

LVP SWD # 1

OCD INCIDENT nAPP2333127536

11/25/2023

Spills In Lined Containment	
Measurements Of Standing Fluid	
Length(Ft)	137.5
Width(Ft)	44.5
Depth(in.)	2.58
Total Capacity without tank displacements (bbls)	234.31
No. of 500 bbl Tanks In Standing Fluid	6
No. of Other Tanks In Standing Fluid	
OD Of Other Tanks In Standing Fluid(feet)	
Total Volume of standing fluid accounting for tank displacement.	190.97



February 15, 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: Deferral Request  
LVP SWD #001  
Incident Number nAPP2333127536  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Devon Energy Production Company (Devon), has prepared this *Deferral Request* to document assessment 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 (32.3330917°, -104.0850372°) is associated with oil and gas exploration and production operations on Private Land.

The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water within a lined tank battery containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, Devon is submitting this *Deferral Request*, describing Site assessment, delineation and excavation activities that have occurred to date and requesting deferral of final remediation for Incident Number nAPP2333127536 until the Site is reconstructed and/or the well pad is abandoned.

## **BACKGROUND**

On November 25, 2023, the produced water tanks overflowed, resulting in the release of approximately 191 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; 190 bbls of produced water were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to the New Mexico Oil Conservation Division (NMOCD) District II Office. A liner integrity inspection was conducted by Ensolum personnel following fluid recovery. Upon inspection, the liner was determined to be insufficient. Two holes were found in the lined secondary containment which allowed produced water to impact the soil outside of the containment wall. Devon reported the release to the NMOCD via email on November 26, 2023, and submitted a Release Notification Form C-141 (Form C-141) on November 28, 2023. The release was assigned Incident Number nAPP2333127536 (Appendix A).

## **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.

Depth to groundwater at the Site is estimated to be 38 feet below ground surface (bgs) based on groundwater depth measurement of a nearby water well. On July 16, 2021, a soil boring, New Mexico Office of the State Engineer (NMOSE) file number C-04415 POD 1, was drilled nearly 0.3 miles west of the Site. Soil boring C-04415 POD7 was drilled to a depth of 55 feet bgs. Depth to groundwater was confirmed at 38 feet bgs as indicated on the NMOSE *Point of Diversion Summary* form. The Well Record and Log is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine dry wash, located approximately 507 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, 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

## SITE ASSESSMENT ACTIVITIES

On December 11, 2023, Ensolum personnel visited the Site to evaluate the release extent, conduct a liner inspection, and collect lateral delineation samples. Two small holes were discovered along the bottom corner of the containment wall; one on the west side of containment and the other hole was located near the northwest corner. Four lateral delineation soil samples (SS01 through SS04) were collected around the tank battery containment at the ground surface level. The soil samples were field screened for Total Petroleum Hydrocarbons (TPH) utilizing a PetroFLAG<sup>®</sup> soil analyzer system and chloride using the MOHR method titration. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted in Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix C.

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 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.

## DELINEATION ACTIVITIES

On December 14, 2023, two holes were identified by Ensolum personnel when conducting the liner integrity inspection. One hole was located along the west containment wall and one hole was located along the northwest corner of the containment wall. Two small areas on-pad were impacted by this

release due to the proximity of the holes in the liner to the edge of the containment walls. Two boreholes, BH01 and BH02, were advanced in the impaired areas on-pad located directly next to the edge of the containment walls in order to prevent further damage to the containment liner. Boreholes BH01 and BH02 were advanced via hand auger to a depth of 1-foot bgs in borehole location BH01 and to a depth of 2.5 feet bgs in borehole location BH02 and soil from the boreholes was field screened for chloride at every foot. Ensolum personnel hit refusal at a depth of 2.5 feet bgs in borehole location BH02 due to a layer of well indurated caliche.

On December 28, 2023, Ensolum personnel returned to the Site to resample in the vicinity of lateral delineation soil sample SS01. The original sample contained a slightly elevated level of chloride due to its proximity to the load line for the produced water tanks. The area was scraped with a shovel and delineation soil sample SS01A was collected. Soil samples from the delineation sampling events conducted on December 14 and December 28, 2023, were handled and analyzed in the same manner as previously described. Field screening results and observations from the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix D. Discrete delineation soil samples were collected at each foot from BH01 beginning at ground surface to 2 feet bgs and from BH02 at ground surface to 2.5 feet bgs and submitted for laboratory analysis.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for lateral delineation soil samples (SS01A through SS04), collected outside of the lined tank battery containment, indicated all COC concentrations were compliant with Site Closure Criteria except for SS01 which was recollected.

Laboratory analytical results for the vertical delineation soil samples collected from borehole BH01, indicated chloride concentrations exceeded the Site Closure Criteria at depths ranging from ground surface to 2 feet bgs. Subsequent delineation borehole BH02 indicated chloride concentrations exceeded the Site Closure Criteria at depths ranging from ground surface to 2.5 feet bgs. Laboratory analytical results indicated excavation of the contaminated areas outside of the lined secondary containment was necessary. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix E.

## EXCAVATION ACTIVITIES

On January 11, 2024, Ensolum personnel oversaw the excavation of impacted soil from the release area's outside of the lined tank battery containment. Excavation activities were performed via hydro-vac to depths ranging from ground surface to 3.75 feet bgs. To direct excavation activities, soil was field screened for chloride as previously described above. Photographic documentation is included in Appendix C.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor of the excavation. The 5-point composite soil samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples (FS01 and FS02) were collected from the floor of the excavation and the walls facing away from the containment. Sidewall samples (SW01 and SW02) were collected from the walls against the lined containment area at depths ranging from ground surface to 3.75 feet bgs. The soil samples were handled and analyzed as previously described. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 3.

A total of approximately 4 cubic yards of soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the excavation floor soil samples FS01 and FS02, collected at 3.75 feet bgs and for sidewall soil samples SW01 and SW02, collected from ground surface to 3.75 feet bgs, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 2 and the complete laboratory analytical reports are included as Appendix E.

## DEFERRAL REQUEST

Devon is requesting deferral of final remediation due to the presence of active production equipment and surface pipelines within the lined containment. Impacted soil is limited to the area immediately beneath the lined containment and active production equipment, where remediation would require a major facility deconstruction.

Impacted soil remaining in place beneath the liner, which is delineated vertically by delineation soil samples BH01 and BH02, collected to a depth of 2.5 feet bgs, and laterally by delineation soil samples SS01A through SS04, collected at the ground level. Laboratory analytical results from sidewall soil samples SW01 and SW02 confirm the presence of chloride containing soil is limited to beneath the lined tank battery containment. Approximately 875 cubic yards of chloride impacted soil remains in place beneath the containment liner based on a maximum depth of 3.75-foot depth determined through delineation and confirmation soil sampling. The impacted soil volume estimate includes waste-containing soil volumes to be addressed through reconstruction of the containment or final pad reclamation.

Devon does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be 38 feet bgs, and the impacted soil remaining in place is limited to the area immediately beneath the liner. The liner has been repaired by Devon and will restrict future vertical migration of residual impacts and any interactions with humans and/or wildlife.

Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, Devon requests deferral of final remediation for Incident Number nAPP2333127536 until final reclamation of the well pad or major construction, whichever comes first. Remedial actions completed to date have been protective of human health, the environment, and groundwater and deferment of impacted soil beneath the lined containment appears to be equally protective and warranting deferment. Notifications submitted to the NMOCD are included in Appendix F.

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

Sincerely,  
**Ensolum, LLC**



Ashely Giovengo  
Senior Scientist



Daniel R. Moir, PG  
Senior Managing Geologist

cc: Dale Woodall, Devon

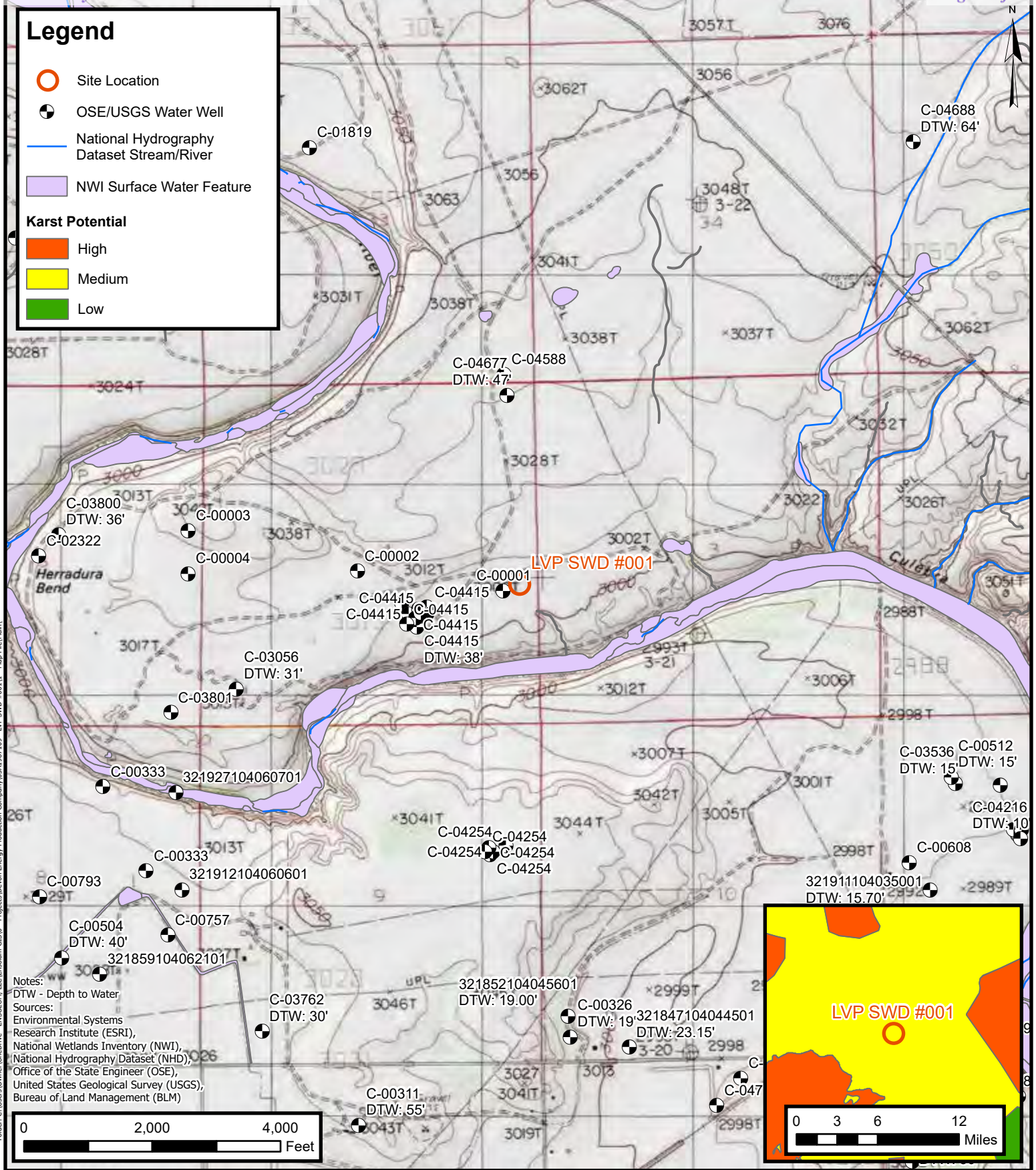
Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Figure 4	Area of Requested Deferral
Table 1	Delineation Soil Sample Analytical Results
Table 2	Confirmation Soil Sample Analytical Results
Appendix A	Form C-141
Appendix B	Reference Wells
Appendix C	Lithographic Soil Sampling Logs
Appendix D	Photographic Log
Appendix E	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix F	NMOCD Correspondence



FIGURES





**Site Receptor Map**  
Devon Energy Production Company  
LVP SWD #001  
Incident Number: nAPP2333127536  
Unit I, Section 04, T 23S, R 28E  
Eddy County, New Mexico

**FIGURE**  
**1**



## Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- Removed Delineation Soil Sample
- Linear Features - Other
- ▨ Release Extent



Notes:  
 Sample ID @ Depth Below Ground Surface.  
 Samples in bold indicate sample exceeded applicable closure criteria.  
 Grey text indicate soil sample was removed during excavation activities.

0 5 10 20 30 40  
 Feet

Sources: Environmental Systems Research Institute (ESRI)



## Delineation Soil Sample Locations

Devon Energy Production Company

LVP SWD #001

Incident Number: nAPP2333127536

Unit I, Section 04, T 23S, R 28E

Eddy County, New Mexico

FIGURE

2

**Legend**

- Confirmation Soil Sample in Compliance with Closure Criteria
- Confirmation Soil Sample in Exceedance of Closure Criteria
- Metal Berm
- ▨ Excavation Extent



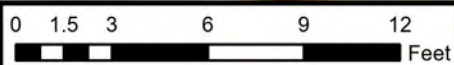
FS01@2.75'

SW01@0-2.5'

FS02@3.75'

SW02@0-3.75'

Notes:  
Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)

**Confirmation Soil Sample Locations**

Devon Energy Production Company  
LVP SWD #001

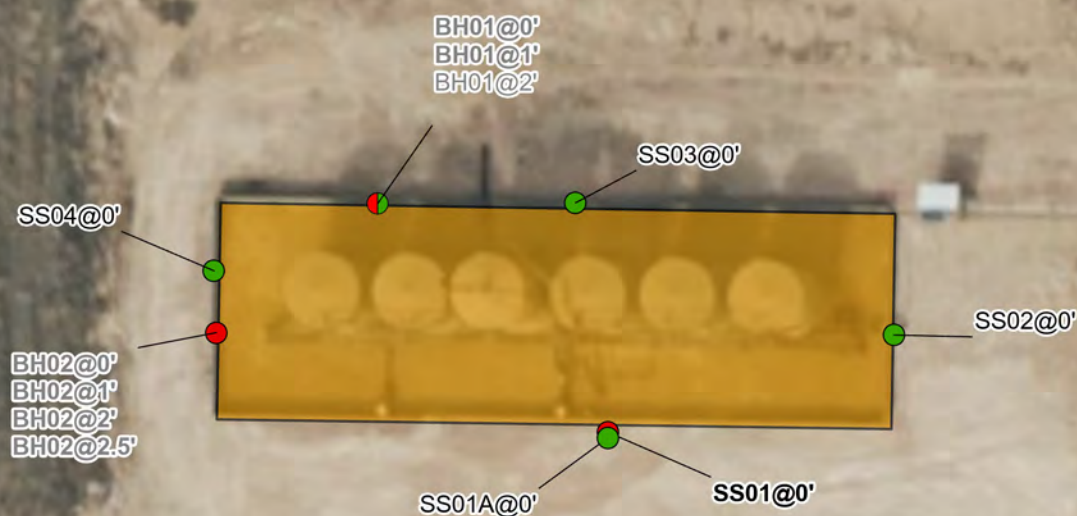
Incident Number: nAPP2333127536  
Unit I, Section 04, T 23S, R 28E  
Eddy Co, New Mexico, United States

**FIGURE****3**



**Legend**

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- ● Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- Area of Requested Deferral



Notes:  
 Sample ID @ Depth Below Ground Surface.  
 Samples in bold indicate sample exceeded applicable closure criteria.  
 Grey text indicate soil sample was removed during excavation activities.

0 10 20 40 60 80  
 Feet

Sources: Environmental Systems Research Institute (ESRI)



## Area of Requested Deferral

Devon Energy Production Company

LVP SWD #001

Incident Number: nAPP2333127536

Unit I, Section 04, T 23S, R 28E

Eddy Co, New Mexico, United States

## FIGURE

# 4



TABLES

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**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 LVP SWD #001  
 Devon Energy Production Company  
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Delineation Soil Samples</b>										
SS01	12/11/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>627</b>
SS01A	12/28/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	206
SS02	12/11/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	501
SS03	12/11/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	262
SS04	12/11/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	303
BH01	12/11/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>9,860</b>
BH01	12/14/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>656</b>
BH01	12/14/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	435
BH02	12/11/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>13,700</b>
BH02	12/14/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>3,120</b>
BH02	12/14/2023	2	<0.0250	0.0864	<20.0	<25.0	<50.0	<50.0	<50.0	<b>2,270</b>
BH02	12/14/2023	2.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>1,800</b>

**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

&lt;: 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

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes





**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 LVP SWD #001  
 Devon Energy Production Company  
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
<b>Confirmation Soil Samples</b>										
FS01	1/11/2024	2.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	183
FS02	1/11/2024	3.75	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	597
<b>Sidewall Soil Samples</b>										
SW01	1/11/2024	0 - 2.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>1,210</b>
SW02	1/11/2024	0 - 3.75	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	<b>644</b>

**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

&lt;": 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

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes



APPENDIX A

Form C-141

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

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

## Initial Response

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

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: Dale Woodall	Title: Env. Professional
Signature: Dale Woodall	Date: _____
email: dale.woodall@dv.com	Telephone: 575-748-1838
<b><u>OCD Only</u></b>	
Received by: Shelly Wells	Date: 11/28/2023

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

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

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

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

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

CONDITIONS

Action 288690

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 288690
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/28/2023



Incident ID	nAPP2333127536
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?	<u>20</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

<p><b>Characterization Report Checklist:</b> <i>Each of the following items must be included in the report.</i></p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li><li><input checked="" type="checkbox"/> Field data</li><li><input checked="" type="checkbox"/> Data table of soil contaminant concentration data</li><li><input checked="" type="checkbox"/> Depth to water determination</li><li><input checked="" type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li><li><input checked="" type="checkbox"/> Boring or excavation logs</li><li><input checked="" type="checkbox"/> Photographs including date and GIS information</li><li><input checked="" type="checkbox"/> Topographic/Aerial maps</li><li><input checked="" type="checkbox"/> Laboratory data including chain of custody</li></ul>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	nAPP2333127536
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: Dale Woodall

Title: Env. Professional

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

Date: 11/28/2023

email: dale.woodall@dvn.com

Telephone: 575-748-1838

**OCD Only**

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

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

Incident ID	nAPP2333127536
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: Dale WoodallTitle: Env. Professional

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

Date: 11/28/2023email: dale.woodall@dm.comTelephone: 575-748-1838**OCD Only**

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

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

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

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



## APPENDIX B

### Referenced Wells

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# 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	X	Y
NA	C 04415 POD7	3	1	4	04	23S	28E	585628	3577518

x

Driller License:

1186

Driller Company:

NOT FOR HIRE

Driller Name:

HAMMER, RODNEY S.WARDENER

Drill Start Date:

07/15/2021

Drill Finish Date:

07/16/2021

Plug Date:

07/16/2021

Log File Date:

10/05/2021

PCW Rcv Date:

Source:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

2.00

Depth Well:

55 feet

Depth Water:

38 feet

x

Water Bearing Stratifications:

Top

Bottom

Description

0

55

Shale/Mudstone/Siltstone

x

Casing Perforations:

Top

Bottom

38

43

x

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.





## APPENDIX C

### Photographic Log

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# Photographic Log

Devon Energy Production Company

LVP SWD #001

nAPP2333127536



Photograph 1

Date: 12/11/2023

Description: Liner Inspection

View: West



Photograph 2

Date: 12/11/2023

Description: Liner Inspection

View: Southwest



Photograph 3

Date: 12/11/2023

Description: Liner Inspection

View: Southwest



Photograph 4

Date: 12/11/2023

Description: Liner Inspection

View: West





## Photographic Log

Devon Energy Production Company

LVP SWD #001

nAPP2333127536



Photograph 5

Date: 12/14/2023

Description: Delineation

View: South



Photograph 6

Date: 12/28/2023

Description: Delineation

View: North



Photograph 7

Date: 01/11/2024

Description: Excavation Area

View: East



Photograph 8

Date: 01/11/2024

Description: Excavation Area


View: South




## APPENDIX D

### Lithologic Soil Sampling Logs

---

								Sample Name: BH01		Date: 12/14/23			
								Site Name: LVP SWD #001					
								Incident Number: nAPP2333127536					
								Job Number: 03A1987109					
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Cole		Method: Hand Auger			
Coordinates: 32.3339206, -104.0855320								Hole Diameter: 3"		Total Depth: 2'			
Comments: Field screening conducted with Mohr titration method for chloride. Chloride test performed with 1:1 dilution factor of soil to distilled water. No correction factors included.													
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions					
M			Y	BH01	0	0	CCHE	Caliche - Silt with some sand and large gravel; Some odor					
M	700		N	BH01	1	1	CCHE	Caliche - Silt with some sand and large gravel; No odor					
M	400		N	BH01	2	2	CCHE						
Total Depth = 2'													



								Sample Name: BH02		Date: 12/14/23					
								Site Name: LVP SWD #001							
								Incident Number: nAPP2333127536							
								Job Number: 03A1987109							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Cole		Method: Hand Auger					
Coordinates: 32.3338476, -104.0856416								Hole Diameter: 3"		Total Depth: 2.5'					
Comments: Field screening conducted with Mohr titration method for chloride. Chloride test performed with 1:1 dilution factor of soil to distilled water. No correction factors included.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
M			Y	BH02	0	0	CCHE	Caliche - Silt with some sand and large gravel; Some odor							
M	2,500		N	BH02	1	1	CCHE	Caliche - Silt with some sand and large gravel; No odor							
M	1,600		N	BH02	2	2	CCHE								
M	1,000		N	BH02	2.5	2.5	CCHE								
Total Depth = 2.5'															



## APPENDIX E

### Laboratory Analytical Reports & Chain-of-Custody Documentation

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Report to:

Ashley Giovengo



# 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

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



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 regarding 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
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[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**  
Laboratory Technical Representative  
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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/23 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.



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: LVP SWD #001  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
12/20/2023 3:48:23PM

SS02-0'

E312086-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	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	89.2 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: 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	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2351045
Chloride	501	20.0	1	12/19/23	12/20/23	



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	12/20/2023 3:48:23PM

Volatile Organics by EPA 8021B

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 Analyzed: 12/15/23

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: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			

LCS (2350076-BS1) Prepared: 12/14/23 Analyzed: 12/15/23

Benzene	4.90	0.0250	5.00		98.0	70-130			
Ethylbenzene	4.72	0.0250	5.00		94.4	70-130			
Toluene	4.90	0.0250	5.00		98.0	70-130			
o-Xylene	4.83	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.76	0.0500	10.0		97.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.72		8.00		96.5	70-130			

Matrix Spike (2350076-MS1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/19/23

Benzene	5.00	0.0250	5.00	ND	99.9	54-133			
Ethylbenzene	4.85	0.0250	5.00	ND	97.0	61-133			
Toluene	5.02	0.0250	5.00	ND	100	61-130			
o-Xylene	4.96	0.0250	5.00	ND	99.1	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	99.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.2	70-130			

Matrix Spike Dup (2350076-MSD1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/17/23

Benzene	4.99	0.0250	5.00	ND	99.7	54-133	0.217	20	
Ethylbenzene	4.73	0.0250	5.00	ND	94.6	61-133	2.49	20	
Toluene	4.96	0.0250	5.00	ND	99.2	61-130	1.21	20	
o-Xylene	4.80	0.0250	5.00	ND	96.0	63-131	3.25	20	
p,m-Xylene	9.73	0.0500	10.0	ND	97.3	63-131	3.05	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.9	63-131	3.12	20	
Surrogate: 4-Bromochlorobenzene-PID	6.15		8.00		76.9	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	12/20/2023 3:48:23PM

Nonhalogenated Organics by EPA 8015D - GRO

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 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: 12/14/23 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: 12/14/23 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: 12/14/23 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			



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	12/20/2023 3:48:23PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2350072-BLK1)					Prepared: 12/14/23 Analyzed: 12/15/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.0		50.0		89.9	50-200			

LCS (2350072-BS1)					Prepared: 12/14/23 Analyzed: 12/15/23				
Diesel Range Organics (C10-C28)	228	25.0	250		91.3	38-132			
Surrogate: n-Nonane	42.9		50.0		85.8	50-200			

Matrix Spike (2350072-MS1)					Source: E312075-05		Prepared: 12/14/23 Analyzed: 12/18/23		
Diesel Range Organics (C10-C28)	684	25.0	250	398	114	38-132			
Surrogate: n-Nonane	44.1		50.0		88.2	50-200			

Matrix Spike Dup (2350072-MSD1)					Source: E312075-05		Prepared: 12/14/23 Analyzed: 12/15/23		
Diesel Range Organics (C10-C28)	657	25.0	250	398	104	38-132	3.95	20	
Surrogate: n-Nonane	45.9		50.0		91.7	50-200			



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	12/20/2023 3:48:23PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

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: E312127-01		Prepared: 12/19/23 Analyzed: 12/20/23		
Chloride	257	20.0	250	ND	103	80-120			
Matrix Spike Dup (2351045-MSD1)					Source: E312127-01		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.



Client: Devon				Bill To				Lab Use Only				TAT				EPA Program				
Project: LVP SWD #001				Attention: Dale Woodall				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Ashley Giovengo				Address: 205 E Bender Road #150				E312086		01058-0007					x					
Address: 3122 National Parks Hwy				City, State, Zip: Hobbs NM, 88240				Analysis and Method												RCRA
City, State, Zip: Carlsbad NM, 88220				Phone: (575)748-1838				TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	State					
Phone: 575-988-0055				Email: dale.woodall@dvn.com											NM	CO	UT	AZ	TX	
Email: agiovengo@ensolum.com																				
Report due by:																		Remarks		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number															
10:10	12/11/2023	Soil	1 Jar	SS02 - 0'	1									x						
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com, chamilton@ensolum.com																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only												
[Signature]		12-12-23	11:05	[Signature]		12-12-23	1105	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N												
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 _____ T2 _____ T3 _____												
[Signature]		12/12/23	1545	[Signature]		12/13/23	1300	AVG Temp °C 4												
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																				
Note: Samples are discarded 30 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.																				

## Envirotech Analytical Laboratory

Printed: 12/13/2023 4:50:38PM

## 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:	(505) 382-1211	Date Logged In:	12/12/23 13:59	Logged In By:	Jordan Montano
Email:	ashley.giovengo@wescominc.com	Due Date:	12/20/23 17:00 (5 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
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, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

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
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

Field Label

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 filtration 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.

Date



envirotech Inc.



Report to:  
Ashley Giovengo



# 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: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
12/20/23

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



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: 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 regarding 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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[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/20/23 15:49

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.



## Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/20/2023 3:49:17PM
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SS01-0'

E312087-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	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	88.5 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2351045	
Chloride	627	20.0	1	12/19/23	12/20/23	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/20/2023 3:49:17PM
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SS03-0'

E312087-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: 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	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	76.4 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2350076	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.9 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: 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	
<i>Surrogate: n-Nonane</i>						
	98.0 %	50-200		12/14/23	12/15/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2351045	
Chloride	262	20.0	1	12/19/23	12/20/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: LVP SWD #001  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
12/20/2023 3:49:17PM

SS04-0'

E312087-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: 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	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	82.3 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2350076
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/14/23	12/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.4 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: 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	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		12/14/23	12/16/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2351045
Chloride	303	20.0	1	12/19/23	12/20/23	





Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/20/2023 3:49:17PM
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BH01-0'

E312087-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	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	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2351045	
Chloride	9860	200	10	12/19/23	12/20/23	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/20/2023 3:49:17PM
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BH02-0'

E312087-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	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	88.5 %	70-130		12/14/23	12/17/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2351045	
Chloride	13700	200	10	12/19/23	12/20/23	



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	12/20/2023 3:49:17PM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2350076-BLK1) Prepared: 12/14/23 Analyzed: 12/15/23

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: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			

LCS (2350076-BS1) Prepared: 12/14/23 Analyzed: 12/15/23

Benzene	4.90	0.0250	5.00		98.0	70-130			
Ethylbenzene	4.72	0.0250	5.00		94.4	70-130			
Toluene	4.90	0.0250	5.00		98.0	70-130			
o-Xylene	4.83	0.0250	5.00		96.7	70-130			
p,m-Xylene	9.76	0.0500	10.0		97.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.72		8.00		96.5	70-130			

Matrix Spike (2350076-MS1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/19/23

Benzene	5.00	0.0250	5.00	ND	99.9	54-133			
Ethylbenzene	4.85	0.0250	5.00	ND	97.0	61-133			
Toluene	5.02	0.0250	5.00	ND	100	61-130			
o-Xylene	4.96	0.0250	5.00	ND	99.1	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	99.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.2	70-130			

Matrix Spike Dup (2350076-MSD1) Source: E312087-02 Prepared: 12/14/23 Analyzed: 12/17/23

Benzene	4.99	0.0250	5.00	ND	99.7	54-133	0.217	20	
Ethylbenzene	4.73	0.0250	5.00	ND	94.6	61-133	2.49	20	
Toluene	4.96	0.0250	5.00	ND	99.2	61-130	1.21	20	
o-Xylene	4.80	0.0250	5.00	ND	96.0	63-131	3.25	20	
p,m-Xylene	9.73	0.0500	10.0	ND	97.3	63-131	3.05	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.9	63-131	3.12	20	
Surrogate: 4-Bromochlorobenzene-PID	6.15		8.00		76.9	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	12/20/2023 3:49:17PM

Nonhalogenated Organics by EPA 8015D - GRO

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
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Blank (2350076-BLK1) Prepared: 12/14/23 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: 12/14/23 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: 12/14/23 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: 12/14/23 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			



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	12/20/2023 3:49:17PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2350074-BLK1)					Prepared: 12/14/23 Analyzed: 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 Analyzed: 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: E312072-04		Prepared: 12/14/23 Analyzed: 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: E312072-04		Prepared: 12/14/23 Analyzed: 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			



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	12/20/2023 3:49:17PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

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: E312127-01		Prepared: 12/19/23 Analyzed: 12/20/23		
Chloride	257	20.0	250	ND	103	80-120			
Matrix Spike Dup (2351045-MSD1)					Source: E312127-01		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 15:49

- 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.



## Project Information

## Chain of Custody

Page 1 of 1

Client: Devon					<b>Bill To</b> Attention: Dale Woodall Address: 205 E Bender Road #150 City, State, Zip: Hobbs NM, 88240 Phone: (575)748-1838 Email: dale.woodall@dnv.com		Lab Use Only						TAT				EPA Program	
Project: LVP SWD #001							Lab WO# E312087		Job Number 01058-0007		1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Ashley Giovengo							Analysis and Method						x		RCRA			
Address: 3122 National Parks Hwy							TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	State				
City, State, Zip: Carlsbad NM, 88220														NM	CO	UT	AZ	TX
Phone: 575-988-0055					x													
Email: agiovengo@ensolum.com					Remarks													
Report due by:																		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number													
9:22	12/11/2023	Soil	1 Jar	SS01 - 0'	1													
9:26	12/11/2023	Soil	1 Jar	SS03 - 0'	2													
9:30	12/11/2023	Soil	1 Jar	SS04 - 0'	3													
9:27	12/11/2023	Soil	1 Jar	BH01 - 0'	4													
9:33	12/11/2023	Soil	1 Jar	BH02 - 0'	5													
<b>Additional Instructions:</b> Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dnv.com, chamilton@ensolum.com																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.								
Relinquished by: (Signature) <i>[Signature]</i> Date 12-12-23 Time 11:05										Received by: (Signature) <i>[Signature]</i> Date 12-12-23 Time 1105								
Relinquished by: (Signature) <i>[Signature]</i> Date 12-12-23 Time 1545										Received by: (Signature) <i>[Signature]</i> Date 12-12-23 Time 1300								
Relinquished by: (Signature) <i>[Signature]</i> Date _____ Time _____										Received by: (Signature) _____ Date _____ Time _____								
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA								
Note: Samples are discarded 30 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.																		



envirotech

## Envirotech Analytical Laboratory

Printed: 12/13/2023 4:47:16PM

## 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:	E312087
Phone:	(505) 382-1211	Date Logged In:	12/12/23 14:00	Logged In By:	Jordan Montano
Email:	ashley.giovengo@wescominc.com	Due Date:	12/20/23 17:00 (5 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
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, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution****Sample Turn Around Time (TAT)**

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

**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
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

**Field Label**

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 filtration 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.

Date



envirotech Inc.

Report to:

Ashley Giovengo



# envirotech

*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

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



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 regarding 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
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[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	12/22/23 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.



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/22/2023 2:00:13PM
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BH01-1'

E312118-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	94.1 %	70-130		12/18/23	12/19/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2351017	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/18/23	12/19/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	87.4 %	70-130		12/18/23	12/19/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	89.7 %	50-200		12/20/23	12/20/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2351062	
Chloride	656	20.0	1	12/20/23	12/20/23	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/22/2023 2:00:13PM
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BH01-2'

E312118-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2351062	
Chloride	435	20.0	1	12/20/23	12/20/23	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/22/2023 2:00:13PM
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BH02-1'

E312118-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2351062	
Chloride	3120	40.0	2	12/20/23	12/20/23	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 12/22/2023 2:00:13PM
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BH02-2'

E312118-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: 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	0.0272	0.0250	1	12/18/23	12/20/23	
o-Xylene	ND	0.0250	1	12/18/23	12/20/23	
p,m-Xylene	0.0592	0.0500	1	12/18/23	12/20/23	
Total Xylenes	0.0592	0.0250	1	12/18/23	12/20/23	
Surrogate: 4-Bromochlorobenzene-PID	92.9 %	70-130		12/18/23	12/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2351017	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/18/23	12/20/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.2 %	70-130		12/18/23	12/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: 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	86.5 %	50-200		12/20/23	12/20/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2351062	
Chloride	2270	40.0	2	12/20/23	12/20/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: LVP SWD #001  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
12/22/2023 2:00:13PM

**BH02-2.5'****E312118-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: 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	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		12/18/23	12/20/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2351017
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/18/23	12/20/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.1 %	70-130		12/18/23	12/20/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: 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	
<i>Surrogate: n-Nonane</i>						
	85.6 %	50-200		12/20/23	12/20/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2351062
Chloride	1800	40.0	2	12/20/23	12/20/23	





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	12/22/2023 2:00:13PM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2351017-BLK1)

Prepared: 12/18/23 Analyzed: 12/19/23

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: 4-Bromochlorobenzene-PID	7.58		8.00		94.8	70-130			

LCS (2351017-BS1)

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	5.04	0.0250	5.00		101	70-130			
Ethylbenzene	4.87	0.0250	5.00		97.5	70-130			
Toluene	5.06	0.0250	5.00		101	70-130			
o-Xylene	4.99	0.0250	5.00		99.9	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			

Matrix Spike (2351017-MS1)

Source: E312118-01

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	5.14	0.0250	5.00	ND	103	54-133			
Ethylbenzene	4.98	0.0250	5.00	ND	99.5	61-133			
Toluene	5.16	0.0250	5.00	ND	103	61-130			
o-Xylene	5.10	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131			
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.60		8.00		95.0	70-130			

Matrix Spike Dup (2351017-MSD1)

Source: E312118-01

Prepared: 12/18/23 Analyzed: 12/19/23

Benzene	4.98	0.0250	5.00	ND	99.7	54-133	3.15	20	
Ethylbenzene	4.83	0.0250	5.00	ND	96.6	61-133	3.00	20	
Toluene	5.01	0.0250	5.00	ND	100	61-130	3.04	20	
o-Xylene	4.95	0.0250	5.00	ND	98.9	63-131	3.04	20	
p,m-Xylene	9.98	0.0500	10.0	ND	99.8	63-131	3.01	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.5	63-131	3.02	20	
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.3	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	12/22/2023 2:00:13PM

Nonhalogenated Organics by EPA 8015D - GRO

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
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Blank (2351017-BLK1) Prepared: 12/18/23 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: 12/18/23 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: 12/18/23 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: 12/18/23 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			



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	12/22/2023 2:00:13PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2351054-BLK1)					Prepared: 12/20/23 Analyzed: 12/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	42.9		50.0		85.9	50-200			

LCS (2351054-BS1)					Prepared: 12/20/23 Analyzed: 12/20/23				
Diesel Range Organics (C10-C28)	255	25.0	250		102	38-132			
Surrogate: n-Nonane	43.4		50.0		86.8	50-200			

Matrix Spike (2351054-MS1)					Source: E312118-03		Prepared: 12/20/23 Analyzed: 12/20/23		
Diesel Range Organics (C10-C28)	249	25.0	250	ND	99.7	38-132			
Surrogate: n-Nonane	44.0		50.0		88.0	50-200			

Matrix Spike Dup (2351054-MSD1)					Source: E312118-03		Prepared: 12/20/23 Analyzed: 12/20/23		
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	1.02	20	
Surrogate: n-Nonane	43.8		50.0		87.6	50-200			



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	12/22/2023 2:00:13PM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2351062-BLK1)					Prepared: 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: E312118-01		Prepared: 12/20/23 Analyzed: 12/21/23		
Chloride	895	20.0	250	656	95.5	80-120			
Matrix Spike Dup (2351062-MSD1)					Source: E312118-01		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.





## Envirotech Analytical Laboratory

Printed: 12/18/2023 8:37:24AM

## 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:	12/18/23 07:30	Work Order ID:	E312118
Phone:	(505) 382-1211	Date Logged In:	12/18/23 08:35	Logged In By:	Alexa Michaels
Email:	ashley.giovengo@wescominc.com	Due Date:	12/27/23 17:00 (5 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
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, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

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
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

Field Label

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 filtration 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.

Date



envirotech Inc.



Report to:  
Ashley Giovengo



# envirotech

*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

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



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 regarding 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	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	01/02/24 15:29

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01A-0'	E312192-01A	Soil	12/28/23	12/29/23	Glass Jar, 2 oz.



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 1/2/2024 3:29:55PM
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SS01A-0'

E312192-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: EG		Batch: 2352034	
Benzene	ND	0.0250	1	12/29/23	12/29/23	
Ethylbenzene	ND	0.0250	1	12/29/23	12/29/23	
Toluene	ND	0.0250	1	12/29/23	12/29/23	
o-Xylene	ND	0.0250	1	12/29/23	12/29/23	
p,m-Xylene	ND	0.0500	1	12/29/23	12/29/23	
Total Xylenes	ND	0.0250	1	12/29/23	12/29/23	
Surrogate: 4-Bromochlorobenzene-PID	93.8 %	70-130		12/29/23	12/29/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: EG		Batch: 2352034	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/29/23	12/29/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.6 %	70-130		12/29/23	12/29/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2352035	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/29/23	12/30/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/29/23	12/30/23	
Surrogate: n-Nonane	82.0 %	50-200		12/29/23	12/30/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2352028	
Chloride	206	20.0	1	12/28/23	12/29/23	



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

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2352034-BLK1) Prepared: 12/29/23 Analyzed: 12/29/23

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: 4-Bromochlorobenzene-PID	7.73		8.00		96.6	70-130			

LCS (2352034-BS1) Prepared: 12/29/23 Analyzed: 12/29/23

Benzene	5.06	0.0250	5.00		101	70-130			
Ethylbenzene	5.03	0.0250	5.00		101	70-130			
Toluene	5.08	0.0250	5.00		102	70-130			
o-Xylene	5.06	0.0250	5.00		101	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.3	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.63		8.00		95.3	70-130			

Matrix Spike (2352034-MS1) Source: E312189-04 Prepared: 12/29/23 Analyzed: 12/29/23

Benzene	5.25	0.0250	5.00	ND	105	54-133			
Ethylbenzene	5.19	0.0250	5.00	ND	104	61-133			
Toluene	5.25	0.0250	5.00	ND	105	61-130			
o-Xylene	5.22	0.0250	5.00	ND	104	63-131			
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131			
Total Xylenes	15.8	0.0250	15.0	ND	105	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.76		8.00		97.0	70-130			

Matrix Spike Dup (2352034-MSD1) Source: E312189-04 Prepared: 12/29/23 Analyzed: 12/29/23

Benzene	5.10	0.0250	5.00	ND	102	54-133	2.90	20	
Ethylbenzene	5.06	0.0250	5.00	ND	101	61-133	2.49	20	
Toluene	5.12	0.0250	5.00	ND	102	61-130	2.60	20	
o-Xylene	5.09	0.0250	5.00	ND	102	63-131	2.48	20	
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131	2.22	20	
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131	2.31	20	
Surrogate: 4-Bromochlorobenzene-PID	7.78		8.00		97.2	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	1/2/2024 3:29:55PM

Nonhalogenated 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
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Blank (2352034-BLK1) Prepared: 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	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		8.00		94.7	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	1/2/2024 3:29:55PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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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			



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

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2352028-BLK1)					Prepared: 12/28/23 Analyzed: 12/29/23				
Chloride	ND	20.0							
LCS (2352028-BS1)					Prepared: 12/28/23 Analyzed: 12/29/23				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2352028-MS1)					Source: E312192-01		Prepared: 12/28/23 Analyzed: 12/29/23		
Chloride	465	20.0	250	206	104	80-120			
Matrix Spike Dup (2352028-MSD1)					Source: E312192-01		Prepared: 12/28/23 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.



[illegible]

Additional Instructions: Please CC: [cburton@ensolum.com](mailto:cburton@ensolum.com), [agiovengo@ensolum.com](mailto:agiovengo@ensolum.com), [dale.woodall@dv.com](mailto:dale.woodall@dv.com), [chamilton@ensolum.com](mailto:chamilton@ensolum.com), [ehaft@ensolum.com](mailto:ehaft@ensolum.com)

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Sampled by: Cole Burton											
Relinquished by: (Signature) <i>Adi Brown</i>	Date 12/28/23	Time 10:55	Received by: (Signature) <i>Michelle Cough</i>	Date 12-28/23	Time 1055	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / N					
Relinquished by: (Signature) <i>Michelle Cough</i>	Date 12-28-23	Time 1520	Received by: (Signature) <i>Andrew Aliso</i>	Date 12-28-23	Time 1730	T1 _____ T2 _____ T3 _____					
Relinquished by: (Signature) <i>Andrew Aliso</i>	Date 12-28-23	Time 2345	Received by: (Signature) <i>Ormonte</i>	Date 12/29/23	Time 7:30	AVG Temp °C <u>4</u>					

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 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.

## Envirotech Analytical Laboratory

Printed: 12/29/2023 11:00:13AM

## 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:	12/29/23 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)

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
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, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

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
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

Field Label

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 filtration 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.

Date



envirotech Inc.



Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: LVP SWD #001

Work Order: E401074

Job Number: 01058-0007

Received: 1/15/2024

Revision: 4

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
2/14/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



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: 2/14/24

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: LVP SWD #001  
Workorder: E401074  
Date Received: 1/15/2024 1:16:00PM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/15/2024 1:16:00PM, 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 regarding 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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[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Sample Summary

Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	02/14/24 09:39

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 - 2.5'	E401074-01A	Soil	01/11/24	01/15/24	Glass Jar, 2 oz.
SW01 - 0-2.5'	E401074-02A	Soil	01/11/24	01/15/24	Glass Jar, 2 oz.
FS02 - 3.75'	E401074-03A	Soil	01/11/24	01/15/24	Glass Jar, 2 oz.
SW02 - 0-3.75'	E401074-04A	Soil	01/11/24	01/15/24	Glass Jar, 2 oz.



Case Narrative:

Project Name: LVP SWD #001

Workorder: E401074

Date Received: 01-15-2024

The client requested the following sample(s) to be re-extracted and re-analyzed:

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Analysis</u>
FS02-3.75'	E401074-03	Anions by EPA 300.0/9056A

The analytical test results summarized in this revised report represent the second re-extraction and re-analysis of sample E401074-03. If you have any questions regarding this report, please feel free to contact Envirotech Inc.

Respectfully,

Walter Hinchman



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: LVP SWD #001  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
2/14/2024 9:39:26AM

FS01 - 2.5'

E401074-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Benzene	ND	0.0250	1	01/15/24	01/19/24	
Ethylbenzene	ND	0.0250	1	01/15/24	01/19/24	
Toluene	ND	0.0250	1	01/15/24	01/19/24	
o-Xylene	ND	0.0250	1	01/15/24	01/19/24	
p,m-Xylene	ND	0.0500	1	01/15/24	01/19/24	
Total Xylenes	ND	0.0250	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.8 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	98.1 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	90.3 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.8 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	98.1 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	90.3 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2403017
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/16/24	
Surrogate: n-Nonane	60.1 %	50-200		01/15/24	01/16/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2403026
Chloride	183	20.0	1	01/16/24	01/17/24	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 2/14/2024 9:39:26AM
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SW01 - 0-2.5'  
E401074-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Benzene	ND	0.0250	1	01/15/24	01/19/24	
Ethylbenzene	ND	0.0250	1	01/15/24	01/19/24	
Toluene	ND	0.0250	1	01/15/24	01/19/24	
o-Xylene	ND	0.0250	1	01/15/24	01/19/24	
p,m-Xylene	ND	0.0500	1	01/15/24	01/19/24	
Total Xylenes	ND	0.0250	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.6 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	90.4 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.6 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	90.4 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2403017
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/18/24	
Surrogate: n-Nonane	93.4 %	50-200		01/15/24	01/18/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2403026
Chloride	1210	20.0	1	01/16/24	01/17/24	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 2/14/2024 9:39:26AM
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FS02 - 3.75'  
E401074-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Benzene	ND	0.0250	1	01/15/24	01/19/24	
Ethylbenzene	ND	0.0250	1	01/15/24	01/19/24	
Toluene	ND	0.0250	1	01/15/24	01/19/24	
o-Xylene	ND	0.0250	1	01/15/24	01/19/24	
p,m-Xylene	ND	0.0500	1	01/15/24	01/19/24	
Total Xylenes	ND	0.0250	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.3 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	90.3 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.3 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	90.3 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2403017
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/16/24	
Surrogate: n-Nonane	92.0 %	50-200		01/15/24	01/16/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2404039
Chloride	597	20.0	1	01/24/24	01/24/24	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: LVP SWD #001 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 2/14/2024 9:39:26AM
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SW02 - 0-3.75'  
E401074-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Benzene	ND	0.0250	1	01/15/24	01/19/24	
Ethylbenzene	ND	0.0250	1	01/15/24	01/19/24	
Toluene	ND	0.0250	1	01/15/24	01/19/24	
o-Xylene	ND	0.0250	1	01/15/24	01/19/24	
p,m-Xylene	ND	0.0500	1	01/15/24	01/19/24	
Total Xylenes	ND	0.0250	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.6 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	91.2 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2403014
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/15/24	01/19/24	
Surrogate: Bromofluorobenzene	98.6 %	70-130		01/15/24	01/19/24	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		01/15/24	01/19/24	
Surrogate: Toluene-d8	91.2 %	70-130		01/15/24	01/19/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2403017
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/24	01/16/24	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/24	01/16/24	
Surrogate: n-Nonane	92.3 %	50-200		01/15/24	01/16/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2403026
Chloride	644	20.0	1	01/16/24	01/17/24	





Devon Energy - Carlsbad	Project Name:	LVP SWD #001	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	2/14/2024 9:39:26AM

Volatile Organic Compounds by EPA 8260B

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2403014-BLK1)					Prepared: 01/15/24 Analyzed: 01/18/24				
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	0.491		0.500		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.534		0.500		107	70-130			
Surrogate: Toluene-d8	0.451		0.500		90.2	70-130			

LCS (2403014-BS1)					Prepared: 01/15/24 Analyzed: 01/18/24				
Benzene	2.58	0.0250	2.50		103	70-130			
Ethylbenzene	2.38	0.0250	2.50		95.3	70-130			
Toluene	2.30	0.0250	2.50		92.0	70-130			
o-Xylene	2.31	0.0250	2.50		92.5	70-130			
p,m-Xylene	4.45	0.0500	5.00		89.0	70-130			
Total Xylenes	6.76	0.0250	7.50		90.2	70-130			
Surrogate: Bromofluorobenzene	0.485		0.500		96.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.525		0.500		105	70-130			
Surrogate: Toluene-d8	0.454		0.500		90.7	70-130			

Matrix Spike (2403014-MS1)					Source: E401073-04	Prepared: 01/15/24 Analyzed: 01/18/24			
Benzene	2.26	0.0250	2.50	ND	90.5	48-131			
Ethylbenzene	2.08	0.0250	2.50	ND	83.0	45-135			
Toluene	2.01	0.0250	2.50	ND	80.3	48-130			
o-Xylene	2.07	0.0250	2.50	ND	83.0	43-135			
p,m-Xylene	4.02	0.0500	5.00	ND	80.3	43-135			
Total Xylenes	6.09	0.0250	7.50	ND	81.2	43-135			
Surrogate: Bromofluorobenzene	0.487		0.500		97.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.524		0.500		105	70-130			
Surrogate: Toluene-d8	0.454		0.500		90.7	70-130			

Matrix Spike Dup (2403014-MSD1)					Source: E401073-04	Prepared: 01/15/24 Analyzed: 01/18/24			
Benzene	2.51	0.0250	2.50	ND	100	48-131	10.4	23	
Ethylbenzene	2.36	0.0250	2.50	ND	94.4	45-135	12.8	27	
Toluene	2.26	0.0250	2.50	ND	90.4	48-130	11.8	24	
o-Xylene	2.35	0.0250	2.50	ND	93.9	43-135	12.4	27	
p,m-Xylene	4.57	0.0500	5.00	ND	91.3	43-135	12.8	27	
Total Xylenes	6.91	0.0250	7.50	ND	92.2	43-135	12.7	27	
Surrogate: Bromofluorobenzene	0.491		0.500		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.515		0.500		103	70-130			
Surrogate: Toluene-d8	0.453		0.500		90.5	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	2/14/2024 9:39:26AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2403014-BLK1)					Prepared: 01/15/24 Analyzed: 01/18/24				
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.491		0.500		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.534		0.500		107	70-130			
Surrogate: Toluene-d8	0.451		0.500		90.2	70-130			

LCS (2403014-BS2)					Prepared: 01/15/24 Analyzed: 01/18/24				
Gasoline Range Organics (C6-C10)	36.7	20.0	50.0		73.3	70-130			
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.519		0.500		104	70-130			
Surrogate: Toluene-d8	0.455		0.500		91.0	70-130			

Matrix Spike (2403014-MS2)					Source: E401073-04	Prepared: 01/15/24 Analyzed: 01/18/24			
Gasoline Range Organics (C6-C10)	44.2	20.0	50.0	ND	88.3	70-130			
Surrogate: Bromofluorobenzene	0.499		0.500		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.512		0.500		102	70-130			
Surrogate: Toluene-d8	0.456		0.500		91.1	70-130			

Matrix Spike Dup (2403014-MSD2)					Source: E401073-04	Prepared: 01/15/24 Analyzed: 01/18/24			
Gasoline Range Organics (C6-C10)	41.2	20.0	50.0	ND	82.3	70-130	7.02	20	
Surrogate: Bromofluorobenzene	0.500		0.500		99.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.517		0.500		103	70-130			
Surrogate: Toluene-d8	0.456		0.500		91.1	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	2/14/2024 9:39:26AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2403017-BLK1)					Prepared: 01/15/24 Analyzed: 01/16/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.8		50.0		89.5	50-200			

LCS (2403017-BS1)					Prepared: 01/15/24 Analyzed: 01/16/24				
Diesel Range Organics (C10-C28)	223	25.0	250		89.1	38-132			
Surrogate: n-Nonane	43.8		50.0		87.7	50-200			

Matrix Spike (2403017-MS1)					Source: E401075-04		Prepared: 01/15/24 Analyzed: 01/19/24		
Diesel Range Organics (C10-C28)	4130	1250	250	4600	NR	38-132			M4
Surrogate: n-Nonane	35.3		50.0		70.6	50-200			

Matrix Spike Dup (2403017-MSD1)					Source: E401075-04		Prepared: 01/15/24 Analyzed: 01/19/24		
Diesel Range Organics (C10-C28)	4340	1250	250	4600	NR	38-132	4.77	20	M4
Surrogate: n-Nonane	38.8		50.0		77.6	50-200			



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	2/14/2024 9:39:26AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2403026-BLK1)					Prepared: 01/16/24 Analyzed: 01/16/24				
Chloride	ND	20.0							
LCS (2403026-BS1)					Prepared: 01/16/24 Analyzed: 01/16/24				
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2403026-MS1)					Source: E401069-02		Prepared: 01/16/24 Analyzed: 01/16/24		
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2403026-MSD1)					Source: E401069-02		Prepared: 01/16/24 Analyzed: 01/16/24		
Chloride	255	20.0	250	ND	102	80-120	0.310	20	



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	2/14/2024 9:39:26AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2404039-BLK1)					Prepared: 01/24/24 Analyzed: 01/24/24				
Chloride	ND	20.0							
LCS (2404039-BS1)					Prepared: 01/24/24 Analyzed: 01/24/24				
Chloride	245	20.0	250		98.1	90-110			
Matrix Spike (2404039-MS1)					Source: E401139-04		Prepared: 01/24/24 Analyzed: 01/24/24		
Chloride	314	20.0	250	64.5	99.6	80-120			
Matrix Spike Dup (2404039-MSD1)					Source: E401139-04		Prepared: 01/24/24 Analyzed: 01/24/24		
Chloride	314	20.0	250	64.5	99.9	80-120	0.181	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	02/14/24 09:39

- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- 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.



Client: Devon						Bill To							Lab Use Only								TAT				EPA Program			
Project: LVP SWD #001						Attention: Dale Woodall							Lab WO# E401074				Job Number 01058-0007				1D	2D	3D	Standard	CWA	SDWA		
Project Manager: Ashley Giovengo						Address: 205 E Bender Road #150																		x				
Address: 3122 National Parks Hwy						City, State, Zip: Hobbs NM, 88240							Analysis and Method													RCRA		
City, State, Zip: Carlsbad NM, 88220						Phone: (575)748-1838							TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC NM	GDOC TX	State						
Phone: 575-988-0055						Email: dale.woodall@dvn.com																NM	CO	UT	AZ	TX		
Email: agiovengo@ensolum.com													x															
Report due by:													Remarks															
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																							
10:36	1/11/2024	Soil	1	FS01 - 2.5'	1																							
10:52	1/11/2024	Soil	1	SW01 - 0-2.5'	2																							
12:34	1/11/2024	Soil	1	FS02 - 3.75'	3																							
12:35	1/11/2024	Soil	1	SW02 - 0-4'	4																							
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, dale.woodall@dvn.com, chamilton@ensolum.com, ehafft@ensolum.com, iestrella@ensolum.com																												
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.												
Sampled by: Cole Burton																												
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time		Lab Use Only												
[Signature]				1-12-24		7:15		[Signature]				1-12-24		0715		Received on ice: Y N												
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time		T1 T2 T3												
[Signature]				1-12-24		1600		[Signature]				1-12-24		1615														
Relinquished by: (Signature)				Date		Time		Received by: (Signature)				Date		Time		AVG Temp °C												
[Signature]				1-12-24		2215		[Signature]				1-15-24		1320		4												
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA												
Note: Samples are discarded 30 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.																												



## Envirotech Analytical Laboratory

Printed: 1/15/2024 1:52:04PM

## 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:	01/15/24 13:16	Work Order ID:	E401074
Phone:	(505) 382-1211	Date Logged In:	01/15/24 13:16	Logged In By:	Angelina Pineda
Email:	ashley.giovengo@wescominc.com	Due Date:	01/19/24 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
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, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

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
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

Field Label

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 filtration 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.

Date



envirotech Inc.



## Project Information

## Chain of Custody

Page 1 of 1

Client: Devon					Bill To		Lab Use Only				TAT			EPA Program		
Project: LVP SWD #001					Attention: Dale Woodall		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Ashley Giovengo					Address: 205 E Bender Road #150		E 401074		01058-0007					x		
Address: 3122 National Parks Hwy					City, State, Zip: Hobbs NM, 88240		Analysis and Method								RCRA	
City, State, Zip: Carlsbad NM, 88220					Phone: (575)748-1838		TPH GRO/DRO/ORO by 8015 BTEX by 8021 VOC by 8250 Metals 6010 Chloride 300.0 BGDOC NM GDGC TX CI - Perun								State	
Email: agiovengo@ensolum.com					Email: dale.woodall@dv.com										NM	CO
Report due by:															Remarks	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											
10:36	1/11/2024	Soil	1	FS01 - 2.5'	1								X			
10:52	1/11/2024	Soil	1	SW01 - 0-2.5'	2								X			
12:34	1/11/2024	Soil	1	FS02 - 3.75'	3								X	X		per. C. Burton
12:35	1/11/2024	Soil	1	<del>SW02 - 0-4'</del> SW02 0-3.75'	4								X			1/22/24
																Sample name
																changed per C. Burton
																2/13/24 RAS
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, dale.woodall@dv.com, chamilton@ensolum.com, ehaft@ensolum.com, iestrella@ensolum.com																
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																
Sampled by: Cole Burton																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only								
<i>Cole Burton</i>		1-12-24	7:15	<i>Michael Kuyf</i>		1-12-24	0715	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3								
<i>Michael Kuyf</i>		1-12-24	1600	<i>Andrew Moss</i>		1-12-24	1615									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C								
<i>Andrew Moss</i>		1-12-24	2215	<i>Q</i>		1-15-24	1320	4								
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																
Note: Samples are discarded 30 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.																



envirotech



## APPENDIX F

### NMOCD Correspondence

---



**From:** [Woodall, Dale](#)  
**To:** [Ashley Giovengo](#)  
**Subject:** FW: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 301772  
**Date:** Tuesday, January 9, 2024 2:19:24 PM

---

[ \*\*EXTERNAL EMAIL\*\* ]

fyi

Dale Woodall  
*Environmental Professional*  
*Hobbs, NM*  
*Office: 575-748-1838*  
*Mobile: 405-318-4697*  
[Dale.Woodall@dvn.com](mailto:Dale.Woodall@dvn.com)

---

**From:** OCDOnline@state.nm.us <OCDOnline@state.nm.us>  
**Sent:** Tuesday, January 9, 2024 2:18 PM  
**To:** Woodall, Dale <Dale.Woodall@dvn.com>  
**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 301772

To whom it may concern (c/o Dale Woodall for DEVON ENERGY PRODUCTION COMPANY, LP),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2333127536.

The sampling event is expected to take place:

**When:** 01/11/2024 @ 09:00

**Where:** I-04-23S-28E 2100 FSL 385 FEL (32.3330917,-104.0850372)

**Additional Information:** Ashley Giovengo  
Senior Engineer  
575-988-0055  
Ensolum, LLC

**Additional Instructions:** I-04-23S-28E (32.3330917,-104.0850372)

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure**

**samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

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**From:** [Ashley Giovengo](#)  
**To:** [Cole Burton](#)  
**Subject:** FW: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 301772  
**Date:** Tuesday, February 6, 2024 12:47:35 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

---



**Ashley Giovengo**

Senior Engineer

575-988-0055

Ensolum, LLC

in f

---

**From:** Woodall, Dale <Dale.Woodall@dvn.com>  
**Sent:** Tuesday, January 9, 2024 2:19 PM  
**To:** Ashley Giovengo <agiovengo@ensolum.com>  
**Subject:** FW: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 301772

[ \*\*EXTERNAL EMAIL\*\* ]

fyi

Dale Woodall  
*Environmental Professional*  
*Hobbs, NM*  
*Office: 575-748-1838*  
*Mobile: 405-318-4697*  
[Dale.Woodall@dvn.com](mailto:Dale.Woodall@dvn.com)

---

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us) <[OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)>  
**Sent:** Tuesday, January 9, 2024 2:18 PM  
**To:** Woodall, Dale <[Dale.Woodall@dvn.com](mailto:Dale.Woodall@dvn.com)>  
**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 301772

To whom it may concern (c/o Dale Woodall for DEVON ENERGY PRODUCTION COMPANY, LP),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2333127536.

The sampling event is expected to take place:

**When:** 01/11/2024 @ 09:00

**Where:** I-04-23S-28E 2100 FSL 385 FEL (32.3330917,-104.0850372)

**Additional Information:** Ashley Giovengo

Senior Engineer

575-988-0055

Ensolum, LLC

**Additional Instructions:** I-04-23S-28E (32.3330917,-104.0850372)

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**

1220 South St. Francis Drive

Santa Fe, NM 87505

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**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS  
  
Action 316221

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 316221
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2333127536
Incident Name	NAPP2333127536 LVP SWD #001 @ 30-015-42234
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Well	[30-015-42234] LVP SWD #001

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	LVP SWD #001
Date Release Discovered	11/25/2023
Surface Owner	Private

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
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

<b>Nature and Volume of Release</b>	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Exploratory Well   Tank (Any)   Produced Water   Released: 191 BBL   Recovered: 190 BBL   Lost: 1 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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)	The water tanks overflowed. Shut in the inlets to the tank to stop the leak. 190.7 bbls spilled. 190 bbls recovered. spill was in containment only.

**District I**

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

**District II**

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

**District III**

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

**District IV**

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

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

QUESTIONS, Page 2

Action 316221

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	316221
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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. 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 safety 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
If all the actions described above have not been undertaken, explain why	Not answered.

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.

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: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dmv.com Date: 02/21/2024
----------------------------------------------------	--------------------------------------------------------------------------------------------------

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**Oil Conservation Division**  
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QUESTIONS, Page 3

Action 316221

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:
	6137
	Action Number:
	316221
Action Type:	
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
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

**Remediation Plan**

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.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	1210
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	0
GRO+DRO	(EPA SW-846 Method 8015M)	0
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	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.

On what estimated date will the remediation commence	01/11/2024
On what date will (or did) the final sampling or liner inspection occur	01/11/2024
On what date will (or was) the remediation complete(d)	01/11/2024
What is the estimated surface area (in square feet) that will be reclaimed	6300
What is the estimated volume (in cubic yards) that will be reclaimed	875
What is the estimated surface area (in square feet) that will be remediated	39
What is the estimated volume (in cubic yards) that will be remediated	4

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.

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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QUESTIONS, Page 4

Action 316221

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	316221
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS****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 <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	R360 Artesia LLC LANDFARM [FEEM0112340644]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> 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: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dmn.com Date: 02/21/2024
----------------------------------------------------	--------------------------------------------------------------------------------------------------

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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QUESTIONS, Page 5

Action 316221

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	316221
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Containment wall, lined floor, production tanks and lines
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	6300
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	875
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (f#) on which this deferral should be granted	Not answered.
Enter the well API (30-) on which this deferral should be granted	30-015-42234 LVP SWD #001
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
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: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dmv.com Date: 02/21/2024

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QUESTIONS, Page 6  
  
Action 316221

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:
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Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	301772
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/11/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	800

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	No

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CONDITIONS

Action 316221

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 316221
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
crystal.walker	Deferral Request Approved. This deferral request indicates SW01 and SW02 confirm the presence of chloride containing soils that is limited to beneath the lined tank battery containment. Approximately 875 cubic yards of chloride impacted soil will remain in place beneath the containment liner until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	5/2/2024