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P.O. Box 1708 • Artesia, NM 88211  
[www.hrlcomp.com](http://www.hrlcomp.com)

January 25, 2021

Mr. Lupe Carrasco  
Devon Energy Corporation  
P.O. Box 250  
Artesia, New Mexico 88211  
Email: [lupe.carrasco@devon.com](mailto:lupe.carrasco@devon.com)

**Subject: Site Characterization, Remediation, and Closure Report  
Ice Dancer 30 Federal Com 2H (February 2019)  
2RP-5249  
Eddy County, New Mexico**

Dear Mr. Carrasco:

HRL Compliance Solutions, Inc. (HRL) is pleased to submit this site characterization, remediation, and closure report for the February 8, 2019 release related to the Ice Dancer 30 Federal Com 2H (Site). The Site is at latitude 32.266651160 and longitude -103.912909576 in Eddy County, New Mexico (Figure 1).

### **Site Background**

On February 8, 2019, a release of two barrels of oil and 3.7 barrels of produced water was observed at the Site. The release occurred when the back-pressure valve on the two-phase separator caused fluid to overflow to the flare. Initial response activities included stopping the source of the release, securing the impacted area to protect human health and the environment, and removing all free liquids and recoverable materials and managing them appropriately. Two barrels of oil and one barrel of produced water were recovered.

Because the volume released is between five and 25 barrels, this is considered a minor release according to the New Mexico Oil and Conservation Division (NMOCD). On February 14, 2019, Devon reported the release to the NMOCD on a Release Notification and Corrective Action Form (Form C-141) (Attachment A). The release was assigned Remediation Permit (RP) number 2RP-5249.

### **New Mexico Administrative Code (NMAC) Site Characterization Criteria**

Title 19, Chapter 15, Part 29, Section 11 of the New Mexico Administrative Code (NMAC) provides requirements for release characterization once the free liquids and recoverable materials have been removed from the Site.

#### *Depth to groundwater*

Depth to groundwater at the release was estimated by evaluating data from the New Mexico Office of the State Engineer (NMOSE) and the United States Geological Survey (USGS) (Figure 2). The nearest

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Mr. Carrasco

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groundwater well was approximately 2 miles from the Site; the depth to water in this well was 50 feet below ground surface.

#### *Wellhead Protection Area*

There are no sources of water, including springs, wells, or other sources of fresh water, within one-half mile of the release (Figure 2).

#### *Distance to Nearest Significant Watercourse*

A significant watercourse is defined as "...a watercourse with a defined bed and bank either named or identified by a dashed blue line on a USGS 7.5-minute quadrangle map or the next lower order tributary with a defined bed and bank" (19.15.17.7 NMAC) (Figure 2). There are no significant watercourses within one-half mile of the lateral extents of the release.

#### *Additional Site Characterization Criteria*

The following is additional information related to characterization of the Site.

<b>Site Characterization</b>	<b>Response/Discussion</b>
What is the shallowest depth to groundwater beneath the area affected by the release?	50 feet
Did the release impact groundwater or surface water?	No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or other significant watercourse?	No
Are the lateral extents of the release within 200 feet of a lakebed, sinkhole, or playa lake?	No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital institution, or church?	No
Are the lateral extents of the release within 500 feet of a spring or private, domestic fresh water well used by less than five households for domestic or stock watering purposes?	No
Are the lateral extents of the release within 1,000 feet of any fresh water well or spring?	No
Are the lateral extents of the release within any incorporated municipal boundaries?	No
Are the lateral extents of the release within a defined municipal fresh water well field?	No
Are the lateral extents of the release within 300 feet of a wetland?	No
Are the lateral extents of the release overlying a subsurface mine?	No

Ice Dancer 30 Com 2H (February 2019)

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Site Characterization	Response/Discussion
Are the lateral extents of the release overlying an unstable area such as karst geology?	The Site is in an area of high potential for karst topography
Are the lateral extents of the release within the 100-year floodplain?	No
Did the release impact areas not on an exploration, development, production, or storage site?	No

### Site Delineation

Prior to initiating field activities, HRL submitted a Mechanical Excavation Permit to Devon Energy and had subsurface utilities located at the Site. HRL mobilized to the Site on April 4, 2020 to collect six soil samples (FS 1, FS 2, FS 3, FS 4, and FS 5) for laboratory analysis. Samples were collected from depths ranging from three inches bgs to 28 inches bgs in laboratory supplied jars. Refusal with the hand auger was encountered in several locations at depths varying from 12 inches bgs to 28 inches bgs. Samples were immediately placed on ice and kept under strict chain of custody protocol prior to submission to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico (Attachment B, Characterization Samples Analytical Laboratory Report) for analysis of:

- Chloride by United States Environmental Protection Agency (US EPA) Method 300.0
- Benzene, toluene, ethyl benzene, and total xylenes (BTEX) by US EPA Method 8021B
- Total petroleum hydrocarbons (TPH) – gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO) by US EPA Method 8015M

Based on the sample results, HRL remobilized to the Site on April 23, 2020 to further delineate the release. HRL collected an additional three soil samples (1, 2, and 3) and submitted them to Hall Environmental Analysis Laboratory as stated above.

### Closure Criteria

Based on the NMAC Site Characterization Criteria, the release is in an area of high potential for karst topography. Therefore, the following NMOCD Closure Criteria are applicable to the release:

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Depth to Groundwater	Parameter	Closure Criteria in milligrams per kilogram (mg/kg)
Less than 50 feet below ground surface	Chloride	600 mg/kg or natural background, whichever is greater
	Total Petroleum Hydrocarbons (TPH) ( <i>Gasoline Range Organics + Diesel Range Organics + Oil Range Organics</i> )	100 mg/kg
	Benzene	10 mg/kg
	Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX)	50 mg/kg

### Remediation Plan

A scaled diagram depicting the potentially impacted area and nearby significant features, such as roads, site infrastructure, location of borings, sample points, monitoring wells (if present) and subsurface features has been prepared (Figure 3). HRL utilized a Trimble GeoXT global positioning system (GPS) unit to collect latitude and longitude data for the sample locations (Figure 3). Based on analysis of the laboratory sample results, the release impacted a surficial area of approximately 612 square-feet to a depth of at least 28 inches.

### Remediation

On August 17, 2020, HRL mobilized to the Site with its excavation subcontractor Halo Services to excavate the impacted soil. Impacted soil was removed from the area immediately surrounding the flare. Confirmation sample results exceeded applicable closure criteria for one or more of the required parameters. Therefore, HRL mobilized to the Site a second time with Halo Services on December 15, 2020 to conduct additional excavation at the Site. The excavation was expanded to approximately 643 square feet in size and to a total depth of approximately five feet (Figures 4 and 5; Attachment C, Photographs).

Five confirmation soil samples were collected from the sidewalls (2-S1 through 2-S4 and 2-S6) and four confirmation soil samples were collected from the excavation floor (2-F1 through 2-F4) (Figures 4 and 5) (Attachment D, Confirmation Samples Laboratory Report). The excavated soil was transported to the R360 Halfway facility in for disposal (Attachment E, Soil Disposal Manifests). The excavation was backfilled with clean soil.

### Scope and Limitations

The scope of HRL's services consists of performing site characterization, oversight of remediation, and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin.

Ice Dancer 30 Com 2H (February 2019)

January 25, 2021

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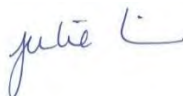
### Conclusions and Recommendations

The soil impacted by TPH and chloride above applicable closure criteria from the February 2019 release at the Site has been removed. Confirmation soil samples indicate the impacted soil has been removed from the Site; HRL recommends closure of this release.

We appreciate the opportunity to work with Devon on this project. If you have any questions or concerns, please do not hesitate to contact me at (970) 243-3271 or via email at [jlinn@hrlcomp.com](mailto:jlinn@hrlcomp.com).

Sincerely,

**HRL Compliance Solutions, Inc.**



Julie Linn, PG, RG  
Project Manager

### Figures:

Figure 1: Site Location

Figure 2: Depth to Groundwater

Figure 3: Characterization Sample Location and Results

Figure 4: Sidewall Confirmation Sample Location and Results

Figure 5: Excavation Floor Confirmation Sample Location and Results

### Tables:

Table 1: Site Characterization Soil Sample Results

Table 2: Confirmation Soil Sample Results

### Attachments:

Attachment A: NMOCD Form C-141

Attachment B: Characterization Samples Analytical Laboratory Report

Attachment C: Photographs

Attachment D: Confirmation Samples Analytical Laboratory Report

Attachment E: Soil Disposal Manifests

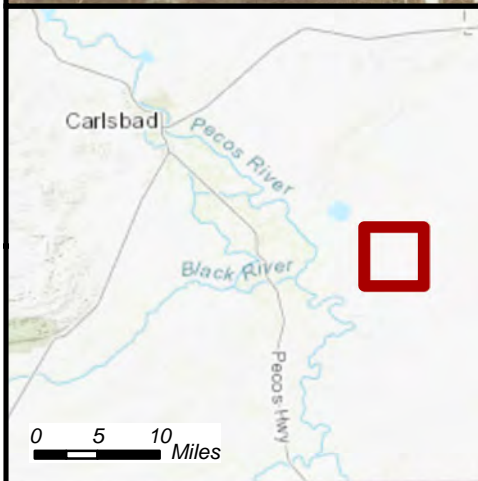
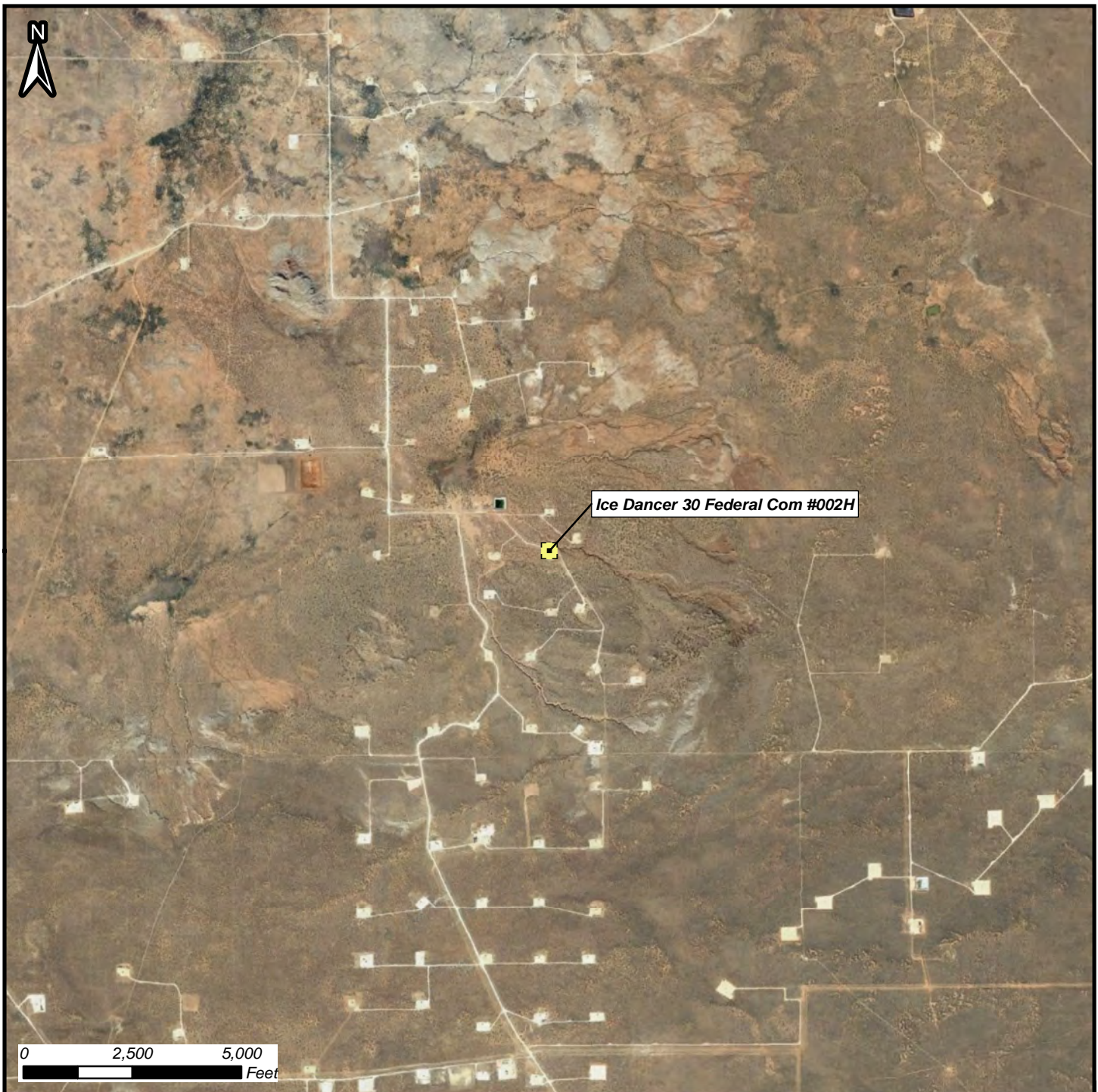
Ice Dancer 30 Com 2H (February 2019)

January 25, 2021



## Figures





### Figure 1: Site Location Map

Ice Dancer 30 Federal Com #002H  
February 2019 Spill

32.266651160, -103.912909576  
Section 31, Township 23 South, Range 30 East

NOTES / COMMENTS:

#### Mapped Features

 Facility Location

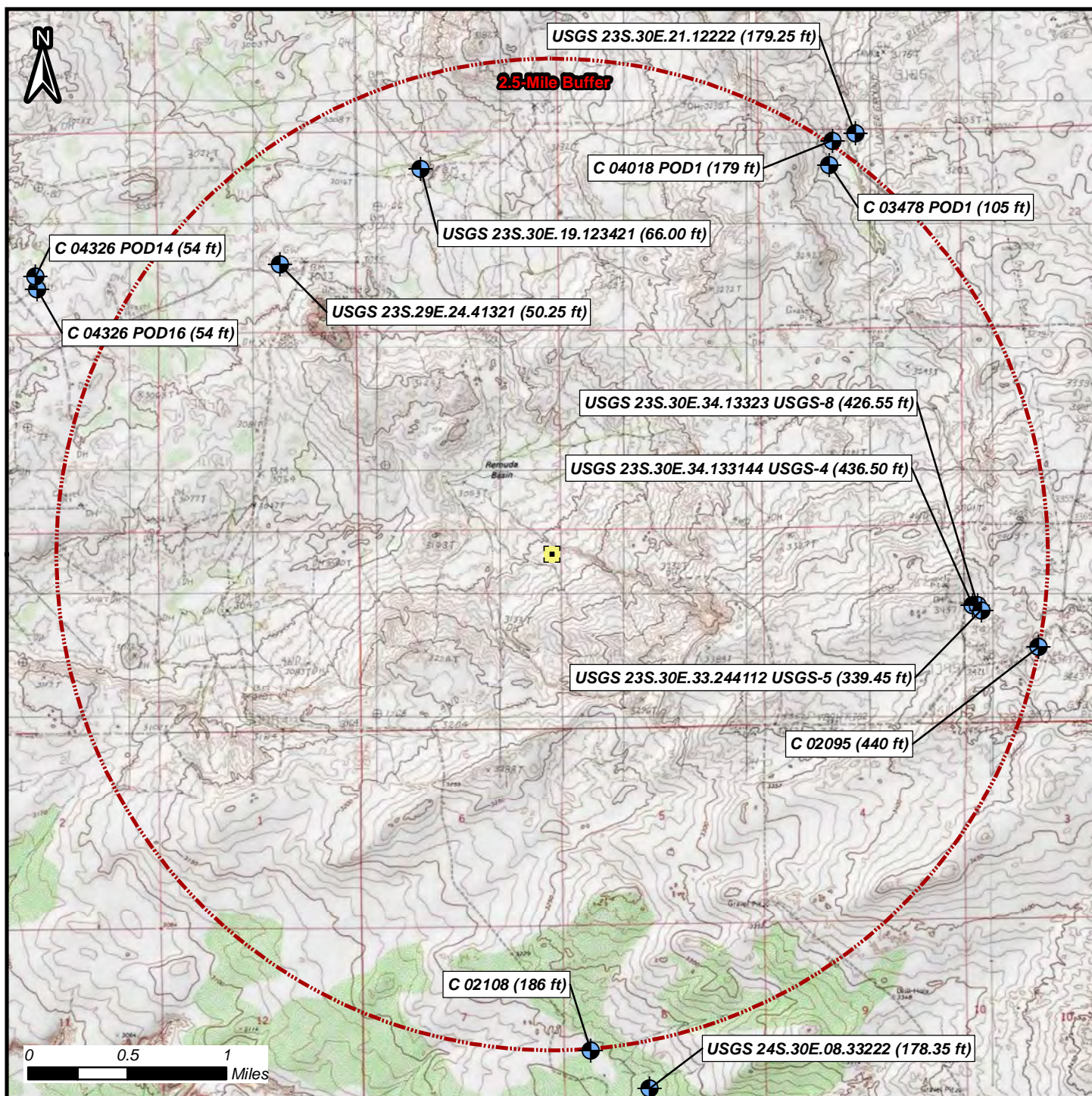
DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



Author: A. Asay  
Revision: 0  
Date: 2/28/2020

T:\CLIENTS\DEVON ENERGY\2020\Ice Dancer 30 Federal Com #002H\Map\Ice Dancer 30 Federal Com #002H Site Location Map (February 2019 Spill) 022820.mxd



**Figure 2: Depth to Groundwater Map**

Ice Dancer 30 Federal Com #002H

February 2019 Spill

32.266651160, -103.912909576

Section 31, Township 23 South, Range 30 East



Well Number	Water Level Below Ground Surface (ft)	Distance from Source (mi)
C 03478 POD1	105.00	2.41
C 02095	440.00	2.50
C 02108	186.00	2.51
C 04018 POD1	179.00	2.52
C 04326 POD14	54.00	2.96
C 04326 POD16	54.00	2.92
USGS 23S.30E.19.123421	66.00	2.06
USGS 23S.29E.24.41321	50.25	2.00
USGS 23S.30E.21.12222	179.25	2.62
USGS 24S.30E.08.33222	178.35	2.74
USGS 23S.30E.34.133144 USGS-4	436.50	2.14
USGS 23S.30E.34.13323 USGS-8	426.55	2.16
USGS 23S.30E.33.244112 USGS-5	339.45	2.18

**Mapped Features**

Point of Release



Groundwater Well



2.5-Mile Buffer

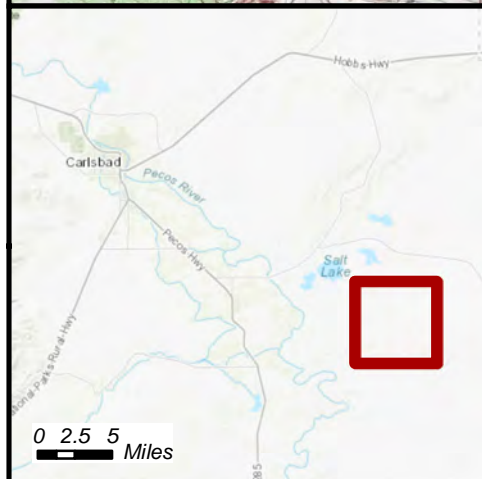
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Author: A. Asay

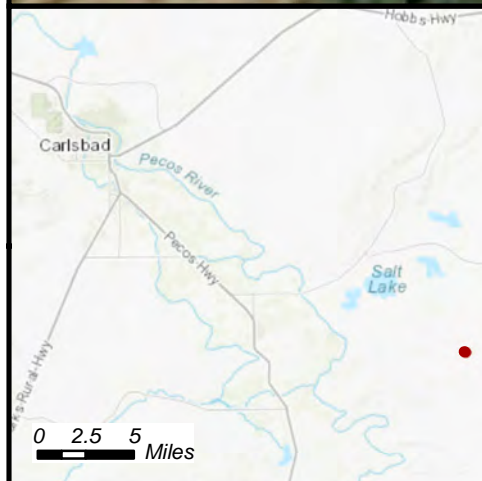
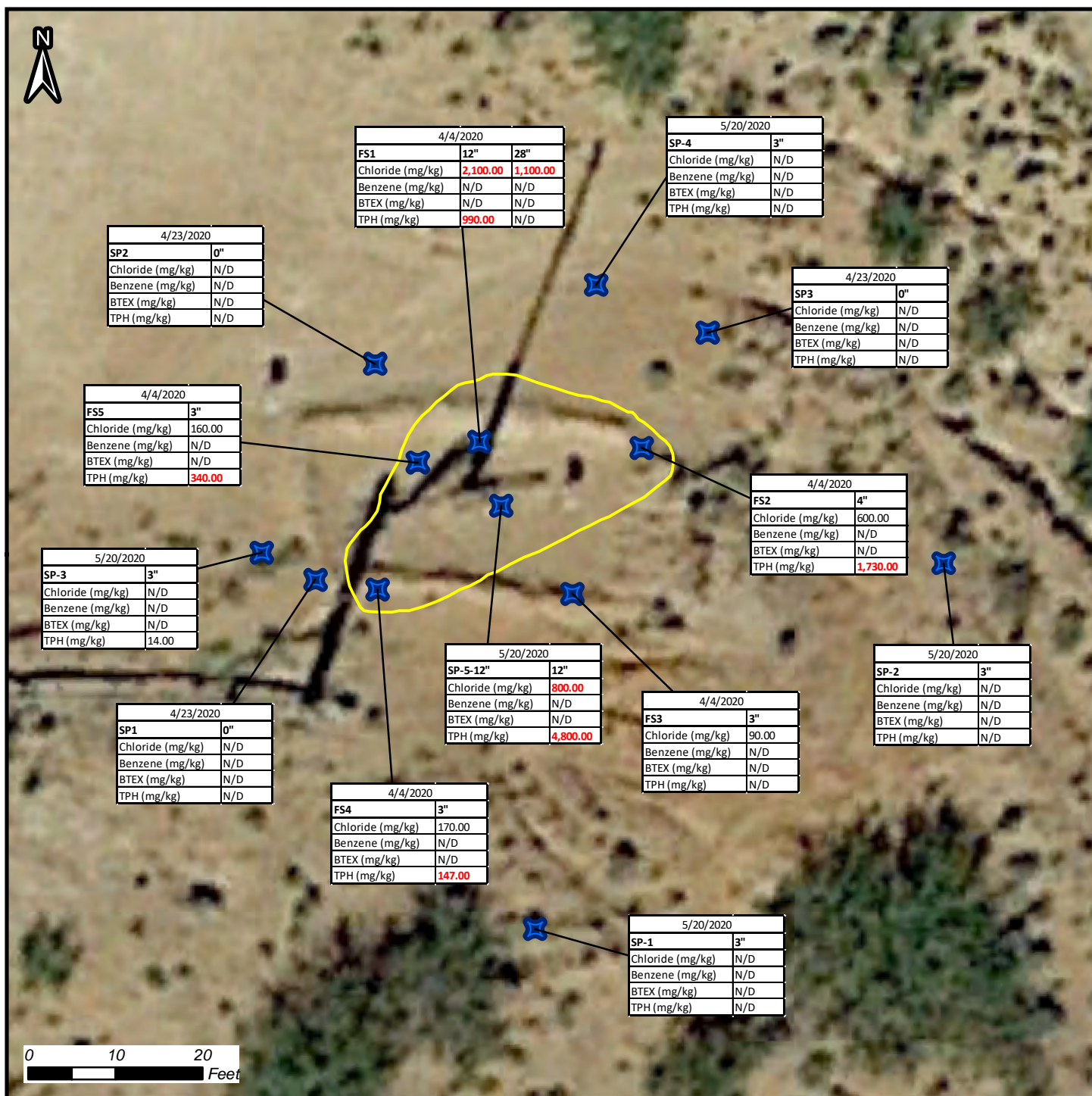
Revision: 0

Date: 5/18/2020



T:\CLIENTS\DEVON ENERGY\2020\Ice Dancer 30 Federal Com #002H\Map\Ice Dancer 30 Federal Com #002H DTGW Map (February 2019 Spill) 060820.mxd





### Figure 3: Sample Location and Results Map

Ice Dancer 30 Federal Com #002H

February 2019 Spill

32.266651160, -103.912909576

Section 31, Township 23 South, Range 30 East

#### NOTES / COMMENTS:

The impacted area is approximately 612 square feet.

Results in red exceed closure criteria.

#### Mapped Features

- Sample Location (Submitted for Lab Analysis)
- Impacted Area

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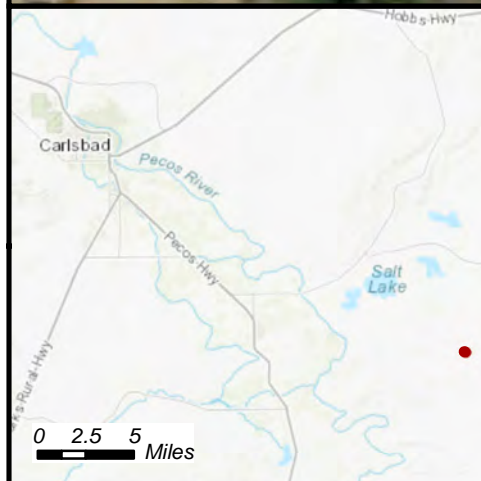
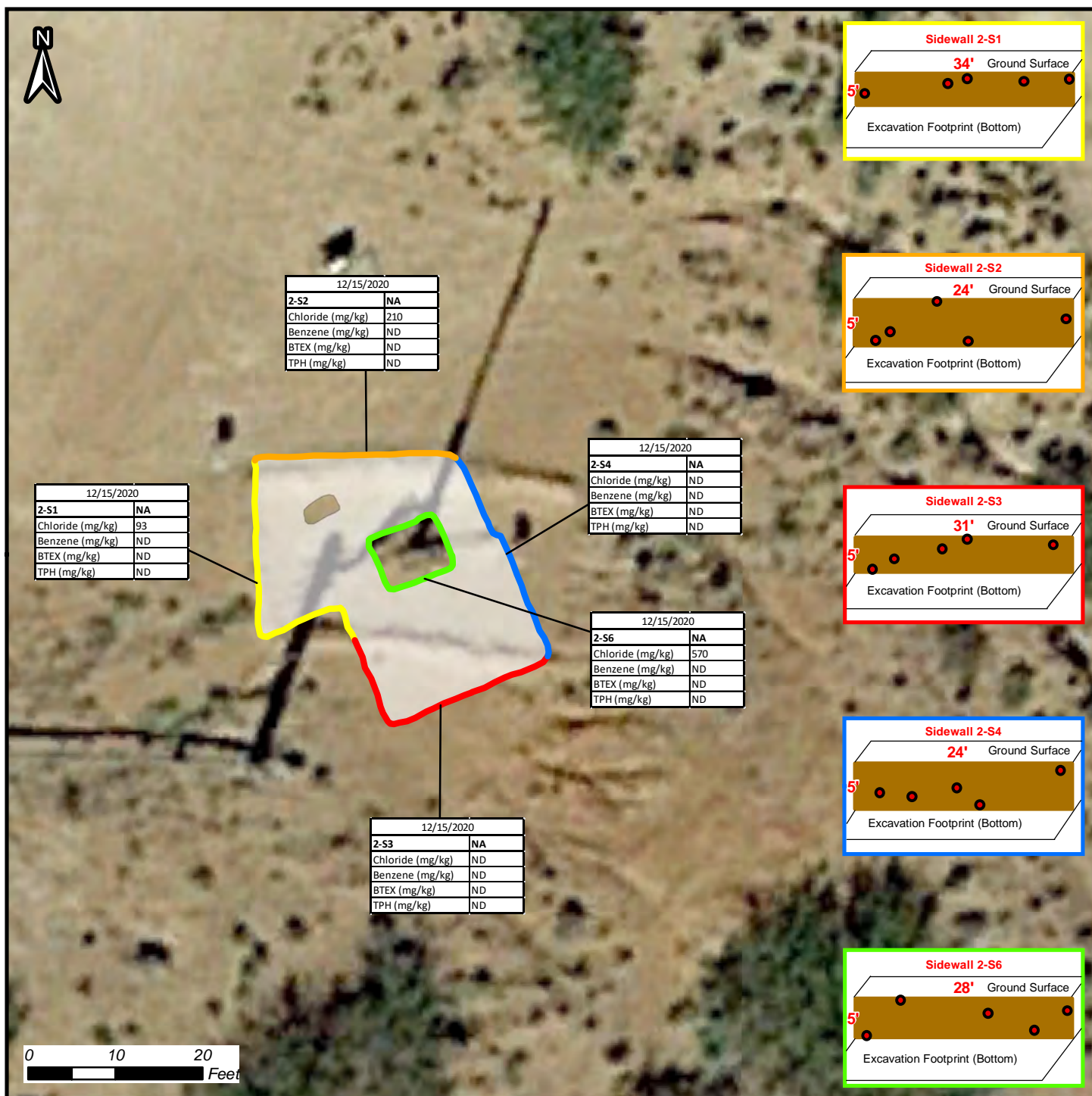
Author: A. Asay

Revision: 0

Date: 6/8/2020

T:\CLIENTS\DEVON ENERGY\2020\Ice Dancer 30 Federal Com #002H\Map\Ice Dancer 30 Federal Com #002H Sample Location and Results Map (February 2019 Spill) 060820.mxd





## Figure 4: Excavation Sidewall Confirmation Sample Map

Ice Dancer 30 Federal Com #002H

February 2019 Spill

32.266651160, -103.912909576

Section 31, Township 23 South, Range 30 East

### NOTES / COMMENTS:

The total excavation area is approximately 643 square feet.

Results in red exceed closure criteria.

### Mapped Features

- Sidewall Composite Sample Location (Submitted for Analysis)
- ~ Sidewall 2-S1
- ~ Sidewall 2-S2
- ~ Sidewall 2-S3
- ~ Sidewall 2-S4
- ~ Sidewall 2-S6
- Total Excavation Area

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



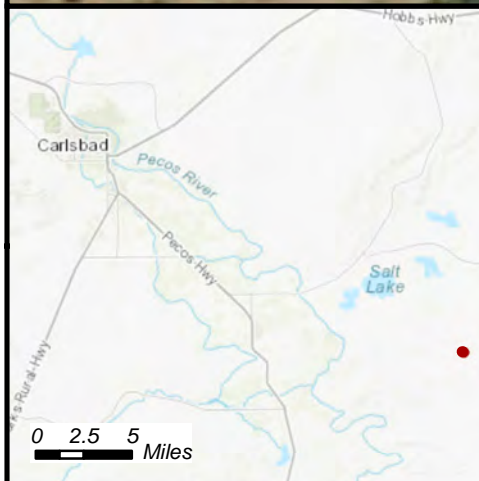
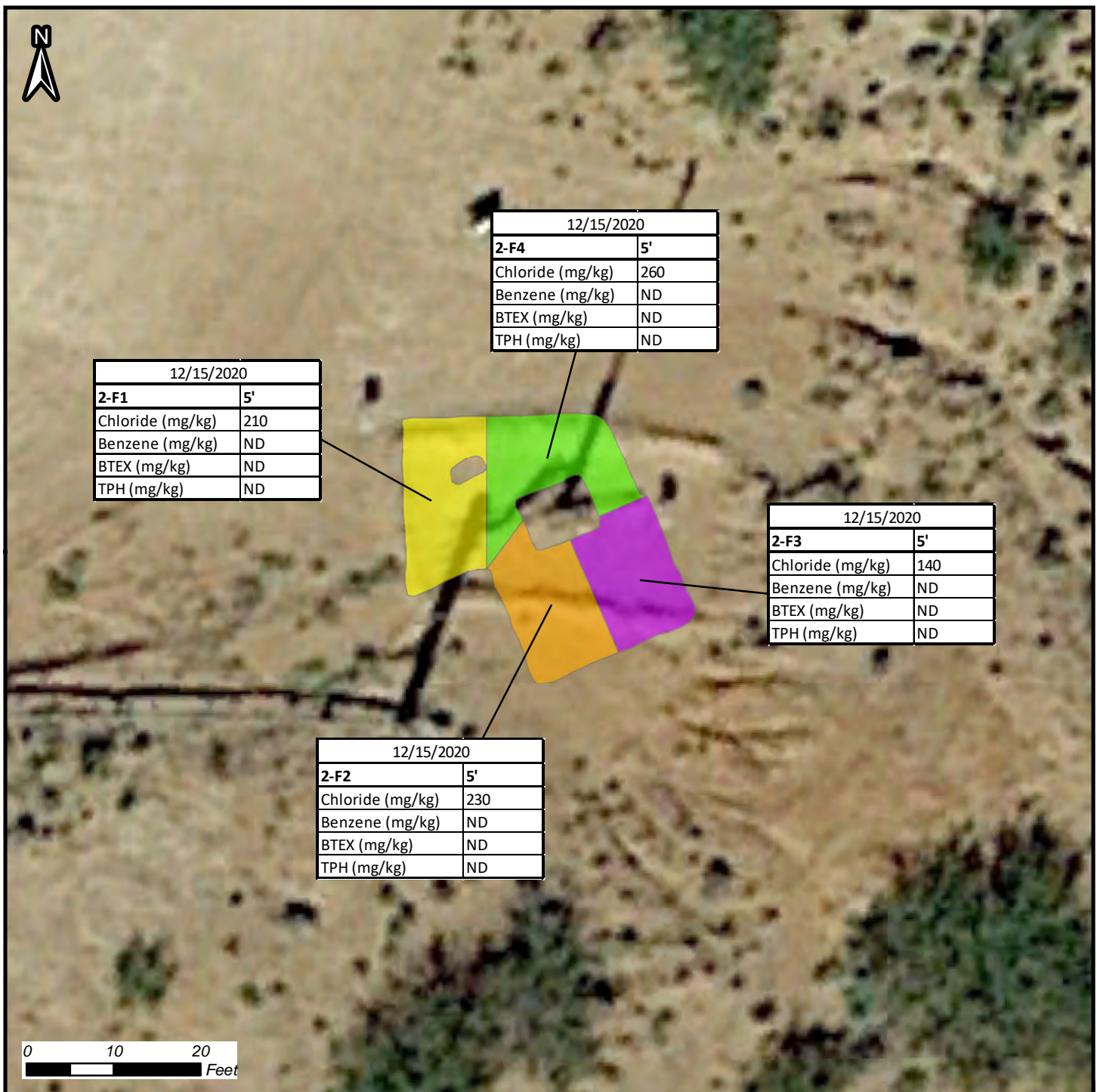
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Author: A. Asay

Revision: 0

Date: 1/5/2021





### Figure 5: Excavation Footprint Confirmation Sample Map

Ice Dancer 30 Federal Com #002H

February 2019 Spill

32.266651160, -103.912909576

Section 31, Township 23 South, Range 30 East

#### NOTES / COMMENTS:

The total excavation area is approximately 643 square feet.

Results in red exceed closure criteria.

#### Mapped Features

- Excavation Area 2-F1 (5' Deep)
- Excavation Area 2-F2 (5' Deep)
- Excavation Area 2-F3 (5' Deep)
- Excavation Area 2-F4 (5' Deep)

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HRL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.



Author: A. Asay

Revision: 0

Date: 1/5/2021

T:\CLIENTS\DEVON ENERGY\2021\Ice Dancer 30 Federal Com #002H\Map\Ice Dancer 30 Federal Com #002H Footprint Post-Treatment Confirmation Sample Location and Results Map (February 2019 Spill) 010521.mxd





## **Tables**



**Table 1**  
**Soil Sample Results**  
**Devon Energy**  
**Ice Dancer 30 Federal Com #002H (February 2019)**  
**Eddy County, New Mexico**

Sample ID	Depth (inches)	Sample Date	Chloride	Benzene	BTEX	TPH
			<i>Values are in milligrams per kilogram (mg/kg)</i>			
NMOCD Closure Criteria (Groundwater less than 50 feet) *			600	10	50	100
FS1.2	12	4/4/2020	<b>2,100</b>	ND	ND	<b>990</b>
FS1.7	28	4/4/2020	<b>1,100</b>	ND	ND	ND
FS2	4	4/4/2020	600	ND	ND	<b>1,730</b>
FS3	3	4/4/2020	90	ND	ND	ND
FS4	3	4/4/2020	170	ND	ND	<b>147</b>
FS5	3	4/4/2020	160	ND	ND	<b>340</b>
SP1	3	4/23/2020	ND	ND	ND	ND
SP2	3	4/23/2020	ND	ND	ND	ND
SP3	3	4/23/2020	ND	ND	ND	ND
SP-1	3	5/20/2020	ND	ND	ND	ND
SP-2	3	5/20/2020	ND	ND	ND	ND
SP-3	3	5/20/2020	ND	ND	ND	14
SP-4	3	5/20/2020	ND	ND	ND	ND
SP-5-12"	12	5/20/2020	<b>800</b>	ND	ND	<b>4,800</b>

*Notes:*

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes

TPH: Total Petroleum Hydrocarbons

**Bold** results exceed closure criteria

\* Closure Criteria specified in 19.15.29.12 NMAC



**Table 2**  
**Confirmation Soil Sample Results**  
**Devon Energy**  
**Ice Dancer 30 Federal Com #002H (February 2019)**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Sample Depth (feet below ground surface)	Chloride	Benzene	BTEX	TPH
			<i>Values are in milligrams per kilogram (mg/kg)</i>			
NMOCD Closure Criteria (Groundwater less than 50 feet) *			600	10	50	100
2-S1	12/15/2020	NA	93	ND	ND	ND
2-S2	12/15/2020	NA	210	ND	ND	ND
2-S3	12/15/2020	NA	ND	ND	ND	ND
2-S4	12/15/2020	NA	ND	ND	ND	ND
2-S6	12/15/2020	NA	570	ND	ND	ND
2-F1	12/15/2020	5	210	ND	ND	ND
2-F2	12/15/2020	5	230	ND	ND	ND
2-F3	12/15/2020	5	140	ND	ND	ND
2-F4	12/15/2020	5	260	ND	ND	ND

*Notes:*

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes

TPH: Total Petroleum Hydrocarbons

**Bold** results exceed closure criteria

\* Closure Criteria specified in 19.15.29.12 NMAC





**Attachment A**  
**NMOCD Form C-141**

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

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: _____	Title: _____
Signature: <u>Kendra DeHoyos</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: <u>Anabela Bracamonte</u>	Date: _____



Incident ID	
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	50(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 checked="" type="checkbox"/> Yes <input 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.

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Lupe Carrasco Title: Environmental Professional

Signature: Lupe Carrasco Date: 1/28/21

email: lupe.carrasco@dvn.com Telephone: (575) 748-0765

**OCD Only**

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: Lupe Carrasco Title: Environmental Professional

Signature: Lupe Carrasco Date: 1/28/21

email: lupe.carrasco@dv.com Telephone: (575) 748-0765

**OCD Only**

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

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

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



Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Lupe Carrasco Title: Environmental Professional

Signature: Lupe Carrasco Date: 1/28/21

email: lupe.carrasco@dvn.com Telephone: (575) 748-0765

### OCD Only

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

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

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

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



**Attachment B**

**Characterization Samples Analytical Report**



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 13, 2020

Tom Bynum

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (575) 748-0176

FAX:

RE: Ice Dancer 30 Fed Com 2H (Feb 2019)

OrderNo.: 2004251

Dear Tom Bynum:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/7/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2004251

Date Reported: 4/13/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: FS1.2

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 4/4/2020 2:23:00 PM

Lab ID: 2004251-001

Matrix: SOIL

Received Date: 4/7/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	640	9.7		mg/Kg	1	4/9/2020 6:59:16 AM
Motor Oil Range Organics (MRO)	350	49		mg/Kg	1	4/9/2020 6:59:16 AM
Surr: DNOP	110	55.1-146		%Rec	1	4/9/2020 6:59:16 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/9/2020 4:18:13 PM
Surr: BFB	97.6	66.6-105		%Rec	1	4/9/2020 4:18:13 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	4/9/2020 4:18:13 PM
Toluene	ND	0.050		mg/Kg	1	4/9/2020 4:18:13 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/9/2020 4:18:13 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/9/2020 4:18:13 PM
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	4/9/2020 4:18:13 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	2100	60		mg/Kg	20	4/9/2020 6:45:18 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2004251

Date Reported: 4/13/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: FS1.7

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 4/4/2020 3:41:00 PM

Lab ID: 2004251-002

Matrix: SOIL

Received Date: 4/7/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/9/2020 7:47:50 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/9/2020 7:47:50 AM
Surr: DNOP	93.3	55.1-146		%Rec	1	4/9/2020 7:47:50 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/9/2020 5:28:29 PM
Surr: BFB	94.3	66.6-105		%Rec	1	4/9/2020 5:28:29 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	4/9/2020 5:28:29 PM
Toluene	ND	0.047		mg/Kg	1	4/9/2020 5:28:29 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/9/2020 5:28:29 PM
Xylenes, Total	ND	0.093		mg/Kg	1	4/9/2020 5:28:29 PM
Surr: 4-Bromofluorobenzene	96.9	80-120		%Rec	1	4/9/2020 5:28:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	1100	60		mg/Kg	20	4/9/2020 6:57:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2004251

Date Reported: 4/13/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: FS2

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 4/4/2020 3:06:00 PM

Lab ID: 2004251-003

Matrix: SOIL

Received Date: 4/7/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	970	9.7		mg/Kg	1	4/9/2020 8:12:08 AM
Motor Oil Range Organics (MRO)	760	49		mg/Kg	1	4/9/2020 8:12:08 AM
Surr: DNOP	119	55.1-146		%Rec	1	4/9/2020 8:12:08 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/9/2020 6:39:20 PM
Surr: BFB	94.7	66.6-105		%Rec	1	4/9/2020 6:39:20 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	4/9/2020 6:39:20 PM
Toluene	ND	0.049		mg/Kg	1	4/9/2020 6:39:20 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/9/2020 6:39:20 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/9/2020 6:39:20 PM
Surr: 4-Bromofluorobenzene	96.2	80-120		%Rec	1	4/9/2020 6:39:20 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	600	60		mg/Kg	20	4/10/2020 10:55:57 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2004251

Date Reported: 4/13/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: FS3

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 4/4/2020 3:17:00 PM

Lab ID: 2004251-004

Matrix: SOIL

Received Date: 4/7/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/9/2020 8:36:20 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/9/2020 8:36:20 AM
Surr: DNOP	89.4	55.1-146		%Rec	1	4/9/2020 8:36:20 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/9/2020 7:02:52 PM
Surr: BFB	93.9	66.6-105		%Rec	1	4/9/2020 7:02:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	4/9/2020 7:02:52 PM
Toluene	ND	0.047		mg/Kg	1	4/9/2020 7:02:52 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/9/2020 7:02:52 PM
Xylenes, Total	ND	0.094		mg/Kg	1	4/9/2020 7:02:52 PM
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	4/9/2020 7:02:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	90	60		mg/Kg	20	4/10/2020 11:32:58 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2004251

Date Reported: 4/13/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: FS4

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 4/4/2020 3:12:00 PM

Lab ID: 2004251-005

Matrix: SOIL

Received Date: 4/7/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	37	9.7		mg/Kg	1	4/9/2020 9:00:49 AM
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	4/9/2020 9:00:49 AM
Surr: DNOP	78.5	55.1-146		%Rec	1	4/9/2020 9:00:49 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/9/2020 8:36:23 PM
Surr: BFB	95.6	66.6-105		%Rec	1	4/9/2020 8:36:23 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	4/9/2020 8:36:23 PM
Toluene	ND	0.049		mg/Kg	1	4/9/2020 8:36:23 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/9/2020 8:36:23 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/9/2020 8:36:23 PM
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	4/9/2020 8:36:23 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	170	60		mg/Kg	20	4/10/2020 11:45:20 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2004251

Date Reported: 4/13/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: FS5

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 4/4/2020 3:19:00 PM

Lab ID: 2004251-006

Matrix: SOIL

Received Date: 4/7/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	190	9.2		mg/Kg	1	4/9/2020 9:25:08 AM
Motor Oil Range Organics (MRO)	150	46		mg/Kg	1	4/9/2020 9:25:08 AM
Surr: DNOP	96.9	55.1-146		%Rec	1	4/9/2020 9:25:08 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/9/2020 8:59:54 PM
Surr: BFB	94.2	66.6-105		%Rec	1	4/9/2020 8:59:54 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	4/9/2020 8:59:54 PM
Toluene	ND	0.049		mg/Kg	1	4/9/2020 8:59:54 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/9/2020 8:59:54 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/9/2020 8:59:54 PM
Surr: 4-Bromofluorobenzene	95.4	80-120		%Rec	1	4/9/2020 8:59:54 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	160	60		mg/Kg	20	4/10/2020 11:57:41 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004251

13-Apr-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>MB-51683</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51683</b>	RunNo: <b>68004</b>								
Prep Date: <b>4/9/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350088</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>MB-51707</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51707</b>	RunNo: <b>68013</b>								
Prep Date: <b>4/10/2020</b>	Analysis Date: <b>4/10/2020</b>	SeqNo: <b>2351082</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-51707</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51707</b>	RunNo: <b>68013</b>								
Prep Date: <b>4/10/2020</b>	Analysis Date: <b>4/10/2020</b>	SeqNo: <b>2351083</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004251

13-Apr-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>LCS-51634</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>51634</b>			RunNo: <b>67900</b>						
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>			SeqNo: <b>2348958</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.4	70	130			
Surr: DNOP	3.7		5.000		74.0	55.1	146			

Sample ID: <b>MB-51634</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>51634</b>			RunNo: <b>67900</b>						
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>			SeqNo: <b>2348959</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		84.9	55.1	146			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004251

13-Apr-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>2004251-001AMSDG</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>FS1.2</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350197</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.41	0	91.7	69.1	142	0.897	20	
Surr: BFB	1000		976.6		102	66.6	105	0	0	

Sample ID: <b>lcs-51628</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350206</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.3	80	120			
Surr: BFB	1100		1000		108	66.6	105			S

Sample ID: <b>mb-51628</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350208</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.0	66.6	105			

Sample ID: <b>2004251-001AMSG</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>FS1.2</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350338</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.20	0	93.4	69.1	142			
Surr: BFB	1100		968.1		109	66.6	105			S

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004251

13-Apr-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>2004251-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS1.2</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350244</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.023	0.9337	0	83.1	78.5	119			
Toluene	0.83	0.047	0.9337	0.01308	87.1	75.7	123			
Ethylbenzene	0.85	0.047	0.9337	0	91.1	74.3	126			
Xylenes, Total	2.6	0.093	2.801	0.01913	91.0	72.9	130			
Surr: 4-Bromofluorobenzene	0.90		0.9337		96.8	80	120			

Sample ID: <b>LCS-51628</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350255</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.6	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

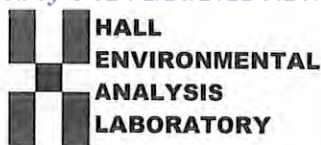
Sample ID: <b>mb-51628</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350257</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.2	80	120			

Sample ID: <b>2004251-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS1.2</b>	Batch ID: <b>51628</b>	RunNo: <b>68006</b>								
Prep Date: <b>4/7/2020</b>	Analysis Date: <b>4/9/2020</b>	SeqNo: <b>2350341</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	0.9852	0	83.8	78.5	119	6.20	20	
Toluene	0.87	0.049	0.9852	0.01308	87.0	75.7	123	5.18	20	
Ethylbenzene	0.91	0.049	0.9852	0	92.0	74.3	126	6.39	20	
Xylenes, Total	2.7	0.099	2.956	0.01913	92.0	72.9	130	6.39	20	
Surr: 4-Bromofluorobenzene	0.97		0.9852		98.3	80	120	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **DEVON ENERGY**Work Order Number: **2004251**

RcptNo: 1

Received By: **Juan Rojas**

4/7/2020 8:25:00 AM

*Juan Rojas*Completed By: **Leah Baca**

4/7/2020 9:48:28 AM

*Leah Baca*Reviewed By: *LB**4/7/20*

### Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 4/7/20

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				
2	2.5	Good				







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 04, 2020

Tom Bynum

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: Ice Dancer 2019

OrderNo.: 2004B04

Dear Tom Bynum:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/25/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2004B04

Date Reported: 5/4/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 1

Project: Ice Dancer 2019

Collection Date: 4/23/2020 2:19:00 PM

Lab ID: 2004B04-001

Matrix: SOIL

Received Date: 4/25/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/29/2020 3:31:08 PM	52154
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/28/2020 11:57:58 PM	52109
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/28/2020 11:57:58 PM	52109
Surr: DNOP	92.2	55.1-146		%Rec	1	4/28/2020 11:57:58 PM	52109
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/28/2020 5:31:46 PM	52091
Surr: BFB	103	66.6-105		%Rec	1	4/28/2020 5:31:46 PM	52091
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/28/2020 5:31:46 PM	52091
Toluene	ND	0.050		mg/Kg	1	4/28/2020 5:31:46 PM	52091
Ethylbenzene	ND	0.050		mg/Kg	1	4/28/2020 5:31:46 PM	52091
Xylenes, Total	ND	0.10		mg/Kg	1	4/28/2020 5:31:46 PM	52091
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	4/28/2020 5:31:46 PM	52091

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 8

## Analytical Report

Lab Order 2004B04

Date Reported: 5/4/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2

Project: Ice Dancer 2019

Collection Date: 4/23/2020 2:21:00 PM

Lab ID: 2004B04-002

Matrix: SOIL

Received Date: 4/25/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	4/29/2020 4:08:21 PM	52154
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	4/29/2020 12:22:18 AM	52109
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	4/29/2020 12:22:18 AM	52109
Surr: DNOP	63.4	55.1-146		%Rec	1	4/29/2020 12:22:18 AM	52109
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/28/2020 6:42:23 PM	52091
Surr: BFB	102	66.6-105		%Rec	1	4/28/2020 6:42:23 PM	52091
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/28/2020 6:42:23 PM	52091
Toluene	ND	0.050		mg/Kg	1	4/28/2020 6:42:23 PM	52091
Ethylbenzene	ND	0.050		mg/Kg	1	4/28/2020 6:42:23 PM	52091
Xylenes, Total	ND	0.099		mg/Kg	1	4/28/2020 6:42:23 PM	52091
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	4/28/2020 6:42:23 PM	52091

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 8

## Analytical Report

Lab Order 2004B04

Date Reported: 5/4/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 3

Project: Ice Dancer 2019

Collection Date: 4/23/2020 2:23:00 PM

Lab ID: 2004B04-003

Matrix: SOIL

Received Date: 4/25/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	59		mg/Kg	20	4/29/2020 4:20:46 PM	52154
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/29/2020 12:46:30 AM	52109
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/29/2020 12:46:30 AM	52109
Surr: DNOP	89.2	55.1-146		%Rec	1	4/29/2020 12:46:30 AM	52109
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/28/2020 7:52:59 PM	52091
Surr: BFB	102	66.6-105		%Rec	1	4/28/2020 7:52:59 PM	52091
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/28/2020 7:52:59 PM	52091
Toluene	ND	0.050		mg/Kg	1	4/28/2020 7:52:59 PM	52091
Ethylbenzene	ND	0.050		mg/Kg	1	4/28/2020 7:52:59 PM	52091
Xylenes, Total	ND	0.10		mg/Kg	1	4/28/2020 7:52:59 PM	52091
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	4/28/2020 7:52:59 PM	52091

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 8

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004B04

04-May-20

**Client:** Devon Energy  
**Project:** Ice Dancer 2019

Sample ID: <b>MB-52154</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52154</b>	RunNo: <b>68503</b>								
Prep Date: <b>4/29/2020</b>	Analysis Date: <b>4/29/2020</b>	SeqNo: <b>2371575</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-52154</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52154</b>	RunNo: <b>68503</b>								
Prep Date: <b>4/29/2020</b>	Analysis Date: <b>4/29/2020</b>	SeqNo: <b>2371576</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004B04

04-May-20

**Client:** Devon Energy  
**Project:** Ice Dancer 2019

Sample ID: <b>LCS-52108</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52108</b>	RunNo: <b>68466</b>								
Prep Date: <b>4/27/2020</b>	Analysis Date: <b>4/28/2020</b>	SeqNo: <b>2369166</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		101	55.1	146			

Sample ID: <b>MB-52108</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52108</b>	RunNo: <b>68466</b>								
Prep Date: <b>4/27/2020</b>	Analysis Date: <b>4/28/2020</b>	SeqNo: <b>2369167</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		99.8	55.1	146			

Sample ID: <b>LCS-52109</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52109</b>	RunNo: <b>68466</b>								
Prep Date: <b>4/27/2020</b>	Analysis Date: <b>4/28/2020</b>	SeqNo: <b>2369963</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	3.1		5.000		62.8	55.1	146			

Sample ID: <b>MB-52109</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52109</b>	RunNo: <b>68466</b>								
Prep Date: <b>4/27/2020</b>	Analysis Date: <b>4/28/2020</b>	SeqNo: <b>2369964</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.6		10.00		66.4	55.1	146			

Sample ID: <b>LCS-52153</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52153</b>	RunNo: <b>68504</b>								
Prep Date: <b>4/29/2020</b>	Analysis Date: <b>4/29/2020</b>	SeqNo: <b>2370383</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.3	55.1	146			

Sample ID: <b>MB-52153</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52153</b>	RunNo: <b>68504</b>								
Prep Date: <b>4/29/2020</b>	Analysis Date: <b>4/29/2020</b>	SeqNo: <b>2370384</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		97.7	55.1	146			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

Page 5 of 8



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004B04

04-May-20

**Client:** Devon Energy  
**Project:** Ice Dancer 2019

Sample ID: <b>mb-52090</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52090</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369829</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	66.6	105			

Sample ID: <b>lcs-52090</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52090</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369834</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		111	66.6	105			S

Sample ID: <b>mb-52091</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369851</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	66.6	105			

Sample ID: <b>lcs-52091</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369852</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.3	80	120			
Surr: BFB	1100		1000		111	66.6	105			S

Sample ID: <b>2004b04-002ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>2</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369855</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.93	0	92.8	80	120			
Surr: BFB	1100		997.0		113	66.6	105			S

Sample ID: <b>2004b04-002amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>2</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369856</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	24.90	0	81.0	80	120	13.6	20	
Surr: BFB	1100		996.0		110	66.6	105	0	0	S

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004B04

04-May-20

**Client:** Devon Energy  
**Project:** Ice Dancer 2019

Sample ID: <b>mb-52090</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52090</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369873</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: <b>LCS-52090</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52090</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369874</b>			Units: <b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID: <b>mb-52091</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369887</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: <b>LCS-52091</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369888</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.2	80	120			
Toluene	0.88	0.050	1.000	0	88.2	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: <b>2004b04-001ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>1</b>	Batch ID: <b>52091</b>			RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>	Analysis Date: <b>4/28/2020</b>			SeqNo: <b>2369890</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.77	0.025	1.000	0	76.7	78.5	119			S
Toluene	0.78	0.050	1.000	0	78.5	75.7	123			
Ethylbenzene	0.79	0.050	1.000	0	78.8	74.3	126			
Xylenes, Total	2.4	0.10	3.000	0	78.8	72.9	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2004B04

04-May-20

**Client:** Devon Energy  
**Project:** Ice Dancer 2019

Sample ID: <b>2004b04-001ams</b>		SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>1</b>		Batch ID: <b>52091</b>		RunNo: <b>68490</b>						
Prep Date: <b>4/26/2020</b>		Analysis Date: <b>4/28/2020</b>		SeqNo: <b>2369890</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

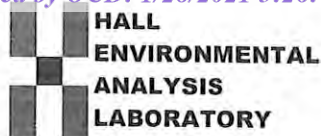
Sample ID: 2004b04-001amsd		SampType: MSD		TestCode: EPA Method 8021B: Volatiles						
Client ID: 1		Batch ID: 52091		RunNo: 68490						
Prep Date: 4/26/2020		Analysis Date: 4/28/2020		SeqNo: 2369891		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	0.9970	0	82.2	78.5	119	6.59	20	
Toluene	0.84	0.050	0.9970	0	84.8	75.7	123	7.40	20	
Ethylbenzene	0.87	0.050	0.9970	0	86.8	74.3	126	9.40	20	
Xylenes, Total	2.6	0.10	2.991	0	86.5	72.9	130	9.11	20	
Surr: 4-Bromofluorobenzene	1.0		0.9970		104	80	120	0	0	

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: DEVON ENERGY

Work Order Number: 2004B04

RcptNo: 1

Received By: Desiree Dominguez 4/25/2020 9:20:00 AM

Completed By: Desiree Dominguez 4/25/2020 10:28:11 AM

Reviewed By: *pt 4/25/20**DD**DD*Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:  
( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: *DAD 4/25/20*Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good	Not Present			









Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

June 02, 2020

Tom Bynum

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: Ice Dancer 30 Fed Com 2H-Feb 2019

OrderNo.: 2005A44

Dear Tom Bynum:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/23/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 2005A44

Date Reported: 6/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: SP-1

Project: Ice Dancer 30 Fed Com 2H-Feb 2019

Collection Date: 5/20/2020 1:31:00 PM

Lab ID: 2005A44-001

Matrix: SOIL

Received Date: 5/23/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/29/2020 1:43:15 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/29/2020 1:43:15 PM
Surr: DNOP	57.5	55.1-146		%Rec	1	5/29/2020 1:43:15 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	ND	60		mg/Kg	20	6/1/2020 2:41:58 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	5/27/2020 8:22:39 PM
Toluene	ND	0.047		mg/Kg	1	5/27/2020 8:22:39 PM
Ethylbenzene	ND	0.047		mg/Kg	1	5/27/2020 8:22:39 PM
Xylenes, Total	ND	0.093		mg/Kg	1	5/27/2020 8:22:39 PM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%Rec	1	5/27/2020 8:22:39 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	5/27/2020 8:22:39 PM
Surr: Dibromofluoromethane	99.1	70-130		%Rec	1	5/27/2020 8:22:39 PM
Surr: Toluene-d8	97.2	70-130		%Rec	1	5/27/2020 8:22:39 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/27/2020 8:22:39 PM
Surr: BFB	103	70-130		%Rec	1	5/27/2020 8:22:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2005A44

Date Reported: 6/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: SP-2

Project: Ice Dancer 30 Fed Com 2H-Feb 2019

Collection Date: 5/20/2020 1:36:00 PM

Lab ID: 2005A44-002

Matrix: SOIL

Received Date: 5/23/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/29/2020 2:31:39 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/29/2020 2:31:39 PM
Surr: DNOP	75.1	55.1-146		%Rec	1	5/29/2020 2:31:39 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	ND	60		mg/Kg	20	6/1/2020 2:54:23 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	5/27/2020 8:52:06 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2020 8:52:06 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2020 8:52:06 PM
Xylenes, Total	ND	0.096		mg/Kg	1	5/27/2020 8:52:06 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	5/27/2020 8:52:06 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	5/27/2020 8:52:06 PM
Surr: Dibromofluoromethane	99.0	70-130		%Rec	1	5/27/2020 8:52:06 PM
Surr: Toluene-d8	101	70-130		%Rec	1	5/27/2020 8:52:06 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2020 8:52:06 PM
Surr: BFB	106	70-130		%Rec	1	5/27/2020 8:52:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2005A44

Date Reported: 6/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: SP-3

Project: Ice Dancer 30 Fed Com 2H-Feb 2019

Collection Date: 5/20/2020 1:41:00 PM

Lab ID: 2005A44-003

Matrix: SOIL

Received Date: 5/23/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	14	9.6		mg/Kg	1	5/29/2020 2:55:52 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/29/2020 2:55:52 PM
Surr: DNOP	78.0	55.1-146		%Rec	1	5/29/2020 2:55:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	ND	59		mg/Kg	20	6/1/2020 3:06:48 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	5/27/2020 11:46:45 PM
Toluene	ND	0.047		mg/Kg	1	5/27/2020 11:46:45 PM
Ethylbenzene	ND	0.047		mg/Kg	1	5/27/2020 11:46:45 PM
Xylenes, Total	ND	0.094		mg/Kg	1	5/27/2020 11:46:45 PM
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%Rec	1	5/27/2020 11:46:45 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	5/27/2020 11:46:45 PM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	5/27/2020 11:46:45 PM
Surr: Toluene-d8	98.9	70-130		%Rec	1	5/27/2020 11:46:45 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/27/2020 11:46:45 PM
Surr: BFB	101	70-130		%Rec	1	5/27/2020 11:46:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2005A44

Date Reported: 6/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: SP-4

Project: Ice Dancer 30 Fed Com 2H-Feb 2019

Collection Date: 5/20/2020 1:45:00 PM

Lab ID: 2005A44-004

Matrix: SOIL

Received Date: 5/23/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/29/2020 3:19:58 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/29/2020 3:19:58 PM
Surr: DNOP	68.7	55.1-146		%Rec	1	5/29/2020 3:19:58 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	97	60		mg/Kg	20	6/1/2020 3:19:12 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	5/28/2020 12:16:10 AM
Toluene	ND	0.048		mg/Kg	1	5/28/2020 12:16:10 AM
Ethylbenzene	ND	0.048		mg/Kg	1	5/28/2020 12:16:10 AM
Xylenes, Total	ND	0.097		mg/Kg	1	5/28/2020 12:16:10 AM
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	5/28/2020 12:16:10 AM
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	5/28/2020 12:16:10 AM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	5/28/2020 12:16:10 AM
Surr: Toluene-d8	100	70-130		%Rec	1	5/28/2020 12:16:10 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/28/2020 12:16:10 AM
Surr: BFB	103	70-130		%Rec	1	5/28/2020 12:16:10 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order 2005A44

Date Reported: 6/2/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: SP-5-12"

Project: Ice Dancer 30 Fed Com 2H-Feb 2019

Collection Date: 5/20/2020 2:58:00 PM

Lab ID: 2005A44-005

Matrix: SOIL

Received Date: 5/23/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	2900	88		mg/Kg	10	5/29/2020 3:44:08 PM
Motor Oil Range Organics (MRO)	1900	440		mg/Kg	10	5/29/2020 3:44:08 PM
Surr: DNOP	0	55.1-146	S	%Rec	10	5/29/2020 3:44:08 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	800	60		mg/Kg	20	6/1/2020 3:31:37 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.12	D	mg/Kg	5	5/28/2020 12:45:39 AM
Toluene	ND	0.24	D	mg/Kg	5	5/28/2020 12:45:39 AM
Ethylbenzene	ND	0.24	D	mg/Kg	5	5/28/2020 12:45:39 AM
Xylenes, Total	ND	0.48	D	mg/Kg	5	5/28/2020 12:45:39 AM
Surr: 1,2-Dichloroethane-d4	99.0	70-130	D	%Rec	5	5/28/2020 12:45:39 AM
Surr: 4-Bromofluorobenzene	98.0	70-130	D	%Rec	5	5/28/2020 12:45:39 AM
Surr: Dibromofluoromethane	102	70-130	D	%Rec	5	5/28/2020 12:45:39 AM
Surr: Toluene-d8	94.8	70-130	D	%Rec	5	5/28/2020 12:45:39 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	24	D	mg/Kg	5	5/28/2020 12:45:39 AM
Surr: BFB	102	70-130	D	%Rec	5	5/28/2020 12:45:39 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005A44

02-Jun-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H-Feb 2019

Sample ID: <b>MB-52800</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52800</b>	RunNo: <b>69292</b>								
Prep Date: <b>6/1/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403563</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-52800</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52800</b>	RunNo: <b>69292</b>								
Prep Date: <b>6/1/2020</b>	Analysis Date: <b>6/1/2020</b>	SeqNo: <b>2403565</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.6	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005A44

02-Jun-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H-Feb 2019

Sample ID: <b>LCS-52738</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52738</b>			RunNo: <b>69198</b>						
Prep Date: <b>5/28/2020</b>	Analysis Date: <b>5/29/2020</b>			SeqNo: <b>2399901</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	114	70	130			
Surr: DNOP	4.6		5.000		92.5	55.1	146			

Sample ID: <b>MB-52738</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52738</b>			RunNo: <b>69198</b>						
Prep Date: <b>5/28/2020</b>	Analysis Date: <b>5/29/2020</b>			SeqNo: <b>2399902</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	55.1	146			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005A44

02-Jun-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H-Feb 2019

Sample ID: <b>LCS-52674</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>52674</b>	RunNo: <b>69165</b>								
Prep Date: <b>5/25/2020</b>	Analysis Date: <b>5/27/2020</b>	SeqNo: <b>2397013</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.8	80	120			
Toluene	1.0	0.050	1.000	0	99.7	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.7	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Sample ID: <b>mb-52674</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52674</b>	RunNo: <b>69165</b>								
Prep Date: <b>5/25/2020</b>	Analysis Date: <b>5/27/2020</b>	SeqNo: <b>2397014</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.0	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.8	70	130			
Surr: Toluene-d8	0.48		0.5000		96.1	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2005A44

02-Jun-20

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H-Feb 2019

Sample ID: <b>ics-52674</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>52674</b>			RunNo: <b>69165</b>						
Prep Date: <b>5/25/2020</b>	Analysis Date: <b>5/27/2020</b>			SeqNo: <b>2397020</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.3	70	130			
Surr: BFB	550		500.0		110	70	130			

Sample ID: <b>mb-52674</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>52674</b>			RunNo: <b>69165</b>						
Prep Date: <b>5/25/2020</b>	Analysis Date: <b>5/27/2020</b>			SeqNo: <b>2397021</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	550		500.0		109	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: DEVON ENERGY

Work Order Number: 2005A44

RcptNo: 1

Received By: Juan Rojas

5/23/2020 8:00:00 AM

Completed By: Juan Rojas

5/23/2020 9:03:03 AM

Reviewed By: @ 05/23/20

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: SR 5/23/20

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good				







## **Attachment C**

### **Photographs**





View to the  
northwest



View to the  
northeast







View to the  
west



View to the  
southwest







View to the  
east



View to the  
northeast







View to the southwest



View to the south







**Attachment D**

**Confirmation Sampling Analytical Report**



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

January 05, 2021

Lupe Carrasco  
Devon Energy  
6488 Seven Rivers Highway  
Artesia, NM 88210  
TEL: (575) 748-0176  
FAX:

RE: Ice Dancer 30 Fed Com 2H (Feb 2019)

OrderNo.: 2012992

Dear Lupe Carrasco:

Hall Environmental Analysis Laboratory received 9 sample(s) on 12/18/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-S1

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:09:00 PM

Lab ID: 2012992-001

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/23/2020 1:22:42 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2020 1:22:42 PM
Surr: DNOP	107	30.4-154		%Rec	1	12/23/2020 1:22:42 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2020 4:41:24 PM
Surr: BFB	87.8	75.3-105		%Rec	1	12/21/2020 4:41:24 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	12/21/2020 4:41:24 PM
Toluene	ND	0.049		mg/Kg	1	12/21/2020 4:41:24 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2020 4:41:24 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2020 4:41:24 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	12/21/2020 4:41:24 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	93	60		mg/Kg	20	1/4/2021 6:16:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-S2

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:11:00 PM

Lab ID: 2012992-002

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/23/2020 1:46:29 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2020 1:46:29 PM
Surr: DNOP	112	30.4-154		%Rec	1	12/23/2020 1:46:29 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2020 5:04:39 PM
Surr: BFB	90.0	75.3-105		%Rec	1	12/21/2020 5:04:39 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	12/21/2020 5:04:39 PM
Toluene	ND	0.049		mg/Kg	1	12/21/2020 5:04:39 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2020 5:04:39 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2020 5:04:39 PM
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	12/21/2020 5:04:39 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	210	60		mg/Kg	20	1/4/2021 6:29:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-S3

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:14:00 PM

Lab ID: 2012992-003

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/23/2020 2:10:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2020 2:10:30 PM
Surr: DNOP	119	30.4-154		%Rec	1	12/23/2020 2:10:30 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2020 5:28:18 PM
Surr: BFB	88.6	75.3-105		%Rec	1	12/21/2020 5:28:18 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	12/21/2020 5:28:18 PM
Toluene	ND	0.049		mg/Kg	1	12/21/2020 5:28:18 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2020 5:28:18 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2020 5:28:18 PM
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	12/21/2020 5:28:18 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/4/2021 7:06:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-S4

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:16:00 PM

Lab ID: 2012992-004

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/23/2020 2:34:17 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/23/2020 2:34:17 PM
Surr: DNOP	109	30.4-154		%Rec	1	12/23/2020 2:34:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2020 5:51:47 PM
Surr: BFB	86.5	75.3-105		%Rec	1	12/21/2020 5:51:47 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	12/21/2020 5:51:47 PM
Toluene	ND	0.049		mg/Kg	1	12/21/2020 5:51:47 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2020 5:51:47 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2020 5:51:47 PM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/21/2020 5:51:47 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	ND	59		mg/Kg	20	1/4/2021 7:18:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-S6

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:19:00 PM

Lab ID: 2012992-005

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	12/23/2020 2:58:13 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/23/2020 2:58:13 PM
Surr: DNOP	118	30.4-154		%Rec	1	12/23/2020 2:58:13 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2020 6:15:17 PM
Surr: BFB	86.7	75.3-105		%Rec	1	12/21/2020 6:15:17 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	12/21/2020 6:15:17 PM
Toluene	ND	0.049		mg/Kg	1	12/21/2020 6:15:17 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2020 6:15:17 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2020 6:15:17 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/21/2020 6:15:17 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	570	60		mg/Kg	20	1/4/2021 7:31:16 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-F1

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:24:00 PM

Lab ID: 2012992-006

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/23/2020 3:46:03 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2020 3:46:03 PM
Surr: DNOP	105	30.4-154		%Rec	1	12/23/2020 3:46:03 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/21/2020 6:38:47 PM
Surr: BFB	87.9	75.3-105		%Rec	1	12/21/2020 6:38:47 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	12/21/2020 6:38:47 PM
Toluene	ND	0.050		mg/Kg	1	12/21/2020 6:38:47 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/21/2020 6:38:47 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/21/2020 6:38:47 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	12/21/2020 6:38:47 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	210	59		mg/Kg	20	1/4/2021 7:43:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-F2

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:27:00 PM

Lab ID: 2012992-007

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/23/2020 4:09:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2020 4:09:51 PM
Surr: DNOP	99.8	30.4-154		%Rec	1	12/23/2020 4:09:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/21/2020 7:02:19 PM
Surr: BFB	87.3	75.3-105		%Rec	1	12/21/2020 7:02:19 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	12/21/2020 7:02:19 PM
Toluene	ND	0.048		mg/Kg	1	12/21/2020 7:02:19 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/21/2020 7:02:19 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/21/2020 7:02:19 PM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/21/2020 7:02:19 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	230	60		mg/Kg	20	1/5/2021 1:31:06 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-F3

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:30:00 PM

Lab ID: 2012992-008

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/23/2020 4:33:48 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/23/2020 4:33:48 PM
Surr: DNOP	97.1	30.4-154		%Rec	1	12/23/2020 4:33:48 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/21/2020 7:25:52 PM
Surr: BFB	87.8	75.3-105		%Rec	1	12/21/2020 7:25:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	12/21/2020 7:25:52 PM
Toluene	ND	0.049		mg/Kg	1	12/21/2020 7:25:52 PM
Ethylbenzene	ND	0.049		mg/Kg	1	12/21/2020 7:25:52 PM
Xylenes, Total	ND	0.098		mg/Kg	1	12/21/2020 7:25:52 PM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/21/2020 7:25:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	140	60		mg/Kg	20	1/5/2021 1:43:30 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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## Analytical Report

Lab Order 2012992

Date Reported: 1/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: 2-F4

Project: Ice Dancer 30 Fed Com 2H (Feb 2019)

Collection Date: 12/15/2020 2:32:00 PM

Lab ID: 2012992-009

Matrix: SOIL

Received Date: 12/18/2020 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/23/2020 4:57:47 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/23/2020 4:57:47 PM
Surr: DNOP	111	30.4-154		%Rec	1	12/23/2020 4:57:47 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/21/2020 7:49:23 PM
Surr: BFB	86.9	75.3-105		%Rec	1	12/21/2020 7:49:23 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	12/21/2020 7:49:23 PM
Toluene	ND	0.050		mg/Kg	1	12/21/2020 7:49:23 PM
Ethylbenzene	ND	0.050		mg/Kg	1	12/21/2020 7:49:23 PM
Xylenes, Total	ND	0.10		mg/Kg	1	12/21/2020 7:49:23 PM
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	12/21/2020 7:49:23 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	260	60		mg/Kg	20	1/5/2021 1:55:54 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012992

05-Jan-21

**Client:** Devon Energy  
**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>MB-57313</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57313</b>	RunNo: <b>74375</b>								
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625460</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57313</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57313</b>	RunNo: <b>74375</b>								
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625461</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.2	90	110			

Sample ID: <b>MB-57323</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57323</b>	RunNo: <b>74375</b>								
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625492</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57323</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57323</b>	RunNo: <b>74375</b>								
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625493</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012992

05-Jan-21

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>LCS-57133</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57133</b>	RunNo: <b>74229</b>								
Prep Date: <b>12/21/2020</b>	Analysis Date: <b>12/23/2020</b>	SeqNo: <b>2620340</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.6	68.9	141			
Surr: DNOP	4.9		5.000		98.7	30.4	154			

Sample ID: <b>MB-57133</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57133</b>	RunNo: <b>74229</b>								
Prep Date: <b>12/21/2020</b>	Analysis Date: <b>12/23/2020</b>	SeqNo: <b>2620341</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	30.4	154			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012992

05-Jan-21

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

Sample ID: <b>mb-57111</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57111</b>	RunNo: <b>74163</b>								
Prep Date: <b>12/19/2020</b>	Analysis Date: <b>12/21/2020</b>	SeqNo: <b>2617096</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.8	75.3	105			

Sample ID: <b>lcs-57111</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57111</b>	RunNo: <b>74163</b>								
Prep Date: <b>12/19/2020</b>	Analysis Date: <b>12/21/2020</b>	SeqNo: <b>2617097</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.2	72.5	106			
Surr: BFB	970		1000		97.1	75.3	105			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2012992

05-Jan-21

**Client:** Devon Energy**Project:** Ice Dancer 30 Fed Com 2H (Feb 2019)

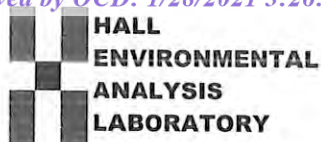
Sample ID: <b>mb-57111</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57111</b>	RunNo: <b>74163</b>								
Prep Date: <b>12/19/2020</b>	Analysis Date: <b>12/21/2020</b>	SeqNo: <b>2617143</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: <b>LCS-57111</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57111</b>	RunNo: <b>74163</b>								
Prep Date: <b>12/19/2020</b>	Analysis Date: <b>12/21/2020</b>	SeqNo: <b>2617144</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



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Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: **Devon Energy**Work Order Number: **2012992**RcptNo: **1**Received By: **Scott Anderson**

12/18/2020 2:10:00 PM

Completed By: **Cheyenne Cason**

12/18/2020 2:49:06 PM

Reviewed By:

JA 12/18/20

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: SGL 12/18/20

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good				







**Attachment E**  
**Soil Disposal Manifests**



Permian Basin

Customer: DEVON ENERGY PRODUCTION  
 Customer #: CRI2450  
 Ordered by: JULIE LINN  
 AFE #:  
 PO #:  
 Manifest #: 204816  
 Manif. Date: 8/17/2020  
 Hauler: Halo Services  
 Driver: MARINO  
 Truck #: T34  
 Card #  
 Job Ref #

Ticket #: 700-1161966  
 Bid #: O6UJ9A000GEV  
 Date: 8/17/2020  
 Generator: DEVON ENERGY PRODUCTION  
 Generator #:  
 Well Ser. #: 39473E  
 Well Name: ICE DANCER 30 FEDERAL CC  
 Well #: 002H  
 Field:  
 Field #:  
 Rig: NON-DRILLING  
 County: EDDY (NM)

Facility: CRI

Product / Service		Quantity Units									
Contaminated Soil (RCRA Exempt)		20.00 yards									
	Cell	pH	Cl	Cond.	%Solids	TDS	PCI/GM	MR/HR	H2S	% Oil	Weight
Lab Analysis:	50/51	0.00	0.00	0.00	0						

**Generator Certification Statement of Waste Status**

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

- ☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste  
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):  
☐ MSDS Information    ☐ RCRA Hazardous Waste Analysis    ☐ Process Knowledge    ☐ Other (Provide description above)

Driver/ Agent Signature

R360 Representative Signature

Customer Approval

**THIS IS NOT AN INVOICE!**

Approved By: \_\_\_\_\_

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



## TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact Information

(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name

Phone No.

## GENERATOR

NO. 204813

Operator No.

Operator's Name

Address

City, State, Zip

Phone No.

Permit/RRC No.

Lease/Well

Name &amp; No.

County

API No.

Rig Name &amp; No.

AFE/PO No.

Devon Energy  
6488 Seven Rivers Hwy

Artesia, NM 88211

Ice Dancer 30 Fed Com 2H  
Zddy

WD MM-138206.01. RNM

## EXEMPT E&amp;P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	Dump Truck
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below the threshold limits for toxicity (TCLP), ignitability, Corrosivity and Reactivity.

Non-Exempt Other

\*please select from Non-Exempt Waste List on back

QUANTITY

B - BARRELS

YARDS 16 yards

E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per-load basis only)

☒ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)Devon 1-800-585-3866  
(970) 903  
8747Julie Linn Amanda Davis  
(PRINT) AUTHORIZED AGENTS SIGNATURE8-17-2020  
DATEJulie Linn  
SIGNATURE

## TRANSPORTER

Transporter's Name

Address

Phone No.

Driver's Name

Print Name

Phone No.

Truck No.

Halo Services Inc.  
412 N 3rd St Loving NM.  
793-0201Don D...  
DAN D...  
793-0201  
T-44

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

8-17-20  
SHIPMENT DATEDon D...  
DRIVER'S SIGNATURE8-17-20  
DELIVERY DATEDon D...  
DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: 3:27 pm OUT:

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. T3

Site Name/

Permit No.

Address

Red Bluff Facility/ STF-065

5053 US Highway 285, Orla, TX 79770

Phone No.

432-448-4239

NORM READINGS TAKEN? (Circle One)

YES

NO

If YES, was reading &gt; 50 micro roentgens? (circle one)

YES

NO

Chemical Analysis (Mg/l)

Conductivity (mmhos/cm)

pH

## TANK BOTTOMS

Feet

Inches

1st Gauge  
2nd Gauge  
Received


BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one):

ACCEPTED

DENIED

If denied, why?

M. Steph  
NAME (PRINT)8-17-20  
DATERCUR  
TITLEm  
SIGNATURE

White - ORIGINAL

Blue - TRANSPORTER

Yellow - GENERATOR

Version 1





## TEXAS NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact Information

(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name

Phone No.

## GENERATOR

NO. 204816

Operator No.

Operators Name

Address

City, State, Zip

Phone No.

Permit/RRC No.

Lease/Well

Name &amp; No.

County

API No.

Rig Name &amp; No.

AFE/PO No.

Devon Energy  
6488 Severn Rivers Hwy  
Artesia, NM 88211

Ice Dancer 30 Fed Com 2H  
Eddy

WD# MM-138206.01-RNM

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	OTHER EXEMPT WASTES (type and generation process of the waste)
Oil Based Cuttings	Washout Water (Non-Injectable)	
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	
Water Based Cuttings	Produced Water (Non-Injectable)	
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	
Tank Bottoms	INTERNAL USE ONLY	
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below the threshold limits for toxicity (TCLP), ignitability, Corrosivity and Reactivity.

Non-Exempt Other

\*please select from Non-Exempt Waste List on back

QUANTITY

B - BARRELS

20 Y-YARDS

E - EACH

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)

☒ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)

Julie Linn Amanda Davis

8-17-2020

DATE

8747

SIGNATURE

## TRANSPORTER

Transporter's

Name

Address

Phone No.

Driver's Name

Print Name

Phone No.

Truck No.

HAVO

MARINO JACQUEZ  
505-635-3323  
7-34

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

8-17-20

SHIPMENT DATE

DRIVER'S SIGNATURE

8-17-20

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: OUT:

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No.

Site Name/

Permit No.

Address

Red Bluff Facility/ STF-065

Phone No.

432-448-4239

NORM READINGS TAKEN? (Circle One)

YES

NO

If YES, was reading &gt; 50 micro roentgens? (circle one)

YES

NO

Chemical Analysis (Mg/l)

Conductivity (mmhos/cm)

pH

## TANK BOTTOMS

Feet

Inches

1st Gauge  
2nd Gauge  
Received


BS&W/BBLS Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one)

ACCEPTED

DENIED

If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE



## NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT)

Company Man Contact Information

Name Jolie LynnPhone No. Annex Davis

## GENERATOR

NO. 456172Operator No. Devon

Permit/RRC No.

Operators Name Joe Dancer #30 Federal

Lease/Well Name &amp; No.

Address

County

City, State, Zip

API No.

Phone No.

Rig Name &amp; No.

AFE/PO No.

NON

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)		
Oil Based Muds	<u>  </u>	NON-INJECTABLE WATERS
Oil Based Cuttings	<u>  </u>	Washout Water (Non-Injectable)
Water Based Muds	<u>  </u>	Completion Fluid/Flow back (Non-Injectable)
Water Based Cuttings	<u>  </u>	Produced Water (Non-Injectable)
Produced Formation Solids	<u>  </u>	Gathering Line Water/Waste (Non-Injectable)
Tank Bottoms	<u>  </u>	INTERNAL USE ONLY
E&P Contaminated Soil	<u>X</u>	Truck Washout (exempt waste)
Gas Plant Waste	<u>  </u>	OTHER EXEMPT WASTES (type and generation process of the waste)

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TC), ignitability, corrosivity and reactivity.

Non-Exempt Other    \*please select from Non-Exempt Waste List on back

QUANTITY    B - BARRELS    L - LIQUID    Y - YARDS    E - EACH

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME    DATE    SIGNATURE   

TRANSPORTER	
Transporter's Name <u>Halo Services</u>	Driver's Name <u>Waylon N. Kuhn</u>
Name <u>4890-70 Road</u>	Print Name <u>Waylon N. Kuhn</u>
Address <u>Bloomfield New Mexico</u>	Phone No. <u>970-560-9492</u>
Phone No. <u>575-654-4413</u>	Truck No. <u>7-44</u>

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE Dec-16-2020 DRIVER'S SIGNATURE Waylon N. Kuhn DELIVERY DATE Dec-16-2020 DRIVER'S SIGNATURE Waylon N. Kuhn

TRUCK TIME STAMP		DISPOSAL FACILITY		RECEIVING AREA	
IN: <u>  </u>	OUT: <u>  </u>	Name/No. <u>50151</u>			

Site Name/ Permit No. Halfway Facility / NM1-006 Phone No. 575-393-1079

Address 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One) YES    NO    If YES, was reading > 50 micro roentgens? (circle one) YES    NO   

PASS THE PAINT FILTER TEST? (Circle One) YES    NO   

TANK BOTTOMS					
1st Gauge	Feet <u>  </u> Inches <u>  </u>	B5&W/BBLS Received	<u>  </u>	BS&W (%)	<u>  </u>
2nd Gauge	<u>  </u>	Free Water	<u>  </u>		
Received	<u>  </u>	Total Received	<u>  </u>		

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?   

NAME (PRINT)

DATE

TITLE

SIGNATURE





# NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT)

Company Man Contact Information

Name: Amanda Davis

Phone No. \_\_\_\_\_

Operator No. Devon

Operators Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone No. NM-138206 01. RNM

**GENERATOR**NO. 456173

Permit/RRC No. \_\_\_\_\_

Lease/Well \_\_\_\_\_

Name &amp; No. \_\_\_\_\_

County Elly 1000 H 002

API No. \_\_\_\_\_

Rig Name &amp; No. \_\_\_\_\_

AFE/PO No. NOA

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)		
Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	Completion Fluid/Flow back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

Non-Exempt E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (ICLR) ignitability, corrosivity and reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from: Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID 20 Y - YARDS E - EACH

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME

DATE

SIGNATURE

TRANSPORTER	
Transporter's Name <u>Halo Services</u>	Driver's Name <u>Wynona Nulman</u>
Name <u>4990-70 Road</u>	Print Name <u>Wynona Nulman</u>
Address <u>Bloomfield New Mexico</u>	Phone No. <u>970-360-9492</u>
Phone No. <u>575-654-4415</u>	Truck No. <u>7-44</u>

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE Dec-16-2010 DRIVER'S SIGNATURE Wynona Nulman DELIVERY DATE Dec-16-2010 DRIVER'S SIGNATURE Wynona Nulman

TRUCK TIME STAMP		DISPOSAL FACILITY		RECEIVING AREA	
IN: _____	OUT: _____	Name/No. <u>50151</u>			

Site Name/ Permit No. Halfway Facility / NM1-006 Phone No. 575-393-1079

Address 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One) YES YES NO NO If YES, was reading > 50 micro roentgens? (circle one) YES YES NO NO

PASS THE PAINT FILTER TEST? (Circle One) YES YES NO NO

TANK BOTTOMS	
Feet	Inches
1st Gauge	BS&W/BBLS Received
2nd Gauge	Free Water
Received	Total Received

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT) Wynona Nulman DATE 12/16/10 TITLE Driver SIGNATURE Wynona Nulman



# NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT)

Company Man Contact Information

Name James G. DavisPhone No. 505-241-1111**GENERATOR**NO. **456174**Operator No. DEVON

Permit/RRC No.

Lease/Well

Name &amp; No.

County

API No.

Rig Name &amp; No.

AFE/PO No.

Operators Name

Address

City, State, Zip

Phone No.

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)		
Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	Completion Fluid/Flow back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS:

☐ DRILLING☐ COMPLETION☐ PRODUCTION☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount	
All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignitability, corrosivity and reactivity.	
Non-Exempt Other	*please select from Non-Exempt Waste List on back

QUANTITY 20 B - BARRELS 20 L - LIQUID 20 Y - YARDS 20 E - EACH

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME

DATE

SIGNATURE

TRANSPORTER	
Transporter's Name	Driver's Name
Address	Print Name
Phone No.	Phone No.
	Truck No.

I hereby certify that the above named material(s) was/were picked up at this Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE Dec 16 2020 DRIVER'S SIGNATURE Waylon Wilson DELIVERY DATE Dec 16 2020 DRIVER'S SIGNATURE Waylon Wilson

TRUCK TIME STAMP		DISPOSAL FACILITY		RECEIVING AREA	
IN:	OUT:			Name/No. <u>50131</u>	

Site Name/ Permit No. Halfway Facility / NM1-006 Phone No. 575-393-1079

Address 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One) YES YES NO NO If YES, was reading > 50 micro roentgens? (circle one) YES YES NO NO

PASS THE PAINT FILTER TEST? (Circle One) YES YES NO NO

TANK BOTTOMS			
Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge		Free Water	
2nd Gauge		Total Received	
Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? None

NAME (PRINT) Waylon Wilson DATE 12/16/20 TITLE Driver SIGNATURE Waylon Wilson



# NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT)

Company Man Contact Information

Name Amanda Davis

Phone No. \_\_\_\_\_

**GENERATOR**NO. 456175Tee Dancer #30 FederalOperator No. DevonPermit/RRC No.  
Lease/Well  
Name & No.

Operators Name \_\_\_\_\_

County

Eddy Co. #1002

Address \_\_\_\_\_

API No.

City, State, Zip \_\_\_\_\_

Rig Name &amp; No.

Phone No. nm 138266-01AFE/PO No. nm

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)		
Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	Completion Fluid/Flow back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), ignitability, corrosivity and reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID 20 Y - YARDS E - EACH

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME

DATE

SIGNATURE

TRANSPORTER	
Transporter's Name <u>Halo Services</u>	Driver's Name <u>Waylon Nelson</u>
Name <u>4590-70 Road</u>	Print Name <u>Waylon Nelson</u>
Address <u>Bloomfield New Mexico</u>	Phone No. <u>970-560-9492</u>
Phone No. <u>575-654-4415</u>	Truck No. <u>444</u>

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

Dec-17-2020 Waylon Nelson Dec-17-2020 Waylon Nelson

SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

TRUCK TIME STAMP		DISPOSAL FACILITY		RECEIVING AREA	
IN: _____	OUT: _____	Name/No. <u>50/51</u>			

Site Name/ Permit No. Halfway Facility / NM1-006 Phone No. 575-393-1079

Address 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One)

YES

NO

If YES, was reading &gt; 50 micro roentgens? (circle one)

YES

NO

PASS THE PAINT FILTER TEST? (Circle One)

YES

NO

TANK BOTTOMS			
1st Gauge	Feet	Inches	BS&W/BBLs Received
2nd Gauge			Free Water
Received			Total Received

I hereby certify that the above load material has been (circle one): ACCEPTED 12/17 Adm If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE



Incident ID	NAB1904955555
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Lupe Carrasco Title: Environmental Professional

Signature: Lupe Carrasco Date: 1/28/21

email: lupe.carrasco@dvn.com Telephone: (575) 748-0765

### OCD Only

Received by: Robert Hamlet Date: 6/7/2021

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

Closure Approved by: Robert Hamlet Date: 6/7/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

**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 16104

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 16104
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAB1904955555 ICE DANCER 30 FEDERAL COM #002H, thank you. This closure is approved.	6/7/2021