3477-A-3-D MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40153

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	35.8		253	295 1		ma/Ka		103	90 110	

Lab Sample ID: 890-3477-A-3-E MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 40153

Analysis Batch. 40100												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	35.8		253	286.6		ma/Ka		99	90 - 110	3	20	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3493-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC VOA

Prep Batch: 40432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Total/NA	Solid	5035	
MB 880-40432/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40432/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40432/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3493-1 MS	FS03	Total/NA	Solid	5035	
890-3493-1 MSD	FS03	Total/NA	Solid	5035	

Prep Batch: 40470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40470/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 40541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Total/NA	Solid	8021B	40432
MB 880-40432/5-A	Method Blank	Total/NA	Solid	8021B	40432
MB 880-40470/5-A	Method Blank	Total/NA	Solid	8021B	40470
LCS 880-40432/1-A	Lab Control Sample	Total/NA	Solid	8021B	40432
LCSD 880-40432/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40432
890-3493-1 MS	FS03	Total/NA	Solid	8021B	40432
890-3493-1 MSD	FS03	Total/NA	Solid	8021B	40432

Analysis Batch: 40669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Total/NA	Solid	8015B NM	40184
MB 880-40184/1-A	Method Blank	Total/NA	Solid	8015B NM	40184
LCS 880-40184/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40184
LCSD 880-40184/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40184
880-21689-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40184
880-21689-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40184

Prep Batch: 40184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Total/NA	Solid	8015NM Prep	
MB 880-40184/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40184/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40184/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21689-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21689-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Total/NA	Solid	8015 NM	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3493-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

HPLC/IC

Leach Batch: 39832

Lab Sample ID 890-3493-1	Client Sample ID FS03	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-39832/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39832/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39832/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3477-A-3-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3477-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3493-1	FS03	Soluble	Solid	300.0	39832
MB 880-39832/1-A	Method Blank	Soluble	Solid	300.0	39832
LCS 880-39832/2-A	Lab Control Sample	Soluble	Solid	300.0	39832
LCSD 880-39832/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39832
890-3477-A-3-D MS	Matrix Spike	Soluble	Solid	300.0	39832
890-3477-A-3-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39832

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-3493-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS03 Lab Sample ID: 890-3493-1

Date Collected: 11/16/22 13:00 Matrix: Solid
Date Received: 11/16/22 15:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40432	11/28/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/30/22 00:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40669	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40297	11/23/22 11:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40184	11/22/22 09:39	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40168	11/22/22 17:59	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39832	11/17/22 14:46	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40153	11/22/22 05:20	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3493-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, but	t the laboratory is not certific	ed by the governing authority. This list ma	av include analytes fo
the agency does not of	• •	it the laboratory is not certific	su by the governing authority. This list his	ay include analytes to
,	• •	Matrix	Analyte	ay include analytes to
the agency does not of	fer certification.	,	, , ,	ay illoude allalytes lo

Method Summary

 Client: Ensolum
 Job ID: 890-3493-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3493-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3493-1	FS03	Solid	11/16/22 13:00	11/16/22 15:31	4'

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Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Chain of Custody

eurotins	SUL	Enviror	Environment Testing Xenco	esting	~	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	TX (281) (432) 70 (X (915) (575) 3	240-42)4-5440, 585-344 92-7550	00. Dalla San Anto 13. Lubbo D. Carlsba	s, TX (21) bnio, TX (3) ck, TX (8) d, NM (57	1) 902-03 210) 509- 210) 794-1 5) 988-3	00 3334 296 199				Work Order No:	Orde	r No:		Of .	1
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ject Manager:	Joseph Hernandez	nandez			Bill to: (if different)	fferent)	Jim	Jim Raley								5	ork O	rder C	Work Order Comments		
	Ensolum				Company Name:	Name:	WPX							rogram	: UST/F	ST 🗌	PRP [Brown	Program: UST/PST 🗌 PRP 🔲 Brownfields 🗎 RRC	RC Superfund	
	3122 National Parks HWY	al Parks H	YWY		Address:		5315	Buena	5315 Buena Vista Dr				S	State of Project:	Project						J
y, State ZIP:	Carlsbad, NM 88220	M 88220			City, State ZIP:	ZIP:	Carls	sbad, N	Carlsbad, NM 88220				70	eporting): Level		vel III	PST	Reporting: Level II Level III PST/JST TRRP	RP Level IV	L.,
	281-702-2329	29		Emai	Email: jhernandez@Ensolum.com, jim.raley@dvn.com	ez@Enso	olum.co	m, jim	.raley@	dvn.con				Deliverables: EDD	les: El			ADaPT	Other	ner:	
Name:	LVP SWD #001	001		Tur	Turn Around						ANA	ANALYSIS REQUEST	REQUI	ST					Preser	Preservative Codes	
er:	03A1987044	43		☑ Routine	☐ Rush	Code	ā #						_	-					None: NO	DI Water: H ₂ O	
ject Location:	Rural Eddy, NM	MM		Due Date:	5 Day TAT						-								Cool: Cool	MeOH: Me	
	Gilbert Moreno	no		TAT starts th	TAT starts the day received by	ed by													HCL: HC	HNO3: HN	
#	9005003893			the lab, if re	the lab, if received by 4:30pm									_	-	-	-		H ₂ SU ₄ : H ₂	NaOH: Na	
MPLE RECEIPT		Temp Blank:	(Kes No	Wet ice:	(Yes) N	Net													H ₃ PO ₄ : HP		
mples Received Intact:	act:	No No	Thermometer ID:	ter ID:	LUW-	Para													Na ₂ S ₂ O ₃ : NaSO ₃	SO ₃	
nple Custody Seals:	Yes	N		Temperature Reading:	Ŋ	9	S (EI				-								Zn Acetate+NaOH: Zn	NaOH: Zn	
al Containers:			Corrected	Corrected Temperature:	2	6	RIDE	015)	802		1.	890-3493		hain of Custody	lody			ġ	NaOH+Asco	NaOH+Ascorbic Acid: SAPC	1_
Sample Identification	ification	Matrix	Date Sampled	Time	Depth	Grab/ # of	CHLOF	TPH (8	втех (Sampl	Sample Comments	
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Total 200.7 / 6010 200.8 / 6020: cle Method(s) and Metal(s) to be analyzed	10 200.8 d Metal(s) to	200.8 / 6020: al(s) to be analy		8RCRA 13	CRA 13PPM Texas 11 AITCLP / SPLP 6010: 8RCRA	Texas 11 Al 3010: 8RCRA		As Ba As Ba	Be B (Sb As Ba Be B Cd Ca Cr Co Cu Fe P Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	Ca Cr Co r Co Cu F	Cu Fe Pb	0	Mg Mn Mo Ni Ni Se Ag Ti U	Mo Ni	x Se	Ag S Hg∵	SiO ₂ Na 1: 1631 / 2	\g SiO ₂ Na Sr Tl Sn U Hg: 1631 / 245.1 / 7470 /	U V Zn 0 /7471	L
ce: 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	ocument and re	linquishment	of samples co	nstitutes a valic	d purchase ord	er from clie	nt compa	ny to Eu	rofins Xen	co, its affi	lates and	subcontra	ctors, it	assigns s	tandard	terms an	d conditi	ons			
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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3493-1 SDG Number: 03A1987044

Login Number: 3493 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3493-1 SDG Number: 03A1987044

Login Number: 3493
List Source: Eurofins Midland
List Number: 2
List Creation: 11/18/22 11:02 AM

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

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<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Generated 11/30/2022 9:49:15 AM

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3494-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 11/30/2022 9:49:15 AM

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

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Page 2 of 21

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3494-1
SDG: 03A1987044

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Definitions/Glossary

Client: Ensolum Job ID: 890-3494-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC	VOA
Qua	lifier

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

Qualifier Description

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	

Glossary

LOD

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
n	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	

DL, RA, RE, IN	indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of tr
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Limit of Detection (DoD/DOE)

MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limi
NC	Not Calculated

ND	Not Detected at the reporting limit (or MDL or EDL if shown)

NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive

QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

RL	Reporting Limit or Requested Limit (Radiochemistry)

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

TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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Case Narrative

Job ID: 890-3494-1 Client: Ensolum

Project/Site: LVP SWD #001 SDG: 03A1987044

Job ID: 890-3494-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3494-1

Receipt

The samples were received on 11/16/2022 3:31 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS04 (890-3494-1) and FS05 (890-3494-2).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3493-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-40432 and analytical batch 880-40541 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-3494-1

Client Sample Results

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS04

Date Collected: 11/16/22 13:30 Date Received: 11/16/22 15:31

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 00:39	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 00:39	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 00:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 10:35	11/30/22 00:39	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 00:39	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 10:35	11/30/22 00:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				11/28/22 10:35	11/30/22 00:39	1
1,4-Difluorobenzene (Surr)	109		70 - 130				11/28/22 10:35	11/30/22 00:39	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/30/22 09:51	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (CC\						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/23/22 11:11	
Analyte		Qualifier U	RL 49.8	MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.8	Qualifier U	RL 49.8			<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.8	Qualifier U nics (DRO) Qualifier	RL 49.8 (GC)		mg/Kg			11/23/22 11:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.8 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL 49.8 (GC)		mg/Kg		Prepared	11/23/22 11:11 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.8 sel Range Orga Result <49.8	Qualifier U nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8		mg/Kg Unit mg/Kg		Prepared 11/22/22 08:14	11/23/22 11:11 Analyzed 11/22/22 17:36	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.8 (GC) RL 49.8 49.8		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/22/22 08:14 11/22/22 08:14	11/23/22 11:11 Analyzed 11/22/22 17:36 11/22/22 17:36	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.8 (GC) RL 49.8 49.8 49.8		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/22/22 08:14 11/22/22 08:14 11/22/22 08:14	Analyzed 11/22/22 17:36 11/22/22 17:36 11/22/22 17:36	Dil Face 1 1 Dil Face
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.8 (GC) RL 49.8 49.8 49.8 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/22/22 08:14 11/22/22 08:14 11/22/22 08:14 Prepared	Analyzed 11/22/22 17:36 11/22/22 17:36 11/22/22 17:36 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/22/22 08:14 11/22/22 08:14 11/22/22 08:14 Prepared 11/22/22 08:14	Analyzed 11/22/22 17:36 11/22/22 17:36 11/22/22 17:36 Analyzed 11/22/22 17:36	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/22/22 08:14 11/22/22 08:14 11/22/22 08:14 Prepared 11/22/22 08:14	Analyzed 11/22/22 17:36 11/22/22 17:36 11/22/22 17:36 Analyzed 11/22/22 17:36	Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: FS05

Date Collected: 11/16/22 14:00

Date Received: 11/16/22 15:31

Sample Depth: 5'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 01:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 01:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 01:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 10:35	11/30/22 01:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 10:35	11/30/22 01:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 10:35	11/30/22 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130				11/28/22 10:35	11/30/22 01:00	1

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Lab Sample ID: 890-3494-2

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Jimo Gariobad

Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS05 Lab Sample ID: 890-3494-2

Date Collected: 11/16/22 14:00 Matrix: Solid
Date Received: 11/16/22 15:31

Sample Depth: 5'

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130				11/28/22 10:35	11/30/22 01:00	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/30/22 09:51	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/23/22 11:11	
	Result < 50.0	Qualifier U		MDL	mg/Kg	D	Prepared 11/22/22 08:14	Analyzed 11/22/22 17:58	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 17:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 17:58	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 17:58	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	89		70 - 130				11/22/22 08:14	11/22/22 17:58	
o-Terphenyl	92		70 - 130				11/22/22 08:14	11/22/22 17:58	
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Surrogate Summary

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3493-A-1-D MS	Matrix Spike	72	104	
890-3493-A-1-E MSD	Matrix Spike Duplicate	69 S1-	102	
890-3494-1	FS04	85	109	
890-3494-2	FS05	79	112	
LCS 880-40432/1-A	Lab Control Sample	91	109	
LCSD 880-40432/2-A	Lab Control Sample Dup	87	109	
MB 880-40432/5-A	Method Blank	73	110	
MB 880-40470/5-A	Method Blank	72	109	

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)	
20-6532-A-1-E MS	Matrix Spike	108	98	
20-6532-A-1-F MSD	Matrix Spike Duplicate	112	101	
390-3494-1	FS04	88	91	
90-3494-2	FS05	89	92	
.CS 880-40176/2-A	Lab Control Sample	78	79	
CSD 880-40176/3-A	Lab Control Sample Dup	81	80	
/IB 880-40176/1-A	Method Blank	121	127	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-3494-1 SDG: 03A1987044 Project/Site: LVP SWD #001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40432/5-A

Matrix: Solid

Analysis Batch: 40541

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40432

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:35	11/29/22 23:50	1
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		11/28/22 10:35	11/29/22 23:50	1

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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73	70 - 130	11/28/22 10:35	11/29/22 23:50	1
1,4-Difluorobenzene (Surr)	110	70 - 130	11/28/22 10:35	11/29/22 23:50	1

Lab Sample ID: LCS 880-40432/1-A

Matrix: Solid

Analysis Batch: 40541

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40432

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09748		mg/Kg	_	97	70 - 130	
Toluene	0.100	0.1040		mg/Kg		104	70 - 130	
Ethylbenzene	0.100	0.09734		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	0.200	0.1695		mg/Kg		85	70 - 130	
o-Xylene	0.100	0.08489		mg/Kg		85	70 - 130	

LCS LCS

Surrogate	%Recovery Qualit	ier Limits
4-Bromofluorobenzene (Surr)	91	70 - 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-40432/2-A

Matrix: Solid

Analysis Batch: 40541

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 40432

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1091		mg/Kg		109	70 - 130	11	35
Toluene	0.100	0.1113		mg/Kg		111	70 - 130	7	35
Ethylbenzene	0.100	0.1029		mg/Kg		103	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1785		mg/Kg		89	70 - 130	5	35
o-Xylene	0.100	0.08844		mg/Kg		88	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1.4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-3493-A-1-D MS

Matrix: Solid

Analysis Batch: 40541

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

Prep Batch: 40432

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1 F2	0.0996	0.02627	F1	mg/Kg		26	70 - 130	
Toluene	< 0.00201	U F1 F2	0.0996	0.02749	F1	mg/Kg		28	70 - 130	

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Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

Prep Batch: 40432

QC Sample Results

Client: Ensolum Job ID: 890-3494-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 890-3493-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Surrogate

Analysis Batch: 40541

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F1 F2	0.0996	0.03012	F1	mg/Kg		30	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.05464	F1	mg/Kg		27	70 - 130	
o-Xylene	<0.00201	U F1	0.0996	0.03019	F1	mg/Kg		30	70 - 130	

Limits

MS MS %Recovery Qualifier

70 - 130 4-Bromofluorobenzene (Surr) 72 1,4-Difluorobenzene (Surr) 70 - 130 104

Lab Sample ID: 890-3493-A-1-E MSD

Matrix: Solid

Analysis Batch: 40541									Prep	Batch:	40432
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F1 F2	0.100	0.04789	F1 F2	mg/Kg		48	70 - 130	58	35
Toluene	<0.00201	U F1 F2	0.100	0.04517	F1 F2	mg/Kg		45	70 - 130	49	35
Ethylbenzene	<0.00201	U F1 F2	0.100	0.04427	F1 F2	mg/Kg		44	70 - 130	38	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.08197	F1 F2	mg/Kg		41	70 - 130	40	35
o-Xylene	<0.00201	U F1	0.100	0.04193	F1	mg/Kg		41	70 - 130	33	35

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 69 1,4-Difluorobenzene (Surr) 102 70 - 130

Lab Sample ID: MB 880-40470/5-A

Matrix: Solid

Analysis Batch: 40541

	Client Sample ID: Method Blank
	Prep Type: Total/NA
	Prep Batch: 40470
R MR	

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:18	11/29/22 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 14:18	11/29/22 12:12	1

	IVID IVID				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72	70 - 130	11/28/22 14:18	11/29/22 12:12	1
1,4-Difluorobenzene (Surr)	109	70 - 130	11/28/22 14:18	11/29/22 12:12	1

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

Lab Sample ID: MB 880-40176/1-A

Matrix: Solid

Analysis Batch: 40164

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 40176

мв мв Result Qualifier MDL Unit Prepared <50.0 U 50.0 11/22/22 08:14 11/22/22 08:39 Gasoline Range Organics mg/Kg

(GRO)-C6-C10

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QC Sample Results

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

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

Lab Sample ID: MB 880-40176/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 40164	Prep Batch: 40176

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 08:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 08:39	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				11/22/22 08:14	11/22/22 08:39	1
o-Terphenyl	127		70 - 130				11/22/22 08:14	11/22/22 08:39	1

Lab Sample ID: LCS 880-40 Matrix: Solid	176/2-A						Cilent	Sample	ID: Lab Control Sam Prep Type: Total/
Analysis Batch: 40164									Prep Batch: 40°
			Spike	LCS	LCS				%Rec
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics			1000	968.9		mg/Kg		97	70 - 130
(GRO)-C6-C10									
Diesel Range Organics (Over			1000	773.9		mg/Kg		77	70 - 130
C10-C28)									
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	78		70 - 130						
o-Terphenyl	79		70 - 130						

Lab Sample ID: LCSD 880-40176/3-A				Ciler	it San	וטו pie וט:	Lab Contro	ıı Sampı	e טup
Matrix: Solid							Prep 1	Type: To	tal/NA
Analysis Batch: 40164							Prep	Batch:	40176
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1000		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	785.6		mg/Kg		79	70 - 130	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 820-6532-A- Matrix: Solid Analysis Batch: 40164	1-E MS							Client	Prep 1	: Matrix Spike Type: Total/NA Batch: 40176
•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	951.4		mg/Kg		93	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	787.3		mg/Kg		79	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	108		70 - 130							
o-Terphenyl	98		70 - 130							

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QC Sample Results

Client: Ensolum Job ID: 890-3494-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 820-6532-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 40164 Prep Batch: 40176

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	991.1		mg/Kg		97	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	815.9		mg/Kg		82	70 - 130	4	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	101		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39707/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40151

мв мв

	Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	<5.00 U	5.00	mg/Kg			11/22/22 06:28	1

Lab Sample ID: LCS 880-39707/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40151

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	256.7		mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-39707/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40151

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	257.3		mg/Kg		103	90 - 110		20	

Lab Sample ID: 880-21560-A-11-E MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40151

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	71.5		250	322 0		ma/Ka		100	90 - 110	

Lab Sample ID: 880-21560-A-11-F MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 40151

Alialysis Datcil. 40101											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	71.5		250	323.2		mg/Kg		101	90 - 110		20

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Prep Type: Soluble

QC Association Summary

Client: Ensolum
Project/Site: LVP SWD #001
SDG

Job ID: 890-3494-1 SDG: 03A1987044

GC VOA

Prep Batch: 40432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Total/NA	Solid	5035	
890-3494-2	FS05	Total/NA	Solid	5035	
MB 880-40432/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40432/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40432/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3493-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3493-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 40470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40470/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 40541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Total/NA	Solid	8021B	40432
890-3494-2	FS05	Total/NA	Solid	8021B	40432
MB 880-40432/5-A	Method Blank	Total/NA	Solid	8021B	40432
MB 880-40470/5-A	Method Blank	Total/NA	Solid	8021B	40470
LCS 880-40432/1-A	Lab Control Sample	Total/NA	Solid	8021B	40432
LCSD 880-40432/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40432
890-3493-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	40432
890-3493-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40432

Analysis Batch: 40670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Total/NA	Solid	Total BTEX	
890-3494-2	FS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Total/NA	Solid	8015B NM	40176
890-3494-2	FS05	Total/NA	Solid	8015B NM	40176
MB 880-40176/1-A	Method Blank	Total/NA	Solid	8015B NM	40176
LCS 880-40176/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40176
LCSD 880-40176/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40176
820-6532-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	40176
820-6532-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40176

Prep Batch: 40176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Total/NA	Solid	8015NM Prep	
890-3494-2	FS05	Total/NA	Solid	8015NM Prep	
MB 880-40176/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40176/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40176/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-6532-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-6532-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC Semi VOA

Analysis Batch: 40288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Total/NA	Solid	8015 NM	
890-3494-2	FS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Soluble	Solid	DI Leach	
890-3494-2	FS05	Soluble	Solid	DI Leach	
MB 880-39707/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39707/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39707/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21560-A-11-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-21560-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3494-1	FS04	Soluble	Solid	300.0	39707
890-3494-2	FS05	Soluble	Solid	300.0	39707
MB 880-39707/1-A	Method Blank	Soluble	Solid	300.0	39707
LCS 880-39707/2-A	Lab Control Sample	Soluble	Solid	300.0	39707
LCSD 880-39707/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39707
880-21560-A-11-E MS	Matrix Spike	Soluble	Solid	300.0	39707
880-21560-A-11-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39707

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Client Sample ID: FS04

Lab Sample ID: 890-3494-1

Job ID: 890-3494-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Date Collected: 11/16/22 13:30 Matrix: Solid Date Received: 11/16/22 15:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40432	11/28/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/30/22 00:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40670	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40288	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 17:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	39707	11/21/22 10:44	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40151	11/22/22 08:57	SMC	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-3494-2

Date Collected: 11/16/22 14:00 Matrix: Solid Date Received: 11/16/22 15:31

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40432	11/28/22 10:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40541	11/30/22 01:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40670	11/30/22 09:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			40288	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 17:58	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39707	11/21/22 10:44	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40151	11/22/22 09:02	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Laboratory: Eurofins Midland

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

Authority	Pi	rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-22-24	06-30-23
The following analytes the agency does not of		ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
	er certification.			
Analysis Method	Prep Method	Matrix	Analyte	
9 ,		Matrix Solid	Analyte Total TPH	

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Method Summary

 Client: Ensolum
 Job ID: 890-3494-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3494-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3494-1	FS04	Solid	11/16/22 13:30	11/16/22 15:31	5'
890-3494-2	FS05	Solid	11/16/22 14:00	11/16/22 15:31	5'

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Kenco

Environment Testing

Company Name:

Ensolum

Bill to: (if different)
Company Name:

WPX

Work Order Comments

Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐

Jim Raley

Joseph Hernandez

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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

Wo	
TK OF	
Work Order No.	

5	3	" (July and)	Relinquished by: (Signature)	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.	Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 200.8 / 6020:		1	/xx010	W	£			FS05 S	FS04 S	Sample Identification Matrix	Total Containers:	Sample Custody Seals: Yes No N/A	Cooler Custody Seals: Yes No NA/A		SAMPLE RECEIPT Temp Blank:	CC#: 9005003893	Sampler's Name: Gilbert Moreno	Project Location: Rural Eddy, NM	Project Number: 03A1987044	Project Name: LVP SWD #001	Phone: 281-702-2329	City, State ZIP: Carlsbad, NM 88220	
		inonly St	Received by: (Signature)	of samples constitutes a valid purcha st of samples and shall not assume ar applied to each project and a charge	red TCLP / SPLP 6010:	8RCRA 13PPM				lile	17		14:00	11.16.22 (12.30 5)	11.16.22 (13:00 5	Date Time Depth	Corrected Temperature:	N/A Temperature Reading:	Correction Factor:	Thermometer ID: Tam	Yes No Wet Ice:	the lab, if received by 4:30pm	TAT starts the day received by	Due Date: 5 [☑ Routine ☐ F	Turn Around	Email: jherr	City,	
		11/16/2	Date/Time	se order from client company to ny responsibility for any losses o of \$5 for each sample submitted	6010: 8RCRA Sb As Ba	Texas 11 Al Sb As E								Comp 1 X	Comp 1 ×	th Grab/ # of Comp Cont CHLO			0. D	OD-7	ves No		eceived by	5 Day TAT	Rush Code	nd	Email: jhernandez@Ensolum.com, jim.raley@dvn.com	City, State ZIP: Carlsbad	
0	. 4	21534	ne Relinquished by: (Signature)	Eurofins Xenco, its affiliates and subcontractors. Ir expenses incurred by the client if such losses are to Eurofins Xenco, but not analyzed. These terms to	Be Cd Cr Co Cu Pb Mr	Ba Be B Cd Ca Cr Co Cu Fe Pb N								×	×	втех	(802									ANALYSIS REQUEST		Carlsbad, NM 88220	
			re) Received by: (Signature)	ntractors, it assigns standard terms and conditions losses are due to circumstances beyond the control see terms will be enforced unless previously negotiated the control seed terms.	Mo Ni Se Ag TI U Hg: 163	K Se A											oracy .					_				JEST	Deliverables: EDD L ADa	Level III]
Re. Jate: 08/25/2020 Rev 2020.2			ature) Date/Time	ted.	Hg: 1631 / 245.1 / /4/0 / /4/1	Na Sr TI Sn U V Zn						nAPP2135033453	Incident ID			Sample Comments	NaUH+Ascorbic Acid. SAFC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ : NaSO ₃	NaHSC4: NABIS	H ₃ PO ₄ : HP	H ₂ SU ₄ : H ₂ NaOH: Na		9	None: NO DI Water: H ₂ O	Preservative Codes	ADaP1 L. Otner:	SI/USI IRKF Level V	

11/30/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3494-1 SDG Number: 03A1987044

Login Number: 3494 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3494-1 SDG Number: 03A1987044

List Source: Eurofins Midland

Creator: Rodriguez, Leticia

Login Number: 3494 List Number: 2 List Creation: 11/18/22 11:02 AM

Quanting	Anower	Comment
Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Released to Imaging: 5/21/2024 1:54:50 PM

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Generated 11/30/2022 1:38:00 PM

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3538-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Released to Imaging: 5/21/2024 1:54:50 PM

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 11/30/2022 1:38:00 PM

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

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3538-1
SDG: 03A1987044

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Definitions/Glossary

Job ID: 890-3538-1 Client: Ensolum Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC VOA Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

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

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG Negative / Absent POS Positive / Present PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-3538-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Job ID: 890-3538-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3538-1

Receipt

The samples were received on 11/18/2022 2:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°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 surrogate recovery for the blank associated with preparation batch 880-40275 and analytical batch 880-40262 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40275/2-A) and (LCSD 880-40275/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: FS10 (890-3538-1), FS11 (890-3538-2), FS12 (890-3538-3), (890-3540-A-1-B), (890-3540-A-1-C MS) and (890-3540-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

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

Client Sample Results

Client: Ensolum Job ID: 890-3538-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS10

Lab Sample ID: 890-3538-1 Date Collected: 11/18/22 12:00 Matrix: Solid Date Received: 11/18/22 14:45

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:33	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:33	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 14:35	11/29/22 16:33	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 14:35	11/29/22 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				11/28/22 14:35	11/29/22 16:33	1
1,4-Difluorobenzene (Surr)	90		70 - 130				11/28/22 14:35	11/29/22 16:33	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 17:14	1
Method: SW846 8015 NM - Diese	•		•						
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH	•	Qualifier	•	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/28/22 11:40	
Analyte	Result <49.9	Qualifier U	RL 49.9	MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9 sel Range Orga	Qualifier U	RL 49.9	MDL	mg/Kg	D_	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Die	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)		mg/Kg			11/28/22 11:40	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	(GC)		mg/Kg		Prepared	11/28/22 11:40 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9		mg/Kg Unit mg/Kg		Prepared 11/23/22 09:52	11/28/22 11:40 Analyzed 11/23/22 14:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/23/22 09:52 11/23/22 09:52	11/28/22 11:40 Analyzed 11/23/22 14:11 11/23/22 14:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result < 49.9 sel Range Orga Result < 49.9 < 49.9 < 49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/23/22 09:52 11/23/22 09:52	Analyzed 11/23/22 14:11 11/23/22 14:11 11/23/22 14:11	Dil Face 1 1 1 Dil Face
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/23/22 09:52 11/23/22 09:52 11/23/22 09:52 Prepared	Analyzed 11/23/22 14:11 11/23/22 14:11 11/23/22 14:11 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier S1+	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 11/23/22 09:52 11/23/22 09:52 11/23/22 09:52 Prepared 11/23/22 09:52	11/28/22 11:40 Analyzed 11/23/22 14:11 11/23/22 14:11 Analyzed 11/23/22 14:11	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U nics (DRO) Qualifier U U Qualifier S1+	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130		mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared 11/23/22 09:52 11/23/22 09:52 11/23/22 09:52 Prepared 11/23/22 09:52	11/28/22 11:40 Analyzed 11/23/22 14:11 11/23/22 14:11 Analyzed 11/23/22 14:11	Dil Fac

Client Sample ID: FS11 Lab Sample ID: 890-3538-2

Date Collected: 11/18/22 12:10 Date Received: 11/18/22 14:45

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 16:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 16:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 16:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/28/22 14:35	11/29/22 16:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 16:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/22 14:35	11/29/22 16:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/28/22 14:35	11/29/22 16:54	1

Eurofins Carlsbad

Matrix: Solid

Job ID: 890-3538-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS11 Lab Sample ID: 890-3538-2 Matrix: Solid

Date Collected: 11/18/22 12:10 Date Received: 11/18/22 14:45

Sample Depth: 4

Method: SW846 8021B - \	Volatile Organic (Compounds (GC)	(Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105	70 - 130	11/28/22 14:35	11/29/22 16:54	1

Method: TAI	SOP Total BTFX -	- Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg		_	11/29/22 17:14	1

Method: SW846	OO4E NIM Discol	Dange Organies	(DBO) (CC)
i weliiou. Swo46	ou io mivi - Diesei	Range Organics	IDROHUGUI

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/28/22 11:40	1

Method: SW846 8015B	NM - Diesel Rand	ge Organics	(DRO)	(GC)
Michiga. Offord out ob	ININ - Diesel Itali	ge Organics	(DitO)	(00)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 14:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 14:33	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121	70 - 130	11/23/22 09:52	11/23/22 14:33	1
o-Terphenyl	144 S1+	70 - 130	11/23/22 09:52	11/23/22 14:33	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	ı	Prepared	Analyzed	Dil Fac
Chloride	2370		24.9		mg/Kg		_		11/24/22 01:33	5

Client Sample ID: FS12 Lab Sample ID: 890-3538-3

Date Collected: 11/18/22 12:20 Date Received: 11/18/22 14:45

Sample Depth: 4

Mothodi	CIMOAC GOOAD	Volotile	Organic Compounds	VCC)
i wethod:	30040 0UZ ID	- voiatile	Organic Compounds	5 (UU)

Method. Syvoto 002 ID - Volat	ne Organic Comp		,						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 17:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 17:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 17:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/28/22 14:35	11/29/22 17:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 17:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/28/22 14:35	11/29/22 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				11/28/22 14:35	11/29/22 17:14	1
1 4-Diffuorobenzene (Surr)	106		70 130				11/28/22 14:35	11/29/22 17:14	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402	ma/Ka			11/30/22 10:54	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/28/22 11:40	1

Eurofins Carlsbad

Matrix: Solid

Matrix: Solid

Lab Sample ID: 890-3538-3

Client Sample Results

 Client: Ensolum
 Job ID: 890-3538-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS12

Date Collected: 11/18/22 12:20 Date Received: 11/18/22 14:45

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 14:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 14:55	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 14:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				11/23/22 09:52	11/23/22 14:55	1
o-Terphenyl	135	S1+	70 ₋ 130				11/23/22 09:52	11/23/22 14:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	11900		99.2		mg/Kg			11/24/22 01:40	20

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Surrogate Summary

Job ID: 890-3538-1 Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

_				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3537-A-1-C MS	Matrix Spike	97	118	
890-3537-A-1-D MSD	Matrix Spike Duplicate	93	114	
890-3538-1	FS10	91	90	
890-3538-2	FS11	111	105	
890-3538-3	FS12	101	106	
LCS 880-40471/1-A	Lab Control Sample	106	109	
LCSD 880-40471/2-A	Lab Control Sample Dup	93	113	
MB 880-40471/5-A	Method Blank	82	104	
Surrogate Legend				
BFB = 4-Bromofluorobenz	zene (Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-3538-1	FS10	107	135 S1+	
390-3538-2	FS11	121	144 S1+	
890-3538-3	FS12	107	135 S1+	
890-3540-A-1-C MS	Matrix Spike	138 S1+	151 S1+	
890-3540-A-1-D MSD	Matrix Spike Duplicate	119	140 S1+	
LCS 880-40275/2-A	Lab Control Sample	206 S1+	246 S1+	
LCSD 880-40275/3-A	Lab Control Sample Dup	208 S1+	244 S1+	
MB 880-40275/1-A	Method Blank	129	160 S1+	

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3538-1 SDG: 03A1987044 Project/Site: LVP SWD #001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40471/5-A

Matrix: Solid Analysis Batch: 40540 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40471

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 14:35	11/29/22 10:48	1

мв мв

Surrogate	%Recovery Qualific	er Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82	70 - 130	11/28/22 14:35	11/29/22 10:48	1
1,4-Difluorobenzene (Surr)	104	70 - 130	11/28/22 14:35	11/29/22 10:48	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-40471/1-A Matrix: Solid

Analysis Batch: 40540

Prep Type: Total/NA Prep Batch: 40471

	Spike	LCS LCS			%Rec	
Analyte	Added	Result Qualifier	Unit [O %Rec	Limits	
Benzene	0.100	0.1088	mg/Kg	109	70 - 130	
Toluene	0.100	0.1011	mg/Kg	101	70 - 130	
Ethylbenzene	0.100	0.1035	mg/Kg	103	70 - 130	
m-Xylene & p-Xylene	0.200	0.2150	mg/Kg	108	70 - 130	
o-Xylene	0.100	0.1054	mg/Kg	105	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-40471/2-A

Matrix: Solid

Analysis Batch: 40540

Client	Sample	ID: Lab	Control	Sample	Dup

Prep Type: Total/NA Prep Batch: 40471

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	2	35
Toluene	0.100	0.09285		mg/Kg		93	70 - 130	8	35
Ethylbenzene	0.100	0.08914		mg/Kg		89	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1804		mg/Kg		90	70 - 130	18	35
o-Xylene	0.100	0.08869		mg/Kg		89	70 - 130	17	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1.4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-3537-A-1-C MS

Matrix: Solid

Analysis Batch: 40540

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

Prep Batch: 40471

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0996	0.1093		mg/Kg	_	110	70 - 130	
Toluene	<0.00201	U	0.0996	0.09247		mg/Kg		93	70 - 130	

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Page 10 of 22

Prep Batch: 40471

Client: Ensolum Job ID: 890-3538-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 890-3537-A-1-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 40540

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.0996	0.08852		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1775		mg/Kg		89	70 - 130	
o-Xylene	< 0.00201	U	0.0996	0.08683		mg/Kg		87	70 - 130	
	446	MS								

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	118	70 - 130

Lab Sample ID: 890-3537-A-1-D MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 40540 Prep Batch: 40471

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.09554		mg/Kg		96	70 - 130	13	35
Toluene	<0.00201	U	0.0994	0.08081		mg/Kg		81	70 - 130	13	35
Ethylbenzene	<0.00201	U	0.0994	0.07589		mg/Kg		76	70 - 130	15	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1519		mg/Kg		76	70 - 130	16	35
o-Xylene	<0.00201	U	0.0994	0.07410		mg/Kg		75	70 - 130	16	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	93	70 - 130
1,4-Difluorobenzene (Surr)	114	70 - 130

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

L

Analysis Batch: 40262

Lab Sample ID: MB 880-40275/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 40262	Prep Batch: 40275
мв мв	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/23/22 08:32	11/23/22 08:39	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/23/22 08:32	11/23/22 08:39	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 08:32	11/23/22 08:39	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	11/23/22 08:32	11/23/22 08:39	1
o-Terphenyl		S1+	70 - 130	11/23/22 08:32	11/23/22 08:39	1

Lab Sample ID: LCS 880-40275/2-A

Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 1000 1024 102 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1217 mg/Kg 122 70 - 130

C10-C28)

Eurofins Carlsbad

Prep Batch: 40275

Job ID: 890-3538-1 Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: LCS 880-40275/2-A

Matrix: Solid

Analysis Batch: 40262

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40275

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 206 S1+ 70 - 130 o-Terphenyl 246 S1+ 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40275

Lab Sample ID: LCSD 880-40275/3-A **Matrix: Solid** Analysis Batch: 40262

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 998.9 100 70 - 1302 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1210 121 mg/Kg 70 - 13020 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 208 S1+ 70 - 130 1-Chlorooctane 244 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-3540-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 40262

Prep Type: Total/NA

Prep Batch: 40275

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits D Gasoline Range Organics <50.0 U 997 1063 mg/Kg 107 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 1225 mg/Kg 121 70 - 130

Limits

C10-C28)

MS MS %Recovery Qualifier Surrogate

138 S1+ 70 - 130 1-Chlorooctane 151 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-3540-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 40262

Prep Type: Total/NA

Prep Batch: 40275

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U 999 901.4 Gasoline Range Organics <50.0 90 70 - 130 16 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 1116 mg/Kg 110 70 - 130 20

C10-C28)

MSD MSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 119 70 - 130 140 S1+ 70 - 130 o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-3538-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40011/1-A

Matrix: Solid

Analysis Batch: 40326

Client Sample ID: Method Blank **Prep Type: Soluble**

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 11/23/22 22:20

Lab Sample ID: LCS 880-40011/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40326

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 257.4 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-40011/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40326

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 257.7 mg/Kg 103 90 - 110

Lab Sample ID: 890-3533-A-5-B MS

Matrix: Solid

Analysis Batch: 40326

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 58.7 252 316.2 102 90 - 110 mg/Kg

Lab Sample ID: 890-3533-A-5-C MSD

Matrix: Solid

Analysis Batch: 40326

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 252 Chloride 58.7 316.9 mg/Kg 103 90 - 110 0 20

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Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

QC Association Summary

 Client: Ensolum
 Job ID: 890-3538-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC VOA

Prep Batch: 40471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Total/NA	Solid	5035	
890-3538-2	FS11	Total/NA	Solid	5035	
890-3538-3	FS12	Total/NA	Solid	5035	
MB 880-40471/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40471/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40471/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3537-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3537-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Total/NA	Solid	8021B	40471
890-3538-2	FS11	Total/NA	Solid	8021B	40471
890-3538-3	FS12	Total/NA	Solid	8021B	40471
MB 880-40471/5-A	Method Blank	Total/NA	Solid	8021B	40471
LCS 880-40471/1-A	Lab Control Sample	Total/NA	Solid	8021B	40471
LCSD 880-40471/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40471
890-3537-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	40471
890-3537-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40471

Analysis Batch: 40645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Total/NA	Solid	Total BTEX	
890-3538-2	FS11	Total/NA	Solid	Total BTEX	
890-3538-3	FS12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Total/NA	Solid	8015B NM	40275
890-3538-2	FS11	Total/NA	Solid	8015B NM	40275
890-3538-3	FS12	Total/NA	Solid	8015B NM	40275
MB 880-40275/1-A	Method Blank	Total/NA	Solid	8015B NM	40275
LCS 880-40275/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40275
LCSD 880-40275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40275
890-3540-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40275
890-3540-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40275

Prep Batch: 40275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Total/NA	Solid	8015NM Prep	· ·
890-3538-2	FS11	Total/NA	Solid	8015NM Prep	
890-3538-3	FS12	Total/NA	Solid	8015NM Prep	
MB 880-40275/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40275/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3540-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3540-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3538-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC Semi VOA

Analysis Batch: 40442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Total/NA	Solid	8015 NM	
890-3538-2	FS11	Total/NA	Solid	8015 NM	
890-3538-3	FS12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Soluble	Solid	DI Leach	
890-3538-2	FS11	Soluble	Solid	DI Leach	
890-3538-3	FS12	Soluble	Solid	DI Leach	
MB 880-40011/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40011/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40011/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3533-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3533-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3538-1	FS10	Soluble	Solid	300.0	40011
890-3538-2	FS11	Soluble	Solid	300.0	40011
890-3538-3	FS12	Soluble	Solid	300.0	40011
MB 880-40011/1-A	Method Blank	Soluble	Solid	300.0	40011
LCS 880-40011/2-A	Lab Control Sample	Soluble	Solid	300.0	40011
LCSD 880-40011/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40011
890-3533-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	40011
890-3533-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	40011

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Client Sample ID: FS10 Lab Sample ID: 890-3538-1

Date Collected: 11/18/22 12:00 Matrix: Solid Date Received: 11/18/22 14:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40471	11/28/22 14:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40540	11/29/22 16:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40645	11/29/22 17:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			40442	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 14:11	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40011	11/20/22 12:23	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40326	11/24/22 01:27	CH	EET MID

Client Sample ID: FS11 Lab Sample ID: 890-3538-2 Date Collected: 11/18/22 12:10 Matrix: Solid

Date Received: 11/18/22 14:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	40471	11/28/22 14:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40540	11/29/22 16:54	MNR	EET MIC
Total/NA	Analysis	Total BTEX		1			40645	11/29/22 17:14	SM	EET MIC
Total/NA	Analysis	8015 NM		1			40442	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 14:33	SM	EET MIC
Soluble	Leach	DI Leach			5.03 g	50 mL	40011	11/20/22 12:23	CH	EET MIC
Soluble	Analysis	300.0		5	50 mL	50 mL	40326	11/24/22 01:33	CH	EET MII

Client Sample ID: FS12 Lab Sample ID: 890-3538-3 Date Collected: 11/18/22 12:20

Date Received: 11/18/22 14:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40471	11/28/22 14:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40540	11/29/22 17:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40645	11/30/22 10:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			40442	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 14:55	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	40011	11/20/22 12:23	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40326	11/24/22 01:40	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Matrix: Solid

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3538-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report hi	it the laboratory is not certific	ed by the governing authority. This list ma	v include analytes for
the agency does not of	· '	it the laboratory is not certain	ed by the governing authority. This list his	ay include analytes for
0 ,	· '	Matrix	Analyte	ay include analytes for
the agency does not of	fer certification.	,	, , ,	

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Method Summary

 Client: Ensolum
 Job ID: 890-3538-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3538-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-3538-1	FS10	Solid	11/18/22 12:00	11/18/22 14:45	
890-3538-2	FS11	Solid	11/18/22 12:10	11/18/22 14:45	4
890-3538-3	FS12	Solid	11/18/22 12:20	11/18/22 14:45	4

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Xenco

Environment Testing

Project Manager:

Joseph Hernandez

Bill to: (if different) Company Name:

WPX Jim Raley

121314

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

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Work Order Comments

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	ins standard terms and conditions ocircumstances beyond the control enforced unless previously negotiated.	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, but not analyzed. These terms will be enforced unless previously negotiated.	o Eurofins Xe or expenses d to Eurofins	it company t r any losses ple submitte	rom clie sibility fo ach sam	purchase order fi sume any respons charge of \$5 for ea	constitutes a valid s and shall not as: ach project and a	of samples st of sample applied to e	quishment y for the ca 5.00 will be	document and relir co will be liable onl ilmum charge of \$8	votice: Signature of this of service. Eurofins Xen of Eurofins Xenco. A mir
Hg: 1631 / 245.1 / /4/0 / /4/1	Ag TI U Hg: 1631 / 2	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Ba Be C	Sb As	RCR	TCLP / SPLP 6010: 8RCRA	TCLP / S	zed	be analy	nd Metal(s) to	Circle Method(s) and Metal(s) to be analyzed
	Ni K Se A	Cd Ca Cr Co Cu Fe Pb Mg Mn Mo	Ba Be B	Sb As	11 AI	13PPM Texas 11	8RCRA 13		6020:	010 200.8 / 6020:	Total 200.7 / 6010
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Incident ID			×	×	7	4' Comp	12:20	11.18.22	S	2	FS12
			×	×	7	4' Comp	12:10	11.18.22	S		FS11
			×	×	ਰ 1	4' Comp	12:00	11.18.22	S	0	FS10
Sample Comments			TPH (8	CHLO	b/ # of tp Cont	Depth Grab/	Time d Sampled	Date Sampled	Matrix	tification	Sample Identification
Adol Francisco Color Col	- - -	_	_			7	Corrected Temperature:	Corrected			Total Containers:
Zn Acetate+NaOH; Zn		890-3538 Chain of Custody	_		1'	W (S)	N/A Temperature Reading:	Tempera	No N/A	Yes	Sample Custody Seals:
Na ₂ O ₂ O ₃ , Na ₃ O ₃				PA	P	1.0.	n Factor:	N/A Correction Factor:	NO NIA	Yes	Cooler Custody Seals:
NamsO : Naso	2 2			: 300	arai	DAY OF	eter ID:	Thermometer ID:	No	ntact: (Yes)	Samples Received Intact:
H ₃ PO ₄ : HP				0.0)	mete	No No	Wet ice:	Yes No	Temp Blank:		SAMPLE RECEIPT
H ₂ SO ₄ : H ₂ NaOH: Na						the lab, if received by 4:30pm	the lab, if red			9005003893	CC#:
					~	TAT starts the day received by	TAT starts th		0	Gilbert Moreno	Sampler's Name:
0						5 Day TAT	Due Date:		Z	Rural Eddy, NM	Project Location:
	Z				Code	Rush	Routine			03A1987044	Project Number:
ervativ		ANALYSIS REQUEST				Turn Around	Turr		01	LVP SWD #001	Project Name:
Other:	Deliverables: EDD L. ADaPT L.		iim.raley@	um.com.	Enso	Email: jhernandez@Ensolum.com, jim.raley@dvn.com	Email:			281-702-2329	Phone:
OSI IRRP Levelly	Level III		Carlsbad, NM 88220	Carlsbac	.,	City, State ZIP:			88220	Carlsbad, NM 88220	City, State ZIP:
	State of Project:		5315 Buena Vista Dr	5315 Bu		Address:		YW	Parks h	3122 National Parks HWY	Address:
ields RRC Superfund	Program: UST/PST PRP Brownfields RRC Superfund	Progr		WPX	ne:	Company Name:				Ensolum	Company Name:
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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3538-1 SDG Number: 03A1987044

Login Number: 3538 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3538-1 SDG Number: 03A1987044

List Source: Eurofins Midland

List Creation: 11/22/22 11:47 AM

Creator: Rodriguez, Leticia

Login Number: 3538

List Number: 2

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701

Generated 12/1/2022 12:54:07 PM

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER Rural Eddy NM

JOB NUMBER

890-3545-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 12/1/2022 12:54:07 PM

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Page 2 of 21

12/1

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3545-1
SDG: Rural Eddy NM

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Definitions/Glossary

Job ID: 890-3545-1 Client: Ensolum Project/Site: LVP SWD #001

SDG: Rural Eddy NM

Qualifiers

GC VOA

Qualifier **Qualifier Description** MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

S1-Surrogate recovery exceeds control limits, low biased. S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

MCL

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

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

EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3545-1

SDG: Rural Eddy NM

Job ID: 890-3545-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3545-1

Receipt

The sample was received on 11/22/2022 12:58 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: PH01 (890-3545-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-40588 and analytical batch 880-40656 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-40686/5), (LCS 880-40653/2-A) and (LCSD 880-40653/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-3559-A-23-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-40653 and analytical batch 880-40686 was outside the upper control limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-40386 and analytical batch 880-40550 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. The associated sample is: PH01 (890-3545-1).

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

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Matrix: Solid

Lab Sample ID: 890-3545-1

Client Sample Results

Client: Ensolum Job ID: 890-3545-1 Project/Site: LVP SWD #001 SDG: Rural Eddy NM

Client Sample ID: PH01

Date Collected: 11/22/22 12:00 Date Received: 11/22/22 12:58

Sample Depth: 11'

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/29/22 10:58	11/30/22 18:59	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/29/22 10:58	11/30/22 18:59	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/29/22 10:58	11/30/22 18:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/29/22 10:58	11/30/22 18:59	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/29/22 10:58	11/30/22 18:59	,
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/29/22 10:58	11/30/22 18:59	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		70 - 130				11/29/22 10:58	11/30/22 18:59	
1,4-Difluorobenzene (Surr)	108		70 - 130				11/29/22 10:58	11/30/22 18:59	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/01/22 12:55	1
	i Kange Organ	ics (DRO) (GC)						
			•	MDI	Unit	D	Prenared	Analyzed	Dil Fac
Analyte		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 12/01/22 12:06	
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9	MDL		<u>D</u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9 sel Range Orga	Qualifier U	RL 49.9 (GC)		mg/Kg	=	<u> </u>	12/01/22 12:06	
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <49.9 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	(GC)		mg/Kg	<u>D</u>	Prepared	12/01/22 12:06 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)		mg/Kg	=	<u> </u>	12/01/22 12:06	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	(GC)		mg/Kg	=	Prepared	12/01/22 12:06 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9		mg/Kg Unit mg/Kg	=	Prepared 11/30/22 08:30	12/01/22 12:06 Analyzed 11/30/22 21:49	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9		mg/Kg Unit mg/Kg	=	Prepared 11/30/22 08:30	12/01/22 12:06 Analyzed 11/30/22 21:49	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/30/22 08:30 11/30/22 08:30	12/01/22 12:06 Analyzed 11/30/22 21:49 11/30/22 21:49	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/30/22 08:30 11/30/22 08:30 11/30/22 08:30	Analyzed 11/30/22 21:49 11/30/22 21:49	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/30/22 08:30 11/30/22 08:30 11/30/22 08:30 Prepared	12/01/22 12:06 Analyzed 11/30/22 21:49 11/30/22 21:49 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: MCAWW 300.0 - Anions	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier S1- S1-	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130		mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/30/22 08:30 11/30/22 08:30 11/30/22 08:30 Prepared 11/30/22 08:30	12/01/22 12:06 Analyzed 11/30/22 21:49 11/30/22 21:49 Analyzed 11/30/22 21:49	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier S1- S1-	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 11/30/22 08:30 11/30/22 08:30 11/30/22 08:30 Prepared 11/30/22 08:30	12/01/22 12:06 Analyzed 11/30/22 21:49 11/30/22 21:49 Analyzed 11/30/22 21:49	Dil Fac

Surrogate Summary

Client: Ensolum Job ID: 890-3545-1
Project/Site: LVP SWD #001 SDG: Rural Eddy NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Re
		BFB1	DFBZ1	_
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21976-A-1-E MS	Matrix Spike	99	116	
880-21976-A-1-F MSD	Matrix Spike Duplicate	102	120	
890-3545-1	PH01	97	108	
LCS 880-40588/1-A	Lab Control Sample	88	115	
LCSD 880-40588/2-A	Lab Control Sample Dup	92	117	
MB 880-40588/5-A	Method Blank	84	101	
Surrogate Legend				
BFB = 4-Bromofluorobei	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (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)	
890-3545-1	PH01	8 S1-	0.9 S1-	
890-3559-A-23-G MS	Matrix Spike	121	123	
890-3559-A-23-H MSD	Matrix Spike Duplicate	124	126	
LCS 880-40653/2-A	Lab Control Sample	183 S1+	217 S1+	
LCSD 880-40653/3-A	Lab Control Sample Dup	170 S1+	200 S1+	
MB 880-40653/1-A	Method Blank	116	145 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3545-1 Project/Site: LVP SWD #001 SDG: Rural Eddy NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40588/5-A

Analysis Batch: 40656

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40588

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/29/22 10:58	11/30/22 11:46	•
Toluene	<0.00200	U	0.00200		mg/Kg		11/29/22 10:58	11/30/22 11:46	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/29/22 10:58	11/30/22 11:46	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/29/22 10:58	11/30/22 11:46	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/29/22 10:58	11/30/22 11:46	
Xylenes, Total	< 0.00400	U	0.00400		mg/Kg		11/29/22 10:58	11/30/22 11:46	•

MB MB

MD MD

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84	70 - 130	11/29/22 10:58	11/30/22 11:46	1
1,4-Difluorobenzene (Surr)	101	70 - 130	11/29/22 10:58	11/30/22 11:46	1

Lab Sample ID: LCS 880-40588/1-A

Matrix: Solid

Analysis Batch: 40656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40588

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1178		mg/Kg		118	70 - 130	
Toluene	0.100	0.09961		mg/Kg		100	70 - 130	
Ethylbenzene	0.100	0.09377		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	0.200	0.1903		mg/Kg		95	70 - 130	
o-Xylene	0.100	0.09180		mg/Kg		92	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	88	70 - 130
1,4-Difluorobenzene (Surr)	115	70 - 130

Lab Sample ID: LCSD 880-40588/2-A

Matrix: Solid

Analysis Batch: 40656

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 40588

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1187		mg/Kg		119	70 - 130	1	35
Toluene	0.100	0.09880		mg/Kg		99	70 - 130	1	35
Ethylbenzene	0.100	0.09425		mg/Kg		94	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1919		mg/Kg		96	70 - 130	1	35
o-Xylene	0.100	0.09325		mg/Kg		93	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1.4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: 880-21976-A-1-E MS

Matrix: Solid

Analysis Batch: 40656

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

Prep Batch: 40588

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996	0.08295		mg/Kg		83	70 - 130	
Toluene	< 0.00199	U F1	0.0996	0.06828	F1	mg/Kg		68	70 - 130	

Eurofins Carlsbad

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3545-1

SDG: Rural Eddy NM

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

Lab Sample ID: 880-21976-A-1-E MS

Lab Sample ID: 880-21976-A-1-F MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 40656

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40588

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U F1	0.0996	0.06277	F1	mg/Kg		63	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1265	F1	mg/Kg		63	70 - 130	
o-Xylene	<0.00199	U F1	0.0996	0.06159	F1	mg/Kg		61	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	116	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 40588

Analysis Batch: 40656 Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.0996 Benzene <0.00199 U 0.08634 mg/Kg 87 70 - 130 4 35 Toluene 0.0996 0.06778 F1 <0.00199 UF1 mg/Kg 67 70 - 130 35 Ethylbenzene <0.00199 UF1 0.0996 0.06442 F1 mg/Kg 65 70 - 130 35 3 0.199 0.1253 F1 70 - 130 35 m-Xylene & p-Xylene <0.00398 UF1 mg/Kg 63 <0.00199 UF1 0.0996 0.06065 F1 60 70 - 130 2 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

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

Lab Sample ID: MB 880-40653/1-A

Matrix: Solid

Analysis Batch: 40686

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40653

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/30/22 08:30	11/30/22 14:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/30/22 08:30	11/30/22 14:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/30/22 08:30	11/30/22 14:25	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	d Analyzed	d Dil Fac
1-Chlorooctane	116		70 - 130	11/30/22 0	8:30 11/30/22 14	1:25 1
o-Terphenyl	145	S1+	70 - 130	11/30/22 0	8:30 11/30/22 14	1:25 1

Lab Sample ID: LCS 880-40653/2-A

Matrix: Solid

Analysis Batch: 40686

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

Prep Batch: 40653

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	994.8		mg/Kg		99	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1096		mg/Kg		110	70 - 130	
C10-C28)								

Job ID: 890-3545-1

mg/Kg

SDG: Rural Eddy NM

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

Lab Sample ID: LCS 880-40653/2-A

Lab Sample ID: LCSD 880-40653/3-A

Lab Sample ID: 890-3559-A-23-G MS

Matrix: Solid

Matrix: Solid

Client: Ensolum

Analysis Batch: 40686

Diesel Range Organics (Over

Analysis Batch: 40686

Project/Site: LVP SWD #001

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40653

LCS LCS %Recovery Qualifier

Surrogate Limits 1-Chlorooctane 183 S1+ 70 - 130 o-Terphenyl 217 S1+ 70 - 130

Client Sample ID: Lab Control Sample Dup

70 - 130

99

Prep Type: Total/NA

Prep Batch: 40653

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Analysis Batch: 40686 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 834.2 83 70 - 13018 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10

993.6

1000

C10-C28)

Matrix: Solid

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	170	S1+	70 _ 130
o-Terphenyl	200	S1+	70 - 130

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40653

Sample Sample Spike MS MS Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 999 1262 mg/Kg 122 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1256 mg/Kg 122 70 - 130 C10-C28)

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 121 o-Terphenyl 123 70 - 130

Lab Sample ID: 890-3559-A-23-H MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 40686

Prep Type: Total/NA

Prep Batch: 40653

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	997	1183		mg/Kg		114	70 - 130	6	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	997	1325		mg/Kg		129	70 - 130	5	20
C10-C28)											

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	126		70 - 130

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Client: Ensolum

Job ID: 890-3545-1

SDG: Rural Eddy NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40386/1-A

Matrix: Solid

Analysis Batch: 40550

Project/Site: LVP SWD #001

Client Sample ID: Method Blank **Prep Type: Soluble**

MB MB

Dil Fac MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/29/22 09:19

Lab Sample ID: LCS 880-40386/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40550

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 241.4 mg/Kg 97 90 - 110

Lab Sample ID: LCSD 880-40386/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40550

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 242.0 mg/Kg 90 - 110

Lab Sample ID: 890-3551-A-4-A MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40550

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 48.9 249 299.9 101 90 - 110 mg/Kg

Lab Sample ID: 890-3551-A-4-A MSD

Matrix: Solid

Analysis Batch: 40550

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 249 48.9 300.2 mg/Kg 101 90 - 110 0 20

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Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3545-1 SDG: Rural Eddy NM

GC VOA

Prep Batch: 40588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Total/NA	Solid	5035	
MB 880-40588/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40588/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40588/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21976-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-21976-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Total/NA	Solid	8021B	40588
MB 880-40588/5-A	Method Blank	Total/NA	Solid	8021B	40588
LCS 880-40588/1-A	Lab Control Sample	Total/NA	Solid	8021B	40588
LCSD 880-40588/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40588
880-21976-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	40588
880-21976-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40588

Analysis Batch: 40785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 40653

Lab Sample ID 890-3545-1	Client Sample ID PH01	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-40653/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40653/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3559-A-23-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3559-A-23-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Total/NA	Solid	8015B NM	40653
MB 880-40653/1-A	Method Blank	Total/NA	Solid	8015B NM	40653
LCS 880-40653/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40653
LCSD 880-40653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40653
890-3559-A-23-G MS	Matrix Spike	Total/NA	Solid	8015B NM	40653
890-3559-A-23-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40653

Analysis Batch: 40776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40386

Released to Imaging: 5/21/2024 1:54:50 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Soluble	Solid	DI Leach	
MB 880-40386/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40386/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40386/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: LVP SWD #001
Job ID: 890-3545-1
SDG: Rural Eddy NM

HPLC/IC (Continued)

Leach Batch: 40386 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3551-A-4-A MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3551-A-4-A MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3545-1	PH01	Soluble	Solid	300.0	40386
MB 880-40386/1-A	Method Blank	Soluble	Solid	300.0	40386
LCS 880-40386/2-A	Lab Control Sample	Soluble	Solid	300.0	40386
LCSD 880-40386/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40386
890-3551-A-4-A MS	Matrix Spike	Soluble	Solid	300.0	40386
890-3551-A-4-A MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	40386

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Lab Chronicle

Client: Ensolum Job ID: 890-3545-1 Project/Site: LVP SWD #001 SDG: Rural Eddy NM

Lab Sample ID: 890-3545-1 **Client Sample ID: PH01** Date Collected: 11/22/22 12:00

Matrix: Solid

Date Received: 11/22/22 12:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40588	11/29/22 10:58	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40656	11/30/22 18:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40785	12/01/22 12:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			40776	12/01/22 12:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40653	11/30/22 08:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40686	11/30/22 21:49	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40386	11/28/22 08:56	СН	EET MID
Soluble	Analysis	300.0		1			40550	11/29/22 10:32	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: LVP SWD #001
Job ID: 890-3545-1
SDG: Rural Eddy NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v
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Method Description

Total BTEX Calculation

Microextraction

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

Method Summary

Client: Ensolum

Method

8021B

Total BTEX

8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Project/Site: LVP SWD #001

Job ID: 890-3545-1

SDG: Rural Eddy NM

Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID
MCAWW	EET MID
SW846	EET MID

EET MID

EET MID

SW846

ASTM

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3545-1

SDG: Rural Eddy NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3545-1	PH01	Solid	11/22/22 12:00	11/22/22 12:58	11'

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www.xenco.com

Work Order No:

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (805) 794-1296 Hobbs, NM (575) 392-7550, Carisbad, NM (575) 988-3199

Environment Testing

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Xenco

Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300 Chain of Custody

							-					
Project Manager:	Joseph Hernandez	dez			Bill to: (if different)	different)	흥	Jim Raley		Work Order Comments	Comments	T
Company Name:	Ensolum				Company Name:	/ Name:	3	WPX		Program: UST/PST PRP Brow	□ PRP □ Brownfields □ RRC □ Superfund □	
Address:	3122 National Parks HWY	arks H	IWY		Address:		53	5315 Buena Vista Dr	sta Dr.	State of Project:		ſ
City, State ZIP:	Carlsbad, NM 88220	8220			City, State ZIP:	e ZIP:	Ö	Carlsbad, NM 88220	88220	vel III		7
Phone:	281-702-2329			Email	: ihernan	lez@En	millos	com jim ra	Email: jhernandez@Ensolum.com_jim.raley@dvn.com	Deliverables: EDB L ADaP	ADaPT C Other:	
Project Name:	LVP SWD #001			Tur	Turn Around				ANALYSIS	ANALYSIS REQUEST	Preservative Codes	
Project Number:	03A1987044			☑ Routine	Rush		Pres. Code				None: NO DI Water: H ₂ O	0
Project Location:	Rural Eddy, NM			Due Date:	5 Day TAT						_	
Sampler's Name:	Gilbert Moreno			TAT starts the day received by	ne day rece	ved by			_			
CC#:	9005003893			the lab, if received by 4:30pm	ceived by 4	30pm	SJE				H ₂ S0 ₄ : H ₂ NaOH: Na	
SAMPLE RECEIPT	IPT Temp Blank:	lank:	(Kes) No	Wet Ice:	(Yes)	o _N	nete	10:			H ₃ PO ₄ : HP	
Samples Received Intact:	Zes.	2	Thermometer ID:	er ID:	121	Mood		200			NaHSO4: NABIS	
Cooler Custody Seals:	۶	E E	Correction Factor:	-actor:	0	0					Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	als: Yes No	NA	Temperature Reading:	e Reading:	-	0			890-3545 Chain of Custody	ustody	Zn Acetate+NaOH: Zn	
Total Containers:				Corrected Temperature:	-	D	-	(31			NaOH+Ascorbic Acid: SAPC	
Sample Identification		Matrix	Date Sampled	Time	Depth	Grab/	Cont	яолно 08) нат	8) X318		Sample Comments	
PH01	11	S	11.22.22	12:00	=======================================	Grab/	-	×	×			
							_					
					L.		1	1			Incident ID	
					,						nAPP2135033453	
			22	22								
		1					_					
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							-					
Total 200.7 / 6010	010 200.8 / 6020	020:	3	BRCRA 13	13PPM Te	exas 11	Al Sb	Sb As Ba Be	B Cd Ca Cr Co	Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 N	Na Sr Tl Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed	ind Metal(s) to be	e analy.	zed	TCLP /	TCLP / SPLP 6010: 8RCRA	0: 8RC	3A Sb	As Ba	Be Cd Cr Co Cu Pb Mn Mo Ni	Se Ag TI U	Hg: 1631 / 245.1 / 7470 / 7471	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of	document and relinquico will be liable only for nimum charge of \$85.0	uishment or the cor	of samples co st of samples a applied to eac	nstitutes a valid ind shall not as h project and a	d purchase ossume any recharge of \$	rder from c sponsibility 5 for each s	ient con for any	ipany to Eurofi losses or expe ibmitted to Eur	ns Xenco, its affiliates and subcont nses incurred by the client if such I ofins Xenco, but not analyzed. Thei	order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	d.	
Relinquist/ed by: (Signature)	y: (Signature)	(Receive	Reçeived by: (Signature)	nature)			Date/Time	Relinquished by: (Signature)	ignature) Received by: (Signature)	ure) Date/Time	
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Carlsbad NM 88220 Phone 575-988-3199 Fax: 575-988-3199

State Zip TX, 79701

Midland

Eurofins Carlsbad

1089 N Canal St.

Chain of Custody Record

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Environment Testing

Project Name LVP SWD #001 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. Empty Kit Relinquished by Deliverable Requested I II III IV Other (specify) PH01 (890-3545-1) hone: 432-704-5440(Tel) 1211 W Florida Ave, Eurofins Environment Testing South Centr Client Information (Sub Contract Lab) Possible Hazard Identification elinquished by sample Identification - Client ID (Lab ID elinquished by elinquished by: hipping/Receiving Custody Seals Intact. Yes A No F Custody Seal No Project #: 89000084 WO# Due Date Requested Primary Deliverable Rank PO# Phone Date/Time FAT Requested (days): 11/30/2022 Sample Date 11/22/22 Date Mountair Sample 1200 (C=comp, G=grab) Sample Preservation Code: Type Company Company Company {W=water S=solid, O=waste/oil, BT=Tissue, Jessica Kramer@et.eurofinsus com Kramer Jessica E-Mail Field Filtered Sample (Yes or No) Time NELAP - Texas Accreditations Required (See note) Perform MS/MSD (Yes or No) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Special Instructions/QC Requirements Recel/Fed by × Cooler Temperature(s) °C and Other Remarks B015MOD_NM/8015NM_S_Prep Full TPH × 300_ORGFM_28D/DI_LEACH Chloride 8021B/5035FP_Calc BTEX Analysis Requested Total_BTEX_GCV State of Origin
New Mexico Carrier Tracking No(s) Method of Shipment Date/Time S 4 **Total Number of containers** A HCL
B NaOH
C Natric Acid
E NaHSO4
F MeOH
H Ascorbic Acid COC No: 890-1040 1 Preservation Codes Page 1 of 1 lce
J DI Water
K EDTA
L-EDA 890-3545-1 134 Special Instructions/Note v MCA^ N≺≷ Company Company Company V pH 4-5 other (specify) Months Page 19 of 21

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3545-1

SDG Number: Rural Eddy NM

List Source: Eurofins Carlsbad

List Number: 1

Login Number: 3545

Creator: Stutzman, Amanda

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3545-1 SDG Number: Rural Eddy NM

Login Number: 3545 List Source: Eurofins Midland List Number: 2

List Creation: 11/23/22 11:54 AM

Creator: Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701

JOB DESCRIPTION

Generated 12/1/2022 12:59:13 PM

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3510-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of

Page 2 of 25 12/1/2022 Released to Imaging: 5/21/2024 1:54:50 PM

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3510-1
SDG: 03A1987044

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Definitions/Glossary

Client: Ensolum Job ID: 890-3510-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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.

Glossarv

QC

RER

RPD

TEF

TEQ

TNTC

RL

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
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

Eurofins Carlsbad

Quality Control

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

Case Narrative

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3510-1

SDG: 03A1987044

Job ID: 890-3510-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3510-1

Receipt

The samples were received on 11/17/2022 3:53 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS06 (890-3510-1), FS07 (890-3510-2), FS08 (890-3510-3) and FS09 (890-3510-4).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-40436 and analytical batch 880-40689 was outside the control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-40719 and analytical batch 880-40689 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS06 (890-3510-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD NM: The surrogate recovery for the blank associated with preparation batch 880-40341 and analytical batch 880-40260 was outside the upper control limits.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40341/2-A) and (LCSD 880-40341/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3498-A-1-B) and (890-3498-A-1-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: FS07 (890-3510-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: FS09 (890-3510-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: The method blank for preparation batch 880-40341 and analytical batch 880-40260 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD NM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-40341 and analytical batch 880-40260 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

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-40006 and analytical

Case Narrative

Client: Ensolum Job ID: 890-3510-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Job ID: 890-3510-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

batch 880-40248 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. The associated samples are: FS06 (890-3510-1), FS07 (890-3510-2), FS08 (890-3510-3), FS09 (890-3510-4), (890-3507-A-1-A), (890-3507-A-1-B MS) and (890-3507-A-1-C MSD).

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

Matrix: Solid

Lab Sample ID: 890-3510-1

Client: Ensolum Job ID: 890-3510-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS06

Date Collected: 11/17/22 10:30 Date Received: 11/17/22 15:53

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/30/22 15:10	12/01/22 09:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/30/22 15:10	12/01/22 09:46	1
Ethylbenzene	0.00403		0.00200		mg/Kg		11/30/22 15:10	12/01/22 09:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/30/22 15:10	12/01/22 09:46	1
o-Xylene	0.119		0.00200		mg/Kg		11/30/22 15:10	12/01/22 09:46	1
Xylenes, Total	0.119		0.00400		mg/Kg		11/30/22 15:10	12/01/22 09:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130				11/30/22 15:10	12/01/22 09:46	1
1,4-Difluorobenzene (Surr)	115		70 - 130				11/30/22 15:10	12/01/22 09:46	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.123		0.00400		mg/Kg			12/01/22 13:21	1
Method: SW846 8015 NM - Diese			•	MDI	11-14	_	Downson	Austral	D!! F
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/22 12:39	1
Method: SW846 8015B NM - Dies			(GC)						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/23/22 14:58	11/24/22 02:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 14:58	11/24/22 02:31	
U10-U201									1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 14:58	11/24/22 02:31	
,	<50.0 %Recovery		50.0 <i>Limits</i>		mg/Kg		11/23/22 14:58 Prepared	11/24/22 02:31 Analyzed	1
Oll Range Organics (Over C28-C36)					mg/Kg				Dil Fac
Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	%Recovery		Limits		mg/Kg		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 108 114	Qualifier	Limits 70 - 130 70 - 130		mg/Kg		Prepared 11/23/22 14:58	Analyzed 11/24/22 02:31	1 Dil Fac
Oll Range Organics (Over C28-C36) Surrogate	%Recovery 108 114 s, lon Chromato	Qualifier	Limits 70 - 130 70 - 130	MDL		<u>D</u> _	Prepared 11/23/22 14:58	Analyzed 11/24/22 02:31	Dil Fac

Client Sample ID: FS07

Date Collected: 11/17/22 11:00

Date Received: 11/17/22 15:53

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/30/22 15:10	12/01/22 10:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/30/22 15:10	12/01/22 10:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/30/22 15:10	12/01/22 10:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/30/22 15:10	12/01/22 10:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/30/22 15:10	12/01/22 10:12	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/30/22 15:10	12/01/22 10:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				11/30/22 15:10	12/01/22 10:12	1

Eurofins Carlsbad

Lab Sample ID: 890-3510-2

Matrix: Solid

Sample Depth: 4

Job ID: 890-3510-1

Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS07 Lab Sample ID: 890-3510-2

Date Collected: 11/17/22 11:00 Matrix: Solid Date Received: 11/17/22 15:53

Method: SW846 8021B -	Volatile Organic Com	nounds (GC)	(Continued)
WELLIOU. SYVONO OUZ ID -	Voiatile Organic Com	poullus (GC)	(Continueu)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	100	70 - 130	11/30/22 15:10	12/01/22 10:12	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/01/22 13:21	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac		

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	57.1	49.9	mg/Kg	 		11/28/22 12:39	1

	Method: SW846 8015B NM - Diesel	Range Orga	nics (DRO) (GC)						
1	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics GRO)-C6-C10	57.1		49.9		mg/Kg		11/23/22 14:58	11/24/22 02:53	1
Ċ	Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/23/22 14:58	11/24/22 02:53	1
	Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/23/22 14:58	11/24/22 02:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	11/23/22 14:58	11/24/22 02:53	1
o-Terphenyl	131	S1+	70 - 130	11/23/22 14:58	11/24/22 02:53	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12800		99.2		mg/Kg			11/23/22 06:57	20

Client Sample ID: FS08 Lab Sample ID: 890-3510-3 Matrix: Solid

Date Collected: 11/17/22 11:30 Date Received: 11/17/22 15:53

Sample Depth: 4

 Mathad.	CIMO 4C	0024D	Valatila Ossania	Compounds (GC)
viernoa:	SVVA4n	AUZID .	· voiatile Organic	: Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/30/22 15:10	12/01/22 10:37	1
Toluene	< 0.00199	U	0.00199		mg/Kg		11/30/22 15:10	12/01/22 10:37	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		11/30/22 15:10	12/01/22 10:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/30/22 15:10	12/01/22 10:37	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/30/22 15:10	12/01/22 10:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/30/22 15:10	12/01/22 10:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				11/30/22 15:10	12/01/22 10:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	11/30/22 15:10	12/01/22 10:37	1
1,4-Difluorobenzene (Surr)	89		70 - 130	11/30/22 15:10	12/01/22 10:37	1

Method: TAL SOP Total BTEX	- Total BTEX Calculation						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

Total BTEX	<0.00398 U	0.00398	mg/Kg	12/01/22 13:21
_				

Method: SW846 8015 NM - Diesel F	Range Organics (DRO) (GC	;)					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	ma/Ka			11/28/22 12:39	1

Client Sample Results

Job ID: 890-3510-1 Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS08

Date Collected: 11/17/22 11:30 Date Received: 11/17/22 15:53

Sample Depth: 4

Lab Sample ID: 890-3510-3

Analyzed

11/23/22 07:02

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier MDL Dil Fac Analyte RL Unit D Prepared Analyzed <50.0 U 50.0 11/24/22 03:14 Gasoline Range Organics mg/Kg 11/23/22 14:58 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 11/23/22 14:58 11/24/22 03:14 mg/Kg C10-C28) mg/Kg Oll Range Organics (Over C28-C36) <50.0 U 50.0 11/23/22 14:58 11/24/22 03:14 %Recovery Qualifier Limits Dil Fac Prepared Analyzed Surrogate 70 - 130 1-Chlorooctane 11/23/22 14:58 11/24/22 03:14 110 o-Terphenyl 115 70 - 130 11/23/22 14:58 11/24/22 03:14 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Client Sample ID: FS09

Date Received: 11/17/22 15:53

Lab Sample ID: 890-3510-4 Date Collected: 11/17/22 12:00 Matrix: Solid

RL

50.0

Result Qualifier

9190

mg/Kg

D

Prepared

MDL Unit

Sample Depth: 4

Analyte

Chloride

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <0.00199 U 0.00199 11/30/22 15:10 12/01/22 11:03 Benzene mg/Kg 0.00199 12/01/22 11:03 Toluene <0.00199 U mg/Kg 11/30/22 15:10 Ethylbenzene 0.00199 11/30/22 15:10 12/01/22 11:03 <0.00199 U mg/Kg <0.00398 U 0.00398 11/30/22 15:10 12/01/22 11:03 m-Xylene & p-Xylene mg/Kg 11/30/22 15:10 12/01/22 11:03 o-Xylene <0.00199 U 0.00199 mg/Kg Xylenes, Total <0.00398 U 0.00398 mg/Kg 11/30/22 15:10 12/01/22 11:03 %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 4-Bromofluorobenzene (Surr) 106 70 - 130 11/30/22 15:10 12/01/22 11:03 100 1,4-Difluorobenzene (Surr) 70 - 130 11/30/22 15:10 12/01/22 11:03

Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte Result Qualifier MDL Unit D Prepared Analyzed Dil Fac <0.00398 Total BTEX 0.00398 12/01/22 13:21 mg/Kg

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <50.0 50.0 11/28/22 12:39 mg/Kg

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 11/23/22 14:58 11/24/22 03:35 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/23/22 14:58 11/24/22 03:35 C10-C28) 11/24/22 03:35 OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/23/22 14:58

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 70 - 130 11/23/22 14:58 1-Chlorooctane 130 11/24/22 03:35 o-Terphenyl 132 S1+ 70 - 130 11/23/22 14:58 11/24/22 03:35

Eurofins Carlsbad

Dil Fac

Client Sample Results

 Client: Ensolum
 Job ID: 890-3510-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Client Sample ID: FS09

Lab Sample ID: 890-3510-4

Date Collected: 11/17/22 12:00

Matrix: Solid

Date Collected: 11/17/22 12:00
Date Received: 11/17/22 15:53

Sample Depth: 4

Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - So	luble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5790		49.9		mg/Kg			11/23/22 07:08	10

4

5

7

9

11

16

14

Surrogate Summary

Job ID: 890-3510-1 Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21907-A-2-D MS	Matrix Spike	118	109	
880-21907-A-2-E MSD	Matrix Spike Duplicate	100	101	
890-3510-1	FS06	136 S1+	115	
890-3510-2	FS07	118	100	
890-3510-3	FS08	93	89	
890-3510-4	FS09	106	100	
LCS 880-40719/1-A	Lab Control Sample	110	111	
LCSD 880-40719/2-A	Lab Control Sample Dup	100	88	
MB 880-40436/5-A	Method Blank	66 S1-	95	
MB 880-40719/5-A	Method Blank	65 S1-	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)
		1CO1	OTPH1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-3498-A-1-C MS	Matrix Spike	131 S1+	128	
390-3498-A-1-D MSD	Matrix Spike Duplicate	118	118	
390-3510-1	FS06	108	114	
390-3510-2	FS07	127	131 S1+	
390-3510-3	FS08	110	115	
390-3510-4	FS09	130	132 S1+	
_CS 880-40341/2-A	Lab Control Sample	126	141 S1+	
_CSD 880-40341/3-A	Lab Control Sample Dup	122	136 S1+	
MB 880-40341/1-A	Method Blank	140 S1+	149 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3510-1 SDG: 03A1987044 Project/Site: LVP SWD #001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40436/5-A

Matrix: Solid Analysis Batch: 40689 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40436

1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 11:21	11/30/22 17:06	•
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 11:21	11/30/22 17:06	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 11:21	11/30/22 17:06	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 11:21	11/30/22 17:06	
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 11:21	11/30/22 17:06	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 11:21	11/30/22 17:06	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130	11/28/22 11:21	11/30/22 17:06	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/28/22 11:21	11/30/22 17:06	1

Lab Sample ID: MB 880-40719/5-A

Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA Analysis Batch: 40689 Prep Batch: 40719 MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/30/22 15:10	12/01/22 06:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/30/22 15:10	12/01/22 06:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/30/22 15:10	12/01/22 06:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/30/22 15:10	12/01/22 06:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/30/22 15:10	12/01/22 06:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/30/22 15:10	12/01/22 06:43	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	11/30/22 15:	10 12/01/22 06:43	1
1,4-Difluorobenzene (Surr)	93		70 - 130	11/30/22 15:	10 12/01/22 06:43	1

Lab Sample ID: LCS 880-40719/1-A

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40719

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1191		mg/Kg		119	70 - 130	
Toluene	0.100	0.1118		mg/Kg		112	70 - 130	
Ethylbenzene	0.100	0.09618		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.1982		mg/Kg		99	70 - 130	
o-Xylene	0.100	0.1060		mg/Kg		106	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	111	70 - 130

Lab Sample ID: LCSD 880-40719/2-A

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Lab	Control Sample Dup
	D T T (1014

Prep Type: Total/NA

Prep Batch: 40719

	Бріке	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1094	mg/Kg	_	109	70 - 130	8	35

QC Sample Results

Client: Ensolum Job ID: 890-3510-1 SDG: 03A1987044 Project/Site: LVP SWD #001

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

Lab Sample ID: LCSD 880-40719/2-A

Matrix: Solid Analysis Batch: 40689 **Client Sample ID: Lab Control Sample Dup**

Prep Type: Total/NA Prep Batch: 40719

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1122		mg/Kg		112	70 - 130	0	35
Ethylbenzene	0.100	0.09879		mg/Kg		99	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1997		mg/Kg		100	70 - 130	1	35
o-Xylene	0.100	0.1042		mg/Kg		104	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-21907-A-2-D MS

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40719

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00201	U	0.101	0.1014		mg/Kg		101	70 - 130
Toluene	<0.00201	U	0.101	0.1069		mg/Kg		106	70 - 130
Ethylbenzene	<0.00201	U	0.101	0.09371		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1867		mg/Kg		93	70 - 130
o-Xylene	<0.00201	U	0.101	0.09637		mg/Kg		96	70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	118	70 - 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: 880-21907-A-2-E MSD

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 40719

		Sample	Sample	Spike	MSD	MSD				%Rec		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Benzene	<0.00201	U	0.0994	0.09568		mg/Kg		96	70 - 130	6	35
	Toluene	<0.00201	U	0.0994	0.09428		mg/Kg		95	70 - 130	13	35
	Ethylbenzene	<0.00201	U	0.0994	0.08668		mg/Kg		87	70 - 130	8	35
	m-Xylene & p-Xylene	<0.00402	U	0.199	0.1655		mg/Kg		83	70 - 130	12	35
	o-Xylene	<0.00201	U	0.0994	0.1073		mg/Kg		108	70 - 130	11	35
ı												

MSD MSD

Surroyate	76Recovery	Qualifier	LIIIIII
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-40341/1-A

Matrix: Solid

Analysis Batch: 40260

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40341

l		MB	МВ						
	Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/23/22 14:58	11/23/22 20:46	1

(GRO)-C6-C10

Client: Ensolum Job ID: 890-3510-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: MB 880-40341/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 40260 Prep Batch: 40341

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 14:58	11/23/22 20:46	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 14:58	11/23/22 20:46	1
	МВ	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130				11/23/22 14:58	11/23/22 20:46	1
o-Terphenyl	149	S1+	70 - 130				11/23/22 14:58	11/23/22 20:46	1

Lab Sample ID: LCS 880-40341/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 40260 Prep Batch: 40341 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 981.4 98 70 - 130 mg/Kg (GRO)-C6-C10 1000 1013 Diesel Range Organics (Over mg/Kg 101 70 - 130 C10-C28) LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 126 o-Terphenyl 141 S1+ 70 - 130

Lab Sample ID: LCSD 880-40341/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 40260 Prep Batch: 40341 Spike LCSD LCSD %Rec RPD Analyto

Analyte		Added	i Result	Qualitier Uni	τ υ	%Rec	Limits	RPD	Limit
Gasoline Range Organics		1000	1015	mg	Kg	101	70 - 130	3	20
(GRO)-C6-C10									
Diesel Range Organics (Over		1000	978.2	mg/	′Kg	98	70 - 130	3	20
C10-C28)									
	LCSD L	Cen							
	LUSD L	.C3 <i>D</i>							

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	136	S1+	70 - 130

Lab Sample ID: 890-3498-A-1-C MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 40260 Prep Batch: 40341

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F2	997	1247		mg/Kg		121	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1161		mg/Kg		116	70 - 130	
	MS	MS								

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	131	S1+	70 - 130
o-Terphenyl	128		70 - 130

Client: Ensolum Job ID: 890-3510-1 Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 890-3498-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Analysis Batch: 40260 Prep Type: Total/NA Prep Batch: 40341

Sample Sample Spike MSD MSD RPD Result Qualifier Limit Analyte Added Result Qualifier Unit %Rec Limits RPD Gasoline Range Organics <49.8 U F2 996 924.4 F2 mg/Kg 89 70 - 130 30 20 (GRO)-C6-C10 996 Diesel Range Organics (Over <49.8 U 1069 mg/Kg 107 70 - 130 8

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	118		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40006/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40248

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/23/22 05:43	1

Lab Sample ID: LCS 880-40006/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40248

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	264.7		mg/Kg		106	90 - 110	

Lab Sample ID: LCSD 880-40006/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40248

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	262.7		mg/Kg	_	105	90 - 110	1	20	

Lab Sample ID: 890-3507-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40248

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	716	F1	250	938.8	F1	ma/Ka		89	90 110	

Lab Sample ID: 890-3507-A-1-C MSD

Matrix: Solid

Analysis Batch: 40248

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	716	F1	250	935.8	F1	mg/Kg		88	90 - 110	0	20

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Prep Type: Soluble

Client Sample ID: Matrix Spike Duplicate

QC Association Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3510-1

SDG: 03A1987044

GC VOA

Prep Batch: 40436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40436/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 40689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Total/NA	Solid	8021B	40719
890-3510-2	FS07	Total/NA	Solid	8021B	40719
890-3510-3	FS08	Total/NA	Solid	8021B	40719
890-3510-4	FS09	Total/NA	Solid	8021B	40719
MB 880-40436/5-A	Method Blank	Total/NA	Solid	8021B	40436
MB 880-40719/5-A	Method Blank	Total/NA	Solid	8021B	40719
LCS 880-40719/1-A	Lab Control Sample	Total/NA	Solid	8021B	40719
LCSD 880-40719/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40719
880-21907-A-2-D MS	Matrix Spike	Total/NA	Solid	8021B	40719
880-21907-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40719

Prep Batch: 40719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Total/NA	Solid	5035	_
890-3510-2	FS07	Total/NA	Solid	5035	
890-3510-3	FS08	Total/NA	Solid	5035	
890-3510-4	FS09	Total/NA	Solid	5035	
MB 880-40719/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40719/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40719/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21907-A-2-D MS	Matrix Spike	Total/NA	Solid	5035	
880-21907-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Total/NA	Solid	Total BTEX	
890-3510-2	FS07	Total/NA	Solid	Total BTEX	
890-3510-3	FS08	Total/NA	Solid	Total BTEX	
890-3510-4	FS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Total/NA	Solid	8015B NM	40341
890-3510-2	FS07	Total/NA	Solid	8015B NM	40341
890-3510-3	FS08	Total/NA	Solid	8015B NM	40341
890-3510-4	FS09	Total/NA	Solid	8015B NM	40341
MB 880-40341/1-A	Method Blank	Total/NA	Solid	8015B NM	40341
LCS 880-40341/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40341
LCSD 880-40341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40341
890-3498-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40341
890-3498-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40341

Prep Batch: 40341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Total/NA	Solid	8015NM Prep	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3510-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC Semi VOA (Continued)

Prep Batch: 40341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-2	FS07	Total/NA	Solid	8015NM Prep	
890-3510-3	FS08	Total/NA	Solid	8015NM Prep	
890-3510-4	FS09	Total/NA	Solid	8015NM Prep	
MB 880-40341/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40341/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3498-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3498-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Total/NA	Solid	8015 NM	
890-3510-2	FS07	Total/NA	Solid	8015 NM	
890-3510-3	FS08	Total/NA	Solid	8015 NM	
890-3510-4	FS09	Total/NA	Solid	8015 NM	

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Leach Batch: 40006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Soluble	Solid	DI Leach	
890-3510-2	FS07	Soluble	Solid	DI Leach	
890-3510-3	FS08	Soluble	Solid	DI Leach	
890-3510-4	FS09	Soluble	Solid	DI Leach	
MB 880-40006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3507-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3507-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3510-1	FS06	Soluble	Solid	300.0	40006
890-3510-2	FS07	Soluble	Solid	300.0	40006
890-3510-3	FS08	Soluble	Solid	300.0	40006
890-3510-4	FS09	Soluble	Solid	300.0	40006
MB 880-40006/1-A	Method Blank	Soluble	Solid	300.0	40006
LCS 880-40006/2-A	Lab Control Sample	Soluble	Solid	300.0	40006
LCSD 880-40006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40006
890-3507-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	40006
890-3507-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	40006

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SDG: 03A1987044

Client Sample ID: FS06

Project/Site: LVP SWD #001

Client: Ensolum

Lab Sample ID: 890-3510-1

Matrix: Solid

Date Collected: 11/17/22 10:30 Date Received: 11/17/22 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	40719	11/30/22 15:10	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40689	12/01/22 09:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40800	12/01/22 13:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			40461	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 02:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	40006	11/20/22 12:14	СН	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40248	11/23/22 06:51	SMC	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-3510-2 Matrix: Solid

Date Collected: 11/17/22 11:00

Date Received: 11/17/22 15:53

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.96 g 5 mL 40719 11/30/22 15:10 EL EET MID Total/NA 8021B 5 mL 12/01/22 10:12 **EET MID** Analysis 1 5 mL 40689 MNR Total/NA Total BTEX 40800 12/01/22 13:21 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 40461 11/28/22 12:39 SM **EET MID** Total/NA Prep 8015NM Prep 10.02 g 10 mL 40341 11/23/22 14:58 EET MID AM Total/NA Analysis 8015B NM 1 uL 1 uL 40260 11/24/22 02:53 SM **EET MID** Soluble Leach DI Leach 5.04 g 50 mL 40006 11/20/22 12:14 CH **EET MID** Soluble Analysis 300.0 20 50 mL 50 mL 40248 11/23/22 06:57 SMC **EET MID**

Client Sample ID: FS08 Lab Sample ID: 890-3510-3 Date Collected: 11/17/22 11:30 **Matrix: Solid**

Date Received: 11/17/22 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40719	11/30/22 15:10	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40689	12/01/22 10:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40800	12/01/22 13:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			40461	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 03:14	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40248	11/23/22 07:02	SMC	EET MID

Lab Sample ID: 890-3510-4 **Client Sample ID: FS09**

Date Collected: 11/17/22 12:00 Date Received: 11/17/22 15:53

Γ	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40719	11/30/22 15:10	EL EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40689	12/01/22 11:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40800	12/01/22 13:21	SM	EET MID

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Matrix: Solid

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Lab Chronicle

Client: Ensolum Job ID: 890-3510-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: FS09 Lab Sample ID: 890-3510-4 Date Collected: 11/17/22 12:00

Matrix: Solid

Date Received: 11/17/22 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			40461	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40341	11/23/22 14:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/24/22 03:35	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40248	11/23/22 07:08	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3510-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v
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Method Summary

 Client: Ensolum
 Job ID: 890-3510-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3510-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3510-1	FS06	Solid	11/17/22 10:30	11/17/22 15:53	4
890-3510-2	FS07	Solid	11/17/22 11:00	11/17/22 15:53	4
890-3510-3	FS08	Solid	11/17/22 11:30	11/17/22 15:53	4
890-3510-4	FS09	Solid	11/17/22 12:00	11/17/22 15:53	4

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Environment Testing

Xenco

Project Number: Project Location:

Rural Eddy, NM 03A1987044

Due Date: ✓ Routine Project Name:

LVP SWD #00

Turn Around

Rush 5 Day TAT

Pres. Code

ANALYSIS REQUEST

City, State ZIP: Address:

281-702-2329 Carlsbad, NM 88220

Email: | jhernandez@Ensolum.com, jim.raley@dvn.com

City, State ZIP:

Carlsbad, NM 88220 5315 Buena Vista Dr

Reporting: Level III Level III PST/UST TRRP

ADaPT []

Other:

Level IV

None: NO

DI Water: H₂O

Preservative Codes

State of Project:

|Program: UST/PST 🗌 PRP 🗌 Brownfields 🗌 RRC 🔲 Superfund 🗌 **Work Order Comments**

Deliverables: EDD

Company Name: Bill to: (if different)

WPX

Jim Raley

Project Manager:

Joseph Hernandez

Company Name:

Ensolum

3122 National Parks HWY

Chain of Custody

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 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

www.xenco.com	Work Order No:
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	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	me	Date/Time		е)	Received by: (Signature	Received	>	nature)	Relinquished by: (Signature)	Relinqu
		contractors. It assigns standard terms and conditions uch losses are due to circumstances beyond the control These terms will be enforced unless previously negotiated.	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 negotiat	Eurofins Xe or expenses to Eurofins	company to iny losses e submitted	m client illty for a h sample	hase order fro any responsit ge of \$5 for eac	titutes a valid puro d shall not assume project and a char	f samples cons of samples and pplied to each	ishment o or the cost o will be a	ent and relinque e liable only for harge of \$85.0	re of this docum ofins Xenco will I Ico. A minimum (Notice: Signat of service. Eu of Eurofins Xe
	470 / 7471	Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr ii Sn O V Zn No Ni Se Ag TI U Hg: 1631/245.1/7470/7471	Cd Ca Cr Co Cu Fe	Ba Be B s Ba Be C	Sb As E	1 Al CRA	/ Texas 11 P 6010: 8RC	8RCRA 13PPM TCLP / SPLP)20: analyz	200.8 / 6020: tal(s) to be an	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 2 Circle Metl
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	nAPP2135033453	nA		×	×		Comp	12:00 4'	11.17.22	S		FS09	
	Incident ID			×	×	_	Comp	11:30 4'	11.17.22	S		FS08	
				×	×	_	Comp	11:00 4'	11.17.22	S		FS07	
				×	×		Comp	10:30 4'	11.17.22	S		FS06	
	Sample Comments	San		TPH (8	CHLO	# of	Depth Comp	Time D	Date Sampled	Matrix		Sample Identification	San
	NaUH+Ascorbic Acid: SAPC	NaCH+As					0	mperature:	Corrected Temperature:			ners:	Total Containers:
	Zn Acetate+NaOH: Zn		890-3510 Chain of Custody		_		3	Reading:	Temperature Reading:	(NA	Yes No	tody Seals:	Sample Custody Seals:
	NaSO ₃				PA:	Pa	9.0		Correction Factor	MA	Yes No	ody Seals:	Cooler Custody Seals:
	NABIS	NaHSC4: NABIS			300	arar	FORMU		Thermometer ID:	No)	Yes	Samples Received Intact:	Samples Re
	70	H ₃ PO ₄ : HP			0.0)	nete	No No	Wet Ice:	(es) No		Temp Blank:	RECEIPT	SAMPLE RECEIPT
	NaOH: Na	H ₂ SO ₄ : H ₂				ers	4:30pm	the lab, if received by 4:30pm)		9005003893		CC#
	HNO ₃ : HN	HCL: HC			_		y received by	TAT starts the day received by			Gilbert Moreno		Sampler's Name
		Cool: Cool					5 Day TAT	Due Date: 5			Rural Eddy, NM		Project Location:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3510-1 SDG Number: 03A1987044

Login Number: 3510 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3510-1

SDG Number: 03A1987044

Login Number: 3510
List Source: Eurofins Midland
List Number: 2
List Creation: 11/21/22 08:46 AM

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

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<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 12/21/2022 2:00:52 PM Revision 1

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3482-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 12/21/2022 2:00:52 PM

Authorized for release by Holly Taylor, Project Manager Holly.Taylor@et.eurofinsus.com Designee for Jessica Kramer, Project Manager Jessica.Kramer@et.eurofinsus.com (432)704-5440

Revision 1

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3482-1
SDG: 03A1987044

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Definitions/Glossary

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

4 MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable.

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid **CFU** Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

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

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RI Reporting Limit or Requested Limit (Radiochemistry)

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

Toxicity Equivalent Factor (Dioxin) TEF **TEQ** Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3482-1

SDG: 03A1987044

Job ID: 890-3482-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3482-1

Revision

The report being provided is a revision of the original report sent on 11/28/2022. The report (revision 1) is being revised to change the depth of sampling fro 0-6' to 0-5' per Gilbert Moreno. A revised COC was provided (email).

Receipt

The sample was received on 11/15/2022 3:23 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW01 (890-3482-1).

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

GC Semi VOA

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (880-21689-A-4-B). Evidence of matrix interference is present: therefore, re-extraction and/or re-analysis was not performed.

Method 8015B NM: The method blank for preparation batch 880-40184 and analytical batch 880-40168 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39829 and analytical batch 880-40152 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.

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Ensolum Job ID: 890-3482-1

Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: SW01 Lab Sample ID: 890-3482-1 Date Collected: 11/15/22 12:30 **Matrix: Solid** Date Received: 11/15/22 15:23

Sample Depth: 0 - 5

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Ethylbenzene	< 0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
n-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Kylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/22 17:45	11/23/22 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Bromofluorobenzene (Surr)	98		70 - 130				11/22/22 17:45	11/23/22 18:12	1
1,4-Difluorobenzene (Surr)	98		70 - 130				11/22/22 17:45	11/23/22 18:12	1
Method: TAL SOP Total BTEX	: Total BTE	X Calculat	ion						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/28/22 16:23	1
Method: SW846 8015 NM - Di	esel Range	Organics (DRO) (GC)						
Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/23/22 11:46	1
Method: SW846 8015B NM - D	Diesel Range	e Organics	(DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 19:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 19:04	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 09:39	11/22/22 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/22/22 09:39	11/22/22 19:04	1
o-Terphenyl	89		70 - 130				11/22/22 09:39	11/22/22 19:04	1
Method: MCAWW 300.0 - Anio	ons. Ion Chr	omatogran	ohv - Soluble						
Method: MCAWW 300.0 - Anio Analyte		omatograp Qualifier	ohy - Soluble RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

5.00

mg/Kg

261

11/22/22 01:10

Surrogate Summary

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Percen	t Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21911-A-1-A MS	Matrix Spike	101	119	
880-21911-A-1-B MSD	Matrix Spike Duplicate	95	112	
890-3482-1	SW01	98	98	
LCS 880-40254/1-A	Lab Control Sample	108	114	
LCSD 880-40254/2-A	Lab Control Sample Dup	100	111	
MB 880-40254/5-A	Method Blank	85	101	
Surrogate Legend				
BFB = 4-Bromofluorob	enzene (Surr)			
DFBZ = 1,4-Difluorobe	nzene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				t Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21689-A-4-C MS	Matrix Spike	104	82	
880-21689-A-4-D MSD	Matrix Spike Duplicate	112	86	
890-3482-1	SW01	92	89	
LCS 880-40184/2-A	Lab Control Sample	117	105	
LCSD 880-40184/3-A	Lab Control Sample Dup	98	102	
MB 880-40184/1-A	Method Blank	112	107	

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Carlsbad

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QC Sample Results

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40254/5-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40254

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:45	11/23/22 12:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/22 17:45	11/23/22 12:42	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	11/22/22 17:45	11/23/22 12:42	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/22/22 17:45	11/23/22 12:42	1

Lab Sample ID: LCS 880-40254/1-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40254

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1107		mg/Kg		111	70 - 130	
Toluene	0.100	0.09513		mg/Kg		95	70 - 130	
Ethylbenzene	0.100	0.1057		mg/Kg		106	70 - 130	
m-Xylene & p-Xylene	0.200	0.2135		mg/Kg		107	70 - 130	
o-Xylene	0.100	0.1038		mg/Kg		104	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-40254/2-A

Matrix: Solid

Analysis Batch: 40265

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

Prep Batch: 40254

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.1083 mg/Kg 108 70 - 130 35 Toluene 0.100 0.09803 mg/Kg 98 70 - 130 3 35 Ethylbenzene 0.100 0.09819 mg/Kg 98 70 - 130 7 35 m-Xylene & p-Xylene 0.200 0.2067 mg/Kg 103 70 - 130 35 0.100 0.1011 mg/Kg 101 70 - 130 35 o-Xylene

LCSD LCSD

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	100	70 - 130
1,4-Difluorobenzene (Surr)	111	70 - 130

Lab Sample ID: 880-21911-A-1-A MS

Matrix: Solid

Analysis Batch: 40265

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

Prep Batch: 40254

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.1164		mg/Kg		115	70 - 130	
Toluene	<0.00202	U	0.101	0.09673		mg/Kg		96	70 - 130	

Client: Ensolum Project/Site: LVP SWD #001

Job ID: 890-3482-1 SDG: 03A1987044

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

Lab Sample ID: 880-21911-A-1-A MS **Matrix: Solid**

Lab Sample ID: 880-21911-A-1-B MSD

Analysis Batch: 40265

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

Prep Batch: 40254

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00202 U 0 101 0.09883 mg/Kg 98 70 - 130 m-Xylene & p-Xylene <0.00403 U 0.202 0.1966 mg/Kg 97 70 - 130 o-Xylene <0.00202 U 0.101 0.09491 mg/Kg 94 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	119		70 - 130

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 40265

Prep Type: Total/NA

Prep Batch: 40254

Sample Sample Spike MSD MSD %Rec **RPD** Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Benzene <0.00202 U 0.0994 0.1045 mg/Kg 105 70 - 130 35 11 Toluene <0.00202 U 0.0994 0.08845 89 70 - 130 9 35 mg/Kg Ethylbenzene <0.00202 U 0.0994 0.08907 mg/Kg 90 70 - 130 10 35 m-Xylene & p-Xylene <0.00403 U 0.199 0.1744 mg/Kg 88 70 - 130 12 35 <0.00202 U 0.0994 0.08420 12 o-Xylene mg/Kg 84 70 - 130

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

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

Lab Sample ID: MB 880-40184/1-A

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40184

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 11/22/22 08:19 11/22/22 08:21 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 11/22/22 08:19 11/22/22 08:21 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/22/22 08:19 11/22/22 08:21

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1-Chlorooctane	112	70 - 130	11/22/22 08:19	11/22/22 08:21	1	
o-Terphenyl	107	70 - 130	11/22/22 08:19	11/22/22 08:21	1	

Lab Sample ID: LCS 880-40184/2-A

Matrix: Solid

Analysis Batch: 40168

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

Prep Batch: 40184

		Spike	LCS	LCS				%Rec	
Analyte	,	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics		1000	863.4		mg/Kg		86	70 - 130	
(GRO)-C6-C10									
Diesel Range Organics (Over		1000	979.4		mg/Kg		98	70 - 130	
C10-C28)									

Client: Ensolum

Job ID: 890-3482-1 SDG: 03A1987044

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

Lab Sample ID: LCS 880-40184/2-A **Matrix: Solid**

Analysis Batch: 40168

Project/Site: LVP SWD #001

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40184

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 117 70 - 130 o-Terphenyl 105 70 - 130

Lab Sample ID: LCSD 880-40184/3-A

Lab Sample ID: 880-21689-A-4-C MS

Lab Sample ID: 880-21689-A-4-D MSD

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40184

LCSD LCSD RPD %Rec Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 886.1 mg/Kg 89 70 - 130 3 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 938.8 mg/Kg 94 70 - 130 20 C10-C28)

LCSD LCSD

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 - 130 70 - 130 o-Terphenyl 102

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40184

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Limits **Analyte** Unit D %Rec <49.8 U Gasoline Range Organics 998 751.2 mg/Kg 75 70 - 130 (GRO)-C6-C10 998 Diesel Range Organics (Over <49.8 U 888.4 mg/Kg 89 70 - 130

C10-C28)

Matrix: Solid

Analysis Batch: 40168

MS MS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 70 - 130 104 o-Terphenyl 82 70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analysis Batch: 40168 Prep Batch: 40184 Sample Sample Spike MSD MSD %Rec **RPD**

Result Qualifier RPD Added Result Qualifier Limits Limit **Analyte** Unit %Rec Gasoline Range Organics <49.8 U 996 809.0 81 70 - 130 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U 996 937.4 mg/Kg 94 70 - 130 5 20

C10-C28)

Matrix: Solid

MSD MSD

%Recovery Qualifier Limits Surrogate 1-Chlorooctane 112 70 - 130 o-Terphenyl 86 70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39829/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40152

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D Prepared 5.00 11/21/22 21:36 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-39829/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40152

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 250 90 - 110 Chloride 241.6 mg/Kg 97

Lab Sample ID: LCSD 880-39829/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40152

Spike LCSD LCSD %Rec **RPD** Added Result Qualifier Limits **RPD** Limit **Analyte** Unit %Rec

Chloride 250 253.5 101 90 - 110 mg/Kg

Lab Sample ID: 890-3479-A-1-B MS **Client Sample ID: Matrix Spike Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40152

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 1220 253 1408 4 90 - 110 mg/Kg 76

Lab Sample ID: 890-3479-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40152

MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit Limits %Rec Limit Chloride 1220 253 1417 4 79 20 mg/Kg 90 - 110

QC Association Summary

 Client: Ensolum
 Job ID: 890-3482-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC VOA

Prep Batch: 40254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	5035	
MB 880-40254/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40254/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40254/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21911-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-21911-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40265

Lab Sample ID 890-3482-1	Client Sample ID SW01	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 40254
MB 880-40254/5-A	Method Blank	Total/NA	Solid	8021B	40254
LCS 880-40254/1-A	Lab Control Sample	Total/NA	Solid	8021B	40254
LCSD 880-40254/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40254
880-21911-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	40254
880-21911-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40254

Analysis Batch: 40505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	8015B NM	40184
MB 880-40184/1-A	Method Blank	Total/NA	Solid	8015B NM	40184
LCS 880-40184/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40184
LCSD 880-40184/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40184
880-21689-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40184
880-21689-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40184

Prep Batch: 40184

Lab Sample ID 890-3482-1	Client Sample ID SW01	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-40184/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40184/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40184/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21689-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21689-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39829

Released to Imaging: 5/21/2024 1:54:50 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Soluble	Solid	DI Leach	-
MB 880-39829/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39829/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39829/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Carlsbad

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QC Association Summary

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

HPLC/IC (Continued)

Leach Batch: 39829 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3479-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3479-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3482-1	SW01	Soluble	Solid	300.0	39829
MB 880-39829/1-A	Method Blank	Soluble	Solid	300.0	39829
LCS 880-39829/2-A	Lab Control Sample	Soluble	Solid	300.0	39829
LCSD 880-39829/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39829
890-3479-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	39829
890-3479-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39829

Lab Chronicle

Client: Ensolum Job ID: 890-3482-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Client Sample ID: SW01 Lab Sample ID: 890-3482-1

Matrix: Solid

Date Collected: 11/15/22 12:30 Date Received: 11/15/22 15:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	40254	11/22/22 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/23/22 18:12	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40505	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40299	11/23/22 11:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40184	11/22/22 09:39	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40168	11/22/22 19:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39829	11/17/22 14:33	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40152	11/22/22 01:10	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3482-1

SDG: 03A1987044

Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
N/A	N/A	None on record.	

Method Description

Total BTEX Calculation

Microextraction

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

Method Summary

Client: Ensolum

Method

Total BTEX

8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

8021B

Project/Site: LVP SWD #001

Job ID: 890-3482-1

SDG: 03A1987044

Danton	Labaratan
Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID
MCAWW	EET MID
SW846	EET MID

EET MID

EET MID

SW846

ASTM

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3482-1

SDG: 03A1987044

Lab Sample ID Client Sample ID Collected Matrix Received Depth 890-3482-1 SW01 Solid <u>11/15/22 12:30</u> <u>11/15/22 15:23</u> <u>0 - 5</u>

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	ontractors. It assigns standard terms and conditions in losses are due to circumstances beyond the control hese terms will be enforced unless previously negotiated.	to Eurofins Xenco, its siffliates and subcontractors. It s or expenses incurred by the client if such losses are ed to Eurofins Xenco, but not analyzed. These terms w	t company to Eurofina X any losses or expenses le submitted to Eurofins	urchase order from cilen ims any responsibility for harge of \$5 for each samp	stice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofina Xenco, its affiliates and subco- service. Eurofina 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 suc Eurofina Xenco. A minimum charge of \$85,00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofina Xenco, but not analyzed. To	document and relinquishment noo will be liable only for the o infimum charge of \$85.00 will t	ice: Signature of thi ervice. Eurofins Xe eurofins Xenco. A m
TI Sn U V Zn 17470 17471	Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn In Mo Ni Se Ag Ti U Hg: 1631/245.1/7470/7471	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb M Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni		CRA 13PPM Texas 11 AI TCLP / SPLP 6010: 8RCRA	8R	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 rcle Method(s) and I
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Sample Comments			CHLOI TPH (8 BTEX	Depth Grab/ # of	Date Time Sampled Sampled	ntification Matrix	Sample Identification
VaOH+Ascorbic Acid: SAPC	NaOt	-	015)	9 0	Corrected Temperature:		otal Containers:
Zn Acetate+NaOH: Zn	-	890-3482 Chain of Custory		၁			imple Custody Seals:
Na ₂ S ₂ O ₃ ; NaSO ₃			PA:	וש	Correction Factor:	Yes No	ooler Custody Seals:
NaHSO ₄ : NABIS	NaHS		300.	Į.	Thermometer ID:	-	amples Received Intact:
	H ₃ PO ₄ : HP		0)	Yes No	Wes No	PT Temp Blank:	AMPLE RECEIPT
	H ₂ S0.: H ₂			the lab. if received by 4.30pm	the lab. if rece	9005003893	CC#:
HC HNO; HN	HCL: HC			day received by	TAT starts the	Gilbert Moreno	Sampler's Name:
				Code		Danie Carlo	
NO DI Water H-O	None	21721		ine Rush Pres.	→ Routine	0341987044	Project Number
Preservative Corios		ANAI VS				LOCK CIVINS GIV. I	niert Name:
Other	Deliverables: EDD		um.com, jim.raley@	jhemandez@Ensolum.com, jim.raley@dvn.com	Email:	281-702-2329	Phone:
TRRP Level NO	Reporting: Level II Level III PST/UST TRRP		Carlsbad, NM 88220	City, State ZIP:		Carlsbad, NM 88220	City, State ZIP:
	State of Project:		5315 Buena Vista Dr	Address:		3122 National Parks HWY	ddress:
RRC Superfund	Program: UST/PST PRP Brownfields RRC Superfund	7	WPX	Company Name:		Ensolum	Company Name:
ents	3		Jim Raley	Bill to: (if different)		Joseph Hernandez	Project Manager:
Page 1 of 1	Work Order No:	Houston, TX (281) 240-4200, Dates, 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) 888-3199	X (281) 240-4200. Dal 432) 704-5440, San Ar ((915) 585-3443, Lubt (575) 392-7550, Carlsl	Houston, T Midland, TX (EL Paso, T) Hobbs, NM	Environment Testing Xenco	1	ss eurotins
		ustody	Chain of Custody	C			

12/21/2022 (Rev. 1)

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3482-1

SDG Number: 03A1987044

Login Number: 3482 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

,c 22 / 0j / 0 /

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3482-1 SDG Number: 03A1987044

Login Number: 3482 **List Source: Eurofins Midland** List Creation: 11/17/22 02:07 PM List Number: 2

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Devon Team

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 12/21/2022 2:06:42 PM Revision 1

JOB DESCRIPTION

LVP SWD #001 SDG NUMBER 03A1987044

JOB NUMBER

890-3537-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated 12/21/2022 2:06:42 PM

Authorized for release by Holly Taylor, Project Manager Holly.Taylor@et.eurofinsus.com Designee for Jessica Kramer, Project Manager Jessica.Kramer@et.eurofinsus.com (432)704-5440

Revision 1

Page 2 of 21

Client: Ensolum
Project/Site: LVP SWD #001
Laboratory Job ID: 890-3537-1
SDG: 03A1987044

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Definitions/Glossary

Client: Ensolum Job ID: 890-3537-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

HPLC/IC

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	y 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

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

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

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

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: LVP SWD #001

Job ID: 890-3537-1

SDG: 03A1987044

Job ID: 890-3537-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3537-1

Revision

The report being provided is a revision of the original report sent on 11/29/2022. The report (revision 1) is being revised to change the sampling depth from 0-6' to 0-5' per Glibert Moreno. A revised COC was provided (email).

Receipt

The samples were received on 11/18/2022 2:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

GC VOA

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

GC Semi VOA

Method 8015B NM: The surrogate recovery for the blank associated with preparation batch 880-40275 and analytical batch 880-40262 was outside the upper control limits.

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40275/2-A) and (LCSD 880-40275/3-A). Evidence of matrix interferences is not obvious.

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: SW02 (890-3537-1), (890-3540-A-1-B), (890-3540-A-1-C MS) and (890-3540-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-40010 and analytical batch 880-40325 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.

Organic Prep

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

VOA Prep

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

 Client: Ensolum
 Job ID: 890-3537-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

Olivet Consult ID: OM/O

Client Sample ID: SW02

Date Collected: 11/18/22 12:30

Date Received: 11/18/22 14:45

Lab Sample ID: 890-3537-1

Matrix: Solid

Sample Depth: 0 - 5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 11:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 11:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 11:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/28/22 14:35	11/29/22 11:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/28/22 14:35	11/29/22 11:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/28/22 14:35	11/29/22 11:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				11/28/22 14:35	11/29/22 11:10	1
1,4-Difluorobenzene (Surr)	106		70 - 130				11/28/22 14:35	11/29/22 11:10	1
Method: TAL SOP Total BT	EX - Total BTE	X Calculat	ion						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	П	0.00402		mg/Kg			11/29/22 14:49	

Method: SW846 8015 NM - Dies	el Range (Organics ((DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/28/22 11:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 13:28	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 13:28	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				11/23/22 09:52	11/23/22 13:28	1
o-Terphenyl	138	S1+	70 - 130				11/23/22 09:52	11/23/22 13:28	1

Method: MCAWW 300.0 - Anio	ns, Ion Chr	omatograp	hy - Soluble	€					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		4.96		mg/Kg			11/23/22 23:07	1

Client Sample ID: SW03

Date Collected: 11/18/22 12:40

Lab Sample ID: 890-3537-2

Matrix: Solid

Date Received: 11/18/22 14:45

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 14:35	11/29/22 16:13	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		11/28/22 14:35	11/29/22 16:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 14:35	11/29/22 16:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				11/28/22 14:35	11/29/22 16:13	1

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Client Sample Results

Client: Ensolum Job ID: 890-3537-1

Project/Site: LVP SWD #001 SDG: 03A1987044

Lab Sample ID: 890-3537-2 **Client Sample ID: SW03** Date Collected: 11/18/22 12:40 Date Received: 11/18/22 14:45

Matrix: Solid Sample Depth: 0 - 4

Surrogate	%Recovery Quali	fier Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109	70 - 130			11/28/22 14:35	11/29/22 16:13	1
: Method: TAL SOP Total B	TEX - Total BTEX Cal	culation					
			MDI Unit	n	Propared	Analyzod	Dil Fac
Method: TAL SOP Total BT Analyte Total BTEX	TEX - Total BTEX Cal Result Quali		MDL Unit	D	Prepared	Analyzed 11/29/22 17:14	Dil Fac

Method: SW846 8015 NM - Dies	el Range (Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/28/22 11:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 13:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				11/23/22 09:52	11/23/22 13:49	1
o-Terphenyl	130		70 - 130				11/23/22 09:52	11/23/22 13:49	1

Method: MCAWW 300.0 -	Anions, Ion Chromatograp	hy - Soluble					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.2	4.95	mg/Kg			11/23/22 23:15	1

Surrogate Summary

Client: Ensolum Job ID: 890-3537-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

	BFB1	DFBZ1
Client Sample ID	(70-130)	(70-130)
SW02	95	106
SW02	97	118
SW02	93	114
SW03	91	109
Lab Control Sample	106	109
Lab Control Sample Dup	93	113
Method Blank	82	104
	SW02 SW02 SW02 SW03 Lab Control Sample Lab Control Sample Dup	SW02 95 SW02 97 SW02 93 SW03 91 Lab Control Sample 106 Lab Control Sample Dup 93

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 Rec
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3537-1	SW02	111	138 S1+	
890-3537-2	SW03	105	130	
890-3540-A-1-C MS	Matrix Spike	138 S1+	151 S1+	
890-3540-A-1-D MSD	Matrix Spike Duplicate	119	140 S1+	
LCS 880-40275/2-A	Lab Control Sample	206 S1+	246 S1+	
LCSD 880-40275/3-A	Lab Control Sample Dup	208 S1+	244 S1+	
MB 880-40275/1-A	Method Blank	129	160 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3537-1 Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40471/5-A

Matrix: Solid

Analysis Batch: 40540

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40471

	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 14:35	11/29/22 10:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 14:35	11/29/22 10:48	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82	70 - 130	11/28/22 14:35	11/29/22 10:48	1
1,4-Difluorobenzene (Surr)	104	70 - 130	11/28/22 14:35	11/29/22 10:48	1

Lab Sample ID: LCS 880-40471/1-A

Matrix: Solid

Analysis Batch: 40540

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40471

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1088		mg/Kg		109	70 - 130	
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	
Ethylbenzene	0.100	0.1035		mg/Kg		103	70 - 130	
m-Xylene & p-Xylene	0.200	0.2150		mg/Kg		108	70 - 130	
o-Xylene	0.100	0.1054		mg/Kg		105	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-40471/2-A

Matrix: Solid

Analysis Batch: 40540

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

Prep Batch: 40471

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	2	35
Toluene	0.100	0.09285		mg/Kg		93	70 - 130	8	35
Ethylbenzene	0.100	0.08914		mg/Kg		89	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1804		mg/Kg		90	70 - 130	18	35
o-Xylene	0.100	0.08869		mg/Kg		89	70 - 130	17	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1.4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 890-3537-1 MS

Matrix: Solid

Analysis Batch: 40540

Client Sample ID: SW02 Prep Type: Total/NA

Prep Batch: 40471

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0996	0.1093		mg/Kg		110	70 - 130	
Toluene	<0.00201	U	0.0996	0.09247		mg/Kg		93	70 - 130	

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QC Sample Results

Job ID: 890-3537-1 Client: Ensolum Project/Site: LVP SWD #001 SDG: 03A1987044

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

Lab Sample ID: 890-3537-1 MS **Matrix: Solid**

Analysis Batch: 40540

Client Sample ID: SW02 Prep Type: Total/NA Prep Batch: 40471

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.0996	0.08852		mg/Kg		89	70 - 130	 -
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1775		mg/Kg		89	70 - 130	
o-Xylene	<0.00201	U	0.0996	0.08683		mg/Kg		87	70 - 130	
o-Xylene	<0.00201	U	0.0996	0.08683		mg/Kg		87	70 - 130	

MS MS

Surrogate	%Recovery (Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: 890-3537-1 MSD

Client Sample ID: SW02 Matrix: Solid Prep Type: Total/NA Prep Batch: 40471 **Analysis Batch: 40540** it

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.09554		mg/Kg		96	70 - 130	13	35
Toluene	<0.00201	U	0.0994	0.08081		mg/Kg		81	70 - 130	13	35
Ethylbenzene	<0.00201	U	0.0994	0.07589		mg/Kg		76	70 - 130	15	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1519		mg/Kg		76	70 - 130	16	35
o-Xylene	<0.00201	U	0.0994	0.07410		mg/Kg		75	70 - 130	16	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

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

Lab Sample ID: MB 880-40275/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA** Prep Batch: 40275

Analysis Batch: 40262

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/23/22 08:32	11/23/22 08:39	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	ı	mg/Kg		11/23/22 08:32	11/23/22 08:39	1	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		ma/Ka		11/23/22 08:32	11/23/22 08:39	1	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	11/23/22 08:32	11/23/22 08:39	1
o-Terphenyl	160	S1+	70 - 130	11/23/22 08:32	11/23/22 08:39	1

Lab Sample ID: LCS 880-40275/2-A

Matrix: Solid Analysis Batch: 40262							Prep Type Prep Bat	: Total/NA ch: 40275
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1024		mg/Kg		102	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1217		mg/Kg		122	70 - 130	

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Client Sample ID: Lab Control Sample

Client: Ensolum Job ID: 890-3537-1 Project/Site: LVP SWD #001

SDG: 03A1987044

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

Lab Sample ID: LCS 880-40275/2-A **Matrix: Solid**

Analysis Batch: 40262

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

Prep Batch: 40275

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 206 S1+ 70 - 130 o-Terphenyl 246 S1+ 70 - 130

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-40275/3-A **Matrix: Solid Analysis Batch: 40262**

Prep Type: Total/NA Prep Batch: 40275

LCSD LCSD %Rec **RPD** Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 998.9 mg/Kg 100 70 - 130 2 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1210 mg/Kg 121 70 - 130 20

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 208 S1+ 70 - 130 70 - 130 o-Terphenyl 244 S1+

Lab Sample ID: 890-3540-A-1-C MS **Client Sample ID: Matrix Spike Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 40262 Prep Batch: 40275 Sample Sample Spike MS MS %Rec

		- up.							,		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1063		mg/Kg		107	70 - 130		_
Diesel Range Organics (Over	<50.0	U	997	1225		mg/Kg		121	70 - 130		

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Lab Sample ID: 890-3540-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 40262** Prep Batch: 40275

Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec <50.0 U 999 901.4 90 70 - 130 20 Gasoline Range Organics mg/Kg 16 (GRO)-C6-C10

1116

mg/Kg

110

70 - 130

999

Diesel Range Organics (Over C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	140	S1+	70 - 130

<50.0 U

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QC Sample Results

Client: Ensolum Job ID: 890-3537-1 Project/Site: LVP SWD #001

SDG: 03A1987044

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40010/1-A **Matrix: Solid**

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac D Prepared 5.00 11/23/22 19:11 Chloride <5.00 U mg/Kg

Lab Sample ID: LCS 880-40010/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40325

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 90 - 110 243.9 mg/Kg 98

Lab Sample ID: LCSD 880-40010/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 40325

Analysis Batch: 40325

Spike LCSD LCSD %Rec RPD Added Result Qualifier Limits **RPD** Limit Analyte Unit %Rec Chloride 250 246.3 99 mg/Kg

Lab Sample ID: 890-3526-A-1-B MS **Client Sample ID: Matrix Spike Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 40325

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 458 F1 250 669.7 F1 mg/Kg 85 90 - 110

Lab Sample ID: 890-3526-A-1-C MSD

Matrix: Solid

Analysis Batch: 40325

MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit Limits RPD %Rec Limit Chloride 458 F1 250 670.8 F1 85 20 mg/Kg 90 - 110 0

QC Association Summary

 Client: Ensolum
 Job ID: 890-3537-1

 Project/Site: LVP SWD #001
 SDG: 03A1987044

GC VOA

Prep Batch: 40471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Total/NA	Solid	5035	
890-3537-2	SW03	Total/NA	Solid	5035	
MB 880-40471/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40471/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40471/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3537-1 MS	SW02	Total/NA	Solid	5035	
890-3537-1 MSD	SW02	Total/NA	Solid	5035	

Analysis Batch: 40540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Total/NA	Solid	8021B	40471
890-3537-2	SW03	Total/NA	Solid	8021B	40471
MB 880-40471/5-A	Method Blank	Total/NA	Solid	8021B	40471
LCS 880-40471/1-A	Lab Control Sample	Total/NA	Solid	8021B	40471
LCSD 880-40471/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40471
890-3537-1 MS	SW02	Total/NA	Solid	8021B	40471
890-3537-1 MSD	SW02	Total/NA	Solid	8021B	40471

Analysis Batch: 40618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Total/NA	Solid	Total BTEX	
890-3537-2	SW03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Total/NA	Solid	8015B NM	40275
890-3537-2	SW03	Total/NA	Solid	8015B NM	40275
MB 880-40275/1-A	Method Blank	Total/NA	Solid	8015B NM	40275
LCS 880-40275/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40275
LCSD 880-40275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40275
890-3540-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40275
890-3540-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40275

Prep Batch: 40275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Total/NA	Solid	8015NM Prep	
890-3537-2	SW03	Total/NA	Solid	8015NM Prep	
MB 880-40275/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40275/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3540-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3540-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Total/NA	Solid	8015 NM	
890-3537-2	SW03	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum Job ID: 890-3537-1 Project/Site: LVP SWD #001 SDG: 03A1987044

HPLC/IC

Leach Batch: 40010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Soluble	Solid	DI Leach	
890-3537-2	SW03	Soluble	Solid	DI Leach	
MB 880-40010/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40010/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40010/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3526-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3526-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3537-1	SW02	Soluble	Solid	300.0	40010
890-3537-2	SW03	Soluble	Solid	300.0	40010
MB 880-40010/1-A	Method Blank	Soluble	Solid	300.0	40010
LCS 880-40010/2-A	Lab Control Sample	Soluble	Solid	300.0	40010
LCSD 880-40010/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40010
890-3526-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	40010
890-3526-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	40010

Job ID: 890-3537-1

SDG: 03A1987044

Client Sample ID: SW02

Project/Site: LVP SWD #001

Client: Ensolum

Lab Sample ID: 890-3537-1

Matrix: Solid

Date Collected: 11/18/22 12:30 Date Received: 11/18/22 14:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	40471	11/28/22 14:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40540	11/29/22 11:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40618	11/29/22 14:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			40441	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 13:28	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	40010	11/20/22 12:21	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40325	11/23/22 23:07	CH	EET MID

Lab Sample ID: 890-3537-2

Client Sample ID: SW03 Date Collected: 11/18/22 12:40 **Matrix: Solid**

Date Received: 11/18/22 14:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40471	11/28/22 14:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40540	11/29/22 16:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40618	11/29/22 17:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			40441	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 13:49	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	40010	11/20/22 12:21	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40325	11/23/22 23:15	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum

Job ID: 890-3537-1 Project/Site: LVP SWD #001 SDG: 03A1987044

Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
N/A	N/A	None on record.	

Method Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3537-1

SDG: 03A1987044

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: LVP SWD #001

Job ID: 890-3537-1

SDG: 03A1987044

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3537-1	SW02	Solid	11/18/22 12:30	11/18/22 14:45	0 - 5
890-3537-2	SW03	Solid	11/18/22 12:40	11/18/22 14:45	0 - 4

plad by: (Signature) ging

Received by: (Signature)

THE CEPTITI

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

020 Rev. 2020

ircle Method(s)

Total 200.7/

eurofins

Environment Testing

Xenco

Chain of Custody

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 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

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Program: UST/PST | PRP | Brownfields | RRC | Superfund |

Work Order Comments

www.xenco.com

Page

Ensolum			Company Name:		WPX				Program: UST/PST PRP Brownfields RRC Superfund	□ Superiora □
3122 National Parks HWY	YWH		Address:		5315 Buena Vista Dr	uena \	Vista C		State of Project:	1
Carlsbad, NM 88220			City, State ZIP:		Carlsbad, NM 88220	ad, NN	18822		Wel III PST/UST	P Level V L
281-702-2329		Email:	Email: ihemandez@Ensolum.com, im.raley@dvn.com	Ensolu	m.com	lim.r	aley@	vn.com	Deliverables: EDD ADaPT Other:	1
LVP SWD #001		Tum	Turn Around					ANALYSIS REQUEST		Preservative Codes
03A1987044		☑ Routine	Rush	Code.					None: NO	DI Water: H ₂ O
Rural Eddy, NM		Due Date:	5 Day TAT						Cool: Cool	MeOH: Me
Gilbert Moreno		TAT starts the	TAT starts the day received by						HCL:HC	HNO3: HN
9005003893		the lab, if reco	the lab. if received by 4:30pm	rs					H ₂ S0 ₄ : H ₂	NBOH: Na
PT Temp Blank:	Yacho	Wet los:	No see	nete	.0)				H ₃ PO ₄ : HP	
ntact: Yes No	Thermometer ID:	er ID:	Tm. 30-	ran	300				NaHSO.: NABIS	
S: Yes No MIA	Correction Factor:	actor:	-D. 2	Pa	PA:					
ils: Yes No NIA	N/A Temperature Reading:	e Reading:	4		S (E		1	890-3537 Chair of Custon	-	
	Corrected Temperature:	emperature:	300		RIDE	015	802	-	7 A C C C C C C C C C C C C C C C C C C	NaOn Pascoloic Acc. SAT C
tification Matrix	N Date X Sampled	Time Sampled	Depth Comp	Cont	CHLO	TPH (8	BTEX		Sample	Sample Comments
)2 S	11.18.22	12:30	Comp	1	×	×	×			
)3 S	11.18.22	12:40	0-4' Comp	1	×	×	×			
									inc	Incident ID
						1	1		nAPP2	nAPP2135033453
				1	1					
		120	1							1
الما	1 1	18:								PA
JAN S	1					Ц				50
										54:
\										11:
010 200.8 / 6020:	8	BRCRA 13PPM	PM Texas 11	1 AI S	Sb As Ba	Ba B	Be B	Cd Ca Cr Co Cu Fe Pb	K Se A	J V Zh
9		TCLP / SI	PLP 6010: 8F	CRA	Sb As	Ba	Be C	TCLP / SPLP 8010: BRCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti L	Ni Se Ag Ti U Hg: 1631/245.1/7470 /7471	
document and relinquishmen	nt of samples con	stitutes a valid p	surchase order fro	m client c	ompany	to Euro	lox sul	document and relinquishment of samples constitutes a valid purchase order from client company to Eurofina Xenco, its affiliates and subcontractors. It assigns standars		5/2
co will be liable only for the o	cost of samples at	nd shall not assu project and a ci	ame any responsit harge of \$6 for eac	ility for au	ny losse submitt	ed to Eu	rofins X	co will be liable only for the coet of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are que to circumstate or expenses incurred by the client if such losses are que to circumstate or expenses of \$85.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced un	avel due to circumstances beyond the control a will be enforced unless previously negotiated.	g:

SAMPLE RECE

nples Received

npie Custody S ier Custody Se

Sample ide

roject Location:

impler's Name:

oject Number:

City, State ZIP:

Company Name:

hoject Manager:

Joseph Hemandez

Bill to: (if different)

Jim Raley

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3537-1

SDG Number: 03A1987044

Login Number: 3537 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

1

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3537-1

SDG Number: 03A1987044

List Source: Eurofins Midland
List Number: 2
List Creation: 11/22/22 11:47 AM

Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

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<6mm (1/4").

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envirotech Inc.

Printed: 10/13/2023 1:02:42PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Devon Energy - Carlsbad	Date Received:	10/13/23	08:15		Work Order ID:	E310090
Phone:	(505) 382-1211	Date Logged In:	10/12/23	16:16		Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	10/19/23	17:00 (4 day TAT)			
Chain of C	Custody (COC)						
1. Does the	e sample ID match the COC?		Yes				
2. Does th	e number of samples per sampling site location ma	tch the COC	Yes				
3. Were sa	mples dropped off by client or carrier?		Yes	Carrier: C	Courier		
4. Was the	COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes				
5. Were al	l samples received within holding time? Note: Analysis, such as pH which should be conducted in	1 the field,	Yes				
	i.e, 15 minute hold time, are not included in this disucssi-	on.				Comment	s/Resolution
	urn Around Time (TAT)		37				
	COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C			3 7				
	ample cooler received?		Yes				
• .	vas cooler received in good condition?		Yes				
	sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
11. If yes,	were custody/security seals intact?		NA				
	sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling	e received w/i 15	Yes				
	isible ice, record the temperature. Actual sample	temperature: 4°0	<u> </u>				
Sample C			3.7				
-	ueous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers		Yes				
	ppropriate volume/weight or number of sample contain	ners collected?	Yes				
Field Lab	 -	.•					
	ield sample labels filled out with the minimum info mple ID?	ormation:	Yes				
	ate/Time Collected?						
	ollectors name?		Yes Yes				
	reservation		105				
	he COC or field labels indicate the samples were pr	reserved?	No				
	mple(s) correctly preserved?		NA				
	filteration required and/or requested for dissolved n	netals?	No				
Multinha	se Sample Matrix						
	he sample have more than one phase, i.e., multipha	se?	No				
	does the COC specify which phase(s) is to be analy		NA				
•		, 200.	INA				
	act Laboratory		3.7				
	mples required to get sent to a subcontract laborato	-	No				
29. Was a	subcontract laboratory specified by the client and it	t so who?	NA	Subcontract Lab	o: NA		
Client In	<u>struction</u>						

Date

Signature of client authorizing changes to the COC or sample disposition.

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E310090

Job Number: 01058-0007

Received: 10/13/2023

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 10/27/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 10/27/23

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E310090

Date Received: 10/13/2023 8:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/13/2023 8:15:00AM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

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Michelle Golzales

Client Representative
Office: 505-421-LABS(5227)

Cell: 505-947-8222

mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Donoutoda
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/23 12:49

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS04A - 5'	E310090-01A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS05A - 5'	E310090-02A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS06A - 4'	E310090-03A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS07A - 4'	E310090-04A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS08A - 5'	E310090-05A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS09A - 4.5'	E310090-06A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS10A - 4.5'	E310090-07A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS11A - 4'	E310090-08A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.
FS12A - 4'	E310090-09A	Solid	10/11/23	10/13/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS04A - 5' E310090-01

		E310090-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Maryo	Result	Liiiit	Dilution	Trepared	Maryzea	rotes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	vst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Toluene	ND	0.0250	1	10/13/23	10/13/23	
o-Xylene	ND	0.0250	1	10/13/23	10/13/23	
p,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
Surrogate: 4-Bromochlorobenzene-PID		95.3 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.7 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	vst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		94.3 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: IY		Batch: 2341099
Chloride	385	20.0	1	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS05A - 5'

		E310090-02				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Toluene	ND	0.0250	1	10/13/23	10/13/23	
o-Xylene	ND	0.0250	1	10/13/23	10/13/23	
p,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
Surrogate: 4-Bromochlorobenzene-PID		95.3 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.5 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		86.2 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2341099
Chloride	1540	20.0	1	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS06A - 4' E310090-03

		E310070-03				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Toluene	ND	0.0250	1	10/13/23	10/13/23	
-Xylene	ND	0.0250	1	10/13/23	10/13/23	
o,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
Surrogate: 4-Bromochlorobenzene-PID		94.8 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.2 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		96.4 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2341099
Chloride	3010	40.0	2	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS07A - 4'

		E310090-04				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Toluene	ND	0.0250	1	10/13/23	10/13/23	
o-Xylene	ND	0.0250	1	10/13/23	10/13/23	
p,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
Surrogate: 4-Bromochlorobenzene-PID		95.0 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.6 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		95.3 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2341099
Chloride	2160	40.0	2	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS08A - 5' E310090-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Coluene	ND	0.0250	1	10/13/23	10/13/23	
-Xylene	ND	0.0250	1	10/13/23	10/13/23	
,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
urrogate: 4-Bromochlorobenzene-PID		94.5 %	70-130	10/13/23	10/13/23	
Onhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	yst: RKS		Batch: 2341096
Sasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		90.0 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	yst: KM		Batch: 2341111
viesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Dil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
urrogate: n-Nonane		80.7 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	yst: IY		Batch: 2341099
Chloride	3680	40.0	2	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS09A - 4.5'

		E310090-06				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Toluene	ND	0.0250	1	10/13/23	10/13/23	
o-Xylene	ND	0.0250	1	10/13/23	10/13/23	
p,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
Surrogate: 4-Bromochlorobenzene-PID		94.9 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.9 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		91.6%	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: IY		Batch: 2341099
Chloride	1750	20.0	1	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS10A - 4.5'

		E310090-07				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/13/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/13/23	
Гoluene	ND	0.0250	1	10/13/23	10/13/23	
p-Xylene	ND	0.0250	1	10/13/23	10/13/23	
o,m-Xylene	ND	0.0500	1	10/13/23	10/13/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/13/23	
Surrogate: 4-Bromochlorobenzene-PID		94.7 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/13/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.6 %	70-130	10/13/23	10/13/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		100 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2341099
Chloride	1970	20.0	1	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS11A - 4'

		E310090-08				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/14/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/14/23	
Toluene	ND	0.0250	1	10/13/23	10/14/23	
o-Xylene	ND	0.0250	1	10/13/23	10/14/23	
p,m-Xylene	ND	0.0500	1	10/13/23	10/14/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/14/23	
Surrogate: 4-Bromochlorobenzene-PID		94.7 %	70-130	10/13/23	10/14/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/14/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.4 %	70-130	10/13/23	10/14/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		97.1 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: IY		Batch: 2341099
Chloride	763	20.0	1	10/13/23	10/13/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

FS12A - 4' E310090-09

		2010070 07				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2341096
Benzene	ND	0.0250	1	10/13/23	10/14/23	
Ethylbenzene	ND	0.0250	1	10/13/23	10/14/23	
Toluene	ND	0.0250	1	10/13/23	10/14/23	
o-Xylene	ND	0.0250	1	10/13/23	10/14/23	
o,m-Xylene	ND	0.0500	1	10/13/23	10/14/23	
Total Xylenes	ND	0.0250	1	10/13/23	10/14/23	
Surrogate: 4-Bromochlorobenzene-PID		94.8 %	70-130	10/13/23	10/14/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2341096
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/13/23	10/14/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.8 %	70-130	10/13/23	10/14/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2341111
Diesel Range Organics (C10-C28)	ND	25.0	1	10/13/23	10/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	10/13/23	10/18/23	
Surrogate: n-Nonane		91.9 %	50-200	10/13/23	10/18/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: IY		Batch: 2341099
-	361	20.0		10/13/23	10/13/23	



QC Summary Data

Devon Energy - Carlsbad LVP SWD #001 Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 10/27/2023 12:49:08PM **Volatile Organics by EPA 8021B** Analyst: RKS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2341096-BLK1) Prepared: 10/13/23 Analyzed: 10/13/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.42 8.00 92.8 70-130 LCS (2341096-BS1) Prepared: 10/13/23 Analyzed: 10/13/23 4.78 95.6 70-130 5.00 Benzene 0.0250 Ethylbenzene 4.62 0.0250 5.00 92.4 70-130 4.79 0.0250 5.00 95.8 70-130 Toluene 95.2 o-Xylene 4.76 0.0250 5.00 70-130 9.57 10.0 95.7 70-130 0.0500 p.m-Xvlene 95.6 70-130 14.3 15.0 Total Xylenes 0.0250 8.00 93.9 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.52 Matrix Spike (2341096-MS1) Source: E310083-01 Prepared: 10/13/23 Analyzed: 10/13/23 4.89 0.0250 5.00 ND 97.7 54-133 Benzene ND 61-133 Ethylbenzene 4.70 0.0250 5.00 94.1 Toluene 4.89 0.0250 5.00 ND 97.9 61-130 4.84 ND 96.8 63-131 5.00 0.0250 o-Xylene p,m-Xylene 9.74 0.0500 10.0 ND 97.4 63-131 14.6 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.60 8.00 Matrix Spike Dup (2341096-MSD1) Source: E310083-01 Prepared: 10/13/23 Analyzed: 10/13/23 4.76 0.0250 5.00 ND 95.2 54-133 2.61 20 4.59 61-133 2.45 0.0250 5.00 ND 91.8 20 Ethylbenzene 61-130 Toluene 4 77 0.0250 5.00 ND 95.3 2.61 20 4.72 5.00 ND 94.5 63-131 2.49 20 o-Xylene 0.0250 95.2 2.35

10.0

15.0

8.00

0.0500

0.0250

ND

ND

94.9

95.5

63-131

63-131

70-130

2.39

20

20



p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

9.52

14.2

7.64

QC Summary Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

Artesia NM, 88210		Project Manage	r: As	hley Gioveng	go			10/2	27/2023 12:49:08PM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2341096-BLK1)							Prepared: 1	0/13/23 Anal	yzed: 10/13/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.22		8.00		90.2	70-130			
LCS (2341096-BS2)							Prepared: 1	0/13/23 Anal	yzed: 10/13/23
Gasoline Range Organics (C6-C10)	46.6	20.0	50.0		93.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.26		8.00		90.7	70-130			
Matrix Spike (2341096-MS2)				Source:	E310083-)1	Prepared: 1	0/13/23 Anal	yzed: 10/13/23
Gasoline Range Organics (C6-C10)	45.9	20.0	50.0	ND	91.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.9	70-130			
Matrix Spike Dup (2341096-MSD2)				Source:	E310083-	01	Prepared: 1	0/13/23 Anal	yzed: 10/13/23
Gasoline Range Organics (C6-C10)	45.0	20.0	50.0	ND	90.1	70-130	1.91	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.5	70-130			

QC Summary Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	•
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/2023 12:49:08PM

Artesia NM, 88210		Project Manage	r: As	shley Gioveng	go]	.0/27/2023 12:49:08P.
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2341111-BLK1)							Prepared: 1	0/13/23 A	nalyzed: 10/18/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	48.3		50.0		96.6	50-200			
LCS (2341111-BS1)							Prepared: 1	0/13/23 A	nalyzed: 10/18/23
Diesel Range Organics (C10-C28)	248	25.0	250		99.3	38-132			
urrogate: n-Nonane	47.8		50.0		95.7	50-200			
Matrix Spike (2341111-MS1)				Source:	E310090-	07	Prepared: 1	0/13/23 A	nalyzed: 10/18/23
Diesel Range Organics (C10-C28)	247	25.0	250	ND	98.7	38-132			
urrogate: n-Nonane	49.7		50.0		99.4	50-200			
Matrix Spike Dup (2341111-MSD1)				Source:	E310090-	07	Prepared: 1	0/13/23 A	nalyzed: 10/18/23
Diesel Range Organics (C10-C28)	266	25.0	250	ND	107	38-132	7.65	20	
hurrogate: n-Nonane	53.1		50.0		106	50-200			



Chloride

QC Summary Data

Devon Energy - Carlsbad		Project Name:		/P SWD #001					Reported:	
6488 7 Rivers Hwy		Project Number:		058-0007					10/25/2022 12 40 00	D
Artesia NM, 88210		Project Manager	:: As	shley Gioveng	go				10/27/2023 12:49:08	SPM
		Anions	by EPA 3	00.0/9056	A				Analyst: IY	
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limi		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes	
Blank (2341099-BLK1)							Prepared:	10/13/23	Analyzed: 10/13/23	
Chloride	ND	20.0								
LCS (2341099-BS1)							Prepared:	10/13/23	Analyzed: 10/13/23	
Chloride	246	20.0	250		98.3	90-110				
Matrix Spike (2341099-MS1)				Source:	E310079-2	21	Prepared:	10/13/23	Analyzed: 10/13/23	
Chloride	251	20.0	250	ND	100	80-120				
Matrix Spike Dup (2341099-MSD1)				Source:	E310079-2	21	Prepared:	10/13/23	Analyzed: 10/13/23	

250

20.0

ND

101

80-120

0.882

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	10/27/23 12:49

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



							E	31	200	90	C	M								
Client: [Devon Energy	1			Bill To				La	b U	se Or	nly				T	EPA P	rogram		
	LVP SWD				Attention: Jim Raley			WO#			Job	Num	ber	1D	2D	3D	St	andard	CWA	SDW
Project N	Manager: As	hley Giov	vengo		Address: 5315 Buena Vista Dr		E	310	90	-	OK	358	.0007					X	N. T. I.	
Address	3122 Natio	nal Parks	Hwy		City, State, Zip: Carlsbad NM, 88	3220							nd Metho	d						RCRA
City, Sta	te, Zip: Carls	bad NM,	88220		Phone: (575)689-7597			by	100											
Phone:	575-988-005	5			Email: jim.raley@dvn.com			ORO							1				State	
Email: a	giovengo@e	nsolum.	com					30/0	ਜ	_		0.0		ΣN	NMI COLUTIAZIO			TX		
Report o	lue by:							JQ/C	8021	8260	5010	300				¥		×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	
11:20	10/11/2023	Rock	1		FS04 - 5'									х						
11:27	10/11/2023	Rock	1		FS05 - 5'	2								х						
10:07	10/11/2023	Rock	1		FS06 - 4'	3								х						
11:02	10/11/2023	Rock	1		FS07 - 4'	4								х						
11:10	10/11/2023	Rock	1		FS08 - 5'	5								х						
9:54	10/11/2023	Rock	1		FS09 - 4.5'	6								х						
9:45	10/11/2023	Rock	1		FS10 - 4.5'	7								х						
10:23	10/11/2023	Rock	1		FS11 - 4'	8								х						
10:42	10/11/2023	Rock	1		FS12 - 4'	9								х						
Addition	al Instructio	ns: Plea	ase CC: cl	ourton@enso	lum.com, agiovengo@ensolum.com, j	im.raley@dv	/n.c	om, ch	nami	lton	@ens	solur	n.com							
				ty of this sample. ly be grounds for le	l am aware that tampering with or intentionally mislegal action. Sampled by: Chad Ham	abelling the samp nilton, Ethan Haft	le loc	ation,			1							on ice the day an 6 °C on subs	The state of the s	led or
-	ed by: (Signatu			/12/23 10	Received by: (Signature)	Date 10-12-6	2)	Time	04	5	Rece	eivec	on ice:		ab U	se Or	nly			
Mid		us		12-13 17	Received by: (Signature) No. See	Date 10.12	2.2	Time	200	2	T1			T2				T3		
Relinquish	ed by: (Signatu	10850	Date /o	12.23	400 (A. The Mayo	_ Date 10.13/2	23	Time	15	-	AVG	Ten	np °C	4						
ample Ma	trix: S - Soil, Sd - S	olid, S g - Slu	idge, A - Aqu	eous, O - Other							oly/p	lastic	c, ag - amb	oer g	lass, v	v - VO	Α			
Note: Sam amples is	ples are discard applicable only	led 30 days to those s	after resu amples rec	lts are reported eived by the labo	unless other arrangements are made. Hazardo oratory with this COC. The liability of the labora	ous samples will story is limited t	be r	eturned amoui	d to cl	ient o	or disp	osed e repo	of at the cl	ient e	expens	se. Th	e rep	ort for the a	inalysis of	the abov



envirotecia analysis of the above

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Printed: 10/13/2023 1:02:42PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Devon Energy - Carlsbad	Date Received:	10/13/23	08:15	Work Order ID:	E310090
Phone:	(505) 382-1211	Date Logged In:	10/12/23	16:16	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wescominc.com	Due Date:	10/19/23	17:00 (4 day TAT)		
<i>-</i>						
	f Custody (COC)					
	the sample ID match the COC?	tab the COC	Yes			
	the number of samples per sampling site location ma	ich the COC	Yes			
	samples dropped off by client or carrier?	-4-4	Yes Yes	Carrier: Courier		
	ne COC complete, i.e., signatures, dates/times, reque	sted analyses?				
5. were	all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi		Yes		Comment	s/Resolution
	<u> Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample						
	sample cooler received?		Yes			
8. If yes,	was cooler received in good condition?		Yes			
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes			
10. Were	custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
	he sample received on ice? If yes, the recorded temp is 4°C. Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes			
Sample	<u>Container</u>					
	aqueous VOC samples present?		No			
15. Are	VOC samples collected in VOA Vials?		NA			
16. Is the	e head space less than 6-8 mm (pea sized or less)?		NA			
17. Was	a trip blank (TB) included for VOC analyses?		NA			
	non-VOC samples collected in the correct containers	?	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field La	bel					
•	field sample labels filled out with the minimum info	ormation:				
	Sample ID?		Yes			
	Date/Time Collected?		Yes			
	Collectors name?		Yes			
	Preservation	10	3.7			
	the COC or field labels indicate the samples were p	reserved?	No			
	sample(s) correctly preserved?	. 1.0	NA			
	o filteration required and/or requested for dissolved n	netais?	No			
	ase Sample Matrix					
	the sample have more than one phase, i.e., multipha		No			
27. If ye	s, does the COC specify which phase(s) is to be analy	yzed?	NA			
Subcont	ract Laboratory					
	samples required to get sent to a subcontract laborato a subcontract laboratory specified by the client and i	•	No NA	Subcontract Lab: NA		
Client I	nstruction					
						

Project Information

Project In	formation						Chai	n of Cust	ody E3	316	m	10	CIN							Pag	e_1_	of_1	Received by OCD: 5/20/2024 3:38:23 PM
Client: D	evon Energy				150	Bill T	0			2, (Lat	Use	Only				ī	AT		EPA Pro	gram		15.
4.5	LVP SWD	The second			Atte	ention: Jim Raley			Lab V					mber		1D 2			andard		SDWA		00
Project N	lanager: As	hley Giov	engo		Statement of the later of the l	lress: 5315 Buena Vi	sta Dr				10			8.00					X				Ö
	3122 Natio	The second secon			City	, State, Zip: Carlsbac	NM, 8822	0		10			nalysis	and N	lethod	A CONTRACT OF THE PARTY OF THE			MINTERS OF		RCRA		5
	e, Zip: Carls					ne: (575)689-7597				2	T	T		T	T	-		T	2.53(6)		-		20
	75-988-005				Particle of Section	ail: jim.raley@dvn.co	m	100		RO I										State			22
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Report de									000	//OK	8021	8260	010	2		NN	¥		×				w
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID				Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8	Metals 6010	and the same of th		BGDOC	GDOC			Remarks			38:2:
11:20	10/11/2023	Rock	1			F504-5' F504	1-5									X			Chan	ood 5	mpl	0	PM
11:27	10/11/2023	Rock	1			FS05-5" FS05	A-5'	2								X			name	0		×.	
10:07	10/11/2023	Rock	1			+506-4'FS06+	4-4'	3								х		(1000	1	005+		
11:02	10/11/2023	Rock	1			F507 4' F5071	4-41	4								х			10/2	reque 1/23	(m		
11:10	10/11/2023	Rock	1			F508-5- F5081	4-5°	5								х							
9:54	10/11/2023	Rock	1			F509-4.5" F50	1A-4.5	6								х							
9:45	10/11/2023	Rock	1			ES10-4.5' FS104	4-4,5	7								X							
10:23	10/11/2023	Rock	1			FS11-4- FS11 F	+-41	8								х							
10:42	10/11/2023	Rock	1			F512-4' F512	A-41	9								х							
Addition	al Instructio	ns: Plea	ase CC: cl	ourton@enso	lum.com	, agiovengo@ensolur	n.com, jim.	raley@d	vn.con	n, ch	amilt	on@	ensol	um.co	m								
				ty of this sample. If		hat tampering with or intenti Sampled by:	onally mislabel		ole locati	on,		0.00							on ice the day t in 6 °C on subse	hey are sampled quent days.	or		
Relinquish	by: (Signatu	re)	Date			Received by: (Signature)	4	Date		Time			Total Control		Negative Control	Lab	Use O	nly					
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	rix: S - Soil, Sd - S	Solid, Sg - Sit	idge, A - Aqu	eous, O - Other		Www. In	~	Containe	Name and Address of the Owner, where	: g - g	lass,	CONTRACTOR NO.	All the state of the latest depth of the lates	THE RESERVE AND DESCRIPTION OF THE PERSON.		er glass	, v - VC	A					
Note: Sam	oles are discare	ded 30 day:	s after resu	Its are reported	unless othe	r arrangements are made	. Hazardous	samples wil	l be reti	urned	to clie	ent or	dispos	ed of at					ort for the a	nalysis of the	above		
samples is	applicable only	to those s	amples rec	eived by the labo	oratory with	this COC. The liability of	the laborator	y is limited	to the a	moun	t paid	for or	the re	port.		and the same							P

envirotech envirotech et al. environment et



APPENDIX G

Email Correspondence

Erick Herrera

From: Erick Herrera

Sent: Wednesday, November 9, 2022 3:44 PM

To: OCD.Enviro@emnrd.nm.gov; 'CFO_Spill, BLM_NM'

Cc: Raley, Jim; Devon-Team

Subject: WPX Site Sampling Activity Update (11/14 - 11/18)

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between November 14th – November 18th, 2022:

Site Name: LVP #001 API: 30-015-42234

Incident Number: nAPP2135033453

Thank you,



PLEASE NOTE OUR NEW CORPORATE ADDRESS:

Ensolum, LLC 8330 LBJ Freeway, Ste. B830 Dallas, TX 75243 From: Enviro, OCD, EMNRD
To: Joseph Hernandez

Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD

Subject: RE: [EXTERNAL] WPX Site Sampling Activity Update (11/21 - 11/23)

Date: Thursday, November 17, 2022 9:05:00 AM

Attachments: <u>image006.png</u>

image007.png image008.png image009.png

[**EXTERNAL EMAIL**]

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov

http://www.emnrd.nm.gov



From: Joseph Hernandez < jhernandez@ensolum.com>

Sent: Wednesday, November 16, 2022 4:40 PM

To: Enviro, OCD, EMNRD < OCD.Enviro@emnrd.nm.gov>; 'CFO_Spill, BLM_NM'

<blm_nm_cfo_spill@blm.gov>

Cc: Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@ensolum.com>

Subject: [EXTERNAL] WPX Site Sampling Activity Update (11/21 - 11/23)

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

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between November 21^{st} – November 23^{rd} , 2022:

Site Name: LVP #001 API: 30-015-42234

Incident Number: nAPP2135033453

Joseph S. Hernandez



PLEASE NOTE OUR NEW CORPORATE ADDRESS:

Ensolum, LLC 8330 LBJ Freeway, Ste. B830 Dallas, TX 75243 From: <u>Cole Burton</u>

To: <u>Enviro, OCD, EMNRD</u>

Cc: Ashley Giovengo; Raley, Jim; Chad Hamilton

Subject: 48-hour Confirmation Sampling Notification Email - LVP SWD #001 - Incident Number nAPP2135033453

Date: Tuesday, October 10, 2023 7:32:00 AM

Attachments: image001.png image002.png

image003.png image004.png

Hello,

We intend to collect confirmation samples at Devon Energy's, LVP SWD #001 site (Incident Number *nAPP2135033453*) beginning on Wednesday, October 11, 2023, at 09:00 am MST through Thursday, October 12, 2023.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,





APPENDIX H

Final C-141

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

Contact Name: Jim Raley

Responsible Party: WPX Energy Permian, LLC

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	nAPP2135033453
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

OGRID: 246289

Contact Telephone: 575-689-7597

Contact email: jim.raley@dvn.com					Incident # (assigned by OCD) nAPP2135033453				
Contact mail 88220	ing address:	5315 Buena Vista	a Dr., Carlsbad I	NM					
			Locatio	n of Releas	se Source				
atitude 32.3	330917		(NAD 83 in	Longi decimal degrees to	tude -104.0850372 5 decimal places)				
Site Name: L	VP SWD #0	001		Site 7	Type: SWD				
Date Release	Discovered:	: December 3 rd , 20)21	API#	(if applicable) 30-015-	42234			
Unit Letter	Section	Taxwashin	Dance		Country	7			
I Letter	04	Township 23S	Range 28E	Eddy	County				
			Nature ai	nd Volume	of Release				
Crudo Oil			ll that apply and atta		pecific justification for	the volumes provided below)			
Crude Oil	1	Volume Release	ll that apply and atta		volume Re	covered (bbls) 0			
_	1	Volume Release	ll that apply and atta ed (bbls) 0 ed (bbls) 200	uch calculations or s	volume Re	covered (bbls) 0 covered (bbls) 0			
Produced	Water	Volume Release Volume Release Is the concentrate produced water	ed (bbls) 0 ed (bbls) 200 tion of dissolved >10,000 mg/l?	uch calculations or s	volume Re Volume Re Volume Re	covered (bbls) 0 covered (bbls) 0 No			
_	Water	Volume Release Volume Release Is the concentra	ed (bbls) 0 ed (bbls) 200 tion of dissolved >10,000 mg/l?	uch calculations or s	volume Re Volume Re Volume Re	covered (bbls) 0 covered (bbls) 0			
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Produced Condensa	Water ite	Volume Release Volume Release Is the concentrate produced water Volume Release	ed (bbls) 200 tion of dissolved (bbls) 200 tion of dissolved (bbls) 200 ed (bbls) ed (bbls)	deh calculations or s	volume Re Volume Re Volume Re Volume Re Volume Re Volume Re	covered (bbls) 0 covered (bbls) 0 No covered (bbls)			
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☐ Condensa☐ Natural G☐ Other (de	Water tte das scribe) ease: Conne	Volume Release Volume Release Is the concentrate produced water Volume Release Volume Release Volume/Weight	ed (bbls) 200 tion of dissolved >10,000 mg/l? ed (bbls) ed (Mcf) Released (provi	de calculations or s	volume Re	covered (bbls) 0 covered (bbls) 0 No covered (bbls) covered (Mcf)			
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Produced Condensa Natural G Other (de	Water Mater Ma	Volume Release Volume Release Is the concentrary produced water Volume Release Volume Release Volume/Weight ction point on und	ed (bbls) 0 ed (bbls) 200 tion of dissolved >10,000 mg/l? ed (bbls) ed (Mcf) E Released (providerground produ	d chloride in the ide units)	Volume Re Volume/Wo Per line failed. Line	covered (bbls) 0 covered (bbls) 0 No covered (bbls) covered (bbls) covered (Mcf) eight Recovered (provide units)			
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☐ Condensa☐ Natural G☐ Other (de	Water Mater Ma	Volume Release Volume Release Is the concentrary produced water Volume Release Volume Release Volume/Weight ction point on und	ed (bbls) 0 ed (bbls) 200 tion of dissolved >10,000 mg/l? ed (bbls) ed (Mcf) E Released (providerground produ	d chloride in the ide units)	Volume Re Volume/Wo Per line failed. Line	covered (bbls) 0 No covered (bbls) 0 No covered (bbls) covered (Mcf) eight Recovered (provide units) was uncovered for repair and extent			

Received by OCD: 5/20/20243:38:23 PM1 State of New Mexico
Page 2 Oil Conservation Division

Page.	2760	f 434
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Incident ID	nAPP2135033453
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? Exceeds 25bbls of Produced Water released.			
⊠ Yes □ No				
	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc) Emily Hernandez on 12/3/2021 via email.			
	Initial Response			
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury			
The source of the rele	ease has been stopped.			
	s been secured to protect human health and the environment.			
_ *	eve been contained via the use of berms or dikes, absorbent pads, or other containment devices.			
☐ All free liquids and re	ecoverable materials have been removed and managed appropriately.			
If all the actions described	d above have <u>not</u> been undertaken, explain why:			
Day 10 15 20 9 D. (4) NIM	AC the generality marks were accompanied in the distance of a release. If we add in the control of a release			
has begun, please attach	AC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.			
regulations all operators are public health or the environr failed to adequately investig	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have atte and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In f a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws			
Printed Name:James	s Raley Title: Environmental Specialist			
Signature: Date:12/16/2021				
email:jim.raley@dvn	.com Telephone:575-689-7597			
OCD Only				
Received by:Ramo	ona Marcus Date:12/20/2021			

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 67514

CONDITIONS

Operator:	OGRID:		
WPX Energy Permian, LLC	246289		
	Action Number:		
Oklahoma City, OK 73102	67514		
	Action Type:		
	[C-141] Release Corrective Action (C-141)		

CONDITIONS

L	Created By	Condition	Condition Date
	rmarcus	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-	12/20/2021

tate of New Mexico

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Incident ID In APP2125022452

Incident ID	nAPP2135033453
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.

<50 (ft bgs)				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ Yes ⊠ No				
☐ 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.				
ls.				

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

Received by OCD: 5/20/2024 3:38:23 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page 279 of 4.	34
Incident ID	nAPP2135033453	
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

Signature:

Date:

Da

Page 280 of 434

	1 1180 200 0) 10
Incident ID	nAPP2135033453
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.		
 □ Detailed description of proposed remediation technique □ Scaled sitemap with GPS coordinates showing delineation points □ Estimated volume of material to be remediated □ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC □ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 		
Deferral Requests Only: Each of the following items must be con	nfirmed as part of any request for deferral of remediation.	
Contamination must be in areas immediately under or around predeconstruction.	roduction equipment where remediation could cause a major facility	
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health, 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 Specialist	
Signature:	Date:	
email:jim.raley@dvn.com	Telephone: 575-689-7597	
ach a l		
OCD Only		
Received by:	Date:	
Approved	Approval	
Signature:	Date:	



APPENDIX C

Email Correspondence

From: Raley, Jim

To: <u>Ashley Giovengo</u>; <u>Cole Burton</u>

Subject: FW: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 292677

Date: Thursday, February 29, 2024 6:59:12 AM

Attachments: <u>image001.png</u>

[**EXTERNAL EMAIL**]

Ashley,

Denial on LVP SWD. Figure out what they are talking about on the sampling. We might just get a hammer hoe out there and finish it up, but lets talk about it first.

Setup call with me in near future.

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



From: OCDOnline@state.nm.us < OCDOnline@state.nm.us >

Sent: Wednesday, February 28, 2024 1:17 PM

To: Raley, Jim <Jim.Raley@dvn.com>

Subject: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application

ID: 292677

To whom it may concern (c/o James Raley for WPX Energy Permian, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2135033453, for the following reasons:

Remediation plan denied. OCD will no longer approve liner installations for contaminant mitigation. The site must be remediated to the most stringent criteria in Table 1. WPX Energy Permian must collect at least 26 five-point confirmation samples from the walls and the base of excavation as stated in your remediation plan that was accepted by OCD on 8/9/2022. In the data you submitted with this report only 15 samples were collected. Submit remediation closure plan to OCD by May 28, 2024.

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 292677.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,

Shelly Wells Environmental Specialist-A 505-469-7520 Shelly.Wells@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

From: Ashley Giovengo
To: Dan Moir

Subject: FW: [EXTERNAL] WPX Energy - LVP SWD #001 - Incident Number nAPP2135033453

Date: Tuesday, April 30, 2024 10:51:12 PM

Attachments: image006.png

image007.png image008.png image009.png



Ashley Giovengo

Senior Scientist 575-988-0055 **Ensolum**, **LLC**

in f ¥

"Your authenticity is your superpower." - Unknown

From: Hamlet, Robert, EMNRD < Robert. Hamlet@emnrd.nm.gov>

Sent: Tuesday, April 16, 2024 1:16 PM

To: Ashley Giovengo <agiovengo@ensolum.com>

Cc: Raley, Jim <jim.raley@dvn.com>; Cole Burton <cburton@ensolum.com>

Subject: RE: [EXTERNAL] WPX Energy - LVP SWD #001 - Incident Number nAPP2135033453

[**EXTERNAL EMAIL**]

Thanks for the update Ashley.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us

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



From: Ashley Giovengo agiovengo@ensolum.com>

Sent: Tuesday, April 16, 2024 12:24 PM

To: Hamlet, Robert, EMNRD < <u>Robert.Hamlet@emnrd.nm.gov</u>>

Cc: Raley, Jim < <u>jim.raley@dvn.com</u>>; Cole Burton < <u>cburton@ensolum.com</u>>

Subject: [EXTERNAL] WPX Energy - LVP SWD #001 - Incident Number nAPP2135033453

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

Good Afternoon, Robert,

I am writing to inform you of WPX's intentions to return to the LVP SWD #001 (Site) to complete the excavation and confirmation sampling associated with a produced water release (Incident Number nAPP2135033453). This Site is located approximately 1,085 feet from the Pecos River in Eddy County, New Mexico and has been the subject of ongoing delineation, excavation, and confirmation sampling for the last 2 years. The difficulty in completing the exaction at this Site can be attributed to over four feet of moderately-cemented conglomerate and indurated caliche beginning at 5.5 feet below ground surface (bgs). NMOCD approved a Remediation Work plan with conditions on 08/09/2022 with a confirmation sampling variance of every 500 square feet from the floor and sidewall of the excavations. The original excavation area was expected to be larger in size (13,000 square feet) and following the approved sampling variance, a total of 26 composite confirmation soil samples were to be collected. The final excavation extent only measured 5,668 square feet and as such, a total of 12 composite confirmation floor samples and 3 composite confirmation sidewall soil samples were collected. Seven out of the fifteen confirmation soil samples collected on October 11, 2023, exceed the Site Closure Criteria at depths ranging from 4 feet bgs to 5.5 feet bgs. Ensolum personnel will return to the Site on April 18, 2024, to further advance the excavation with a larger trackhoe and hydraulic hammer head attachment and to recollect the failing confirmation soil samples. We just wanted to make sure you agreed that due to the size of the actual excavation area; we were not planning on collecting a total of 26 composite samples as was noted in the denial. We will be collecting samples that represent the approved variance of 500 sq. ft., which totaled 15 and 7 of those exceeded the closure criteria.

Thanks,



"Your authenticity is your superpower." – Unknown

 From:
 Raley, Jim

 To:
 Ashley Giovengo

 Cc:
 Cole Burton; Israel Estrella

Subject: RE: [EXTERNAL] 48-hour Confirmation Sampling Notification - LVP SWD #001 - Incident Number nAPP2135033453

Date: Monday, April 22, 2024 9:16:29 AM

Attachments: image001.png image002.png

image002.png image003.png image004.png image005.png

[**EXTERNAL EMAIL**]

Sampling notification made on 04/22/2024 for following dates at nAPP2135033453 (LVP).

04/24

04/25

04/26

04/28

04/29

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220

C: (575)689-7597 | jim.raley@dvn.com



From: Raley, Jim

Sent: Tuesday, April 16, 2024 3:42 PM

To: Ashley Giovengo <agiovengo@ensolum.com>

Cc: Cole Burton <cburton@ensolum.com>; Israel Estrella <iestrella@ensolum.com>

Subject: RE: [EXTERNAL] 48-hour Confirmation Sampling Notification - LVP SWD #001 - Incident Number nAPP2135033453

Submitted 4/18, 4/19, 4/20, 4/22, 4/23

Let me know if need more time by Monday 4/22/2024

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



From: Ashley Giovengo <a giovengo@ensolum.com>

Sent: Tuesday, April 16, 2024 1:29 PM

To: Enviro, OCD, EMNRD <<u>ocd.enviro@emnrd.nm.gov</u>>; Hamlet, Robert, EMNRD <<u>Robert.Hamlet@emnrd.nm.gov</u>>; Raley, Jim <<u>Jim.Raley@dvn.com</u>>

Cc: Cole Burton < cburton@ensolum.com >; Chad Hamilton < chamilton@ensolum.com >; Israel Estrella@ensolum.com >

Subject: [EXTERNAL] 48-hour Confirmation Sampling Notification - LVP SWD #001 - Incident Number nAPP2135033453

Hello,

Please see the 48-hour confirmation sampling notification for the LVP SWD #001 Site (Incident Number nAPP2135033453)

What is the sampling surface area in square feet	5,668 sq. ft.
What is the estimated number of samples that will be gathered	7
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection	
D of 19.15.29.12 NMAC	04/18/2024
Time sampling will commence	09:00am MST.

Please provide any information necessary for observers to contact samplers	Sampler: Cole Burton (575)-706-5056
Please provide any information necessary for navigation to sampling site	
	32.3330917, -104.0850372

NMOCD District II,

Please see the 48-hour notice for the LVP SWD #001, WPX will enter this information into NMOCD web portal.

Thanks,



"Your authenticity is your superpower." – Unknown

Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.



APPENDIX D

Photographic Log



Photographic Log

WPX Energy Permian, LLC. LVP SWD #001 nAPP2135033453





Photograph: 1 Date: 4/18/24

Description: Larger track hoe with hammer attachment

View: West

Photograph: 2 Date: 4/18/24

Description: Excavation through conglomerate soil

View: North





Photograph: 3 Date: 4/24/24

Description: Broken conglomerates and caliche

View: West-northwest

Photograph: 4 Date: 4/24/24

Description: Excavation at depth with hammer bit

View: Southwest-west



APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody

Documentation

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E312086

Job Number: 01058-0007

Received: 12/13/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 12/20/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 12/20/23

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E312086

Date Received: 12/13/2023 1:00:00PM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/13/2023 1:00:00PM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

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Southern New Mexico Area

Lynn Jarboe

Laboratory Technical Representative Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Michelle Golzales

Client Representative
Office: 505-421-LABS(5227)

G 11 505 0 15 0000

Cell: 505-947-8222

mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Γ	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Donoutode
l	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
l	Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/23 15:48

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS02-0'	E312086-01A	Soil	12/11/23	12/13/23	Glass Jar, 2 oz.



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/2023 3:48:23PM

SS02-0'

		E312086-01				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: RKS		Batch: 2350076
Benzene	ND	0.0250	1	12/14/23	12/17/23	
Ethylbenzene	ND	0.0250	1	12/14/23	12/17/23	
Toluene	ND	0.0250	1	12/14/23	12/17/23	
o-Xylene	ND	0.0250	1	12/14/23	12/17/23	
p,m-Xylene	ND	0.0500	1	12/14/23	12/17/23	
Total Xylenes	ND	0.0250	1	12/14/23	12/17/23	
Surrogate: 4-Bromochlorobenzene-PID		81.4 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.2 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2350072
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/23	12/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/14/23	12/16/23	
Surrogate: n-Nonane		81.9 %	50-200	12/14/23	12/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2351045
Chloride	501	20.0	1	12/19/23	12/20/23	



Devon Energy - Carlsbad LVP SWD #001 Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 12/20/2023 3:48:23PM **Volatile Organics by EPA 8021B** Analyst: RKS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2350076-BLK1) Prepared: 12/14/23 Analyzed: 12/15/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.64 8.00 95.5 70-130 LCS (2350076-BS1) Prepared: 12/14/23 Analyzed: 12/15/23 4.90 5.00 98.0 70-130 Benzene 0.0250 Ethylbenzene 4.72 0.0250 5.00 94.4 70-130 4.90 0.0250 5.00 98.0 70-130 Toluene o-Xylene 4.83 0.0250 5.00 96.7 70-130 9.76 10.0 97.6 70-130 0.0500 p.m-Xvlene 97.3 70-130 14.6 15.0 Total Xylenes 0.0250 8.00 96.5 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.72 Source: E312087-02 Matrix Spike (2350076-MS1) Prepared: 12/14/23 Analyzed: 12/19/23 5.00 0.0250 5.00 ND 54-133 Benzene ND 97.0 61-133 Ethylbenzene 4.85 0.0250 5.00 Toluene 5.02 0.0250 5.00 ND 100 61-130 ND 99.1 63-131 4.96 5.00 0.0250 o-Xylene p,m-Xylene 10.0 0.0500 10.0 ND 100 63-131 15.0 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.62 8.00 Matrix Spike Dup (2350076-MSD1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/17/23 4.99 0.0250 5.00 ND 99.7 54-133 0.217 20 4.73 ND 61-133 2.49 0.0250 5.00 94.6 20 Ethylbenzene

4 96

4.80

9.73

14.5

6.15

0.0250

0.0250

0.0500

0.0250

5.00

5.00

10.0

15.0

8.00

ND

ND

ND

ND

99 2

96.0

97.3

96.9

76.9

61-130

63-131

63-131

63-131

70-130

1.21

3.25

3.05

3.12

20

20

20

20



Toluene

o-Xylene

p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/2023 3:48:23PM

Artesia NM, 88210		Project Manage	r: As	hley Gioveng	go				12/20/2023 3:48:23PM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2350076-BLK1)							Prepared: 1	2/14/23	Analyzed: 12/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		8.00		87.2	70-130			
LCS (2350076-BS2)							Prepared: 1	2/14/23	Analyzed: 12/19/23
Gasoline Range Organics (C6-C10)	47.4	20.0	50.0		94.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		8.00		88.6	70-130			
Matrix Spike (2350076-MS2)				Source:	E312087-	02	Prepared: 1	2/14/23	Analyzed: 12/17/23
Gasoline Range Organics (C6-C10)	40.5	20.0	50.0	ND	81.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.6	70-130			
Matrix Spike Dup (2350076-MSD2)				Source:	E312087-	02	Prepared: 1	2/14/23	Analyzed: 12/17/23
Gasoline Range Organics (C6-C10)	40.9	20.0	50.0	ND	81.8	70-130	0.891	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		8.00		88.6	70-130			

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	•
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/2023 3:48:23PM

Artesia NM, 88210		Project Manage	r: As	niey Gioveng	go				12/20/2023 3:48:23P1
	Nonha	logenated Or	ganics by l	E PA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2350072-BLK1)							Prepared: 1	2/14/23	Analyzed: 12/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	45.0		50.0		89.9	50-200			
LCS (2350072-BS1)							Prepared: 1	2/14/23	Analyzed: 12/15/23
Diesel Range Organics (C10-C28)	228	25.0	250		91.3	38-132			
urrogate: n-Nonane	42.9		50.0		85.8	50-200			
Matrix Spike (2350072-MS1)				Source:	E312075-0	05	Prepared: 1	2/14/23	Analyzed: 12/18/23
Diesel Range Organics (C10-C28)	684	25.0	250	398	114	38-132			
urrogate: n-Nonane	44.1		50.0		88.2	50-200			
Matrix Spike Dup (2350072-MSD1)				Source:	E312075-0	05	Prepared: 1	2/14/23	Analyzed: 12/15/23
Diesel Range Organics (C10-C28)	657	25.0	250	398	104	38-132	3.95	20	
urrogate: n-Nonane	45.9		50.0		91.7	50-200			



Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210		Project Name: Project Number: Project Manager:	0	VP SWD #001 1058-0007 ashley Giovengo	ı				•	oorted: 3 3:48:23PM
		Anions l	by EPA	300.0/9056A					Analys	st: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPE Limi %		Notes
Blank (2351045-BLK1)							Prepared	12/19/23	Analyzed:	12/20/23
Chloride	ND	20.0								
LCS (2351045-BS1)							Prepared:	12/19/23	Analyzed:	12/20/23
Chloride	256	20.0	250		102	90-110				
Matrix Spike (2351045-MS1)				Source: E	312127-)1	Prepared:	12/19/23	Analyzed:	12/20/23
Chloride	257	20.0	250	ND	103	80-120				
Matrix Spike Dup (2351045-MSD1)				Source: E	312127-0	01	Prepared:	12/19/23	Analyzed:	12/20/23
Chloride	264	20.0	250	ND	106	80-120	2.79	20		

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/23 15:48

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



EF	A Pr	ogra	m
CV	VA	SD	WA
		RC	RA
Sta	ite		
T	AZ	TX	
m	arks		

Client: Devon	Bill To			La	b Us	se On	ly	***			T	AT	EPA	Program
Project: LVP SWD #001	Attention: Dale Woodall		Lab WO	#		Job I	Num	ber		2D	3D	Standa	d CWA	SDWA
Project Manager: Ashley Giovengo	Address: 205 E Bender Road #15	0	E312	081	0	010	56	7000				Х		
Address: 3122 National Parks Hwy	City, State, Zip: Hobbs NM, 8824)				Analy	sis a	nd Metho	d					RCRA
City, State, Zip: Carlsbad NM, 88220	Phone: (575)748-1838		þý											
Phone: 575-988-0055	Email: dale.woodall@dvn.com		SRO SRO										State	
Email: agiovengo@ensolum.com			0/0	4	2		0.		ΣN			NM	CO UT A	Z TX
Report due by:			NO/OR	802	3260	010	300				×	×		
Time Date Sampled Matrix No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC		Remark	S
10:10 12/11/2023 Soil 1 Jar	SS02 - 0'	1							х					
										-				
										-				
										-				
Additional Instructions: Please CC: cbu	l ton@ensolum.com, agiovengo@ensolum.com, jim.	aley@dvn.o	com, cha	miltor	1@e	nsolu	um.c	com		1				
, (field sampler), attest to the validity and authenticity of date or time of collection is considered fraud and may b	f this sample. I am aware that tampering with or intentionally mislabelli e grounds for legal action. Sampled by:	ng the sample lo	cation,										e day they are sar subsequent days	
	-12-23 Time Received by: (Signature)	Date 12-12-0		105		Rece	eived	on ice:		ab U		nly		
Relinquished by: (Signature) Date William Ceny Date	1223 1545 auntes	ia/Bl		300)	T1			<u>T2</u>			<u>T3</u>		
Relinquished by: (Signature)	Time Received by:\(Signal\ure\)	Date	Time		_			np °C	+					
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueo	or O. Other	Container	Tunora			1 /	1			Sala .	. 110	۸		



e client expense. The report for the analysis of the above

envirotech

Page 302 of 434

Printed: 12/13/2023 4:50:38PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Devon Energy - Carlsbad	Date Received:	12/13/23	13:00		Work Order ID:	E312086
							
Phone:		Date Logged In:	12/12/23			Logged In By:	Jordan Montano
Email:	ashley.giovengo@wescominc.com	Due Date:	12/20/23	17:00 (5 day TAT)			
Chain o	of Custody (COC)						
1. Does	the sample ID match the COC?		Yes				
	the number of samples per sampling site location mate	th the COC	Yes				
3. Were	samples dropped off by client or carrier?		Yes	Carrier: <u>C</u>	Courier		
4. Was t	he COC complete, i.e., signatures, dates/times, request	ed analyses?	Yes				
	all samples received within holding time?	•	Yes				
	Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssion					Comment	s/Resolution
Sample	Turn Around Time (TAT)						
	ne COC indicate standard TAT, or Expedited TAT?		Yes				
	Cooler						
	a sample cooler received?		Yes				
	, was cooler received in good condition?		Yes				
-	he sample(s) received intact, i.e., not broken?						
	e custody/security seals present?		Yes				
			No				
•	es, were custody/security seals intact?		NA				
	the sample received on ice? If yes, the recorded temp is 4°C, i Note: Thermal preservation is not required, if samples are minutes of sampling	received w/i 15	Yes				
13. If no	visible ice, record the temperature. Actual sample t	emperature: 4°0	<u>C</u>				
Sample	<u>Container</u>						
14. Are	aqueous VOC samples present?		No				
15. Are	VOC samples collected in VOA Vials?		NA				
16. Is th	e head space less than 6-8 mm (pea sized or less)?		NA				
17. Was	a trip blank (TB) included for VOC analyses?		NA				
18. Are	non-VOC samples collected in the correct containers?		Yes				
19. Is the	e appropriate volume/weight or number of sample contained	ers collected?	Yes				
Field La	<u>abel</u>						
	e field sample labels filled out with the minimum infor	mation:					
	Sample ID?		Yes				
	Date/Time Collected?		Yes	L			
	Collectors name?		Yes				
	Preservation		NT.				
	s the COC or field labels indicate the samples were pre	eservea?	No				
	sample(s) correctly preserved?	-4-1-9	NA				
	b filteration required and/or requested for dissolved me	etais?	No				
	nase Sample Matrix						
	s the sample have more than one phase, i.e., multiphase		No				
27. If ye	es, does the COC specify which phase(s) is to be analyzed	zed?	NA				
Subcon	tract Laboratory						
28. Are	samples required to get sent to a subcontract laboratory	y?	No				
29. Was	a subcontract laboratory specified by the client and if	so who?	NA	Subcontract Lab	: NA		
Client	<u>Instruction</u>						
CHERT	instruction						

Date

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E312087

Job Number: 01058-0007

Received: 12/13/2023

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 12/21/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 12/21/23

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E312087

Date Received: 12/13/2023 1:00:00PM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/13/2023 1:00:00PM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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Sample Summary

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Donouted.
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/23 14:07

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
SS01-0'	E312087-01A Soil	12/11/23	12/13/23	Glass Jar, 2 oz.
SS03-0'	E312087-02A Soil	12/11/23	12/13/23	Glass Jar, 2 oz.
SS04-0'	E312087-03A Soil	12/11/23	12/13/23	Glass Jar, 2 oz.
BH01-0'	E312087-04A Soil	12/11/23	12/13/23	Glass Jar, 2 oz.
BH02-0'	E312087-05A Soil	12/11/23	12/13/23	Glass Jar, 2 oz.



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Case	- NI	ara	tıτ	70.

Project Name: LVP SWD #001

Workorder:E312087

Date Received: 12/13/23 13:00

The client requested the following sample(s) to be re-extracted and re-analyzed:

Sample Name

<u>Laboratory ID</u>

Analysis

SS01-0'

E312087-01

300.0 Chloride

The analytical test results summarized in this revised report represent this re-extration and re-analysis.

If you have any questions reguarding this report please feel free to contact Envirotech Inc.

Respectfully,

Walter Hinchman

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM

SS01-0'

		E312087-01				
		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2350076
Benzene	ND	0.0250	1	12/14/23	12/17/23	
Ethylbenzene	ND	0.0250	1	12/14/23	12/17/23	
Toluene	ND	0.0250	1	12/14/23	12/17/23	
o-Xylene	ND	0.0250	1	12/14/23	12/17/23	
p,m-Xylene	ND	0.0500	1	12/14/23	12/17/23	
Total Xylenes	ND	0.0250	1	12/14/23	12/17/23	
Surrogate: 4-Bromochlorobenzene-PID		81.6 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: RKS		Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.5 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2350074
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/23	12/15/23	
Oil Range Organics (C28-C36)	52.5	50.0	1	12/14/23	12/15/23	
Surrogate: n-Nonane		99.7 %	50-200	12/14/23	12/15/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2351069
Chloride	655	20.0	1	12/21/23	12/21/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM

SS03-0'

E312087-02

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2350076
Benzene	ND	0.0250	1	12/14/23	12/17/23	
Ethylbenzene	ND	0.0250	1	12/14/23	12/17/23	
Toluene	ND	0.0250	1	12/14/23	12/17/23	
o-Xylene	ND	0.0250	1	12/14/23	12/17/23	
p,m-Xylene	ND	0.0500	1	12/14/23	12/17/23	
Total Xylenes	ND	0.0250	1	12/14/23	12/17/23	
Surrogate: 4-Bromochlorobenzene-PID		76.4 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.9 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2350074
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/23	12/15/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/14/23	12/15/23	
Surrogate: n-Nonane		98.0 %	50-200	12/14/23	12/15/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2351045
	262	20.0		12/19/23	12/20/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM

SS04-0'

E312087-03

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2350076
Benzene	ND	0.0250	1	12/14/23	12/17/23	
Ethylbenzene	ND	0.0250	1	12/14/23	12/17/23	
Toluene	ND	0.0250	1	12/14/23	12/17/23	
o-Xylene	ND	0.0250	1	12/14/23	12/17/23	
p,m-Xylene	ND	0.0500	1	12/14/23	12/17/23	
Total Xylenes	ND	0.0250	1	12/14/23	12/17/23	
Surrogate: 4-Bromochlorobenzene-PID		82.3 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.4 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2350074
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/23	12/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/14/23	12/16/23	
Surrogate: n-Nonane		102 %	50-200	12/14/23	12/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2351045



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM

BH01-0'

E31	208	37 - 04
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		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: RKS		Batch: 2350076
Benzene	ND	0.0250	1	12/14/23	12/17/23	
Ethylbenzene	ND	0.0250	1	12/14/23	12/17/23	
Toluene	ND	0.0250	1	12/14/23	12/17/23	
o-Xylene	ND	0.0250	1	12/14/23	12/17/23	
p,m-Xylene	ND	0.0500	1	12/14/23	12/17/23	
Total Xylenes	ND	0.0250	1	12/14/23	12/17/23	
Surrogate: 4-Bromochlorobenzene-PID		83.1 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.9 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2350074
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/23	12/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/14/23	12/16/23	
Surrogate: n-Nonane		100 %	50-200	12/14/23	12/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2351045
	9860	200	10	12/19/23	12/20/23	•



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM

BH02-0'

E312087-05

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2350076
Benzene	ND	0.0250	1	12/14/23	12/17/23	
Ethylbenzene	ND	0.0250	1	12/14/23	12/17/23	
Toluene	ND	0.0250	1	12/14/23	12/17/23	
o-Xylene	ND	0.0250	1	12/14/23	12/17/23	
p,m-Xylene	ND	0.0500	1	12/14/23	12/17/23	
Total Xylenes	ND	0.0250	1	12/14/23	12/17/23	
Surrogate: 4-Bromochlorobenzene-PID		84.0 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: RKS		Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.5 %	70-130	12/14/23	12/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2350074
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/23	12/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/14/23	12/16/23	
Surrogate: n-Nonane		99.9 %	50-200	12/14/23	12/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2351045
Chloride	13700	200	10	12/19/23	12/20/23	



LVP SWD #001 Devon Energy - Carlsbad Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 12/21/2023 2:07:08PM **Volatile Organics by EPA 8021B** Analyst: RKS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2350076-BLK1) Prepared: 12/14/23 Analyzed: 12/15/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.64 8.00 95.5 70-130 LCS (2350076-BS1) Prepared: 12/14/23 Analyzed: 12/15/23 4.90 5.00 98.0 70-130 Benzene 0.0250 Ethylbenzene 4.72 0.0250 5.00 94.4 70-130 4.90 0.0250 5.00 98.0 70-130 Toluene o-Xylene 4.83 0.0250 5.00 96.7 70-130 9.76 10.0 97.6 70-130 0.0500 p.m-Xvlene 97.3 70-130 14.6 15.0 Total Xylenes 0.0250 8.00 96.5 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.72 Matrix Spike (2350076-MS1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/19/23 5.00 0.0250 5.00 ND 54-133 Benzene 97.0 61-133 Ethylbenzene 4.85 0.0250 5.00 ND Toluene 5.02 0.0250 5.00 ND 100 61-130 ND 99.1 63-131 4.96 5.00 0.0250 o-Xylene p,m-Xylene 10.0 0.0500 10.0 ND 100 63-131 15.0 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.62 8.00 Matrix Spike Dup (2350076-MSD1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/17/23 4.99 0.0250 5.00 ND 99.7 54-133 0.217 4.73 61-133 2.49 0.0250 5.00 ND 94.6 20 Ethylbenzene 61-130 Toluene 4 96 0.0250 5.00 ND 99 2 1.21 20 4.80 5.00 ND 96.0 63-131 3.25 20 o-Xylene 0.0250 97.3 9.73 10.0 ND 63-131 3.05 20 p,m-Xylene 0.0500



14.5

6.15

0.0250

15.0

8.00

ND

96.9

76.9

63-131

70-130

3.12

20

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy Artesia NM, 88210	Project Number: Project Manager:	01058-0007 Ashley Giovengo	12/21/2023 2:07:08PM

Artesia NM, 88210		Project Manage	r: As	shley Giovens	go			12	2/21/2023 2:07:08PN
	Nor	nhalogenated	Organics	by EPA 80	15D - G	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2350076-BLK1)							Prepared:	12/14/23 A	nalyzed: 12/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		8.00		87.2	70-130			
LCS (2350076-BS2)							Prepared:	12/14/23 A	nalyzed: 12/19/23
Gasoline Range Organics (C6-C10)	47.4	20.0	50.0		94.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		8.00		88.6	70-130			
Matrix Spike (2350076-MS2)				Sourc	e: E31208	37-02	Prepared:	12/14/23 A	nalyzed: 12/17/23
Gasoline Range Organics (C6-C10)	40.5	20.0	50.0	ND	81.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.6	70-130			
Matrix Spike Dup (2350076-MSD2)				Source	e: E31208	37-02	Prepared:	12/14/23 A	nalyzed: 12/17/23
Gasoline Range Organics (C6-C10)	40.9	20.0	50.0	ND	81.8	70-130	0.891	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		8.00		88.6	70-130			



Devon Energy - Carlsbad 6488 7 Rivers Hwy	Project Name: Project Number:	LVP SWD #001 01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM

Artesia NM, 88210		Project Manage	r: As	shley Gioveng	go			12	/21/2023 2:07:08PM
	Nonha	logenated Or		Analyst: KM					
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2350074-BLK1)							Prepared:	12/14/23 A	nalyzed: 12/15/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.5		50.0		103	50-200			
LCS (2350074-BS1)							Prepared:	12/14/23 A	nalyzed: 12/15/23
Diesel Range Organics (C10-C28)	271	25.0	250		108	38-132			
Surrogate: n-Nonane	50.8		50.0		102	50-200			
Matrix Spike (2350074-MS1)				Source	e: E31207	72-04	Prepared:	12/14/23 A	nalyzed: 12/15/23
Diesel Range Organics (C10-C28)	294	25.0	250	31.0	105	38-132			
Surrogate: n-Nonane	49.4		50.0		98.8	50-200			
Matrix Spike Dup (2350074-MSD1)				Source	e: E31207	2-04	Prepared:	12/14/23 A	nalyzed: 12/15/23
Diesel Range Organics (C10-C28)	301	25.0	250	31.0	108	38-132	2.25	20	
Surrogate: n-Nonane	50.4		50.0		101	50-200			



Devon Energy - Carlsbad 6488 7 Rivers Hwy	Project Name: Project Number:	LVP SWD #001 01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/2023 2:07:08PM
	Anions by	EPA 300 0/9056A	A I D A

	Analyst: BA								
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	N.
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2351045-BLK1)							Prepared:	12/19/23 An	alyzed: 12/20/23
Chloride	ND	20.0							
LCS (2351045-BS1)							Prepared:	12/19/23 An	alyzed: 12/20/23
Chloride	256	20.0	250		102	90-110			
Matrix Spike (2351045-MS1)				Sourc	e: E31212	7-01	Prepared:	12/19/23 An	alyzed: 12/20/23
Chloride	257	20.0	250	ND	103	80-120			
Matrix Spike Dup (2351045-MSD1)				Sourc	e: E31212	7-01	Prepared:	12/19/23 An	alyzed: 12/20/23
Chloride	264	20.0	250	ND	106	80-120	2.79	20	

Devon Energy - Carlsbad		Project Name:		VP SWD #001 1058-0007					Reported:
6488 7 Rivers Hwy Artesia NM, 88210		Project Number: Project Manager:		shley Gioveng	o				12/21/2023 2:07:08PM
		Anions	by EPA 3	300.0/9056A					Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2351069-BLK1)							Prepared:	12/20/23	Analyzed: 12/21/23
Chloride	ND	20.0							
LCS (2351069-BS1)							Prepared:	12/20/23	Analyzed: 12/21/23
Chloride	255	20.0	250		102	90-110			
Matrix Spike (2351069-MS1)				Source	e: E31211	9-42	Prepared:	12/20/23	Analyzed: 12/21/23
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2351069-MSD1)				Source	e: E31211	9-42	Prepared:	12/20/23	Analyzed: 12/21/23
Chloride	256	20.0	250	ND	102	80-120	0.272	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
-	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
	Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/21/23 14:07

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



CWA SDWA
RCRA
state
T AZ TX

Client: Devon		Attention: Dale Woodall Address: 205 E Bender Road #150		Lab Use Only					TAT				EPA Program					
Project: LVP SWD #001				Lab WO#			Job Number			1D	2D	3D	D Standard	CWA	SDWA			
Project Manager: Ashley Giovengo				E312067		5+	OIC	B	-000-		1		X					
Address: 3122 National Parks Hwy City			City, State, Zip: Hobbs NM, 882	City, State, Zip: Hobbs NM, 88240				Analy	ysis a	nd Metho	d			11111		RCRA		
		Phone: (575)748-1838		ργ														
		Email: dale.woodall@dvn.com		ORO	1	1								State				
Email: agiovengo@ensolum.com					RO/	12	0		0.0	;	Z			NM CO	UT AZ	TX		
Report due by:					0/0	0/0	826	6010	300	1 1 1	100		¥	×				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	TPH GRO/DRO/ORO by	8015 BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC		Remarks	
9:22	12/11/2023	Soil	1 Jar		SS01 - 0'	1							х					
9:26	12/11/2023	Soil	1 Jar		SS03 - 0'	2							х					
9:30	12/11/2023	Soil	1 Jar		SS04 - 0'	3							x					
9:27	12/11/2023	Soil	1 Jar		BH01 - 0'	4							х					
9:33	12/11/2023	Soil	1 Jar		BH02 - 0'	5							х					
								-										
Additiona	l Instructions:	Please	CC: cbui	rton@ensolum.	com, agiovengo@ensolum.com, jin	n.raley@dvn.	com, cha	milto	on@e	ensol	um.c	om						
				f this sample. I am av e grounds for legal act	vare that tampering with or intentionally mislabe ion. Sampled by:	elling the sample lo	ocation,									ceived on ice the day ess than 6 °C on sub		led or
bell	by: (Signature)	t	Date 2	-12-23 Time	Received by: (Signature)	Date 12-12-		110	5	Rece	eived	on ice:	(1	ab Us	se On	ly		
wich		nh	Date 12		Received by: (Signature)	Date 12:12:		30	0	T1			T2			T3		
lelinquished	d by: (Signature)	y	Date	Time	Received by: (Signature)	Date	Tim	е		AVG	i Ten	np°c_	+					
ample Matrix	x: S - Soil, Sd - Solid,	Sg - Sludge	A - Aqueou	ıs, O - Other		Containe	r Type: g	glass	, p - p			c, ag - amb	er gl	ass, v	- VOA	(
	avenue diseased ad i	20 days aft	er results :	are reported unless	other arrangements are made. Hazardous	camples will be	roturned:	o cline	at ard	icnocc	d of a	t the client	ovno	nco	Thorn	nort for the and	biolo of the	ahava



e client expense. The report for the analysis of the above

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Printed: 12/13/2023 4:47:16PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

	evon Energy - Carlsbad	Date Received:	12/13/23	13:00	Work Order ID:	E312087
Phone: (50	O5) 382-1211 I	Date Logged In:	12/12/23	14:00	Logged In By:	Jordan Montano
Email: ash	nley.giovengo@wescominc.com	Oue Date:	12/20/23	17:00 (5 day TAT)		
Chain of Cus	stody (COC)					
	ample ID match the COC?		Yes			
2. Does the nu	umber of samples per sampling site location match	the COC	Yes			
3. Were samp	les dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was the CC	OC complete, i.e., signatures, dates/times, requeste	d analyses?	Yes			
No	mples received within holding time? ote: Analysis, such as pH which should be conducted in the conducted in	•	Yes		Commen	ts/Resolution
Sample Turn	Around Time (TAT) OC indicate standard TAT, or Expedited TAT?		Yes			
	• •		103			
Sample Coole	er ple cooler received?		Yes			
-	cooler received in good condition?					
•	ŭ		Yes			
	mple(s) received intact, i.e., not broken?		Yes			
	ody/security seals present?		No			
11. If yes, we	re custody/security seals intact?		NA			
No mir	mple received on ice? If yes, the recorded temp is 4°C, i. te: Thermal preservation is not required, if samples are runtes of sampling	eceived w/i 15	Yes			
	ble ice, record the temperature. Actual sample to	mperature: 4°	<u> </u>			
Sample Cont						
-	ous VOC samples present?		No			
	samples collected in VOA Vials?		NA			
	d space less than 6-8 mm (pea sized or less)?		NA			
_	blank (TB) included for VOC analyses?		NA			
	VOC samples collected in the correct containers?		Yes			
19. Is the appro	opriate volume/weight or number of sample container	rs collected?	Yes			
Field Label						
	d sample labels filled out with the minimum inform	nation:	37			
_	le ID? Time Collected?		Yes			
	ctors name?		Yes Yes			
Sample Prese			168			
	COC or field labels indicate the samples were pres	served?	No			
	le(s) correctly preserved?		NA			
	eration required and/or requested for dissolved me	tals?	No			
	Sample Matrix					
	sample <u>watrix</u> sample have more than one phase, i.e., multiphase	?	No			
	es the COC specify which phase(s) is to be analyze					
		Ju:	NA			
Subcontract		_				
_	les required to get sent to a subcontract laboratory specified by the client and if s		No NA	Subcontract Lab: NA		
29. Was a sub						

Signature of client authorizing changes to the COC or sample disposition.

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E312118

Job Number: 01058-0007

Received: 12/18/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 12/22/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 12/22/23

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E312118

Date Received: 12/18/2023 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/18/2023 7:30:00AM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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Sample Summary

Γ	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Demonstral.
١	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
l	Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/23 14:00

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
BH01-1'	E312118-01A Soil	12/14/23	12/18/23	Glass Jar, 2 oz.
BH01-2'	E312118-02A Soil	12/14/23	12/18/23	Glass Jar, 2 oz.
BH02-1'	E312118-03A Soil	12/14/23	12/18/23	Glass Jar, 2 oz.
BH02-2'	E312118-04A Soil	12/14/23	12/18/23	Glass Jar, 2 oz.
BH02-2.5'	E312118-05A Soil	12/14/23	12/18/23	Glass Jar. 2 oz.



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/2023 2:00:13PM

BH01-1' E312118-01

	1512110 01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: RKS		Batch: 2351017
ND	0.0250	1	12/18/23	12/19/23	
ND	0.0250	1	12/18/23	12/19/23	
ND	0.0250	1	12/18/23	12/19/23	
ND	0.0250	1	12/18/23	12/19/23	
ND	0.0500	1	12/18/23	12/19/23	
ND	0.0250	1	12/18/23	12/19/23	
	94.1 %	70-130	12/18/23	12/19/23	
mg/kg	mg/kg	Anal	yst: RKS		Batch: 2351017
ND	20.0	1	12/18/23	12/19/23	
	87.4 %	70-130	12/18/23	12/19/23	
mg/kg	mg/kg	Anal	yst: KM		Batch: 2351054
ND	25.0	1	12/20/23	12/20/23	
ND	50.0	1	12/20/23	12/20/23	
	89.7 %	50-200	12/20/23	12/20/23	
mg/kg	mg/kg	Anal	yst: IY		Batch: 2351062
_	mg/kg ND	Result Reporting Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 MD 0.0250 94.1 % mg/kg MD 20.0 87.4 % mg/kg ND 25.0 ND 50.0	Reporting Result Limit Dilution mg/kg mg/kg Anal ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 ND 0.0250 1 MD 0.0250 1 94.1 % 70-130 mg/kg mg/kg Anal ND 20.0 1 87.4 % 70-130 70-130 mg/kg mg/kg Anal ND 25.0 1 ND 50.0 1	Reporting Result Limit Dilution Prepared mg/kg mg/kg Analyst: RKS ND 0.0250 1 12/18/23 ND 0.0250 1 12/18/23 ND 0.0250 1 12/18/23 ND 0.0250 1 12/18/23 ND 0.0500 1 12/18/23 ND 0.0250 1 12/18/23 mg/kg mg/kg Analyst: RKS ND 20.0 1 12/18/23 mg/kg mg/kg Analyst: KM ND 25.0 1 12/20/23 ND 50.0 1 12/20/23 ND 50.0 1 12/20/23	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: RKS ND 0.0250 1 12/18/23 12/19/23 ND 0.0250 1 12/18/23 12/19/23 ND 0.0250 1 12/18/23 12/19/23 ND 0.0500 1 12/18/23 12/19/23 ND 0.0250 1 12/18/23 12/19/23 MD 0.0250 1 12/18/23 12/19/23 mg/kg mg/kg Analyst: RKS ND 20.0 1 12/18/23 12/19/23 mg/kg mg/kg Analyst: KM ND 25.0 1 12/20/23 12/20/23 ND 50.0 1 12/20/23 12/20/23 ND 50.0 1 12/20/23 12/20/23



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/2023 2:00:13PM

BH01-2'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2351017
Benzene	ND	0.0250	1	12/18/23	12/19/23	
Ethylbenzene	ND	0.0250	1	12/18/23	12/19/23	
Toluene	ND	0.0250	1	12/18/23	12/19/23	
o-Xylene	ND	0.0250	1	12/18/23	12/19/23	
p,m-Xylene	ND	0.0500	1	12/18/23	12/19/23	
Total Xylenes	ND	0.0250	1	12/18/23	12/19/23	
Surrogate: 4-Bromochlorobenzene-PID		94.9 %	70-130	12/18/23	12/19/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: RKS		Batch: 2351017
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/18/23	12/19/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.0 %	70-130	12/18/23	12/19/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2351054
Diesel Range Organics (C10-C28)	ND	25.0	1	12/20/23	12/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/20/23	12/20/23	
Surrogate: n-Nonane		87.4 %	50-200	12/20/23	12/20/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2351062
				12/20/23	12/20/23	



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/2023 2:00:13PM

BH02-1'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: RKS		Batch: 2351017
Benzene	ND	0.0250	1	12/18/23	12/19/23	
Ethylbenzene	ND	0.0250	1	12/18/23	12/19/23	
Toluene	ND	0.0250	1	12/18/23	12/19/23	
o-Xylene	ND	0.0250	1	12/18/23	12/19/23	
p,m-Xylene	ND	0.0500	1	12/18/23	12/19/23	
Total Xylenes	ND	0.0250	1	12/18/23	12/19/23	
Surrogate: 4-Bromochlorobenzene-PID		94.9 %	70-130	12/18/23	12/19/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS		Batch: 2351017
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/18/23	12/19/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.3 %	70-130	12/18/23	12/19/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2351054
Diesel Range Organics (C10-C28)	ND	25.0	1	12/20/23	12/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/20/23	12/20/23	
Surrogate: n-Nonane		87.8 %	50-200	12/20/23	12/20/23	
	mg/kg	mg/kg	Analy	st: IY		Batch: 2351062
Anions by EPA 300.0/9056A	mg ng	mg ng				



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/2023 2:00:13PM

BH02-2'

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analyst	: RKS		Batch: 2351017
ND	0.0250	1	12/18/23	12/20/23	
ND	0.0250	1	12/18/23	12/20/23	
0.0272	0.0250	1	12/18/23	12/20/23	
ND	0.0250	1	12/18/23	12/20/23	
0.0592	0.0500	1	12/18/23	12/20/23	
0.0592	0.0250	1	12/18/23	12/20/23	
	92.9 %	70-130	12/18/23	12/20/23	
mg/kg	mg/kg	Analyst	: RKS		Batch: 2351017
ND	20.0	1	12/18/23	12/20/23	
			12/10/23	12/20/23	
	89.2 %	70-130	12/18/23	12/20/23	
mg/kg	89.2 % mg/kg	70-130 Analyst	12/18/23		Batch: 2351054
mg/kg ND			12/18/23		Batch: 2351054
	mg/kg		12/18/23 : KM	12/20/23	Batch: 2351054
ND	mg/kg 25.0		12/18/23 : KM 12/20/23	12/20/23	Batch: 2351054
ND	mg/kg 25.0 50.0	Analyst 1 1	12/18/23 : KM 12/20/23 12/20/23 12/20/23	12/20/23 12/20/23 12/20/23	Batch: 2351054 Batch: 2351062
	mg/kg ND ND 0.0272 ND 0.0592 0.0592	mg/kg mg/kg ND 0.0250 ND 0.0250 0.0272 0.0250 ND 0.0250 0.0592 0.0500 0.0592 0.0250 92.9 % mg/kg	Result Limit Dilution mg/kg mg/kg Analyst ND 0.0250 1 ND 0.0250 1 0.0272 0.0250 1 ND 0.0250 1 0.0592 0.0500 1 0.0592 0.0250 1 92.9 % 70-130 mg/kg mg/kg Analyst	Result Limit Dilution Prepared mg/kg mg/kg Analyst: RKS ND 0.0250 1 12/18/23 ND 0.0250 1 12/18/23 0.0272 0.0250 1 12/18/23 ND 0.0250 1 12/18/23 0.0592 0.0500 1 12/18/23 0.0592 0.0250 1 12/18/23 92.9 % 70-130 12/18/23 mg/kg mg/kg Analyst: RKS	Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: RKS ND 0.0250 1 12/18/23 12/20/23 ND 0.0250 1 12/18/23 12/20/23 0.0272 0.0250 1 12/18/23 12/20/23 ND 0.0250 1 12/18/23 12/20/23 0.0592 0.0500 1 12/18/23 12/20/23 0.0592 0.0250 1 12/18/23 12/20/23 92.9 % 70-130 12/18/23 12/20/23 mg/kg mg/kg Analyst: RKS



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/2023 2:00:13PM

BH02-2.5'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: RKS		Batch: 2351017
Benzene	ND	0.0250	1	12/18/23	12/20/23	
Ethylbenzene	ND	0.0250	1	12/18/23	12/20/23	
Toluene	ND	0.0250	1	12/18/23	12/20/23	
o-Xylene	ND	0.0250	1	12/18/23	12/20/23	
p,m-Xylene	ND	0.0500	1	12/18/23	12/20/23	
Total Xylenes	ND	0.0250	1	12/18/23	12/20/23	
Surrogate: 4-Bromochlorobenzene-PID		92.8 %	70-130	12/18/23	12/20/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	ılyst: RKS		Batch: 2351017
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/18/23	12/20/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.1 %	70-130	12/18/23	12/20/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	ılyst: KM		Batch: 2351054
Diesel Range Organics (C10-C28)	ND	25.0	1	12/20/23	12/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/20/23	12/20/23	
Surrogate: n-Nonane		85.6 %	50-200	12/20/23	12/20/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2351062
-	1800	40.0	2	12/20/23	12/20/23	·



Devon Energy - Carlsbad LVP SWD #001 Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 12/22/2023 2:00:13PM **Volatile Organics by EPA 8021B** Analyst: RKS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2351017-BLK1) Prepared: 12/18/23 Analyzed: 12/19/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.58 8.00 94.8 70-130 LCS (2351017-BS1) Prepared: 12/18/23 Analyzed: 12/19/23 5.04 5.00 101 70-130 Benzene 0.0250 Ethylbenzene 4.87 0.0250 5.00 97.5 70-130 5.06 0.0250 5.00 101 70-130 Toluene 99.9 o-Xylene 4.99 0.0250 5.00 70-130 10.1 10.0 101 70-130 0.0500 p.m-Xvlene 101 70-130 15.1 15.0 Total Xylenes 0.0250 8.00 95.9 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.67 Matrix Spike (2351017-MS1) Source: E312118-01 Prepared: 12/18/23 Analyzed: 12/19/23 5.14 0.0250 5.00 ND 54-133 Benzene ND 99.5 61-133 Ethylbenzene 4.98 0.0250 5.00 Toluene 5.16 0.0250 5.00 ND 103 61-130 ND 102 63-131 5.10 5.00 0.0250 o-Xylene p,m-Xylene 10.3 0.0500 10.0 ND 103 63-131 15.4 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.60 8.00 Matrix Spike Dup (2351017-MSD1) Source: E312118-01 Prepared: 12/18/23 Analyzed: 12/19/23

4.98

4.83

5.01

4.95

9.98

14.9

7.62

0.0250

0.0250

0.0250

0.0250

0.0500

0.0250

5.00

5.00

5.00

5.00

10.0

15.0

8.00

ND

ND

ND

ND

ND

ND

99.7

96.6

100

98.9

99.8

99.5

95.3

54-133

61-133

61-130

63-131

63-131

63-131

70-130

3.15

3.00

3.04

3.04

3.01

3.02

20

20

20

20

20

20



Ethylbenzene

Toluene

o-Xylene

p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy Artesia NM, 88210	Project Number: Project Manager:	01058-0007 Ashley Giovengo	12/22/2023 2:00:13PM

Artesia NM, 88210		Project Manage	r: As	shley Gioven	go				12/22/2023 2:00:13PM
	Noi	nhalogenated	Organics	by EPA 80	15D - G	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2351017-BLK1)							Prepared: 1	2/18/23 A	Analyzed: 12/19/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.95		8.00		86.9	70-130			
LCS (2351017-BS2)							Prepared: 1	2/18/23 A	Analyzed: 12/19/23
Gasoline Range Organics (C6-C10)	46.7	20.0	50.0		93.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.1	70-130			
Matrix Spike (2351017-MS2)				Source:	E312118-	01	Prepared: 1	2/18/23 A	Analyzed: 12/19/23
Gasoline Range Organics (C6-C10)	46.9	20.0	50.0	ND	93.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.06		8.00		88.3	70-130			
Matrix Spike Dup (2351017-MSD2)				Source:	E312118-	01	Prepared: 1	2/18/23 A	Analyzed: 12/19/23
Gasoline Range Organics (C6-C10)	45.3	20.0	50.0	ND	90.6	70-130	3.47	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.04		8.00		88.0	70-130			

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	-
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/2023 2:00:13PM

Artesia NM, 88210		Project Manage	r: As	hley Gioveng	go				12/22/2023 2:00:13PI
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2351054-BLK1)							Prepared: 1	2/20/23 A	Analyzed: 12/20/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	42.9		50.0		85.9	50-200			
LCS (2351054-BS1)							Prepared: 1	2/20/23 A	Analyzed: 12/20/23
Diesel Range Organics (C10-C28)	255	25.0	250		102	38-132			
urrogate: n-Nonane	43.4		50.0		86.8	50-200			
Matrix Spike (2351054-MS1)				Source:	E312118-0)3	Prepared: 1	2/20/23 A	Analyzed: 12/20/23
Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.7	38-132			
urrogate: n-Nonane	44.0		50.0		88.0	50-200			
Matrix Spike Dup (2351054-MSD1)				Source:	E312118-0)3	Prepared: 1	2/20/23 A	Analyzed: 12/20/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	1.02	20	
urrogate: n-Nonane	43.8		50.0		87.6	50-200			

Devon Energy - Carlsbad 6488 7 Rivers Hwy		Project Name: Project Number:		/P SWD #001 058-0007					Re	eported:
Artesia NM, 88210		Project Number: Project Manager:		shley Gioveng	go				12/22/202	23 2:00:13PM
		Anions	by EPA 3	00.0/9056	\				Analy	yst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limi		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%		Notes
Blank (2351062-BLK1)							Prepared: 1	12/20/23	Analyzed:	12/20/23
Chloride	ND	20.0								
LCS (2351062-BS1)							Prepared:	12/20/23	Analyzed:	12/20/23
Chloride	248	20.0	250		99.2	90-110				
Matrix Spike (2351062-MS1)				Source:	E312118-0	1	Prepared:	12/20/23	Analyzed:	12/21/23
Chloride	895	20.0	250	656	95.5	80-120				
Matrix Spike Dup (2351062-MSD1)				Source:	E312118-0	1	Prepared:	12/20/23	Analyzed:	12/21/23
Chloride	918	20.0	250	656	105	80-120	2.50	20		

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/23 14:00

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



	Ch	nain	of	Custo
--	----	------	----	-------

	rogra	_	4
NA	SD	WA	1
	RC	RA	1
ate			1
AZ	TX		7
narks			

Client: D	Devon				Bill To			1:	ab U	se On	lv	Т		TA	T	EPA P	rogram
	LVP SWD #001				Attention: Dale Woodall		Lab WO	#				1D	2D		Standard	CWA	SDW
Project N	Nanager: Ashle	ey Giover	ngo		Address: 205 E Bender Re	oad #150	E 312	115	8	DO	Number 56007				x		
Address:	3122 Nationa	l Parks H	wy		City, State, Zip: Hobbs NI	Л, 88240					sis and Metho						RCR.
	e, Zip: Carlsba	d NM, 88	3220		Phone: (575)748-1838		by						1				
	575-988-0055				Email: dale.woodall@dvr	i.com	ORO							1		State	
	giovengo@ens	olum.cor	n				RO/	21	0		0.0	ΣN		×	NM CO	UT AZ	TX
Report d	ue by:						0/0	y 80.	, 826	601	e 30		1		×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC		GDOC	1	Remarks	
9:48	12/14/2023	Soil	1 Jar		BH01 - 1'	1						х					
10:02	12/14/2023	Soil	1 Jar		BH01 - 2'	2						x					
9:03	12/14/2023	Soil	1 Jar		BH02 - 1'	3						х					
9:18	12/14/2023	Soil	1 Jar		BH02 - 2'	4						х					
10:45	12/14/2023	Soil	1 Jar		BH02 - 2.5'	5						х					
					-												
						,					++	H		H			
												-					
Addition	al Instructions:	Please	CC: cbur	ton@ensolum.	com, agiovengo@ensolum.co	m. dale.woodall@d	dvn.com.	chan	nilto	n@er	solum.com.	eha	ft@ei	nsolun	n.com		
				-2.00.00.00.00.00.00.00.00.00.00.00.00.00	ware that tampering with or intentionally						s requiring thermal p			200		they are samp	led or
date or time	of collection is cons	idered frauc	and may be	grounds for legal ac	tion. Sampled by: Co	le Burton	1000 003			receive	d packed in ice at an	avg te	mp abov	e 0 but les	ss than 6 °C on subse	equent days.	
Relinguishe	d by: (Signature)		Date 12	-15-23 8;	Received by: (Signature)	Date 12.15	127 Time	10	7	Rece	ived on ice:	7	ab Us	se Only	1		
elinquishe	d by: (Signature)		Pate	1523 15	Received by (Signature)	Date 1218	23 Time	R	5	T1		T2)		Т3		
telinquishe	d by: (Signature)		Date		Received by: (Signature)	Date	Time				Temp °C(+					
	ix: S - Soil, Sd - Solid,	r- clud-s						-			lastic, ag - amb						



e client expense. The report for the analysis of the above

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envirotech Inc.

Printed: 12/18/2023 8:37:24AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

CII: 4	Devon Energy - Carlsbad	Date Received:	12/19/22	07.20	·	W 101 ID	F212110
Client:			12/18/23			Work Order ID:	E312118
Phone:	(505) 382-1211	Date Logged In:	12/18/23			Logged In By:	Alexa Michaels
Email:	ashley.giovengo@wescominc.com	Due Date:	12/21/23	17:00 (5 day TAT)			
Chain o	f Custody (COC)						
	the sample ID match the COC?		Yes				
	the number of samples per sampling site location materials.	tch the COC	Yes				
	samples dropped off by client or carrier?		Yes	Comion C			
	ne COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes	Carrier: <u>C</u>	<u>ourier</u>		
	all samples received within holding time?	stea anary ses.	Yes				
3. WOIC	Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssion.		103	_		<u>Comment</u>	s/Resolution
Sample '	<u>Turn Around Time (TAT)</u>						
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample	<u>Cooler</u>						
7. Was a	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes				
10. Were	custody/security seals present?		No				
	s, were custody/security seals intact?		NA				
12. Was t	he sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling	e received w/i 15	Yes				
	visible ice, record the temperature. Actual sample	temperature: 4°	<u>U</u>				
	<u>Container</u>						
	aqueous VOC samples present?		No				
	VOC samples collected in VOA Vials?		NA				
	e head space less than 6-8 mm (pea sized or less)?		NA				
	a trip blank (TB) included for VOC analyses?	_	NA				
	non-VOC samples collected in the correct containers		Yes				
	appropriate volume/weight or number of sample contain	ners collected?	Yes				
Field La							
	e field sample labels filled out with the minimum info	ormation:	Vos				
	Sample ID? Date/Time Collected?		Yes				
	Collectors name?		Yes Yes				
	Preservation		105				
	the COC or field labels indicate the samples were pr	reserved?	No				
22. Are s	sample(s) correctly preserved?		NA				
	o filteration required and/or requested for dissolved n	netals?	No				
Multinh	ase Sample Matrix						
	the sample have more than one phase, i.e., multipha	se?	No				
	s, does the COC specify which phase(s) is to be analy		NA				
.		, 200.	11/21				
	ract Laboratory	0	3.7				
	samples required to get sent to a subcontract laborato	-	No				
29. was	a subcontract laboratory specified by the client and it	r so wno?	NA	Subcontract Lab	: NA		
Client I	<u>nstruction</u>						

Date

Signature of client authorizing changes to the COC or sample disposition.

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E312192

Job Number: 01058-0007

Received: 12/29/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 1/2/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 1/2/24

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E312192

Date Received: 12/29/2023 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/29/2023 7:30:00AM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

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Cell: 505-947-8222

mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

_				
ſ	Devon Energy - Carlsbad	Project Name:	Reported:	
1	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported.
1	Artesia NM, 88210	Project Manager:	Ashley Giovengo	01/02/24 15:29

Client Sample ID	Lab Sample ID Ma	atrix	Sampled	Received	Container
SS01A-0'	E312192-01A S	Soil	12/28/23	12/29/23	Glass Jar, 2 oz.



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	1/2/2024 3:29:55PM

SS01A-0' E312192-01

	E312192-01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: EG		Batch: 2352034
ND	0.0250	1	12/29/23	12/29/23	
ND	0.0250	1	12/29/23	12/29/23	
ND	0.0250	1	12/29/23	12/29/23	
ND	0.0250	1	12/29/23	12/29/23	
ND	0.0500	1	12/29/23	12/29/23	
ND	0.0250	1	12/29/23	12/29/23	
	93.8 %	70-130	12/29/23	12/29/23	
mg/kg	mg/kg	Anal	yst: EG		Batch: 2352034
ND	20.0	1	12/29/23	12/29/23	
	94.6 %	70-130	12/29/23	12/29/23	
mg/kg	mg/kg	Anal	yst: KM		Batch: 2352035
ND	25.0	1	12/29/23	12/30/23	
ND	50.0	1	12/29/23	12/30/23	
	82.0 %	50-200	12/29/23	12/30/23	
mg/kg	mg/kg	Anal	yst: DT		Batch: 2352028
206	20.0		12/28/23	12/29/23	
	mg/kg ND ND ND ND ND ND ND ND ND mg/kg ND mg/kg	Result Reporting Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 MD 0.0250 MD 20.0250 93.8 % mg/kg MD 20.0 94.6 % mg/kg ND 25.0 ND 50.0 82.0 % mg/kg mg/kg mg/kg	Reporting Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 ND 0.0250 1 MD 0.0250 1 MD 20.0250 1 Mg/kg mg/kg Analy ND 20.0 1 Mg/kg mg/kg Analy ND 25.0 1 ND 50.0 1 82.0 % 50-200 mg/kg Mg/kg Analy	Reporting Result Limit Dilution Prepared mg/kg mg/kg Analyst: EG ND 0.0250 1 12/29/23 ND 0.0250 1 12/29/23 ND 0.0250 1 12/29/23 ND 0.0250 1 12/29/23 ND 0.0500 1 12/29/23 ND 0.0250 1 12/29/23 mg/kg mg/kg Analyst: EG ND 20.0 1 12/29/23 mg/kg mg/kg Analyst: KM ND 25.0 1 12/29/23 ND 50.0 1 12/29/2	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: EG ND 0.0250 1 12/29/23 12/29/23 ND 0.0250 1 12/29/23 12/29/23 ND 0.0250 1 12/29/23 12/29/23 ND 0.0500 1 12/29/23 12/29/23 ND 0.0250 1 12/29/23 12/29/23 ND 0.0250 1 12/29/23 12/29/23 mg/kg mg/kg Analyst: EG ND 20.0 1 12/29/23 12/29/23 mg/kg mg/kg Analyst: EG ND 20.0 1 12/29/23 12/29/23 mg/kg mg/kg Analyst: KM ND 25.0 1 12/29/23 12/30/23 ND 50.0 1 12/29/23 12/30/23 ND 50.0 1 12/29/23 12/30/23



Devon Energy - Carlsbad LVP SWD #001 Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 1/2/2024 3:29:55PM **Volatile Organics by EPA 8021B** Analyst: EG Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2352034-BLK1) Prepared: 12/29/23 Analyzed: 12/29/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.73 8.00 96.6 70-130 LCS (2352034-BS1) Prepared: 12/29/23 Analyzed: 12/29/23 5.06 5.00 101 70-130 Benzene 0.0250 Ethylbenzene 5.03 0.0250 5.00 101 70-130 5.08 0.0250 5.00 102 70-130 Toluene 101 o-Xylene 5.06 0.0250 5.00 70-130 10.2 10.0 102 70-130 0.0500 p.m-Xvlene 102 70-130 15.3 0.0250 15.0 Total Xylenes 8.00 95.3 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.63 Matrix Spike (2352034-MS1) Source: E312189-04 Prepared: 12/29/23 Analyzed: 12/29/23 5.25 0.0250 5.00 ND 54-133 Benzene ND 104 61-133 Ethylbenzene 5.19 0.0250 5.00 Toluene 5.25 0.0250 5.00 ND 105 61-130 5.22 ND 104 63-131 5.00 0.0250 o-Xylene p,m-Xylene 10.6 0.0500 10.0 ND 106 63-131 15.8 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.76 8.00 Matrix Spike Dup (2352034-MSD1) Source: E312189-04 Prepared: 12/29/23 Analyzed: 12/29/23 5.10 0.0250 5.00 ND 102 54-133 2.90 20 ND 61-133 2.49 5.06 0.0250 5.00 101 20 Ethylbenzene Toluene 5 12 0.0250 5.00 ND 102 61-130 2 60 20 5.09 5.00 ND 102 63-131 2.48 20 o-Xylene 0.0250

10.0

15.0

8.00

0.0500

0.0250

ND

ND

103

103

97.2

63-131

63-131

70-130



2.22

2.31

20

20

p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

10.3

15.4

7.78

Surrogate: 1-Chloro-4-fluorobenzene-FID

QC Summary Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	•
Artesia NM, 88210	Project Manager:	Ashley Giovengo	1/2/2024 3:29:55PM

Artesia NM, 88210		Project Manage	r: As	shley Gioveng	go				1/2/2024 3:29:55PM
	Nor	halogenated	Organics	by EPA 80	15D - Gl	RO			Analyst: EG
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec	Rec Limits	RPD %	RPD Limit %	
Blank (2352034-BLK1)							Prepared: 1	12/29/23	Analyzed: 12/29/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.44		8.00		93.0	70-130			
LCS (2352034-BS2)							Prepared:	12/29/23	Analyzed: 12/29/23
Gasoline Range Organics (C6-C10)	51.2	20.0	50.0		102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.2	70-130			
Matrix Spike (2352034-MS2)				Source:	E312189-	04	Prepared:	12/29/23	Analyzed: 12/29/23
Gasoline Range Organics (C6-C10)	50.3	20.0	50.0	ND	101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.51		8.00		93.8	70-130			
Matrix Spike Dup (2352034-MSD2)				Source:	E312189-	04	Prepared:	12/29/23	Analyzed: 12/29/23
Gasoline Range Organics (C6-C10)	50.5	20.0	50.0	ND	101	70-130	0.393	20	

8.00

7.58

94.7

70-130

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	•
Artesia NM, 88210	Project Manager:	Ashley Giovengo	1/2/2024 3:29:55PM

Artesia NM, 88210		Project Manage	r: As	hley Gioveng	go				1/2/2024 3:29:55PM
	Nonha	logenated Or	ganics by l	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limi	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2352035-BLK1)							Prepared:	12/29/23	Analyzed: 12/29/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.0		50.0		90.0	50-200			
LCS (2352035-BS1)							Prepared:	12/29/23	Analyzed: 12/29/23
Diesel Range Organics (C10-C28)	237	25.0	250		94.9	38-132			
Surrogate: n-Nonane	45.4		50.0		90.9	50-200			
Matrix Spike (2352035-MS1)				Source:	E312193-	03	Prepared:	12/29/23	Analyzed: 12/29/23
Diesel Range Organics (C10-C28)	243	25.0	250	ND	97.0	38-132			
Surrogate: n-Nonane	43.6		50.0		87.3	50-200			
Matrix Spike Dup (2352035-MSD1)				Source:	E312193-	03	Prepared:	12/29/23	Analyzed: 12/29/23
Diesel Range Organics (C10-C28)	245	25.0	250	ND	98.2	38-132	1.14	20	
Surrogate: n-Nonane	47.3		50.0		94.6	50-200			

Devon Energy - Carlsbad 6488 7 Rivers Hwy		Project Name: Project Number:		VP SWD #003 1058-0007	1				Repor	ted:
Artesia NM, 88210		Project Manager		shley Gioven	go				1/2/2024 3:	29:55PM
		Anions	by EPA 3	300.0/9056	A				Analyst: I	DΤ
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	No	otes
Blank (2352028-BLK1)							Prepared: 1	2/28/23 A	Analyzed: 12/	29/23
Chloride	ND	20.0								
LCS (2352028-BS1)							Prepared: 1	2/28/23 A	Analyzed: 12/	29/23
Chloride	254	20.0	250		102	90-110				
Matrix Spike (2352028-MS1)				Source:	E312192-0	01	Prepared: 1	2/28/23 A	Analyzed: 12/	29/23
Chloride	465	20.0	250	206	104	80-120				
Matrix Spike Dup (2352028-MSD1)				Source:	E312192-0	01	Prepared: 1	2/28/23 A	Analyzed: 12/	29/23
Chloride	448	20.0	250	206	96.9	80-120	3.68	20		

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
-	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
	Artesia NM, 88210	Project Manager:	Ashley Giovengo	01/02/24 15:29

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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Client: E	Devon					Bill To				La	ab Us	se On	ly	A. Land			TA	AT		EPA PI	ogram
Na Contract	LVP SWD #001				At	tention: Dale Woodall		Lat	b WO#	†		Job I	Num	ber	1D	2D	3D	Stand	ard	CWA	SDWA
-	Manager: Ashle		igo			dress: 205 E Bender Road #15	0]E	312	191	L	DIC	58	(aso-				х			
	3122 Nationa				Cit	y, State, Zip: Hobbs NM, 8824	0							nd Metho	d			1			RCRA
	te, Zip: Carlsba					one: (575)748-1838			þý					7							
	575-988-0055					nail: dale.woodall@dvn.com			ORO											State	
	giovengo@ens	olum.con	n					1	0/0	1	_		0.0		ΣN			NN	CO	UT AZ	TX
Report d									J/DF	8021	3260	010	300				×	×			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number		TPH GRO/DRO/ORO by 8015	BTEX by	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	
9:25	12/28/2023	Soil	1 Jar			SS01A - 0'	1								х						
Addition	al Instructions	: Please	CC: cbu	rton@ensolur	n.com, a	giovengo@ensolum.com, dale	e.woodall@	dvn.	.com,	chan	nilto										
	pler), attest to the va of collection is cons					tampering with or intentionally mislabel <u>Sampled by: Cole Burton</u>	ing the sample l	ocatio	on,					iring thermal p ed in ice at an	avg ter	mp abov	e 0 but l	less than 6 °C			ed or
a	ed by: (Signature)			128/23 10	:55	Received by: (Signature) Wicheller Clerch	Date 12-28/	23		023	5	Rece	eived	on ice:	G	ab U	se On I	ily			
Micel	ed by: (Signature)			2823	520	Received by: (Signature)	12.29	3.23	Time	30		T1			<u>T2</u>			<u></u>			
Relinguish	ed by: (Signature)		Date		345	Received by: (Signature)	12/25	1 6 60	1 1 1	:3				1p°c_4							
Sample Mat	rix: S - Soil, Sd - Solid	d, Sg - Sludge	A - Aqueou	us, O - Other		1	Containe	r Ty	pe:g-	glass,	p - p	oly/p	lastic	c, ag - amb	oer gl	ass, v	- VO	4			
Note: Sam samples is	ples are discarded applicable only to	30 days aft	er results	are reported unle	ess other a	rrangements are made. Hazardous in COC. The liability of the laborator	samples will be is limited to t	retu he ar	urned to mount p	clien oald fo	t or d	ispose the re	d of a	at the clien	t expe	ense.	The re	eport for th	ne analy	sis of the a	bove



e client expense. The report for the analysis of the above

envirotech

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Printed: 12/29/2023 11:00:13AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

 $\underline{\textbf{If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.}$

Client:	Devon Energy - Carlsbad	Date Received:	12/29/23	07:30		Work Order ID:	E312192
Phone:	(505) 382-1211	Date Logged In:	12/28/23	15:08		Logged In By:	Jordan Montano
Email:	ashley.giovengo@wescominc.com	Due Date:	01/05/24	17:00 (4 day TAT)			
Chain of	Custody (COC)						
	ne sample ID match the COC?		Yes				
	ne number of samples per sampling site location mat	ch the COC	Yes				
3. Were s	amples dropped off by client or carrier?		Yes	Carrier: C	Courier		
4. Was the	e COC complete, i.e., signatures, dates/times, reques	ted analyses?	Yes	currer. <u>c</u>	<u> </u>		
	Il samples received within holding time?	•	Yes				
	Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssic					Comment	s/Resolution
Sample T	<u> [urn Around Time (TAT)</u>						
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C							
7. Was a s	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was the	e sample(s) received intact, i.e., not broken?		Yes				
10. Were	custody/security seals present?		No				
11. If yes	, were custody/security seals intact?		NA				
	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes				
	, .	temperature. 4	<u>c</u>				
	Container queous VOC samples present?		Na				
	OC samples collected in VOA Vials?		No NA				
	head space less than 6-8 mm (pea sized or less)?		NA NA				
	•						
	trip blank (TB) included for VOC analyses?	•	NA				
	on-VOC samples collected in the correct containers		Yes				
	appropriate volume/weight or number of sample contair	iers conected?	Yes				
Field Lab	<u>net</u> field sample labels filled out with the minimum info						
	ample ID?	illiation.	Yes				
	pate/Time Collected?		Yes				
C	ollectors name?		Yes				
Sample F	<u>Preservation</u>						
21. Does	the COC or field labels indicate the samples were pr	eserved?	No				
22. Are sa	ample(s) correctly preserved?		NA				
24. Is lab	filteration required and/or requested for dissolved m	etals?	No				
Multipha	se Sample Matrix						
26. Does	the sample have more than one phase, i.e., multiphase	se?	No				
27. If yes	, does the COC specify which phase(s) is to be analy	zed?	NA				
	act Laboratory						
	amples required to get sent to a subcontract laborator	n/9	No				
	subcontract laboratory specified by the client and if	-	NA	Subcontract Lab	N A		
		so who:	INA	Subcontract Lab); NA		
Client Ir	<u>istruction</u>						

Page 12 of 12

Signature of client authorizing changes to the COC or sample disposition.

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy

Project Name: LVP. SWD #001

Work Order: E404221

Job Number: 01058-0007

Received: 4/20/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 4/23/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 4/23/24

Ashley Giovengo PO Box 6459 Navajo Dam, NM 87419

Project Name: LVP. SWD #001

Workorder: E404221

Date Received: 4/20/2024 7:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/20/2024 7:45:00AM, under the Project Name: LVP. SWD #001.

The analytical test results summarized in this report with the Project Name: LVP. SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com



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Sample Summary

	Devon Energy	Project Name:	LVP. SWD #001	Reported:
١	PO Box 6459	Project Number:	01058-0007	Keporteu.
	Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	04/23/24 13:00

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS11-8'	E404221-01A	Solid	04/19/24	04/20/24	Glass Jar, 2 oz.
	E404221-01B	Solid	04/19/24	04/20/24	Glass Jar, 2 oz.
FS07-8'	E404221-02A	Solid	04/19/24	04/20/24	Glass Jar, 2 oz.
	E404221-02B	Solid	04/19/24	04/20/24	Glass Jar, 2 oz.
FS06-8'	E404221-03A	Solid	04/19/24	04/20/24	Glass Jar, 2 oz.
	E404221-03B	Solid	04/19/24	04/20/24	Glass Jar, 2 oz.

Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/23/2024 1:00:29PM

FS11-8' E404221-01

Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	vst: EG		Batch: 2417007
ND	0.0250	1	04/22/24	04/22/24	
ND	0.0250	1	04/22/24	04/22/24	
ND	0.0250	1	04/22/24	04/22/24	
ND	0.0250	1	04/22/24	04/22/24	
ND	0.0500	1	04/22/24	04/22/24	
ND	0.0250	1	04/22/24	04/22/24	
	90.1 %	70-130	04/22/24	04/22/24	
mg/kg	mg/kg	Analy	vst: EG		Batch: 2417007
ND	20.0	1	04/22/24	04/22/24	
	93.1 %	70-130	04/22/24	04/22/24	
mg/kg	mg/kg	Analy	st: KM		Batch: 2417002
ND	25.0	1	04/22/24	04/23/24	
ND	50.0	1	04/22/24	04/23/24	
	119 %	50-200	04/22/24	04/23/24	
mg/kg	mg/kg	Analy	/st: IY		Batch: 2416122
317	20.0	1	04/20/24	04/20/24	
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg	Result Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 MD 0.0250 MD 0.0250 MD 20.0 93.1 % mg/kg MD 25.0 ND 50.0 119 % mg/kg mg/kg mg/kg	mg/kg mg/kg Analy ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 90.1 % 70-130 mg/kg mg/kg Analy ND 20.0 1 93.1 % 70-130 1 mg/kg mg/kg Analy ND 25.0 1 ND 50.0 1 119 % 50-200 mg/kg Mg/kg Analy	Result Limit Dilution Prepared mg/kg mg/kg Analyst: EG ND 0.0250 1 04/22/24 ND 0.0250 1 04/22/24 ND 0.0250 1 04/22/24 ND 0.0250 1 04/22/24 ND 0.0500 1 04/22/24 ND 0.0250 1 04/22/24 mg/kg mg/kg Analyst: EG ND 20.0 1 04/22/24 mg/kg mg/kg Analyst: KM ND 25.0 1 04/22/24 ND 50.0 1 04/22/24 ND 50.0 1 04/22/24 MD 50.0 1 04/22/24 Mg/kg Mg/kg Analyst: KM	Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: EG ND 0.0250 1 04/22/24 04/22/24 ND 0.0500 1 04/22/24 04/22/24 ND 0.0250 1 04/22/24 04/22/24 MD 0.0250 1 04/22/24 04/22/24 mg/kg mg/kg Analyst: EG ND 20.0 1 04/22/24 04/22/24 mg/kg mg/kg Analyst: KM ND 25.0 1 04/22/24 04/23/24 ND 25.0 1 04/22/24 04/23/24 ND 50.0 1 04/22/24 04/23/24 ND 50.0 1 04/22/24 04/23/24 <t< td=""></t<>

Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/23/2024 1:00:29PM

FS07-8'

E404221-02

		Reporting					
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst:	: IY		Batch: 2416122	
Chloride	5400	40.0	2	04/20/24	04/20/24		

Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/23/2024 1:00:29PM

FS06-8'

E404221-03

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: EG		Batch: 2417007
Benzene	ND	0.0250	1	04/22/24	04/22/24	
Ethylbenzene	ND	0.0250	1	04/22/24	04/22/24	
Toluene	ND	0.0250	1	04/22/24	04/22/24	
o-Xylene	ND	0.0250	1	04/22/24	04/22/24	
o,m-Xylene	ND	0.0500	1	04/22/24	04/22/24	
Total Xylenes	ND	0.0250	1	04/22/24	04/22/24	
Surrogate: 4-Bromochlorobenzene-PID		90.4 %	70-130	04/22/24	04/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: EG		Batch: 2417007
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/22/24	04/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.5 %	70-130	04/22/24	04/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2417002
Diesel Range Organics (C10-C28)	ND	25.0	1	04/22/24	04/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/22/24	04/23/24	
Surrogate: n-Nonane		120 %	50-200	04/22/24	04/23/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2416122
	330	20.0		04/20/24	04/20/24	



LVP. SWD #001 Devon Energy Project Name: Reported: PO Box 6459 Project Number: 01058-0007 Navajo Dam NM, 87419 Project Manager: Ashley Giovengo 4/23/2024 1:00:29PM **Volatile Organics by EPA 8021B** Analyst: EG Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2417007-BLK1) Prepared: 04/22/24 Analyzed: 04/22/24 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.22 8.00 90.3 70-130 LCS (2417007-BS1) Prepared: 04/22/24 Analyzed: 04/22/24 4.78 95.6 70-130 5.00 Benzene 0.0250 Ethylbenzene 4.99 0.0250 5.00 99.8 70-130 4.92 0.0250 5.00 98.4 70-130 Toluene 98.8 o-Xylene 4.94 0.0250 5.00 70-130 10.1 10.0 101 70-130 0.0500 p.m-Xvlene 100 70-130 15.0 0.0250 15.0 Total Xylenes 8.00 90.2 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.21 Matrix Spike (2417007-MS1) Source: E404221-03 Prepared: 04/22/24 Analyzed: 04/22/24 4.87 0.0250 5.00 ND 97.5 54-133 Benzene ND 102 61-133 Ethylbenzene 5.10 0.0250 5.00 Toluene 5.03 0.0250 5.00 ND 101 61-130 5.04 ND 101 63-131 5.00 0.0250 o-Xylene p,m-Xylene 10.3 0.0500 10.0 ND 103 63-131 15.3 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.21 8.00 Matrix Spike Dup (2417007-MSD1) Source: E404221-03 Prepared: 04/22/24 Analyzed: 04/22/24 4.87 0.0250 5.00 ND 97.4 54-133 0.112 20

ND

ND

ND

ND

ND

102

100

101

103

102

90.2

5.00

5.00

5.00

10.0

15.0

8.00

5.10

5.02

5.06

10.3

15.3

7.21

0.0250

0.0250

0.0250

0.0500

0.0250

61-133

61-130

63-131

63-131

63-131

70-130

0.0157

0.126

0.268

0.0414

0.116

20

20

20

20

20



Ethylbenzene Toluene

o-Xylene

p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

Surrogate: 1-Chloro-4-fluorobenzene-FID

QC Summary Data

Devon Energy	Project Name:	LVP. SWD #001	Reported:
PO Box 6459	Project Number:	01058-0007	•
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/23/2024 1:00:29PM

Navajo Dam NM, 87419		Project Manage	r: As	shley Gioveng	go			4/2	3/2024 1:00:29PM
	Nor	onhalogenated Organics by EPA 8015D - GRO					Analyst: EG		
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2417007-BLK1)							Prepared: 0	4/22/24 Anal	yzed: 04/22/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.1	70-130			
LCS (2417007-BS2)							Prepared: 0	4/22/24 Anal	yzed: 04/22/24
Gasoline Range Organics (C6-C10)	48.3	20.0	50.0		96.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.39		8.00		92.4	70-130			
Matrix Spike (2417007-MS2)				Source:	E404221-	03	Prepared: 0	4/22/24 Anal	yzed: 04/22/24
Gasoline Range Organics (C6-C10)	48.6	20.0	50.0	ND	97.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.45		8.00		93.2	70-130			
Matrix Spike Dup (2417007-MSD2)				Source:	E404221-	03	Prepared: 0	4/22/24 Anal	yzed: 04/22/24
Gasoline Range Organics (C6-C10)	48.2	20.0	50.0	ND	96.3	70-130	0.953	20	

8.00

7.36

92.0

70-130

Devon EnergyProject Name:LVP. SWD #001Reported:PO Box 6459Project Number:01058-0007Navajo Dam NM, 87419Project Manager:Ashley Giovengo4/23/2024 1:00:29PM

Navajo Dani Nivi, 67417		1 Toject Ivianage	. 7 to	mey Gloveng	,0				25/2021 1:00:2911
	Nonha	logenated Or	ganics by	EPA 8015I	O - DRO	ORO/			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417002-BLK1)							Prepared: 0	4/22/24 Ana	alyzed: 04/22/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	58.7		50.0		117	50-200			
LCS (2417002-BS1)							Prepared: 0	4/22/24 Ana	alyzed: 04/22/24
Diesel Range Organics (C10-C28)	284	25.0	250		114	38-132			
Surrogate: n-Nonane	59.6		50.0		119	50-200			
Matrix Spike (2417002-MS1)				Source:	E404158-2	23	Prepared: 0	4/22/24 Ana	alyzed: 04/22/24
Diesel Range Organics (C10-C28)	1390	25.0	250	1130	104	38-132			
Surrogate: n-Nonane	59.8		50.0		120	50-200			
Matrix Spike Dup (2417002-MSD1)				Source:	E404158-2	23	Prepared: 0	4/22/24 Ana	alyzed: 04/22/24
Diesel Range Organics (C10-C28)	1420	25.0	250	1130	115	38-132	1.85	20	
Surrogate: n-Nonane	60.0		50.0		120	50-200			

Matrix Spike Dup (2416122-MSD1)

Chloride

QC Summary Data

Devon Energy PO Box 6459 Navajo Dam NM, 87419		Project Name: Project Number: Project Manager	: 01	/P. SWD #003 058-0007 shley Gioveng				,	Reported: 4/23/2024 1:00:29PM
Navajo Daili Nivi, 6/419				00.0/9056A					Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits		RPD Limit	
Blank (2416122-BLK1)	mg/kg	mg/kg	mg/kg	mg/kg	%	%	% Prepared: 0	% 4/19/24 An	Notes nalyzed: 04/20/24
Chloride	ND	20.0					Trepared. 0	1/1//24 / MI	aryzed: 04/20/24
LCS (2416122-BS1)							Prepared: 0	4/19/24 An	nalyzed: 04/20/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2416122-MS1)				Source:	E404208-	03	Prepared: 0	4/19/24 An	nalyzed: 04/20/24
Chloride	330	100	250	ND	132	80-120			M6

250

100

Source: E404208-03

133

80-120

0.629

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Prepared: 04/19/24 Analyzed: 04/20/24

M6

20

Definitions and Notes

Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	04/23/24 13:00

M6 Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS

recoveries

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



	Chain of	Custo	dy //	se	P,	I	CPI	np.	4	20	T	41"	Pageo
Client Information	Invoice Information				Lab	Use O	nly	10		7	AT		State
Client: Devon Project Name: LYP SWD #561 Project Manager: AShley Giovengo	Company: Jim Ral-Ry Address: On F, IR City, State, Zip:		Lab \	042	21	Job	Num S&-	ber -000	7	LD 2D	3D S	Std NM	CO UT TX
ity, State, Zip: Carlstad NM 88220 hone: S75 988 0055 mail: 9910 venyo@ensolum.com	Phone: Email: Miscellaneous:			015	015	An	alysis	and	Metho	od		SDWA	PA Program CWA RCRA ce Y or N
Sample In	formation			to by 8	10 by 8	8260	300.0	N.	XT - 20	Metals		PWSID#	
Time Date Sampled Matrix No. of Containers	Sample ID	Field	Lab Number	DRO/OR	GRO/DRO by	VOC by 8260	Chloride 300.	BGDOC - NM	ΤCEQ 1005 - ΤΧ	RCRA 8 Metals			Remarks
316 4/14/24 solid 2 FS 11			1					X				Rush	chloride
322 4/19/24 solid 2 FS 07 319 4/19/24 solid 2 FS 06	- 81		2					X				R454	chloride chloride charide
319 4/19/24 solid 2 FS 06	- 8'		3					X				Rush	charide
					-						H		
					+						\Box		
											Н		
Additional Instructions: Pleace CC - Cole	Burton, Ashdey Giovengo	, cha	d He	a ton i /	ton	1 I.S	rae	1 1	£5+,	olla	, Jin	n Roley	
(field sampler), attest to the validity and authenticity of this sample. I am ampled by:				date or	time of o	collection	n is cons	sidered	fraud a	nd may be	grounds	for legal action.	
elinguished by: (Signature) Date 1/19/24 13	S& Received by: (Signature)	Date H-19	9-24	Time 13	58			17.7					on ice the day they are but less than 6 °C on
elinguished by: (Signature) Wichelle Georgales 4-19-24 Time	SS Received by: (Signature) Received by: (Signature) Received by: (Signature)	U.10	1.24	180				Rece	eived o	on ice:	Lat (Y)/	Use Only	
elinquisheil by: (Signature) Date G.19.14 Time	Received by: (Signature)	Date	dry	Time 74	15			<u>T1</u>			<u>T2</u>		<u>T3</u>
elinquished by: (Signature) Date Time	Received by: (Signature)	Date		Time						°c_4			
ample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other lote: Samples are discarded 14 days after results are reported unle	ss other arrangements are made. Hazardous same	_	ner Type				_			7		or the analysis	of the above samples i

applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Printed: 4/22/2024 9:10:36AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hor	rs of the date of this notice, all the samples will be analyzed as requested.

Devon Energy Date Received: 04/20/24 07:45 Work Order ID: E404221 Client: Logged In By: Irene Yazzie Phone: (505)324-5600 Date Logged In: 04/20/24 07:58 Email: Due Date: 04/26/24 17:00 (4 day TAT) Chain of Custody (COC) 1. Does the sample ID match the COC? Ycs 2. Does the number of samples per sampling site location match the COC Ycs 3. Were samples dropped off by client or carrier? Ycs Carrier: Carrier 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes 5. Were all samples received within holding time? Yes Note: Analysis, such as pH which should be conducted in the field, Comments/Resolution i.e, 15 minute hold time, are not included in this disucssion. Sample Turn Around Time (TAT) Rush Chloride Only. If Chloride is > 6006. Did the COC indicate standard TAT, or Expedited TAT? Yes do not run other tests. Per client see COC Sample Cooler 7. Was a sample cooler received? Yes -IY 04/20/2024. 8. If yes, was cooler received in good condition? Yes 9. Was the sample(s) received intact, i.e., not broken? Yes 10. Were custody/security seals present? No 11. If yes, were custody/security seals intact? NA 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling 13. If no visible ice, record the temperature. Actual sample temperature: 4°C Sample Container 14. Are aqueous VOC samples present? No NA 15. Are VOC samples collected in VOA Vials? 16. Is the head space less than 6-8 mm (pea sized or less)? NA 17. Was a trip blank (TB) included for VOC analyses? NA 18. Are non-VOC samples collected in the correct containers? Yes 19. Is the appropriate volume/weight or number of sample containers collected? Yes 20. Were field sample labels filled out with the minimum information: Sample ID? Yes Date/Time Collected? Yes Collectors name? Yes Sample Preservation 21. Does the COC or field labels indicate the samples were preserved? No 22. Are sample(s) correctly preserved? NA 24. Is lab filteration required and/or requested for dissolved metals? No Multiphase Sample Matrix 26. Does the sample have more than one phase, i.e., multiphase? No 27. If yes, does the COC specify which phase(s) is to be analyzed? NA Subcontract Laboratory 28. Are samples required to get sent to a subcontract laboratory? No 29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA **Client Instruction** Date

Signature of client authorizing changes to the COC or sample disposition.



envirotech Inc.

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy

Project Name: LVP. SWD #001

Work Order: E404231

Job Number: 01058-0007

Received: 4/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 4/29/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 4/29/24

Ashley Giovengo PO Box 6459 Navajo Dam, NM 87419

Project Name: LVP. SWD #001

Workorder: E404231

Date Received: 4/23/2024 8:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/23/2024 8:15:00AM, under the Project Name: LVP. SWD #001.

The analytical test results summarized in this report with the Project Name: LVP. SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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Sample Summary

Devon Energy	Project Name:	LVP. SWD #001	Donoutoda
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	04/29/24 10:00

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
FS05-9.5'	E404231-01A Soil	04/22/24	04/23/24	Glass Jar, 2 oz.
FS07-10'	E404231-02A Soil	04/22/24	04/23/24	Glass Jar, 2 oz.
FS08-7.5'	E404231-03A Soil	04/22/24	04/23/24	Glass Jar, 2 oz.



Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/29/2024 10:00:17AM

FS05-9.5' E404231-01

		2.0.201 01					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2417028
Benzene	ND	0.0250		1	04/23/24	04/24/24	
Ethylbenzene	ND	0.0250		1	04/23/24	04/24/24	
Toluene	ND	0.0250		1	04/23/24	04/24/24	
o-Xylene	ND	0.0250		1	04/23/24	04/24/24	
p,m-Xylene	ND	0.0500		1	04/23/24	04/24/24	
Total Xylenes	ND	0.0250		1	04/23/24	04/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130		04/23/24	04/24/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130		04/23/24	04/24/24	
Surrogate: Toluene-d8		98.2 %	70-130		04/23/24	04/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2417028
Gasoline Range Organics (C6-C10)	ND	20.0		1	04/23/24	04/24/24	
Surrogate: Bromofluorobenzene		101 %	70-130		04/23/24	04/24/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130		04/23/24	04/24/24	
Surrogate: Toluene-d8		98.2 %	70-130		04/23/24	04/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: KM		Batch: 2417038
Diesel Range Organics (C10-C28)	ND	25.0		1	04/23/24	04/24/24	
Oil Range Organics (C28-C36)	ND	50.0		1	04/23/24	04/24/24	
Surrogate: n-Nonane		108 %	50-200		04/23/24	04/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2417029
Chloride	553	20.0		1	04/23/24	04/23/24	



 Devon Energy
 Project Name:
 LVP. SWD #001

 PO Box 6459
 Project Number:
 01058-0007
 Reported:

 Navajo Dam NM, 87419
 Project Manager:
 Ashley Giovengo
 4/29/2024 10:00:17AM

FS07-10' E404231-02

		2.0.201 02				
Analyte	Result	Reporting Limit	Diluti	ion Prepared	Analyzed	Notes
Allalyte	Result	Liiiit	Dilut	ion Frepared	Allalyzeu	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: BA		Batch: 2417028
Benzene	ND	0.0250	1	04/23/24	04/24/24	
Ethylbenzene	ND	0.0250	1	04/23/24	04/24/24	
Toluene	ND	0.0250	1	04/23/24	04/24/24	
o-Xylene	ND	0.0250	1	04/23/24	04/24/24	
p,m-Xylene	ND	0.0500	1	04/23/24	04/24/24	
Total Xylenes	ND	0.0250	1	04/23/24	04/24/24	
Surrogate: Bromofluorobenzene		98.6 %	70-130	04/23/24	04/24/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/23/24	04/24/24	
Surrogate: Toluene-d8		99.0 %	70-130	04/23/24	04/24/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	Analyst: BA		Batch: 2417028
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/23/24	04/24/24	
Surrogate: Bromofluorobenzene		98.6 %	70-130	04/23/24	04/24/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	04/23/24	04/24/24	
Surrogate: Toluene-d8		99.0 %	70-130	04/23/24	04/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Α	Analyst: KM		Batch: 2417038
Diesel Range Organics (C10-C28)	ND	25.0	1	04/23/24	04/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/23/24	04/24/24	
Surrogate: n-Nonane		108 %	50-200	04/23/24	04/24/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Α	Analyst: IY		Batch: 2417029
Chloride	488	20.0	1	04/23/24	04/23/24	



Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/29/2024 10:00:17AM

FS08-7.5'

E404231-03

		Reporting					
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2417029	
· · · · · · · · · · · · · · · · · · ·					04/23/24		



Devon Energy Project Name: LVP. SWD #001 Reported:
PO Box 6459 Project Number: 01058-0007
Navajo Dam NM, 87419 Project Manager: Ashley Giovengo 4/29/2024 10:00:17AM

Navajo Dam NM, 87419		Project Manage	r: As	shley Gioveng	go			4/29	0/2024 10:00:17A
	V	olatile Organ	ic Compo	unds by EI	PA 82601	В			Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417028-BLK1)							Prepared: 04	4/23/24 Analy	yzed: 04/23/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.1	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.6	70-130			
LCS (2417028-BS1)							Prepared: 04	4/23/24 Analy	yzed: 04/23/24
Benzene	2.63	0.0250	2.50		105	70-130		<u> </u>	
Ethylbenzene	2.53	0.0250	2.50		101	70-130			
Toluene	2.45	0.0250	2.50		97.9	70-130			
p-Xylene	2.51	0.0250	2.50		100	70-130			
p,m-Xylene	4.88	0.0500	5.00		97.7	70-130			
Total Xylenes	7.39	0.0250	7.50		98.6	70-130			
Surrogate: Bromofluorobenzene	0.495		0.500		99.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.7	70-130			
Surrogate: Toluene-d8	0.497		0.500		99.3	70-130			
Matrix Spike (2417028-MS1)				Source:	E404233-	02	Prepared: 04	4/23/24 Analy	yzed: 04/23/24
Benzene	2.73	0.0250	2.50	ND	109	48-131	-	•	·
Ethylbenzene	2.62	0.0250	2.50	ND	105	45-135			
Toluene	2.55	0.0250	2.50	ND	102	48-130			
o-Xylene	2.63	0.0250	2.50	ND	105	43-135			
p,m-Xylene	5.14	0.0500	5.00	ND	103	43-135			
Total Xylenes	7.77	0.0250	7.50	ND	104	43-135			
Surrogate: Bromofluorobenzene	0.499		0.500		99.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130			
Matrix Spike Dup (2417028-MSD1)				Source:	E404233-	02	Prepared: 04	4/23/24 Analy	yzed: 04/23/24
Benzene	2.62	0.0250	2.50	ND	105	48-131	4.09	23	
Ethylbenzene	2.50	0.0250	2.50	ND	100	45-135	4.72	27	
Toluene	2.42	0.0250	2.50	ND	96.9	48-130	5.03	24	
o-Xylene	2.57	0.0250	2.50	ND	103	43-135	2.41	27	
p,m-Xylene	4.95	0.0500	5.00	ND	98.9	43-135	3.80	27	
Total Xylenes	7.51	0.0250	7.50	ND	100	43-135	3.33	27	
Surrogate: Bromofluorobenzene	0.506		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.488		0.500		97.6	70-130			
			0.500		00.6	50 110			



0.500

70-130

0.493

Surrogate: Toluene-d8

Devon EnergyProject Name:LVP. SWD #001Reported:PO Box 6459Project Number:01058-0007Navajo Dam NM, 87419Project Manager:Ashley Giovengo4/29/2024 10:00:17AM

Anal	vst.	B

Analyte R	Ţ.			Source Result	Rec	Rec Limits	RPD	RPD Limit	
n	ıg/kg m	ng/kg	mg/kg	mg/kg	%	%	%	%	Notes

	Result	LIIIII	Level	Result	Rec	LIIIIIIS	KPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417028-BLK1)							Prepared: 04	1/23/24 A1	nalyzed: 04/23/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.1	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.6	70-130			
LCS (2417028-BS2)							Prepared: 04	1/23/24 Aı	nalyzed: 04/23/24
Gasoline Range Organics (C6-C10)	47.3	20.0	50.0		94.5	70-130	·	·	
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.4	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.2	70-130			
Matrix Spike (2417028-MS2)				Source:	E404233-0	02	Prepared: 04	1/23/24 A1	nalyzed: 04/23/24
Gasoline Range Organics (C6-C10)	51.7	20.0	50.0	ND	103	70-130			
Surrogate: Bromofluorobenzene	0.505		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.507		0.500		101	70-130			
Surrogate: Toluene-d8					101	70-130			
ourrogate. Totalene do	0.503		0.500		101	/0-130			
Matrix Spike Dup (2417028-MSD2)	0.503		0.500	Source:	E404233-0		Prepared: 04	1/23/24 A1	nalyzed: 04/23/24
	48.9	20.0	50.0	Source:			Prepared: 04	1/23/24 A1 20	nalyzed: 04/23/24
Matrix Spike Dup (2417028-MSD2)		20.0			E404233-0)2			nalyzed: 04/23/24
Matrix Spike Dup (2417028-MSD2) Gasoline Range Organics (C6-C10)	48.9	20.0	50.0		E404233- 0	70-130			nalyzed: 04/23/24



Devon EnergyProject Name:LVP. SWD #001Reported:PO Box 6459Project Number:01058-0007Navajo Dam NM, 87419Project Manager:Ashley Giovengo4/29/2024 10:00:17AM

3		, ,		, .	,				
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417038-BLK1)							Prepared: 0	4/23/24 Ana	lyzed: 04/24/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.6		50.0		105	50-200			
LCS (2417038-BS1)							Prepared: 0	4/23/24 Ana	lyzed: 04/24/24
Diesel Range Organics (C10-C28)	289	25.0	250		116	38-132			
Surrogate: n-Nonane	53.6		50.0		107	50-200			
Matrix Spike (2417038-MS1)				Source:	E404234-0	02	Prepared: 0	4/23/24 Ana	lyzed: 04/24/24
Diesel Range Organics (C10-C28)	296	25.0	250	ND	118	38-132			
Surrogate: n-Nonane	54.6		50.0		109	50-200			
Matrix Spike Dup (2417038-MSD1)				Source:	E404234-0	02	Prepared: 0	4/23/24 Ana	lyzed: 04/24/24
Diesel Range Organics (C10-C28)	299	25.0	250	ND	120	38-132	0.863	20	
Surrogate: n-Nonane	54.7		50.0		109	50-200			



Chloride

QC Summary Data

Devon Energy PO Box 6459 Navajo Dam NM, 87419		Project Name: Project Number: Project Manager	0	VP. SWD #001 1058-0007 .shley Gioveng					Reported: 4/29/2024 10:00:17AM
Navajo Daili Nivi, 87419		<u>, </u>		300.0/9056A	,				
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result	Rec %	Rec Limits	RPD	RPD Limit %	Analyst: IY Notes
Blank (2417029-BLK1)							Prepared: 0	4/23/24 A	nalyzed: 04/23/24
Chloride LCS (2417029-BS1)	ND	20.0					Prepared: 0	4/23/24 A	nalyzed: 04/23/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2417029-MS1)				Source:	E404230-)1	Prepared: 0	4/23/24 A	nalyzed: 04/23/24
Chloride	533	100	250	259	110	80-120			
Matrix Spike Dup (2417029-MSD1)				Source:	E404230-	01	Prepared: 0	4/23/24 A	nalyzed: 04/23/24

250

100

107

80-120

1.20

20

526

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

ſ	Devon Energy	Project Name:	LVP. SWD #001	
١	PO Box 6459	Project Number:	01058-0007	Reported:
١	Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	04/29/24 10:00

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



						Ch	ain of C	ustod	У							50	P -	tr	en	e fo	or TAT Page	1_ of
	Clie	ent Inform	nation			Invoice Inform	nation	-			La	b Us	e On	lv				TAT			State	
Client: Project N Project N	Devo lame: L\ Manager: 4	1P54	VD #	001		Company: J. M. R Address: on file City, State, Zip:	Raley		Lab	WO# 104					er -00	07	1D	2D :	BD S	td	NM CO UT TX	
Phone:	e, Zip: (a 575 ° 1910 Veny	708 0	055		20 1	Phone: mail: liscellaneous:				y 8015	7 8015	1			and	Meth				Co		CRA N
		1		Sam	ole Informa	tion				RO by	RO by	y 8021	/ 8260	le 300.0	N.	705 - T	Met				V	
Time Sampled	Date Sampled	Matrix	No. of Containers			Sample ID		Filter	Lab umber	DRO/ORO	GRO/DRO by 8015	втех by	VOC by 8	Chloride	BGDOC - NM	TCEQ 1005	RCRA 8 Metals				Remarks	
1040	4/22/24	Solid	1	F	505	- 9.5'			1						×					B	Rush chlande enly Rush chlande	
1028	4/22/24	Solid	(F	507	-10'			2						X					P	tush chlaride	
1030	4/22/24	Solid	1			- 7.5			3						X					K	Cush chloride	6
						to A) J: m Raley hat tampering with or intentionally r	· 1															
Sampled by Relinquish		12 urt	Date		Time 1(: 3 C	Received by: (Signature)	y !	Date (4-1)	-X	Time	30				Sample	s requir d or rec	ing ther eived pa	mal pres	ervatio	n must b n avg tem o Use	ne received on ice the day they are np above 0 but less than 6 °C on	e
Relinquish	ed by: (Signatur ed by: (Signatur	re)	Date	-22-24	Time City	Received by (Signature) Received by: (Signature)		Y/Z Date	3/24	Time Time	315				T1 AVG	Tem	p°C_	_ I	2		<u>T3</u>	_
Sample Mat	rix: S - Soil, Sd - S	Solid, Sg - Slu	ige, A - Aque	ous, O - Other				Contain	er Type	: g - g	glass,	p - pc	ly/pl	astic,	ag - a	ambe	r glas	s, v - V	OA			

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Do not run TPH or BTEX if chloride is > 600



envirotech

Printed: 4/23/2024 1:02:26PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC

Does the sample ID. Does the number of Were samples dropp Was the COC comp Was the COC comp Were all samples rei Note: Analysie, 15 minut mmple Turn Around Did the COC indica mmple Cooler Was a sample cooler Was a sample cooler Was the sample(s) re Was the sample receives Note: Therm minutes of sa If no visible ice, re mmple Container A Are aqueous VOC Are VOC samples Is the head space to Was a trip blank (T A re non-VOC sam Is the appropriate voieled Label	match the COC? samples per sampling site location match the COC? samples per sampling site location match defended by client or carrier? etc., i.e., signatures, dates/times, requested within holding time? is, such as pH which should be conducted it hold time, are not included in this disucess Time (TAT) the standard TAT, or Expedited TAT? Treceived? the ceived in good condition? the ceived intact, i.e., not broken? the samples present? the do nice? If yes, the recorded temp is 4°C and preservation is not required, if samples as the samples present? The collected in VOA Vials? The collected in VOA Vials? The collected in VOA Vials? The collected in the correct containers only included for VOC analyses?	in the field, ion. C. i.e., 6°±2°C re received w/i 15 e temperature: 4°C	Yes	50 00 (4 day TAT) Carrier: <u>C</u>	Carrier Rush Chlorid	le Only. If	Alexa Michaels ts/Resolution Chloride is > 600 Per client see COC
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9. Is the appropriate vo <u>Field Label</u> 0. Were field sample Sample ID?		.9	IIV				
Field Label 20. Were field sample Sample ID?) ·	Yes				
20. Were field sample Sample ID?	ume/weight or number of sample contai	iners collected?	Yes				
Sample ID?	•						
•	abels filled out with the minimum info	ormation:	•-				
	ented?		Yes				
Collectors name			Yes Yes				
Sample Preservation			100				
1. Does the COC or fi	eld labels indicate the samples were p	reserved?	No				
2. Are sample(s) corre	ectly preserved?		NA				
24. Is lab filteration red	uired and/or requested for dissolved n	netals?	No				
Multiphase Sample M	<u>atrix</u>						
26. Does the sample ha	ve more than one phase, i.e., multipha	ase?	No				
7. If yes, does the CO	C specify which phase(s) is to be analy	yzed?	NA				
Subcontract Laborate	<u>ry</u>						
	ed to get sent to a subcontract laborato	ory?	No				
9. Was a subcontract l	aboratory specified by the client and i	f so who?	NA Su	bcontract Lab	: NA		
Client Instruction							
Client Instruction					. 1121		

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E404242

Job Number: 01058-0007

Received: 4/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 4/29/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 4/29/24

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E404242

Date Received: 4/24/2024 5:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/24/2024 5:00:00AM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

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Sample Summary

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Γ	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
ı	6488 7 Rivers Hwy	Project Number:	01058-0007	Keporteu:
l	Artesia NM, 88210	Project Manager:	Ashley Giovengo	04/29/24 13:07

Client Sample ID	Lab Sample ID Matrix	Sampled Received	Container
BF01	E404242-01A Soil	04/23/24 04/24/24	Glass Jar, 2 oz.



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/29/2024 1:07:27PM

BF01 F404242-01

		E404242-01				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	/st: RKS		Batch: 2417041
Benzene	ND	0.0250	1	04/24/24	04/25/24	
Ethylbenzene	ND	0.0250	1	04/24/24	04/25/24	
Toluene	ND	0.0250	1	04/24/24	04/25/24	
o-Xylene	ND	0.0250	1	04/24/24	04/25/24	
p,m-Xylene	ND	0.0500	1	04/24/24	04/25/24	
Total Xylenes	ND	0.0250	1	04/24/24	04/25/24	
Surrogate: 4-Bromochlorobenzene-PID		93.1 %	70-130	04/24/24	04/25/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: RKS		Batch: 2417041
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/24/24	04/25/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.0 %	70-130	04/24/24	04/25/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2417043
Diesel Range Organics (C10-C28)	ND	25.0	1	04/24/24	04/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/24/24	04/25/24	
Surrogate: n-Nonane		85.7 %	50-200	04/24/24	04/25/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	/st: JM		Batch: 2417044
Chloride	80.7	20.0	1	04/24/24	04/24/24	



Devon Energy - Carlsbad LVP SWD #001 Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 4/29/2024 1:07:27PM **Volatile Organics by EPA 8021B** Analyst: RKS Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2417041-BLK1) Prepared: 04/24/24 Analyzed: 04/24/24 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.19 8.00 89.9 70-130 LCS (2417041-BS1) Prepared: 04/24/24 Analyzed: 04/24/24 4.98 99.7 70-130 5.00 Benzene 0.0250 Ethylbenzene 4.96 0.0250 5.00 99.2 70-130 4.96 0.0250 5.00 99.2 70-130 Toluene 97.9 o-Xylene 4.89 0.0250 5.00 70-130 9.99 10.0 99.9 70-130 0.0500 p.m-Xvlene 99.2 70-130 14.9 15.0 Total Xylenes 0.0250 8.00 89.9 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.19 Matrix Spike (2417041-MS1) Source: E404240-03 Prepared: 04/24/24 Analyzed: 04/24/24 5.13 0.0250 5.00 ND 54-133 Benzene ND 102 61-133 Ethylbenzene 5.08 0.0250 5.00 Toluene 5.10 0.0250 5.00 ND 102 61-130 ND 100 63-131 5.01 5.00 0.0250 o-Xylene p,m-Xylene 10.2 0.0500 10.0 ND 102 63-131 15.3 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.18 8.00 Matrix Spike Dup (2417041-MSD1) Source: E404240-03 Prepared: 04/24/24 Analyzed: 04/24/24 3.32 5.30 0.0250 5.00 ND 54-133 ND 61-133 5.27 0.0250 5.00 105 3.64 20 Ethylbenzene 61-130 Toluene 5.28 0.0250 5.00 ND 106 3 31 20

5.00

10.0

15.0

8.00

0.0250

0.0500

0.0250

ND

ND

ND

105

106

106

90.5

63-131

63-131

63-131

70-130

4.13

3.51

3.71

20

20

20



o-Xylene

p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

5.23

10.6

15.8

7.24

Devon Energy - Carlsbad 6488 7 Rivers Hwy	Project Name: Project Number:	LVP SWD #001 01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/29/2024 1:07:27PM

Artesia NM, 88210		Project Manage	r: As	hley Gioveng	go			4/2	9/2024 1:07:27PM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO		A	analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2417041-BLK1)							Prepared: 0	4/24/24 Analy	/zed: 04/24/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.88		8.00		86.0	70-130			
LCS (2417041-BS2)							Prepared: 0	4/24/24 Analy	zed: 04/24/24
Gasoline Range Organics (C6-C10)	38.3	20.0	50.0		76.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.11		8.00		88.8	70-130			
Matrix Spike (2417041-MS2)				Source:	E404240-	03	Prepared: 0	4/24/24 Analy	zed: 04/24/24
Gasoline Range Organics (C6-C10)	39.1	20.0	50.0	ND	78.1	70-130			
urrogate: 1-Chloro-4-fluorobenzene-FID	6.78		8.00		84.7	70-130			
Matrix Spike Dup (2417041-MSD2)				Source:	E404240-	03	Prepared: 0	4/24/24 Analy	zed: 04/24/24
Gasoline Range Organics (C6-C10)	38.5	20.0	50.0	ND	77.0	70-130	1.49	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.83		8.00		85.4	70-130			

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	•
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/29/2024 1:07:27PM

Artesia NM, 88210		Project Manage	r: As	hley Gioveng	go			4	7/29/2024 1:07:27PN
	Nonha	logenated Or	ganics by l	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417043-BLK1)							Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	ND	25.0							
il Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	44.3		50.0		88.7	50-200			
LCS (2417043-BS1)							Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	258	25.0	250		103	38-132			
urrogate: n-Nonane	46.6		50.0		93.2	50-200			
Matrix Spike (2417043-MS1)				Source:	E404240-	03	Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	265	25.0	250	ND	106	38-132			
urrogate: n-Nonane	46.1		50.0		92.3	50-200			
Matrix Spike Dup (2417043-MSD1)				Source:	E404240-	03	Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132	5.19	20	
urrogate: n-Nonane	45.1		50.0		90.3	50-200			



Devon Energy - Carlsbad 6488 7 Rivers Hwy		Project Name: Project Number:		VP SWD #001 1058-0007					Reported:
Artesia NM, 88210		Project Number: Project Manager:		shley Gioveng	go				4/29/2024 1:07:27PM
		Anions	by EPA	300.0/9056 <i>A</i>	1				Analyst: JM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417044-BLK1)							Prepared: 0	4/24/24	Analyzed: 04/24/24
Chloride	ND	20.0							
LCS (2417044-BS1)							Prepared: 0	4/24/24	Analyzed: 04/24/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2417044-MS1)				Source:	E404237-0	07	Prepared: 0	4/24/24	Analyzed: 04/24/24
Chloride	550	20.0	250	305	97.9	80-120			
Matrix Spike Dup (2417044-MSD1)				Source:	E404237-0	07	Prepared: 0	4/24/24	Analyzed: 04/24/24
Chloride	560	20.0	250	305	102	80-120	1.80	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
-	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
	Artesia NM, 88210	Project Manager:	Ashley Giovengo	04/29/24 13:07

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



	Clie	ent Inform	ation			Invoice Informatio	n				La	b Us	e On	ly				TAT			State	9
Client: Project N	Name: LV Nanager: A	PSU	Ciar	001	Ad	ompany: 🎉 M Rala ddress: 🔊 🙀 Fill ity, State, Zip:		=	ab V E 4	NO#	124	(2) 010	Num 58	ber -00	7	1D	2D 3	D Std	NM	CO UT	TX
Address:				7	_	none:			Г				Ana	lysis	and	Met	hod			EP	A Progra	m
Phone:	szs 9 4910 V e	88 0	055	88 221	Mis	nail: scellaneous:				10	10									SDWA Compliance	CWA	RCRA or N
-	-17:	119 00	() = 1-1		ے د					/ 801	8015	1		0.0	-	×	sis			PWSID#	2 1	OI N
				Sampl	le Informati	on				RO by	RO by	y 802	8260	e 300	N	XT - 500	Met				T	
Time Sampled	Date Sampled	Matrix	No. of Containers			Sample ID	Field	Lab Numb		DRO/ORO by 8015	GRO/DRO by	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 ·	RCRA 8 Metals				Remarks	
1138	4/23/24	5011	1	BF	- O)			1							X							
Addition	al Instructio	ns:																				
I, (field sam Sampled by	pler), attest to th	e validity apd	authenticity of	this sample.	I am aware tha	t tampering with or intentionally mislab		nple locat	tion, c	date o	r time	of coll	ection	is con	sidered	l fraud	and m	ay be gro	ounds for I	egal action.		
Relinquish	ed by: (Signatur	int	Date 4//	13/24	1333	Received by: (Signature)	les 4	-23.2	14	Time	33	3							ce at an avg	st be received of temp above 0 b		
Relinguish	ed by Asignator	e) on gal	Date Date	3.24	17619 ime	Received by: (Signature) Received by: (Signature)	Bo 4	-23	-24	Time	300	>_			Rec	eivec	on i	ce:	Y N	se Only		
Cha	dre (Signatur	Huse	9-7 Date	3-4	7400 ime	Received by: (Signature)	J- Date	24.2	24	Time	50	0			T1	i Ten	np °C	_ I	2		<u>T3</u>	-
	rix: S - Soil, Sd - S							tainer 1							, ag -	ambe	er glas	s, v - V				
Note: Sam	ples are discard	led 14 days a	after results a	re reported	unless other a	arrangements are made. Hazardous	samples wi	ll be reti	urnec	d to cl	lient o	r disp	osed	of at t	he clie	ent ex	pense	The rep	ort for t	ne analysis o	f the above	samples is



envirotech

Printed: 4/24/2024 10:23:10AM

Envirotech Analytical Laboratory

	: Please take note of any NO checkmarks.	-	•	Checklist (SRC		averted.		
Client:	no response concerning these items within 24 hours of th Devon Energy - Carlsbad	Date Received:	04/24/24		uyzeu as re	Work Order ID:	E404242	
Phone:	.	Date Logged In:	04/23/24			Logged In By:	Alexa Michaels	
Email:	* *	Due Date:		17:00 (4 day TAT)		Logged in By.	Alexa Wichaels	
Chain o	Custody (COC)							
	he sample ID match the COC?		Ycs					
	he number of samples per sampling site location mate	h the COC	Yes					
	samples dropped off by client or carrier?		Yes	Carrier: C	ourier			
4. Was ti	ne COC complete, i.e., signatures, dates/times, request	ed analyses?	Yes					
	all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssion	he field,	Yes			Commen	ts/Resolution	
	Turn Around Time (TAT) e COC indicate standard TAT, or Expedited TAT?		Yes					
Sample	Cooler							
`	sample cooler received?		Yes					
8. If yes,	was cooler received in good condition?		Yes					
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes					
10. Were	custody/security seals present?		No					
11. If yes	s, were custody/security seals intact?		NA					
12. Was t	ne sample received on ice? If yes, the recorded temp is 4°C, i. Note: Thermal preservation is not required, if samples are minutes of sampling		Yes					
13. If no	visible ice, record the temperature. Actual sample to	emperature: 4º	<u>c</u>					
Sample	<u>Container</u>							
14. Are a	queous VOC samples present?		No					
15. Are \	OC samples collected in VOA Vials?		NA					
16. Is the	head space less than 6-8 mm (pea sized or less)?		NA					
17. Was	a trip blank (TB) included for VOC analyses?		NA	Î				
18. Are 1	on-VOC samples collected in the correct containers?		Yes					
19. Is the	appropriate volume/weight or number of sample containe	rs collected?	Yes					
	<u>bel</u> field sample labels filled out with the minimum informations in the filled out with the minimum information in the filled	nation:	Yes					
	Date/Time Collected?		Yes	Į				
(Collectors name?		Yes					
	Preservation_							
	the COC or field labels indicate the samples were pre-	served?	No					
	ample(s) correctly preserved?		NA					
24. Is lat	filteration required and/or requested for dissolved me	tals?	No					
	ase Sample Matrix	_						
	the sample have more than one phase, i.e., multiphase		No					
-	s, does the COC specify which phase(s) is to be analyz	ed?	NA					
		2	No					
				Subcontract Lab	· NA			
	nstruction			5455444455				
28. Are s 29. Was	ract Laboratory amples required to get sent to a subcontract laboratory a subcontract laboratory specified by the client and if s nstruction		No NA	Subcontract Lab	: NA	, , , , , , , , , , , , , , , , , , , ,		-

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy

Project Name: LVP. SWD #001

Work Order: E404244

Job Number: 01058-0007

Received: 4/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 4/29/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 4/29/24

Ashley Giovengo PO Box 6459 Navajo Dam, NM 87419

Project Name: LVP. SWD #001

Workorder: E404244

Date Received: 4/24/2024 5:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/24/2024 5:00:00AM, under the Project Name: LVP. SWD #001.

The analytical test results summarized in this report with the Project Name: LVP. SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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Cell: 775-287-1762

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Sample Summary

_				
I	Devon Energy	Project Name:	LVP. SWD #001	Reported:
١	PO Box 6459	Project Number:	01058-0007	Reported.
l	Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	04/29/24 13:13

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
FS10-5.5'	E404244-01A Soil	04/23/24	04/24/24	Glass Jar, 2 oz.



Devon Energy	Project Name:	LVP. SWD #001	
PO Box 6459	Project Number:	01058-0007	Reported:
Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	4/29/2024 1:13:04PM

FS10-5.5' E404244-01

	E404244-01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analyst: BA			Batch: 2417048
ND	0.0250	1	04/24/24	04/25/24	
ND	0.0250	1	04/24/24	04/25/24	
ND	0.0250	1	04/24/24	04/25/24	
ND	0.0250	1	04/24/24	04/25/24	
ND	0.0500	1	04/24/24	04/25/24	
ND	0.0250	1	04/24/24	04/25/24	
	92.9 %	70-130	04/24/24	04/25/24	
mg/kg	mg/kg	Analy	Analyst: BA		Batch: 2417048
ND	20.0	1	04/24/24	04/25/24	
	81.8 %	70-130	04/24/24	04/25/24	
mg/kg	mg/kg	Analy	Analyst: KM		Batch: 2417049
ND	25.0	1	04/24/24	04/24/24	
ND	50.0	1	04/24/24	04/24/24	
	113 %	50-200	04/24/24	04/24/24	
mg/kg	mg/kg	Analy	yst: IY		Batch: 2417029
331	20.0	1	04/24/24	04/24/24	
	mg/kg ND Mg/kg ND mg/kg	Result Reporting mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 mg/kg mg/kg ND 20.0 81.8 % mg/kg ND 25.0 ND 50.0 113 % mg/kg mg/kg mg/kg	Reporting Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 MD 0.0250 1 MD 0.0250 1 Mg/kg mg/kg Analy ND 20.0 1 81.8 % 70-130 mg/kg mg/kg Analy ND 25.0 1 ND 50.0 1 113 % 50-200 mg/kg mg/kg Analy	Reporting Result Limit Dilution Prepared mg/kg Analyst: BA ND 0.0250 1 04/24/24 ND 0.0250 1 04/24/24 ND 0.0250 1 04/24/24 ND 0.0500 1 04/24/24 ND 0.0250 1 04/24/24 ND 0.0250 1 04/24/24 mg/kg mg/kg Analyst: BA ND 20.0 1 04/24/24 mg/kg mg/kg Analyst: KM ND 25.0 1 04/24/24 ND 50.0 1 04/24/24 ND 50.0 1 04/24/24 ND 50.0 1 04/24/24 Mg/kg Mg/kg Analyst: KM	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: BA ND 0.0250 1 04/24/24 04/25/24 ND 0.0250 1 04/24/24 04/25/24 ND 0.0250 1 04/24/24 04/25/24 ND 0.0500 1 04/24/24 04/25/24 ND 0.0250 1 04/24/24 04/25/24 ND 0.0250 1 04/24/24 04/25/24 mg/kg mg/kg Analyst: BA ND 20.0 1 04/24/24 04/25/24 mg/kg mg/kg Analyst: KM ND 25.0 1 04/24/24 04/25/24 ND 25.0 1 04/24/24 04/24/24 ND 50.0 1 04/24/24 04/24/24 ND 50.0 1 04/24/24 04/24/24 ND 50.0 1 04/24/24

LVP. SWD #001 Devon Energy Project Name: Reported: PO Box 6459 Project Number: 01058-0007 Navajo Dam NM, 87419 Project Manager: Ashley Giovengo 4/29/2024 1:13:04PM **Volatile Organics by EPA 8021B** Analyst: BA RPD Reporting Spike Source Rec Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2417048-BLK1) Prepared: 04/24/24 Analyzed: 04/25/24 ND 0.0250 ND Ethylbenzene 0.0250 ND Toluene 0.0250 ND 0.0250 o-Xylene ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.49 8.00 93.6 70-130 LCS (2417048-BS1) Prepared: 04/24/24 Analyzed: 04/25/24 5.40 5.00 108 70-130 0.0250 Benzene Ethylbenzene 5.22 0.0250 5.00 104 70-130 5.38 70-130 Toluene 0.0250 5.00 108 5.32 106 70-130 o-Xylene 0.0250 5.00 10.7 0.0500 10.0 107 70-130 p,m-Xylene 107 70-130 16.0 0.0250 15.0 Total Xylenes 70-130 7.57 8.00 94.6 Surrogate: 4-Bromochlorobenzene-PID

Matrix Spike (2417048-MS1)					E404246-0)3	Prepared: 04/24/24 Analyzed: 04/25/24
Benzene	5.28	0.0250	5.00	ND	106	54-133	
Ethylbenzene	5.10	0.0250	5.00	ND	102	61-133	
Toluene	5.25	0.0250	5.00	ND	105	61-130	
o-Xylene	5.18	0.0250	5.00	ND	104	63-131	
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131	
Total Xylenes	15.6	0.0250	15.0	ND	104	63-131	
Surrogate: 4-Bromochlorobenzene-PID	7.51		8.00		93.8	70-130	

Matrix Spike Dup (2417048-MSD1)					Source: E404246-03			Prepared: 04/24/24 Analyzed: 04/25/24		
Benzene	5.11	0.0250	5.00	ND	102	54-133	3.23	20		
Ethylbenzene	4.95	0.0250	5.00	ND	99.0	61-133	2.87	20		
Toluene	5.09	0.0250	5.00	ND	102	61-130	3.15	20		
o-Xylene	5.03	0.0250	5.00	ND	101	63-131	2.98	20		
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	2.79	20		
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	2.85	20		
Surrogata: A Promochlorohonzana PID	7.52		8.00		94 1	70-130				

Gasoline Range Organics (C6-C10)

Surrogate: 1-Chloro-4-fluorobenzene-FID

QC Summary Data

Devon EnergyProject Name:LVP. SWD #001Reported:PO Box 6459Project Number:01058-0007Navajo Dam NM, 87419Project Manager:Ashley Giovengo4/29/2024 1:13:04PM

Navajo Dam NM, 87419		Project Manage	r: As	hley Gioveng	go			4	/29/2024 1:13:04PM	
	Non	halogenated		Analyst: BA						
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes	
Blank (2417048-BLK1)							Prepared: 0	04/24/24 Analyzed: 04/25/24		
Gasoline Range Organics (C6-C10)	ND	20.0								
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.60		8.00		82.5	70-130				
LCS (2417048-BS2)							Prepared: 0	4/24/24 An	alyzed: 04/25/24	
Gasoline Range Organics (C6-C10)	37.5	20.0	50.0		75.0	70-130				
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.64		8.00		83.0	70-130				
Matrix Spike (2417048-MS2)				Source:	E404246-	03	Prepared: 0	4/24/24 An	alyzed: 04/25/24	
Gasoline Range Organics (C6-C10)	42.6	20.0	50.0	ND	85.1	70-130				
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.47		8.00		80.9	70-130				
Matrix Spike Dup (2417048-MSD2)				Source:	E404246-0	03	Prepared: 0	4/24/24 An	alyzed: 04/25/24	

50.0

8.00

ND

87.3

82.9

2.48

70-130

70-130

20

43.6

6.64

20.0

Devon EnergyProject Name:LVP. SWD #001Reported:PO Box 6459Project Number:01058-0007Navajo Dam NM, 87419Project Manager:Ashley Giovengo4/29/20241:13:04PM

Navajo Dam NM, 8/419		Project Manager	r: As	hley Gioveng	go			4	/29/2024 1:13:04PI
	Nonha		Analyst: KM						
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417049-BLK1)							Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	57.7		50.0		115	50-200			
LCS (2417049-BS1)							Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	296	25.0	250		119	38-132			
urrogate: n-Nonane	58.2		50.0		116	50-200			
Matrix Spike (2417049-MS1)				Source:	E404246-	02	Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	382	25.0	250	72.7	124	38-132			
urrogate: n-Nonane	58.7		50.0		117	50-200			
Matrix Spike Dup (2417049-MSD1)				Source:	E404246-	02	Prepared: 0	4/24/24 An	alyzed: 04/24/24
Diesel Range Organics (C10-C28)	390	25.0	250	72.7	127	38-132	2.18	20	
Jurrogate: n-Nonane	58.9		50.0		118	50-200			



Chloride

QC Summary Data

Devon Energy PO Box 6459		Project Name: Project Number:	0	VP. SWD #001 1058-0007					Reported:
Navajo Dam NM, 87419		Project Manager	:: A	shley Gioveng	go				4/29/2024 1:13:04PM
		Anions	by EPA	300.0/9056 <i>A</i>	1				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417029-BLK1)							Prepared: 0	4/23/24 A	nalyzed: 04/23/24
Chloride	ND	20.0							
LCS (2417029-BS1)							Prepared: 0	4/23/24 A	nalyzed: 04/23/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2417029-MS1)				Source:	E404230-	01	Prepared: 0	4/23/24 A	nalyzed: 04/23/24
Chloride	533	100	250	259	110	80-120			
Matrix Spike Dup (2417029-MSD1)				Source:	E404230-	01	Prepared: 0	4/23/24 A	nalyzed: 04/23/24

250

100

107

80-120

1.20

20

526

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

ſ	Devon Energy	Project Name:	LVP. SWD #001	
١	PO Box 6459	Project Number:	01058-0007	Reported:
l	Navajo Dam NM, 87419	Project Manager:	Ashley Giovengo	04/29/24 13:13

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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	•	nt Inform	nation			Invoice Information		Lab Use Only IAI Lab WO# Job Number 1D 2D 3D Std			State										
Client:	Pero	2 0 1/	15 44	. 1		Company: J.M Kal	2 4			Std	NM CO UT TX										
Project I	Name: LVI Manager: A	1 1	D 400	0	_	ddress: of file		_ E	40	TU	14	ULU	72	- <i>000</i>		X		X			
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City, State, Zip: Carl Soyd NM 88220		70	Phone:		-	-	_		Ana	llysis	and	Met	nod	_			A Progra				
Phone:	575 9	100 KR	100	1002		mail:		-											SDWA	CWA	RCRA
	agioven			con	— ^v	iscellaneous:		18	100	10									Complianc	e Y	or N
E. T. Gill	17.1000	1400	7 701 117						8015	8015			0			5			PWSID#	-	01 1
				Sam	ple Informa	ion			- À	to by	8021	8260	300.	NN	XT - 20	Meta			T WSID II		
Time Sampled	Date Sampled	Matrix	No. of Containers			Sample ID	Field	Lab Numbe	DRO/ORO	GRO/DRO by	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks	
1350	4/23/24	solid	(F	510-	5.5'		1						X					R454	Chlor	ride
									1	1											
									+	1								H			
									-	+					-						
									+	-						×	-	-			
Addition	l al Instructio	ns:						-	-										E		
, (field sam Sampled by	oler), attest to the	validity and	authenticity	of this sampl	e. I am aware th	at tampering with or intentionally mislat	beling the sar	nple locatio	n, date	or time	e of coll	lection	is con	sidere	d fraud	and ma	y be groun	ds for	legal action.		
			Date		Time	Inani Alba (Simon Co)	Date		Tim	e .									ust be received o	n ice the day	they are
The	ed by: (Signatur		4/	23/24	5:45	Soden MR	0 4.	23-2	4/	74	5			sampl	ed or re	ceived p	icked in ice a	at an av	g temp above 0 b	out less than 6	5 °C on
Religiously	ed by: (Signatur	(50	Date 4-2	3-24	5:45 Time 2400	Received by: (Signature) Received by: (Signature) Received by: (Signature)	Date 4.	24.20	Tim	5 <i>0</i> 0	5			Rec	eived	on ic		ab U	Ise Only		
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ample Mat	rix: S - Soil, Sd - S	olid Co. Clud	no A Anuna	0 01			(0)	toiner Tu	20: 4	alacc	n n	oly/p	lactic				s, v - VOA	1	T		

If chbride is > 600 do not run TPH or BTEX



envirotech

Envirotech Analytical Laboratory

Printed: 4/24/2024 9:52:58AM

Sample Receipt Checklist (SRC)

Client: Devon Energy Da	ate Received:	04/24/24 05	:00	Work Order I	D: E404244	
Phone: (505)324-5600 Da	ate Logged In:	04/24/24 07	:18	Logged In By	: Raina Schwanz	
Email: De	ue Date:	04/30/24 17	:00 (4 day TAT)			
Chain of Custody (COC)		_				
1. Does the sample ID match the COC?		Yes				
2. Does the number of samples per sampling site location match	the COC	Yes				
3. Were samples dropped off by client or carrier?		Yes	Carrier: C	arrier		
4. Was the COC complete, i.e., signatures, dates/times, requested	l analyses?	Yes	_			
 Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion. 		Yes		Comm	nents/Resolution	
Sample Turn Around Time (TAT)					70.011 11 1	
6. Did the COC indicate standard TAT, or Expedited TAT?		Yes			If Chloride is > 600	
Sample Cooler				do not run other tests	s Per COC	
7. Was a sample cooler received?		Yes				
8. If yes, was cooler received in good condition?		Yes				
9. Was the sample(s) received intact, i.e., not broken?		Yes				
10. Were custody/security seals present?		No				
11. If yes, were custody/security seals intact?		NA.				
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re-	., 6°±2°C ceived w/i 15	Yes				
minutes of sampling 13. If no visible ice, record the temperature. Actual sample ter	mnerature: 4º	PC.				
•	mporusare. <u></u>					
Sample Container 14. Are aqueous VOC samples present?		No				
15. Are VOC samples collected in VOA Vials?		NA				
16. Is the head space less than 6-8 mm (pea sized or less)?		NA				
17. Was a trip blank (TB) included for VOC analyses?		NA				
18. Are non-VOC samples collected in the correct containers?		Yes				
19. Is the appropriate volume/weight or number of sample containers	s collected?	Yes				
Field Label						
20. Were field sample labels filled out with the minimum inform	ation:	V				
Sample ID? Date/Time Collected?		Yes				
Collectors name?		Yes Yes				
Sample Preservation		145				
21. Does the COC or field labels indicate the samples were presented.	erved?	No				
22. Are sample(s) correctly preserved?		NA				
24. Is lab filteration required and/or requested for dissolved meta-	als?	No				
Multiphase Sample Matrix						
26. Does the sample have more than one phase, i.e., multiphase?	•	No				
27. If yes, does the COC specify which phase(s) is to be analyze		NA				
Subcontract Laboratory						
28. Are samples required to get sent to a subcontract laboratory?	,	No				
29. Was a subcontract laboratory specified by the client and if so			Subcontract Lab	· NA		
· - ·			Japoniagot Lau	4 446 %		
Client Instruction						
						\Box
						╝

Date

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E404251

Job Number: 01058-0007

Received: 4/25/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 5/1/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 5/1/24

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E404251

Date Received: 4/25/2024 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/25/2024 7:00:00AM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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QC - Nonhalogenated Organics by EPA 8015D - GRO	8
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Sample Summary

Γ	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Domonto I.
١	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
l	Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/01/24 13:58

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
FS08 -11'	E404251-01A Soil	04/24/24	04/25/24	Glass Jar, 2 oz.
FS09 -12.5'	E404251-02A Soil	04/24/24	04/25/24	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/1/2024 1:58:13PM

FS08 -11' E404251-01

		2.0.201 01					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2417078
Benzene	ND	0.0250		1	04/26/24	04/26/24	
Ethylbenzene	ND	0.0250		1	04/26/24	04/26/24	
Toluene	ND	0.0250		1	04/26/24	04/26/24	
o-Xylene	ND	0.0250		1	04/26/24	04/26/24	
p,m-Xylene	ND	0.0500		1	04/26/24	04/26/24	
Total Xylenes	ND	0.0250		1	04/26/24	04/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130		04/26/24	04/26/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130		04/26/24	04/26/24	
Surrogate: Toluene-d8		97.7 %	70-130		04/26/24	04/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2417078
Gasoline Range Organics (C6-C10)	ND	20.0		1	04/26/24	04/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130		04/26/24	04/26/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130		04/26/24	04/26/24	
Surrogate: Toluene-d8		97.7 %	70-130		04/26/24	04/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: KM		Batch: 2417071
Diesel Range Organics (C10-C28)	ND	25.0		1	04/26/24	04/27/24	
Oil Range Organics (C28-C36)	ND	50.0		1	04/26/24	04/27/24	
Surrogate: n-Nonane		111 %	50-200		04/26/24	04/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2417050
Chloride	539	20.0	·	1	04/25/24	04/25/24	



Sample Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/1/2024 1:58:13PM

FS09 -12.5' E404251-02

		E404231-02					
		Reporting					
Analyte	Result	Limit	Dilut	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	Analyst: BA	1		Batch: 2417078
Benzene	ND	0.0250	1		04/26/24	04/27/24	
Ethylbenzene	ND	0.0250	1		04/26/24	04/27/24	
Toluene	ND	0.0250	1		04/26/24	04/27/24	
p-Xylene	ND	0.0250	1		04/26/24	04/27/24	
p,m-Xylene	ND	0.0500	1		04/26/24	04/27/24	
Total Xylenes	ND	0.0250	1		04/26/24	04/27/24	
Surrogate: Bromofluorobenzene		102 %	70-130		04/26/24	04/27/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130		04/26/24	04/27/24	
Surrogate: Toluene-d8		96.6 %	70-130		04/26/24	04/27/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	I	Analyst: BA	L		Batch: 2417078
Gasoline Range Organics (C6-C10)	ND	20.0	1		04/26/24	04/27/24	
Surrogate: Bromofluorobenzene		102 %	70-130		04/26/24	04/27/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130		04/26/24	04/27/24	
Surrogate: Toluene-d8		96.6 %	70-130		04/26/24	04/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	Analyst: KN	Л		Batch: 2417071
Diesel Range Organics (C10-C28)	ND	25.0	1		04/26/24	04/27/24	_
Oil Range Organics (C28-C36)	ND	50.0	1		04/26/24	04/27/24	
Surrogate: n-Nonane		106 %	50-200		04/26/24	04/27/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	Analyst: IY			Batch: 2417050
Chloride	ND	20.0	1		04/25/24	04/25/24	



Devon Energy - Carlsbad LVP SWD #001 Project Name: Reported: 6488 7 Rivers Hwy Project Number: 01058-0007 Artesia NM, 88210 Project Manager: Ashley Giovengo 5/1/2024 1:58:13PM Volatile Organic Compounds by EPA 8260B Analyst: BA Spike Source RPD Reporting Rec Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2417078-BLK1) Prepared: 04/26/24 Analyzed: 04/26/24 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND 0.0250 o-Xylene ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: Bromofluorobenzene 0.505 0.500 101 70-130 Surrogate: 1,2-Dichloroethane-d4 0.503 0.500 101 70-130 0.500 95.9 70-130 Surrogate: Toluene-d8 0.480 LCS (2417078-BS1) Prepared: 04/26/24 Analyzed: 04/26/24 2.52 0.0250 2.50 101 70-130 Benzene 70-130 2.48 2.50 99.3 0.0250 Ethylbenzene Toluene 2.37 0.0250 2.50 94.9 70-130 2.40 2.50 95.9 70-130 0.0250 o-Xylene 94.3 4.71 5.00 70-130 p,m-Xylene 0.0500 7.11 0.0250 7.50 94.8 70-130 Total Xylenes Surrogate: Bromofluorobenzene 0.501 0.500 100 70-130 Surrogate: 1,2-Dichloroethane-d4 0.513 0.500 103 70-130 Surrogate: Toluene-d8 0.500 97.1 70-130 0.486

Matrix Spike (2417078-MS1)				Source:	Prepared: 04/26/24 Analyzed: 04/26/24		
Benzene	2.63	0.0250	2.50	ND	105	48-131	
Ethylbenzene	2.56	0.0250	2.50	ND	102	45-135	
Toluene	2.43	0.0250	2.50	ND	97.3	48-130	
o-Xylene	2.48	0.0250	2.50	ND	99.4	43-135	
p,m-Xylene	4.92	0.0500	5.00	ND	98.4	43-135	
Total Xylenes	7.40	0.0250	7.50	ND	98.7	43-135	
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130	
Surrogate: 1,2-Dichloroethane-d4	0.516		0.500		103	70-130	
Surrogate: Toluene-d8	0.477		0.500		95.3	70-130	

Matrix Spike Dup (2417078-MSD1)		Source:	Source: E404266-03			1/26/24 Analyzed: 04/26/24			
Benzene	2.65	0.0250	2.50	ND	106	48-131	0.681	23	
Ethylbenzene	2.59	0.0250	2.50	ND	103	45-135	1.01	27	
Toluene	2.47	0.0250	2.50	ND	98.9	48-130	1.59	24	
o-Xylene	2.59	0.0250	2.50	ND	103	43-135	3.99	27	
p,m-Xylene	5.07	0.0500	5.00	ND	101	43-135	3.05	27	
Total Xylenes	7.66	0.0250	7.50	ND	102	43-135	3.37	27	
Surrogate: Bromofluorobenzene	0.509		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.515		0.500		103	70-130			
Surrogate: Toluene-d8	0.481		0.500		96.2	70-130			

Devon Energy - CarlsbadProject Name:LVP SWD #001Reported:6488 7 Rivers HwyProject Number:01058-0007Artesia NM, 88210Project Manager:Ashley Giovengo5/1/2024 1:58:13PM

Nonhalogenated	Organics by	v EPA 8015D	- GRO

Analyst: BA

Analyte Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes

	resure				1000				
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417078-BLK1)							Prepared: 0-	4/26/24 A	nalyzed: 04/26/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.505		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.480		0.500		95.9	70-130			
LCS (2417078-BS2)							Prepared: 0	4/26/24 A	nalyzed: 04/26/24
Gasoline Range Organics (C6-C10)	54.0	20.0	50.0	·	108	70-130	·		
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.511		0.500		102	70-130			
Surrogate: Toluene-d8	0.487		0.500		97.4	70-130			
Matrix Spike (2417078-MS2)				Source:	E404266-	03	Prepared: 0	4/26/24 A	nalyzed: 04/26/24
Gasoline Range Organics (C6-C10)	54.2	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.518		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.492		0.500		98.3	70-130			
Matrix Spike Dup (2417078-MSD2)				Source:	E404266-	03	Prepared: 0	4/26/24 A	nalyzed: 04/26/24
Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130	2.47	20	
Surrogate: Bromofluorobenzene	0.518		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.484		0.500		96.7	70-130			



Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	•
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/1/2024 1:58:13PM

Artesia NM, 88210		Project Manager	r: As	hley Gioveng	go				5/1/2024 1:58:13PN
	Nonha	logenated Or	ganics by l	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417071-BLK1)							Prepared: 0	4/26/24 An	alyzed: 04/27/24
tiesel Range Organics (C10-C28)	ND	25.0							
vil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	56.7		50.0		113	50-200			
.CS (2417071-BS1)							Prepared: 0	4/26/24 An	alyzed: 04/27/24
riesel Range Organics (C10-C28)	293	25.0	250		117	38-132			
urrogate: n-Nonane	57.2		50.0		114	50-200			
Matrix Spike (2417071-MS1)				Source:	E404259-0	02	Prepared: 0	4/26/24 An	alyzed: 04/27/24
riesel Range Organics (C10-C28)	299	25.0	250	ND	119	38-132			
urrogate: n-Nonane	56.9		50.0		114	50-200			
Matrix Spike Dup (2417071-MSD1)				Source:	E404259-0	02	Prepared: 0	4/26/24 An	alyzed: 04/27/24
tiesel Range Organics (C10-C28)	304	25.0	250	ND	122	38-132	1.88	20	
urrogate: n-Nonane	58.0		50.0		116	50-200			

Devon Energy - Carlsbad 6488 7 Rivers Hwy		Project Name: Project Number:		VP SWD #001 1058-0007					Reported:
Artesia NM, 88210		Project Manager:		shley Giovengo	o				5/1/2024 1:58:13PM
		Anions	by EPA 3	300.0/9056A					Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2417050-BLK1)							Prepared: 0	4/25/24 A	nalyzed: 04/25/24
Chloride	ND	20.0							
LCS (2417050-BS1)							Prepared: 0	4/25/24 A	nalyzed: 04/25/24
Chloride	248	20.0	250		99.2	90-110			
Matrix Spike (2417050-MS1)				Source: 1	E 404255 -2	22	Prepared: 0	4/25/24 A	nalyzed: 04/25/24
Chloride	455	20.0	250	216	95.6	80-120			
Matrix Spike Dup (2417050-MSD1)				Source: 1	E404255-2	22	Prepared: 0	4/25/24 A	nalyzed: 04/25/24
Chloride	447	20.0	250	216	92.2	80-120	1.91	20	

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
-	6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
	Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/01/24 13:58

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



							Cha	ain of C	ustoc	ly						<	See	I	rei	re	Cor	TAT	Page	of
	Clie	nt Inform	nation				Invoice Informa	ation				L	ab Us	e On	lv				TA	T			State	
Client:	Dei	roh				Co	mpany: Jim Ra	ley		la	h WO					ber		1D		3D S	td	NM CC		
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	Manager: /	754/27	1 Gior	1990		Cit	y, State, Zip:				- 150							-		- 11				
Address:						Ph	one:							Ana	lysis	and	Met	hod			1	EPA I	rogran	n
City, Stat	e, Zip: Car 575	15bad	NM	8877	0	Ema	ail:										1				5	SDWA C	WA	RCRA
	575	900	005	5		Misc	cellaneous:																	
Email:	agiore	ny o co	ensol	um.con	h						8015	8015									_	ompliance	Y	or N
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Time Sampled	Date Sampled	Matrix	No. of Containers				Sample ID		Filter	Lab umbe	DRO/ORO by	GRO/DRO by	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005	RCRA 8 Metals				Re	marks	
1015	4/24/24	solid	1	F	508	3 -	11'			1						X					F	2454	Hori	de
1312	4/24/24	Solid	1	F	509	1 -	12.5'			2						X					1	2454 C	chlo	ride
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	by: (Signatur	e)	Date	24/24	TIME 40	5	Received by: (Signature)	2	Date 4-24	- 24	I Time	40	5			A-140 - 150		100				e received on ice np above 0 but le		
Repropulsh	d by Signatur	ongal	Date 4.	24.24	Time 1620)	Receiled by: (Signature)	Q.	Date 4-24	-0	Time	31				Rece	eived	on i	ce:	Lab	Use	Only		
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Relinquish	ed by: (Signatur	e)	Date		Time		Received by: (Signature)		Date		Time					AVG	Tem	n°C	L					

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

BTEX or TPH

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other



Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

envirotech

Printed: 4/25/2024 9:08:10AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

instructions:	Please	take	note	of any	NO	checkmarks.
mati actions.	Licasc	tunc	MOLE		***	cuccumus ico.

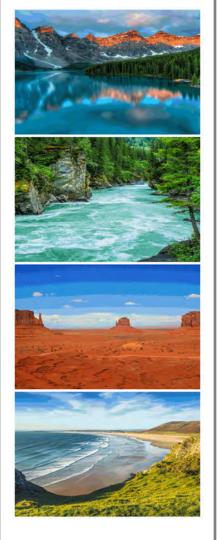
If we receive no response concerning	these items within 24 hours	of the date of this notice, al	I the samples will be analyzed as requested.

Devon Energy - Carlsbad Date Received: 04/25/24 07:00 Work Order ID: E404251 Client: Logged In By: Angelina Pineda Phone (505) 382-1211 Date Logged In: 04/24/24 15:51 Email: ashley.giovengo@wescominc.com Due Date: 04/25/24 17:00 (0 day TAT) Chain of Custody (COC) 1. Does the sample ID match the COC? Yes 2. Does the number of samples per sampling site location match the COC Yes 3. Were samples dropped off by client or carrier? Ycs Carrier: Courier 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes 5. Were all samples received within holding time? Yes Note: Analysis, such as pH which should be conducted in the field, Comments/Resolution i.e, 15 minute hold time, are not included in this disucssion. Sample Turn Around Time (TAT) Rush Chlorides Only. If Chloride is > 6006. Did the COC indicate standard TAT, or Expedited TAT? Yes do not run other tests Per COC Sample Cooler 7. Was a sample cooler received? Yes 8. If yes, was cooler received in good condition? Yes 9. Was the sample(s) received intact, i.e., not broken? Yes 10. Were custody/security seals present? No 11. If yes, were custody/security seals intact? NA 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling 13. If no visible ice, record the temperature. Actual sample temperature: 4°C Sample Container 14. Are aqueous VOC samples present? No 15. Are VOC samples collected in VOA Vials? NA NA 16. Is the head space less than 6-8 mm (pea sized or less)? 17. Was a trip blank (TB) included for VOC analyses? NA 18. Are non-VOC samples collected in the correct containers? Yes 19. Is the appropriate volume/weight or number of sample containers collected? Yes 20. Were field sample labels filled out with the minimum information: Sample ID? Yes Date/Time Collected? Yes Collectors name? Yes Sample Preservation 21. Does the COC or field labels indicate the samples were preserved? No NA 22. Are sample(s) correctly preserved? 24. Is lab filteration required and/or requested for dissolved metals? No Multiphase Sample Matrix 26. Does the sample have more than one phase, i.e., multiphase? No 27. If yes, does the COC specify which phase(s) is to be analyzed? NA Subcontract Laboratory 28. Are samples required to get sent to a subcontract laboratory? No 29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA **Client Instruction**

Signature of client authorizing changes to the COC or sample disposition.

envirotech Inc.

Report to:
Ashley Giovengo



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





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Practical Solutions for a Better Tomorrow

Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E405133

Job Number: 01058-0007

Received: 5/9/2024

Revision: 0

Report Reviewed By:

Draft Walter Hinchman Laboratory Director 5/9/24

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 5/9/24

Ashley Giovengo 6488 7 Rivers Hwy Artesia, NM 88210

Project Name: LVP SWD #001

Workorder: E405133

Date Received: 5/9/2024 7:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/9/2024 7:45:00AM, under the Project Name: LVP SWD #001.

The analytical test results summarized in this report with the Project Name: LVP SWD #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe

Laboratory Technical Representative Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Michelle Golzales

Client Representative Office: 505-421-LABS(5227)

Cell: 505-947-8222

mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Chain of Custody etc.	8

Sample Summary

_			-	
Γ	Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
l	6488 7 Rivers Hwy	Project Number:	01058-0007	Keporteu:
1	Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/09/24 17:12

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS03 - 0'	E405133-01A	Soil	05/07/24	05/09/24	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/9/2024 5:12:28PM

SS03 - 0' E405133-01

		E405133-01				
Austra	D16	Reporting	Dilution	D	A	Notes
Analyte	Result	Limit	Dilution	Prepared	Analyzed	ivotes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	vst: EG		Batch: 2419147
Benzene	ND	0.0250	1	05/09/24	05/09/24	
Ethylbenzene	ND	0.0250	1	05/09/24	05/09/24	
Toluene	ND	0.0250	1	05/09/24	05/09/24	
o-Xylene	ND	0.0250	1	05/09/24	05/09/24	
p,m-Xylene	ND	0.0500	1	05/09/24	05/09/24	
Total Xylenes	ND	0.0250	1	05/09/24	05/09/24	
Surrogate: 4-Bromochlorobenzene-PID		91.6 %	70-130	05/09/24	05/09/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	/st: EG		Batch: 2419147
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/09/24	05/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.8 %	70-130	05/09/24	05/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	vst: NV		Batch: 2419145
Diesel Range Organics (C10-C28)	ND	25.0	1	05/09/24	05/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/09/24	05/09/24	
Surrogate: n-Nonane		110 %	50-200	05/09/24	05/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	/st: IY		Batch: 2419143
Chloride	152	20.0	1	05/09/24	05/09/24	



Chloride

Chloride

LCS Dup (2419143-BSD1)

QC Summary Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210		Project Name: Project Number: Project Manager	: 0	LVP SWD #001 01058-0007 Ashley Giovengo					Reported: 5/9/2024 5:12:28PM
		Anions	by EPA	300.0/9056 <i>A</i>	4				Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2419143-BLK1)							Prepared: 0	5/08/24 A	nalyzed: 05/08/24
Chloride	ND	20.0							
LCS (2419143-BS1)							Prepared: 0	5/08/24 A	analyzed: 05/08/24

250

250

102

101

90-110

90-110

0.0607

Prepared: 05/08/24 Analyzed: 05/08/24

20

254

254

20.0

20.0

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/09/24 17:12

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



	Clie	nt Inform	nation	-	Invoice Information Lab Use Only TAT										State									
Client: D	evon					1	Company: Devon			La	b WO	WO#133		Job	Num	ber		1D 2D 3D Sto			Std	NM	TX	
Project:	LVP SWD #0	01]	Address: 5315 Buena Vista	Dr		. IE	140°	DI) 579	-0	207	x	\vdash			×				
	<u> Manager: As</u>					4	City, State, Zip: Carlsbad NN	<i>1</i> , 88220		. [1 14					-							
Address:	3122 Natio	<u>nal Parks</u>	Hwy			_	Phone: (575)689-7597			_	Analysis and Method									EPA Program				
	e, Zip: Carls		88220			4 L	Email: jim.raley@dvn.com			J			1			-						SDWA	CWA	RCRA
Phone: 5	575-988-005	5					Miscellaneous: Jim Raley					ŀ					l							
Email: a	giovengo@e	<u>nsolum.c</u>	om			J L					15	2					ŀ					Complian	ce Y	or N
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				Sa	mple	Inform	ation				🖁	0 0	8 8	826	Š.	ź	1.50	Şet						
Time Sampled	Date Sampled	Matrix	No. of Container	,			Sample ID	Field	Eilter	Lab umbe	T DRO/ORO by 8015	GRO/DRO by 8	ВТЕХ Ьу 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals					Remarks	
16:10	5/7/2024	Soil	1				SS03 - 0'			\overline{I}		Ĭ			Ŭ	х								
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Addition	al Instruction	ns: Plea	ase CC:	rhurton@	Denso	lum co	m, agiovengo@ensolum.cor	n iim rak	V@C	lvn c	om s	hami	ilton	l			n io	ctroli	1200	nsol				
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	ler), attest to the Cole Burton_	validity and	authentici	ity of this sar	mple. I a	ım aware	that tampering with or intentionally mis	labeling the	ample	location	on, date	or time	e of co	llectio	n is con	sidere	d frau	dandı	may b	grour	ds for	legal action.		
Relinquishe	d by: (Senatur	h	3	18/2	y Time	130	Received by: (Signature) Michelle, Good	aleo S	5-8.	24	Time O	730				sample	d or re	celved (st be received temp above 0		
Relinguished by: (Signature) Date Time			800	Received by: (Signature)	Dat	<u>₹ ·</u> {	3. <i>i</i> .	Y Ime	80	2				eived		ce:		b Us	e Only					
	d by: (Signatur		Dat	·8.24	Time	_	Received by: (Signature)	Dat		12	Time	74				T1				T2			T3	
Relinquishe	d by: (Signatur	e)	Dat		Time		Received by: (Signature)	Dat	e	Time					AVG Temp °C									
	ix: S - Soil , Sd - So							co	ntain	er Ty	pe: g -	glass	, p - p	oly/j	olastic	, ag	amb	er gl	ass, v	/ - VO	A		-	
Note: Samp	les are discard	ed 14 days	after resi	ults are rep	orted t	nless otl	ner arrangements are made. Hazar	dous sample	s will	be re	turned	to clie	nt or	dispos	ed of	at the	clien	t exp	ense.	The re	port f	or the anal	sis of the	above

samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Printed: 5/9/2024 9:34:34AM

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items wi	thin 24 hours of the date of this notice, all th	e samples will be analyzed as requested.

05/09/24	07:45	Work Order ID:	E405133
: 05/09/24	08:31	Logged In By:	Angelina Pineda
05/09/24	17:00 (0 day TAT)		
Yes			
Yes			
Yes	Carrier: Courier		
Yes			
Yes			
		Commen	ts/Resolution
Yes			
Yes			
Yes			
Yes			
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Yes			
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163			
No			
.10			
NA			
No			
NA	Subcontract Lab: NA		
	Yes Yes Yes Yes Yes Yes Yes Yes No NA Yes A*C No NA	Yes	Yes Yes

From: <u>Cole Burton</u>

To: Wells, Shelly, EMNRD
Cc: Ashley Giovengo; Dan Moir

Subject: [EXTERNAL] RE: NAPP2135033453 LVP SWD #001

Date: Tuesday, May 21, 2024 11:56:02 AM

Attachments: <u>image001.png</u>

image002.png image003.png

LVP SWD #001 - Soil Sample Results 100-600 - wrong data removed.pdf

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

Shelly,

I apologize the table that was included on this report had SS01 - SS04, BH01 and BH02. These sample points must have been added by accident but were from another spill for incident # nAPP2333127536 on the same location. I have removed the samples from the table. Please review the original Wescom report for those other delineation samples and locations.

Thanks,



From: Ashley Giovengo <agiovengo@ensolum.com>

Sent: Tuesday, May 21, 2024 10:50 AM

To: Cole Burton <cburton@ensolum.com>; Dan Moir <dmoir@ensolum.com>

Subject: Fwd: NAPP2135033453 LVP SWD #001

Ashley Giovengo

Senior Scientist 575-988-0055 **Ensolum. LLC**

"Your authenticity is your superpower." – Unknown

From: Wells, Shelly, EMNRD < Shelly. Wells@emnrd.nm.gov>

Sent: Tuesday, May 21, 2024 6:49:31 PM

To: Ashley Giovengo <agiovengo@ensolum.com> **Subject:** RE: NAPP2135033453 LVP SWD #001

[**EXTERNAL EMAIL**]

Hi again Ashley,

For some reason I was looking at the end of the photos but I see you added April ones in a different part of the report so never mind! However, I do not see a figure showing all the delineation sample locations (Figure 3 only shows SS07, SS08, and PHO1). Can you provide location of the others?

Thank you,

Shelly

From: Wells, Shelly, EMNRD

Sent: Tuesday, May 21, 2024 10:20 AM

To: Ashley Giovengo agiovengo@ensolum.com>

Subject: NAPP2135033453 LVP SWD #001

Hi Ashley,

There are no photos submitted for the further excavation carried out in April 2024 from the above incident. If you can, please provide some to the OCD.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced Environmental Bureau

EMNRD-Oil Conservation Division

1220 S. St. Francis Drive|Santa Fe, NM 87505

(505)469-7520|Shelly.Wells@emnrd.nm.gov

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



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS LVP SWD #001 WPX Energy Permian, LLC Eddy County, New Mexico Ensolum Project No. 03A4978044

				Ensolum Proje	ct No. 03A1978044								
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 I	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	100	600				
				Delineation Soil Sai	mple Analytical Resu	Its							
SS07	3/17/2022	8.5	<0.250	<0.250	<200	<25.0	<50.0	<200	328				
SS08	3/17/2022	9	<0.250	<0.250	<200	< 25.0	< 50.0	<200	956				
BF01**	4/23/2024		<0.250	<0.250	<200	<25.0	<50.0	<20.0	80.7				
PH01	11/22/2022	41	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	48.8				
Confirmation Floor Soil Sample Analytical Results													
FS01	11/15/2022	5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	105				
FS02	11/15/2022	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	178				
FS03	11/16/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	164				
FS04	11/16/2022	5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	5,920				
FS04A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	385				
FS05	11/16/2022	5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	9,270				
FS05A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,540				
FS05	4/22/2024	9.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	553				
FS06	11/17/2022	4	<0.00200	0.123	<50.0	<50.0	<50.0	<50.0	14,500				
FS06A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	3,010				
FS06	4/19/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	330				
FS07	11/17/2022	4	<0.00202	<0.00403	57.1	<49.9	<49.9	57.1	12,800				
FS07A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	2,160				
FS07	4/19/2024	7	AA	NA.	NA.	NA	NA.	NA	5,400				
FS07	4/22/2024	10	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	488				
FS08	11/17/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	9,190				
FS08A	10/11/2023	5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	3,680				
FS08	4/23/2024	7.5	NA.	AA	NA.	NA	NA.	NA	1,530				
FS08	4/23/2024	10	NA.	NA.	NA.	NA	NA	NA	1,710				
FS08	4/24/2024	11	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	539				
FS09	11/17/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	5,790				
FS09A	10/11/2023	4.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	1,750				
FS09	4/24/2024	12.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0				
FS10	11/18/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	893				
FS10A	10/11/2023	4.5	<0.0250	<0.0250	<20.0	<25.0	< 50.0	<20.0	1,970				
FS10	4/24/2024	5.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	331				
FS11	11/18/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	2,370				
FS11A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	< 50.0	<20.0	763				
FS11	4/19/2024	8	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	317				
FS12	11/18/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	11,900				
FS12A	10/11/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	361				

Ensolum 1 of 2



NE

<49.9

<50.0

<49.9

Notes:

Sample I.D.

SW01

SW02

SW03

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

Sample

Date

NMOCD Table I Closure Criteria (NMAC 19.15.29)

11/15/2022

11/18/2022

11/18/2022

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

"<": Laboratory Analytical result is less than reporting limit Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

Benzene

(mg/kg)

10

<0.00201

<0.00201

<0.00199

Sample Depth

(feet bgs)

0-5

0-5

0-4

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

100

<49.9

<50.0

<49.9

261

140

94.2

**Backfill material sample

* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

50

<0.00402

<0.00402

<0.00398

NE

<49.9

<50.0

<49.9

ation Sidewall Soil Sample Analytical Results

NE

<49.9

<50.0

<49.9

 $2 \ of \ 2$ Ensolum

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

QUESTIONS

Action 346038

QUESTIONS

Operator:	OGRID:					
WPX Energy Permian, LLC	246289					
Devon Energy - Regulatory	Action Number:					
Oklahoma City, OK 73102	346038					
	Action Type:					
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)					

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2135033453
Incident Name	NAPP2135033453 LVP SWD #001 @ 30-015-42234
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-42234] LVP SWD #001

Location of Release Source	
Please answer all the questions in this group.	
Site Name	LVP SWD #001
Date Release Discovered	12/03/2021
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 200 BBL Recovered: 0 BBL Lost: 200 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

QUESTIONS, Page 2

Action 346038

1220 S. St Francis Dr., Santa Fe, NM 8/505 Phone:(505) 476-3470 Fax:(505) 476-3462		
QUESTIONS (continued)		
Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289 Action Number: 346038 Action Type:	
QUESTIONS	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	
Nature and Volume of Release (continued)		
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.	
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes	
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.	
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	e. gas only) are to be submitted on the C-129 form.	
Initial Response The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.	
The source of the release has been stopped	True	
The impacted area has been secured to protect human health and the environment	True	
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True	
All free liquids and recoverable materials have been removed and managed appropriately	True	

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

Not answered.

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.

Name: James Raley Title: EHS Professional I hereby agree and sign off to the above statement Email: jim.raley@dvn.com Date: 05/20/2024

If all the actions described above have not been undertaken, explain why

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

QUESTIONS, Page 3

Action 346038

QUESTIONS (continued)

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	346038
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization		
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)	
What method was used to determine the depth to ground water	NM OSE iWaters Database Search	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)	
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)	
Any other fresh water well or spring	Between 1 and 5 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)	
A wetland	Between ½ and 1 (mi.)	
A subsurface mine	Greater than 5 (mi.)	
An (non-karst) unstable area	Between 1 and 5 (mi.)	
Categorize the risk of this well / site being in a karst geology	Medium	
A 100-year floodplain	Between 500 and 1000 (ft.)	
Did the release impact areas not on an exploration, development, production, or storage site	No	

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Yes		
mination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Yes		
No		
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
501		
0		
0		
0		
0		
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
04/01/2024		
04/24/2024		
04/24/2024		
5668		
560		
5668		
560		
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
7		

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 4

Action 346038

QUESTIONS (continued)

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	346038
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Permediation Plan (continued)	
Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	Not answered.
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Yes
What is the name of the NMED facility	R360 Halfway
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement

Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 05/20/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 5

Action 346038

QUESTIONS (continued)

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	346038
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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

QUESTIONS, Page 6

Action 346038

QUESTIONS (continued)

Operator:	OGRID:
WPX Energy Permian, LLC	246289
0, 0 ,	Action Number:
Oklahoma City, OK 73102	346038
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	335896
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/29/2024
What was the (estimated) number of samples that were to be gathered	7
What was the sampling surface area in square feet	5668

Remediation Closure Request	Remediation Closure Request		
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.			
Requesting a remediation closure approval with this submission Yes			
Have the lateral and vertical extents of contamination been fully delineated	Yes		
Was this release entirely contained within a lined containment area	No		
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes		
What was the total surface area (in square feet) remediated	5668		
What was the total volume (cubic yards) remediated	560		
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes		
What was the total surface area (in square feet) reclaimed	5668		
What was the total volume (in cubic yards) reclaimed	560		
Summarize any additional remediation activities not included by answers (above)	Rock hammer was used to remove soil from excavation		

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement

I hereby agree and sign off to the above statement

Title: EHS Professional
Email: jim.raley@dvn.com
Date: 05/20/2024

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QUESTIONS, Page 7

Action 346038

QUESTIONS (continued)
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Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory Oklahoma City, OK 73102	Action Number: 346038
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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

CONDITIONS

Action 346038

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	346038
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By		Condition Date
scwells	None	5/21/2024