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

			Resp	OHSH	ole I ally						
Responsible I	Party: Enter	prise Field Ser	vices, LLC	OGRID: 15	1618						
Contact Name		The state of the s	Contact Tel	elephone: 505-599-2286							
Contact email	:tjlong@ep	rod.com	Incident # (d	(assigned by OCD): NVF1831839225							
Contact maili 87401	ng address:	614 Reilly Ave,	Farmington, NN	VI							
			Location	of R	elease So	urce					
atitude 36.4	85104		Longitude	<u>-107.8</u>	86305	(NAD 83 in	decimal degrees to 5 decimal places)				
Site Name Tr	unk 2C				Site Type N	atural Gas Gathe	ring Pipeline				
Date Release	Discovered:	10/19/2018			Serial Numb	per (if applicable): NN	0 015563				
II. it I attan	Castian	Township	Range		Count	v	CHOPPING CONTRACTOR				
Unit Letter K	Section 15	26N	10W		San Ju		NMOCD				
			ribal Private (1	RI M		MAR 2 1 2019					
Surface Owner	r: State	△ rederal □ 11					DISTRICT III				
			Nature and	d Vo	lume of R	Kelease	** others and				
		(s) Released (Select a	ll that apply and attach	calcula	tions or specific	c justification for the volumes provided below)					
Crude Oi	l	Volume Release	ed (bbls)			Volume Recovered (bbls)					
Produced	Water	Volume Release	ed (bbls)			Volume Recovere	d (bbls)				
		Is the concentra produced water	tion of dissolved c >10,000 mg/l?	chlorid	e in the	☐ Yes ☐ No					
	ate	Volume Release	ed (bbls): Estimat	ted 10	-12 barrels.	Volume Recovered (bbls): None					
Natural C	as	Volume Release	ed (Mcf): 10 MCF		Volume Recovered (Mcf): None						
Other (de	scribe)	Volume/Weight	Released (provide	s):	Volume/Weight Recovered (provide units)						
pipeline. The stained by a remediation: November 1,	e pipeline wa condensate/ standard (10 , 2018 the re	as isolated, depres water mix. Enterp ppm Benzene, 50 lease was remedi	surized, locked out orise has determine oppm BTEX, 2,500 ated. The final exc opther smaller exc	ut and this of the control of the co	tagged out. Al release was TPH and 20,0 n dimensions ons were requi	n area of approxima required to be reme 200 ppm Chloride). measured approximate the ired to remediate the red to remediate red to red red to red red to red red to red red to red red red red red red red red	is and condensate on Trunk 2C tely 30 feet wide by 15 long was diated to the third tier NMOCD From October 26, 2018 to nately 33 feet long by 15 feet wide a flow paths of the released fluids.				

approved land farm facility. A third party closure report is included with this "Final." C-141.



Form C-141 Page 2

State of New Mexico Oil Conservation Division

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: Jon E. Fields Title: Director, Field Environmental Date: 713-381-6684 Telephone: 713-381-6684
Received by: Date: 3/21/19
Received by: Date: 3/21/17
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: Cory Smt Spec.



March 8, 2019

7015 0640 0003 1839 5006 Return Receipt Requested

EMNRD Oil Conservation Division Aztec District III Office Attention: Vanessa Fields 1000 Rio Brazos Road Aztec, New Mexico 87410

7015 0640 0003 1839 4993 Return Receipt Requested

BLM Farmington Field Office Lands Team Attention: Whitney Thomas 6251 College Blvd. Farmington, New Mexico 87401

NMOCD MAR 2 1 2019 DISTRICT III

RE: Release of Natural Gas and Condensate Closure Report

Enterprise Field Services, LLC - Trunk 2C

San Juan County

Sir or Madam:

Enterprise Field Services, LLC is submitting the closure report on the Trunk 2C pipeline release of natural gas and condensate that occurred on October 19, 2018.

If you have questions or require additional information, please contact Thomas Long, Senior Field Environmental Scientist at (505) 599-2286 or Brian Stone, Field Environmental Manager at (970) 263-3020.

Thank you,

Jon E. Fields

Director, Field Environmental

Rodney M. Sartor

Senior Director, Environmental

/mbp Attachments



NMOCD

MAR 2 1 2019

DISTRICT III

CLOSURE REPORT

Property:

Trunk 2C Pipeline Release (October 2018) SW 1/4, S15 T26N R10W San Juan County, New Mexico

> January 22, 2019 Apex Project No. 725040112528

> > Prepared for:

Enterprise Field Services, LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long

Prepared by:

Chad D'Aponti Project Scientist

Kyle Summers, CPG

Branch Manager / Senior Geologist

umms

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CLOSURE REPORT

Trunk 2C Pipeline Release (October 2018) SW 1/4, S15 T26N R10W San Juan County, New Mexico

Apex Project No. 725040112528

1.0 INTRODUCTION

1.1 Site Description & Background

The Trunk 2C Pipeline Release site, referred to hereinafter as the "Site", is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in the southwest (SW) ¼ of Section 15, Township 26 North, Range 10 West, in rural San Juan County, New Mexico (36.4851°N, 107.8863°W). The Site is located on land managed by the Bureau of Land Management (BLM). The Site is surrounded by rangeland that is periodically interrupted by oil and gas production and gathering facilities, including two (2) Enterprise natural gas pipelines that traverse the area from approximately southeast to northwest.

On October 19, 2018, a release of natural gas occurred at a section of the Trunk 2C pipeline. The surface expression of the release was identified by soil discoloration at the ground surface and two (2) flow paths diverging southwest and southeast from the point of release. On October 24, 2018, Enterprise initiated excavation activities to facilitate the repair of the pipeline, and to remediate potential petroleum-hydrocarbon impact resulting from the release.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-Site soils to below the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) closure criteria using the New Mexico EMNRD OCD's New Mexico Administrative Code (NMAC) 19.15.29 *Releases* as guidance.

2.0 CLOSURE CRITERIA

In accordance with the New Mexico ENMRD OCD's NMAC 19.15.29 *Releases*, Apex Companies, LLC (Apex) utilized the general site characteristics obtained during the implementation of closure activities and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site. Supporting documentation and figures associated with the following bullets are provided in **Appendix B**.

 No water wells were identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database.



- Several cathodic-protection (cathodic) well records were found in the New Mexico EMNRD imaging database within the approximate search radius of one-half mile. The shallowest water recorded for a cathodic well within the search area was 140 feet below grade surface (bgs) at the Huerfano Unit #178 which is approximately 0.6 miles from the Site. The closest cathodic well (Huerfano Unit #119) records indicate a depth to water of 460 feet bgs at approximately 0.4 miles from the Site. The remaining cathodic well records for wells within 0.5 miles of the Site indicate water depths of approximately 150 feet bgs, or greater.
- The Site is not located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse. The closest "blue line" ephemeral wash is located approximately 735 feet east of the Site.
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet from a permanent residence, school, hospital, institution, or church.
- No springs or private domestic fresh water wells used by less than five (5) households from domestic or stock water purposes were identified within 500 feet of the Site.
- No fresh water wells or springs were identified within 1,000 feet of the Site.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is not located within a 100-year floodplain.

Based on the evaluation of the site characterization, cleanup goals for soils remaining in place at the Site include:



	Closure Criteria for Soil	s Impacted by a Release	《大学》
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 300.0 or SM4500 CI B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
> 100 feet	(GRO+DRO)	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On October 19, 2018, a release of natural gas was identified at a section of the Trunk 2C pipeline. The pipeline was temporarily taken out of service pending repairs. On October 24, 2018, Enterprise initiated excavation activities to facilitate the repair of the pipeline and to remediate potential petroleum hydrocarbon impact resulting from the release. The pipeline was subsequently repaired and placed back into service. During the pipeline repair and corrective action activities, OFT Construction, Inc. provided heavy equipment and labor support while Apex provided environmental support.

The final primary excavation measured approximately 33 feet long by 15 feet wide. The maximum depth of the primary excavation measured approximately 11 feet bgs. The southwest flow path (FP1) excavation measured approximately 42 feet in length and nine (9) feet in width, with a maximum depth of 0.5 feet bgs. The southeast flow path (FP2) excavation measured approximately 25 feet in length and 21 feet in width, with a maximum depth of three (3) feet bgs.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty sand underlain by sandstone.

A total of approximately 430 cubic yards of petroleum hydrocarbon affected soils and 65 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation will be backfilled with clean, imported fill and contoured to surrounding grade once permanent pipeline repairs are completed.

Soil sample locations, the approximate dimensions of the excavation with respect to the pipeline, and the approximate location of the release flow paths, are presented in **Figure 3** in **Appendix A**. Photographic documentation of the field activities is included in **Appendix D**.



3.2 Soil Sampling Program

Apex field screened soil samples from the excavation utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp and a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system to quide excavation extents.

Apex's soil sampling program included the collection of 10 composite soil samples (S-1 through S-10) from the sidewalls and the base of the final primary excavation for laboratory analysis. In addition, 10 composite soil samples (FP-1a through FP-1b, and FP-2a through FP-2h) were collected from the flow path excavations for laboratory analysis. A New Mexico EMNRD OCD representative was at the Site for a portion of the sampling activities and approved the final sampling locations. Soils associated with composite soil samples S-7 and S-8 (excavation floor samples), and FP-2e (sidewall sample) were removed by excavation and transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation.

Soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

3.3 Laboratory Analytical Methods

The composite soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method 8021/8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method 8015, and chlorides using EPA Method 300.0. Laboratory results are summarized in **Table 1** in **Appendix E**. The executed chain-of-custody form and laboratory data sheets are provided in **Appendix F**.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to oil and gas releases, the New Mexico EMNRD OCD utilizes NMAC 19.15.29 *Releases*, that establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Soil Samples

Apex compared the BTEX, TPH, and chloride laboratory analytical results or practical quantitation limits (PQLs) associated with the composite soil samples (S-1 through S-10, FP-1a through FP-1b and FP-2a through FP-2h) to the New Mexico EMNRD OCD closure criteria. Composite soil samples S-7, S-8 and FP-2e were removed by excavation and transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation, and are not included in the following discussion.

- Laboratory analytical results indicate that benzene concentrations in soils remaining in place at the Site excavation do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 10 mg/kg.
- Laboratory analytical results indicate that total BTEX concentrations in soils remaining in
 place at the Site excavation do not exceed the laboratory PQLs or the New Mexico
 EMNRD OCD closure criteria of 50 mg/kg.



- The laboratory analytical results of composite soil samples collected from soils remaining
 in place at the Site excavation indicate combined TPH GRO/DRO concentrations ranging
 from below the PQLs to 160 mg/kg (FP-2f); these concentrations are below the
 applicable New Mexico EMNRD OCD closure criteria of 1,000 mg/kg.
- The laboratory analytical results of composite soil samples collected from soils remaining
 in place at the Site excavation indicate combined TPH GRO/DRO/MRO concentrations
 ranging from below the PQL to 270 mg/kg (FP-2f); these concentrations are below the
 applicable New Mexico EMNRD OCD closure criteria of 2,500 mg/kg.
- Composite soil sample S-9, collected from soils remaining in place near the pipeline point
 of release, exhibited a chloride concentration of 35 mg/kg that is below the applicable
 New Mexico OCD closure criteria of 20,000 mg/kg. Composite soil sample results from
 soils remaining in place at the Site, do not indicate chloride concentrations above the
 laboratory PQLs or the applicable New Mexico OCD closure criteria of 20,000 mg/kg.

Laboratory analytical results are summarized in Table 1 in Appendix E.

5.0 RECLAMATION AND RE-VEGETATION

The excavation is still partially open, awaiting permanent pipeline repairs. The excavation will be backfilled with clean, imported fill and contoured to the surrounding grade once permanent pipeline repairs are completed. Enterprise will re-seed the Site with a seeding mixture approved by the BLM Farmington Field Office at the beginning of the next favorable growing season.

6.0 FINDINGS AND RECOMMENDATIONS

The Trunk 2C Pipeline Release Site is located within the Enterprise pipeline ROW in the SW ¼ of Section 15, Township 26 North, Range 10 West, in rural San Juan County, New Mexico. The Site is located on land managed by the BLM. The Site is surrounded by rangeland that is periodically interrupted by oil and gas production and gathering facilities, including two (2) Enterprise natural gas pipelines which traverse the area from approximately southeast to northwest.

On October 19, 2018, a release of natural gas occurred at a section of the Trunk 2C pipeline. The surface expression of the release was identified by soil discoloration at the ground surface and two (2) flow paths diverging southwest and southeast from the point of release. On October 24, 2018, Enterprise initiated excavation activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- The final primary excavation measured approximately 33 feet long by 15 feet wide. The maximum depth of the excavation measured approximately 11 feet bgs. The southwest flow path (FP1) excavation measured approximately 42 feet in length and nine (9) feet in width, with a maximum depth of 0.5 feet bgs. The southeast flow path (FP2) excavation measured approximately 25 feet in length and 21 feet in width, with a maximum depth of three (3) feet bgs.



- Prior to backfilling, 10 composite soil samples were collected from the final primary excavation for laboratory analysis. In addition, 10 composite soil samples were collected from the flow path excavations. Based on soil analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.
- A total of approximately 430 cubic yards of petroleum hydrocarbon affected soils and 65 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation will be backfilled with clean, imported fill and contoured to surrounding grade once permanent pipeline repairs are completed.

Based on laboratory analytical results, no benzene, BTEX, or TPH exceedances were identified in soil or sandstone remaining in place. Enterprise received regulatory approval for the remediation standard on October 23, 2018. Regulatory correspondence is provided in Appendix G.

7.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

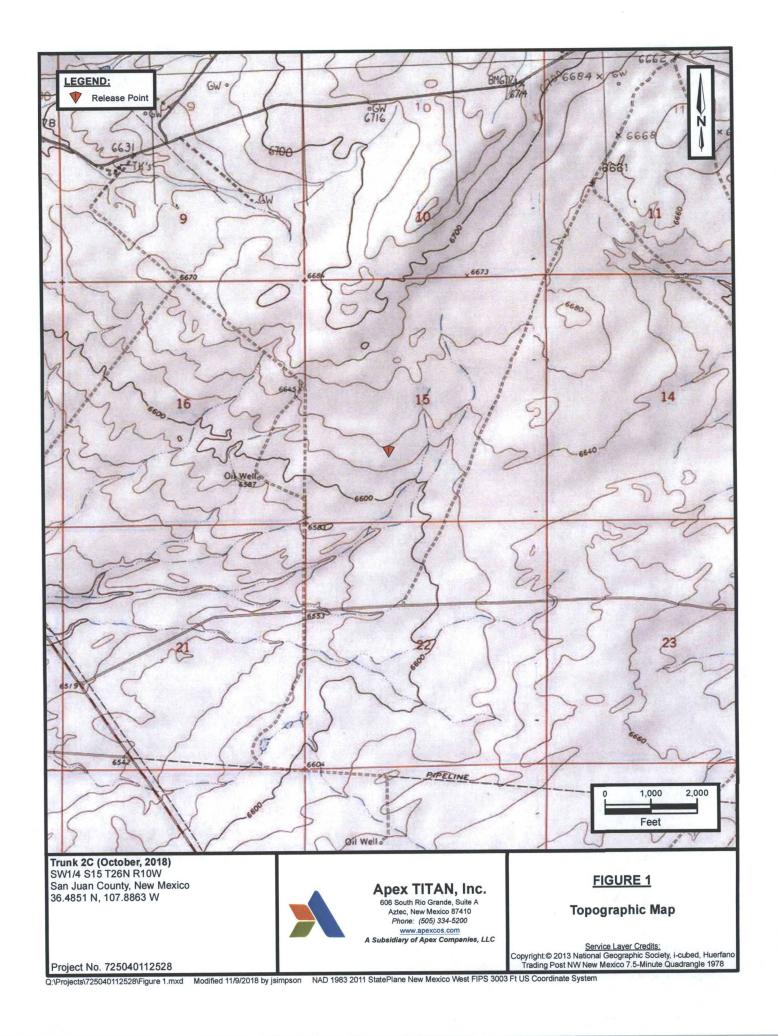
Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

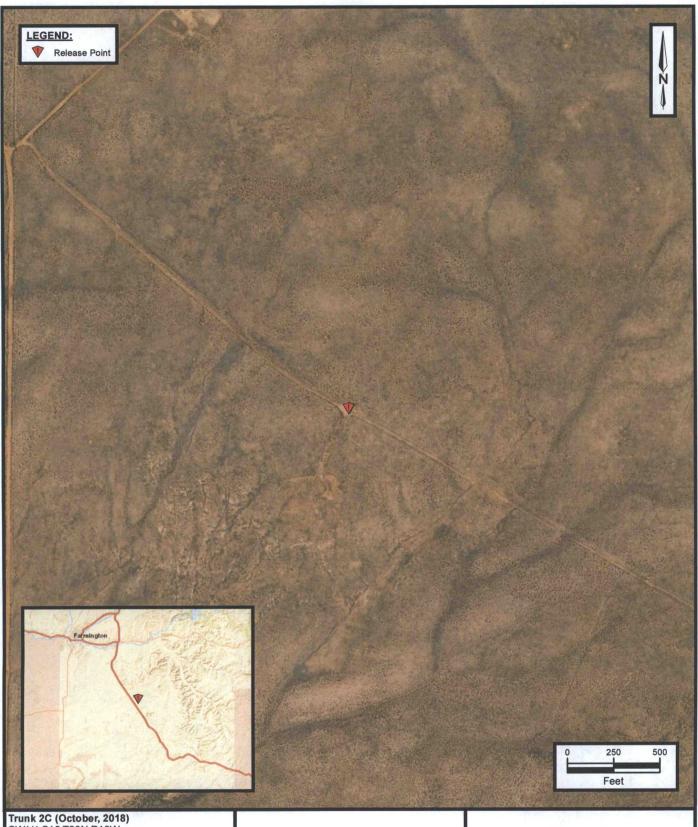
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.



APPENDIX A

Figures





SW1/4 S15 T26N R10W San Juan County, New Mexico 36.4851 N, 107.8863 W



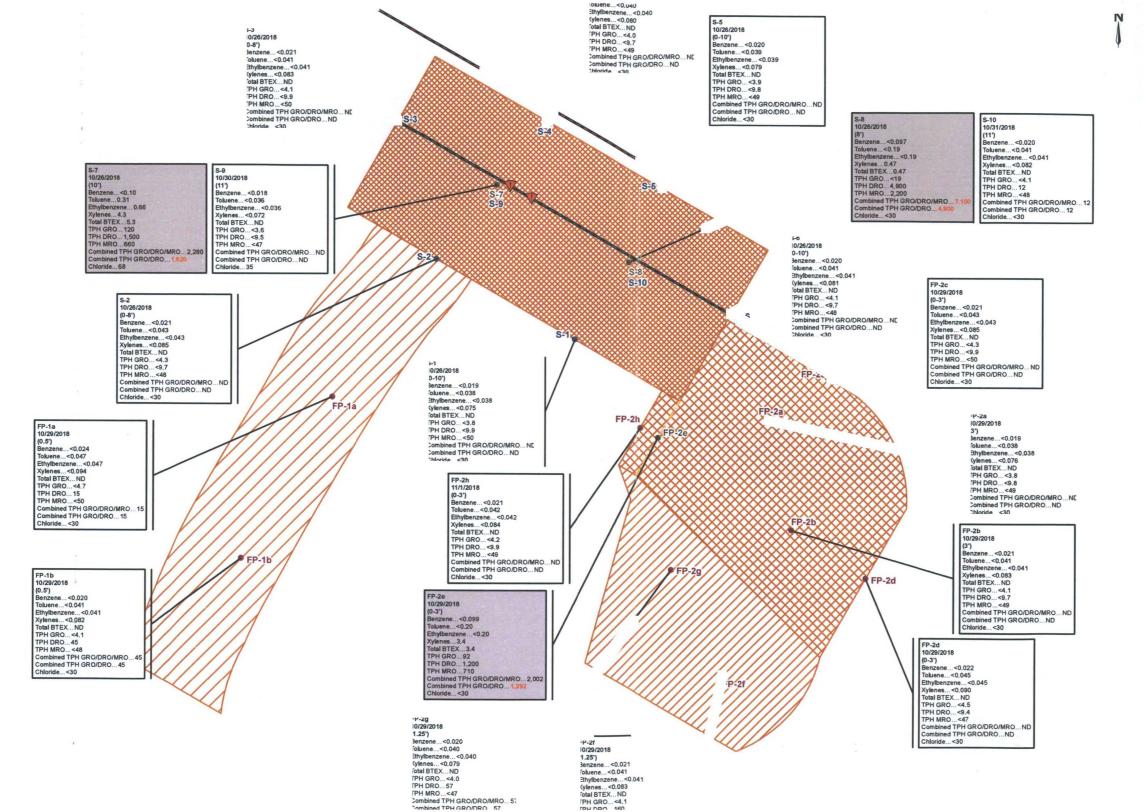
Apex TITAN, Inc. 606 South Rio Grande, Suite A Aztec, New Mexico 87410 Phone: (505) 334-5200 www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 2

Site Vicinity Map

Service Laver Credits:

Sources: Eari, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Eari Japan,
METI, Eari China (Hong Kong), Eari Korea, Eari (Thalland), NGCC, © OpenStreetMap
contributors, and the GIS User Community, Source: Eari, DigitalGlobe, GeoEye,
Earthstar Geographics, CNES/Airbus DS, USGA, USGS, AeroGRID, IdN, and the GIS
User Community, Aerial Photograph March 2016



- Flowpath Composite Soil Sample Location
- Composite Soil Sample Location Removed by
- Previous Extent of Excavation Wall
- Enterprise Trunk 2C Pipeline Location
- Enterprise Lateral 6A-38 Pipeline Location
- X95790 Well Tie Pipeline Location (Abandoned)
- Extent of Excavation (11-Feet BGS)
- Extent of Excavation (3-Feet BGS)
- Extent of Excavation (1.25-Feet BGS)
- Extent of Excavation (0.5-Feet BGS)

NOTE:

All Concentrations Are Listed in mg/Kg.

All Depths Are Listed in Feet BGS.

Concentrations in Red Exceed the Applicable NM EMNRD Closure Criteria.

Callouts in Gray Denoted Sample Location Removed by Excavation.

ND - Not Detected



Apex TITAN, Inc.

606 South Rio Grande, Suite A Aztec, New Mexico 87410 Phone: (505) 334-5200 www.apexcos.com

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Trunk 2C (October, 2018) SW1/4 S15 T26N R10W San Juan County, New Mexico 36.4851 N, 107.8863 W

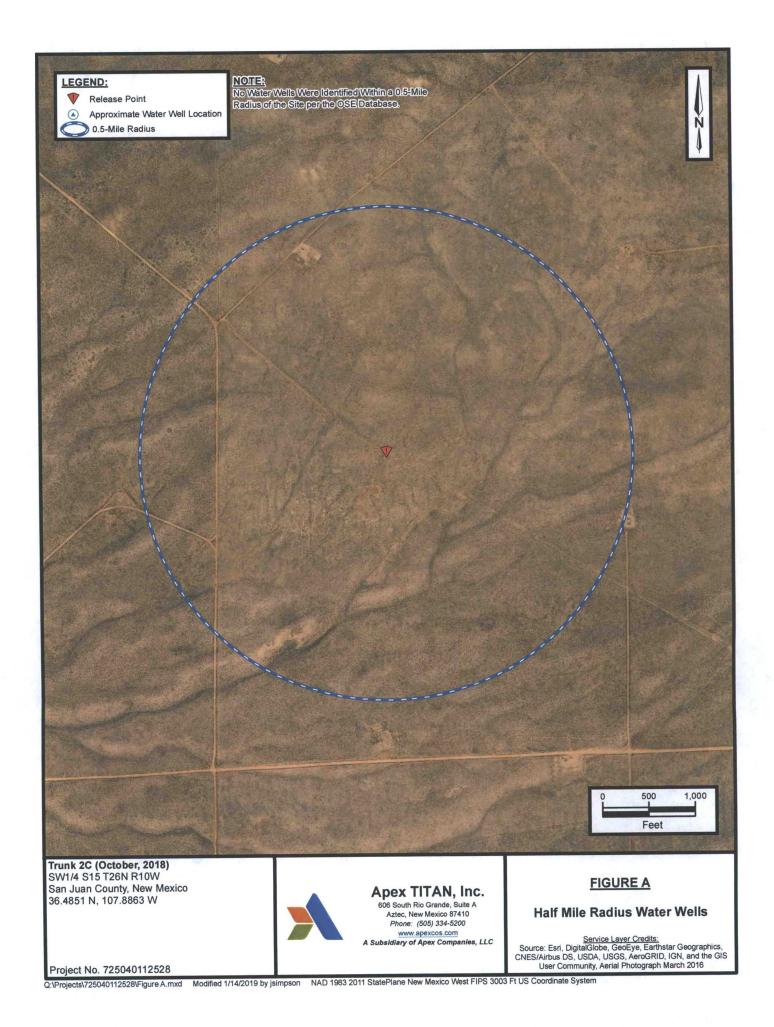
Project No. 725040112528

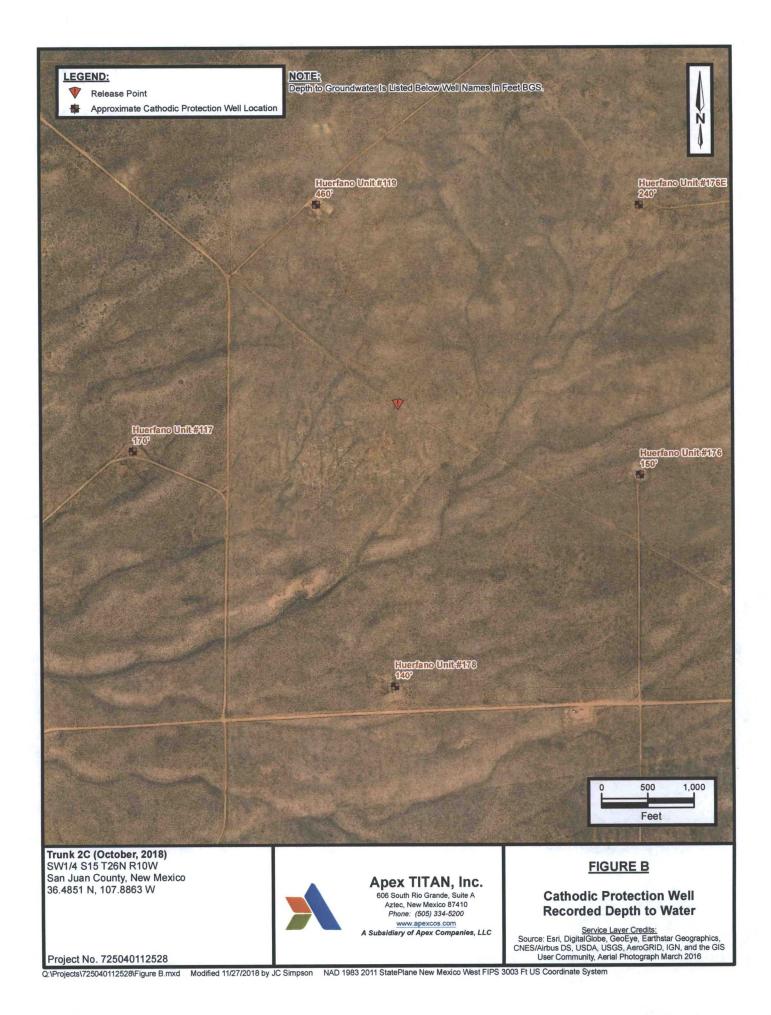
FIGURE 3

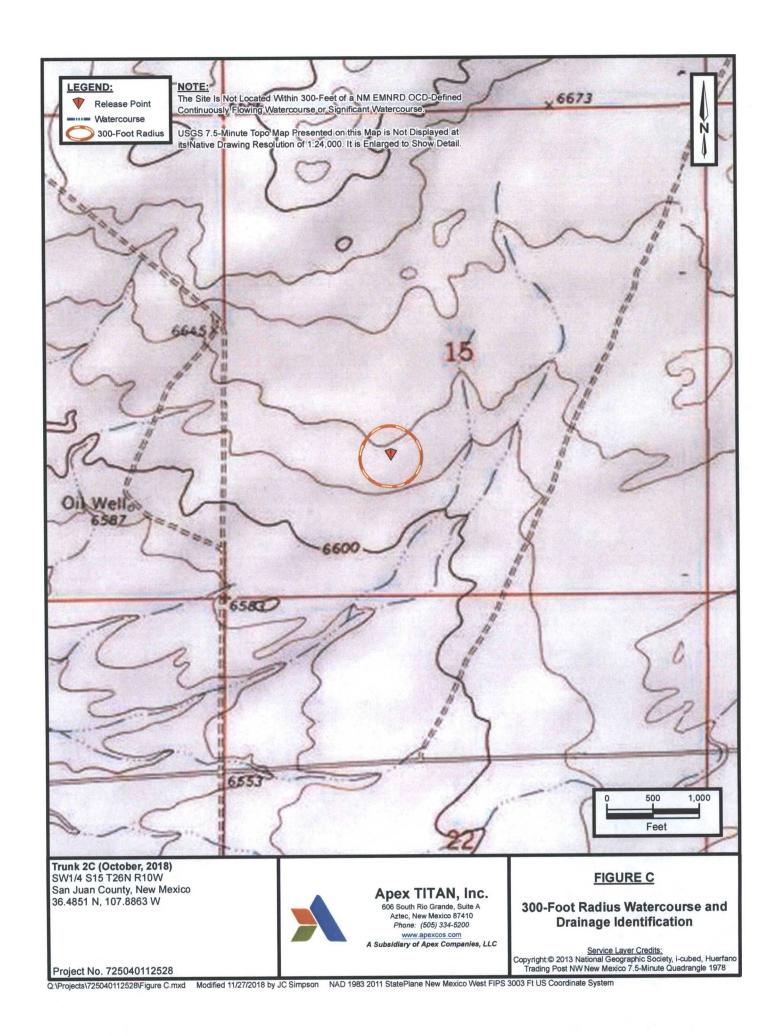


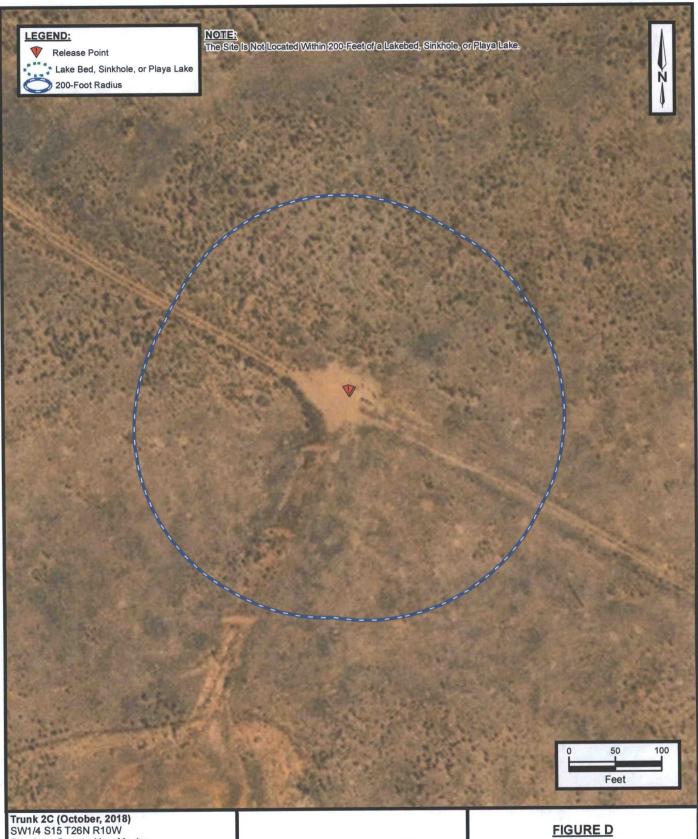
APPENDIX B

Siting Figures and Documentation









San Juan County, New Mexico 36.4851 N, 107.8863 W

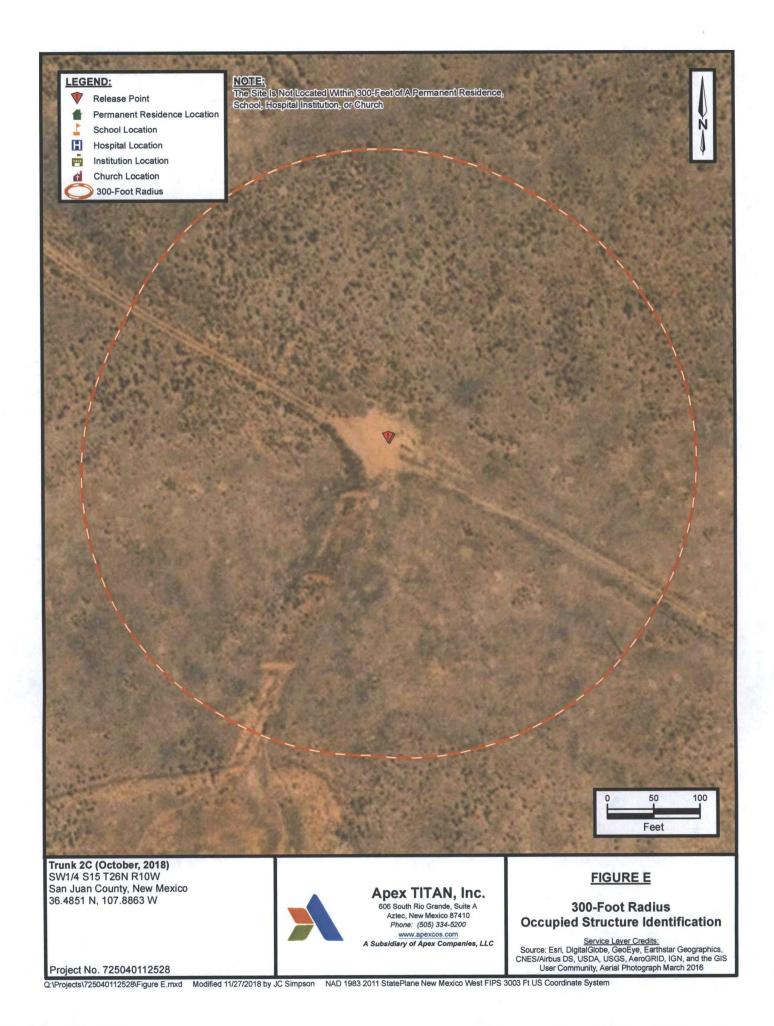


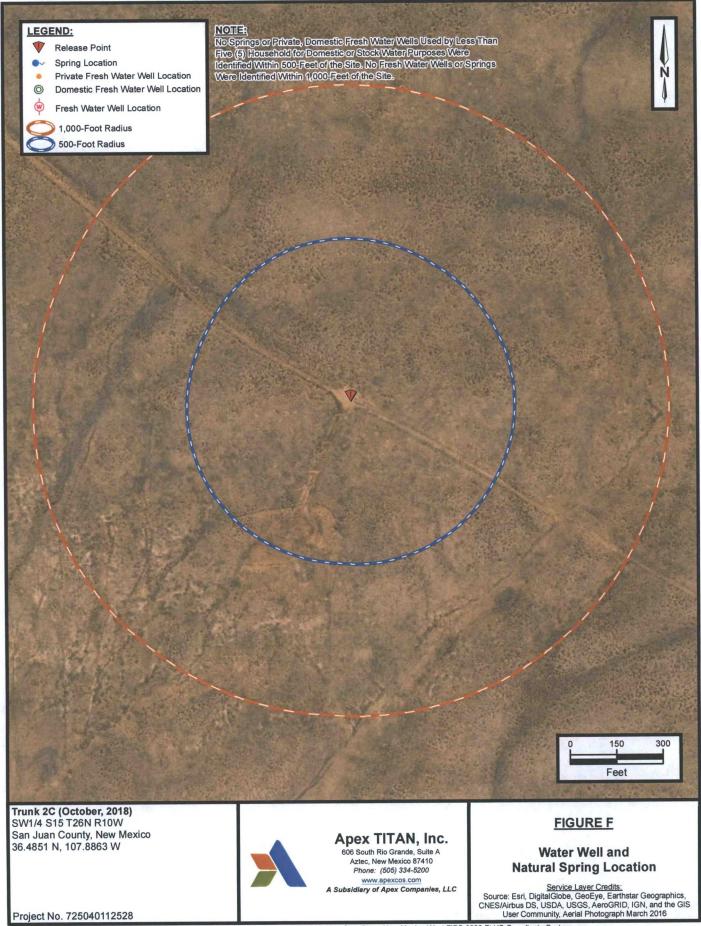
Apex TITAN, Inc. 606 South Rio Grande, Suite A Aztec, New Mexico 87410 Phone: (505) 334-5200 www.apexcos.com
A Subsidiary of Apex Companies, LLC

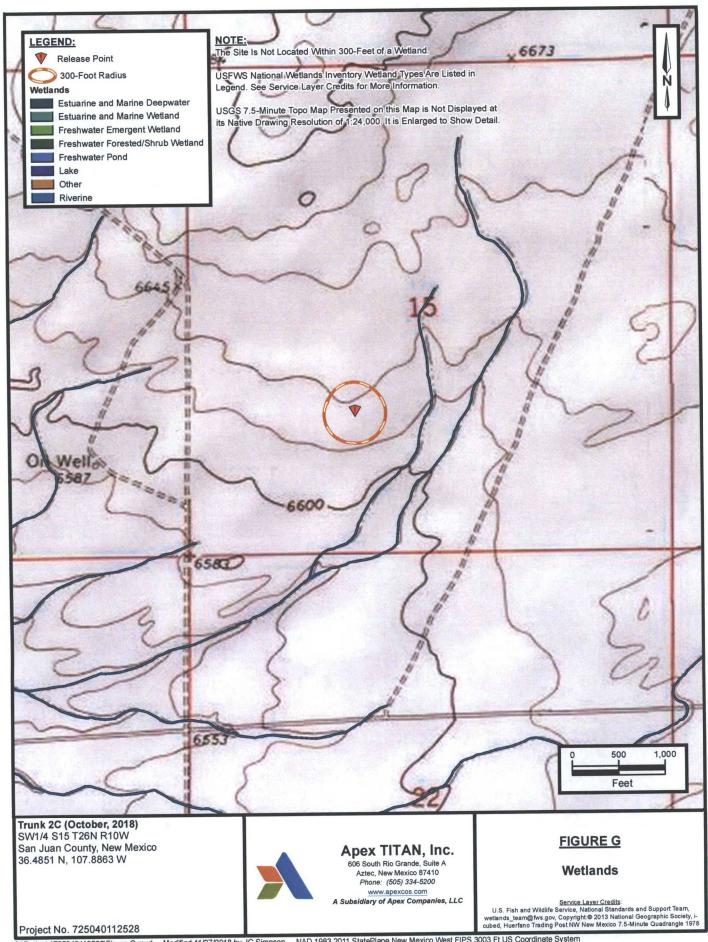
200-Foot Radius Surface Water **Feature Identification**

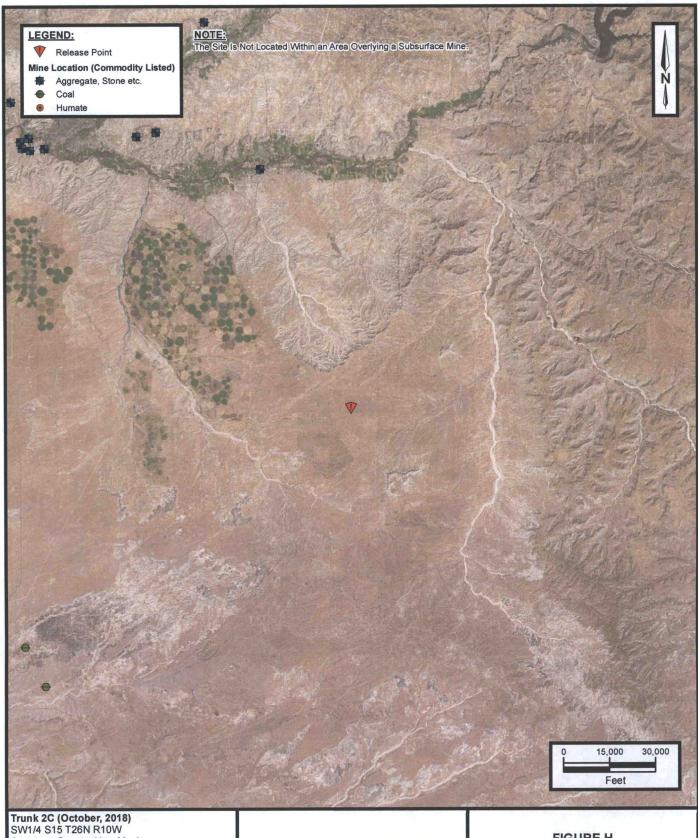
Service Laver Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Aerial Photograph March 2016

Project No. 725040112528









San Juan County, New Mexico 36.4851 N, 107.8863 W



Apex TITAN, Inc.

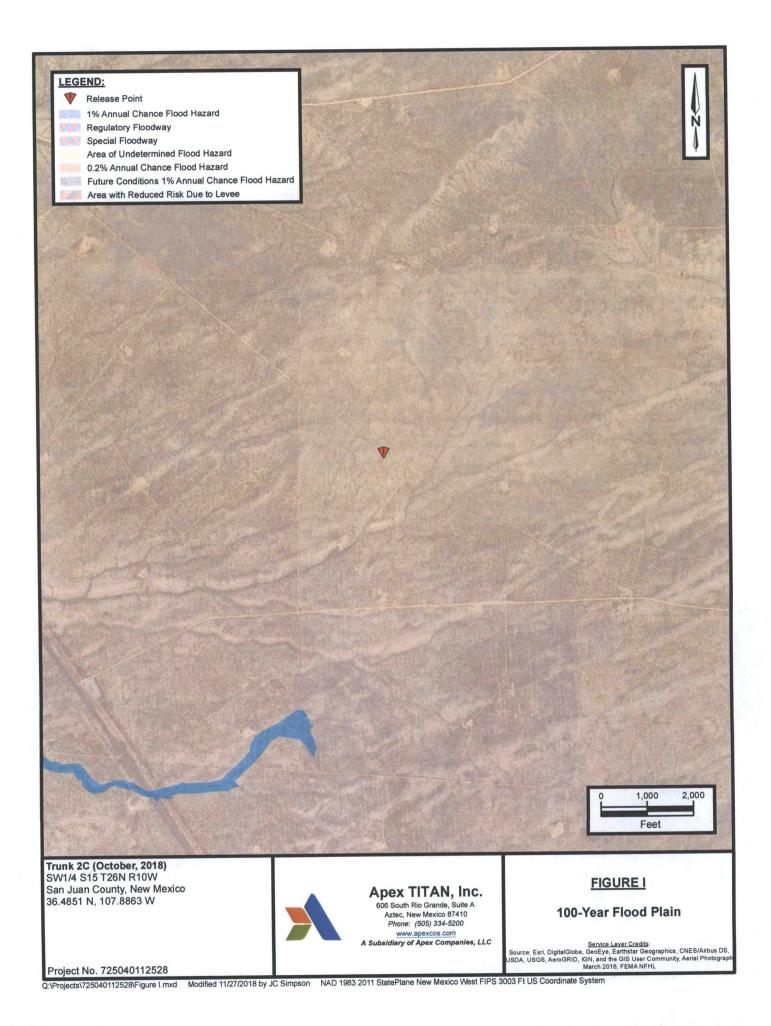
606 South Rio Grande, Suite A Aztec, New Mexico 87410 Phone: (505) 334-5200 www.apexcos.com

A Subsidiary of Apex Companies, LLC

FIGURE H

Mines, Mills, and Quarries

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Aerial Photograph March 2016





New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

UTMNAD83 Radius Search (in meters):

Easting (X): 241451.41

Northing (Y): 4041618.13

Radius: 1609.3

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



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 241451.41

Northing (Y): 4041618.13

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

Radius: 1609.3

	Cathodic Protec		种和影響的特色的							
Trunk 2C (October 2018) Pipeline Release										
Well Name	Location	Depth to Water	Approximate Distance to Site*							
Huerfano Unit #176	Unit SE, Sec 15 T26N R10W	150'	0.5 miles							
Huerfano Unit #119**	Unit NW, Sec 15 T26N R10W	460'	0.4 miles							
Huerfano Unit #176E	Unit H, Sec 15 T26N R10W	240'	0.6 miles							
Huerfano Unit #117	Unit SE, Sec 16 T26N R10W	170'	0.6 miles							
Huerfano Unit #178**	Unit C, Sec 22 T26N R10W	140'	0.6 miles							

^{*} Based on assumed well pad identification on aerial imagery

^{**} Some locations have multiple CPS forms

30-045-05879

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: UnitSE Sec. 16 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #117
cps 971w
Elevation 6582 Completion Date9/5/75 Total Depth 350' Land Type* N/A
Casing, Sizes, Types & DepthsN/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 170'
Depths gas encountered: N/A
Type & amount of coke breeze used: 3400 lbs.
Depths anodes placed: 310',300',290', 280', 270',240', 230', 220',210', 200
Depths vent pipes placed: N/A
Vent pipe perforations: 200' Remarks: (200') MAY 2.
Remarks: (195.11)

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

E! Paso Natural Gas Company Form 7-238 (Rev. 1-69)"

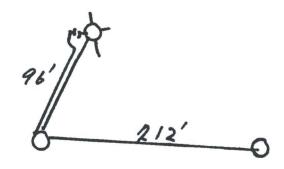
WELL CASING CATHODIC PROTECTION CONSTRUCTION REPORT DAILY LOG



Completion Date Drilling Log (Attach Hereto). Well Name SE 16 - 26N-10W Work Order No. Type & Size Bit Used 53950 Total Lbs. Coke Used Lost Circulation Mat'l Used Total Drilling Rig Time 400 Anode Depth # 4 2 80 = 5 270 = 6 240 = 7 230 = 8 #4 4.0 #5 3.4 #6 3.6 #7 4.0 # 8 4. 8 Anode Depth # 16 # 17 # 18 # 19 # 15 # 11 Anode Output (Amps) # 19 # 16 # 15 # 12 **Total Circuit Resistance** 2850 Ohms Volts PerforaTed ANOde STopped All Construction Completed

Eduard R. Parelike

GROUND BED LAYOUT SKETCH





MORGAN DRILLING COMPANY

P.O. Box 326 e Broken Bow, Oklahoma 74728

Night 420	-6860 -3248		ERVICE AR	DRESS A	Work Order No. 53451-14 56-2 Work Order No. 5451-14 56-2 Work Order N
Material	From	То	Water Strata	Time	
ilie i trate	3/2	750	170		SERVICE PERFORMED: TOTAL DEPTH 334' RIG TIME WATER TRUCK
Date started				19	DRILLERS CERTIFICATION This well was drilled under my supervision and the report is true to the hof my knowledge. Name Address Well driller's license number Signed Date

1200

Customer's	Signature	
Ву	C.L.	Hisis

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30-045-20265

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: UnitSE Sec. 15 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #176
cps 969w
Elevation 6631 Completion Date 9/5/75 Total Depth 325' Land Type* N/A
Casing, Sizes, Types & Depths N/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used
N/A
Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 150'
Depths gas encountered: N/A MAY31 1991
Type & amount of coke breeze used: 3000 lbs. OIST. 3
Depths anodes placed: 285',275', 250',240', 230',220', 190', 180', 170', 16
Depths vent pipes placed: N/A
Vent pipe perforations: 200'
Remarks: gb #1

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

30-045-20282

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit C Sec. 22 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #178
cps 980w
Elevation 6627 Completion Date 9/15/87 Total Depth 360 Land Type* N/A
Casing, Sizes, Types & Depths N/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible: Fresh, Clear, Salty, Sulphur, Etc. 140'
Depths gas encountered: N/A
Type & amount of coke breeze used: N/A
Depths anodes placed: 320', 305', 295', 285', 275', 265', 255', 245', 235', 225'
Depths vent pipes placed: N/A DEGETYER
Vent pipe perforations: UP TO 130' WAY31 1991
Remarks: Gb #2.

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

FM-07-0238 (Rev 10-82) CATHODIC PROTECTION CONSTRUCTION REPORT DAILY LOG

Drilling Log (Astach Hereto)			Completion	Date 9-15-8-7
CPS # Well Name, Lis	ne or Plant:	Work Order	Static:	Ins. Union Checker
1.000	fand 178		.70 w	Dossa D Bad
980w				
Location	e Size: Anode Type:		Size Bit:	
NO 22-2670 2	2"x60" D	riron	694	
Depth Drilled Depth Logg	od Druking Rig Time	Total Liss. Coke Used	Lost Circulation Mat'l Used	No Secta Mud Used
		275 26	51., 7551., 29	15 235 225
				1 6.8 . 106.2
	35.8 #4 516	15 7.8 165,2	1 1 7 6 10 12 8 6.	1 10 0 0
Anode Depth # 11 # 12 #	13 # 14	# 15 # 16	# 17 # 18	# 19 # 20 E
Anode Output (Amps)	-			
# 11 # 12 # 12		* 15	# 17 # 18	# 19 # 20
Voits // 4 Amps	20.8 chms	55		TOTAL
Remarks: On illes so	il water	valat 1	yo'. Jenx	pipe 15
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Rectifier Size:V	A 4300 588.			
Addn'l Depth	388.		All Con	nstruction Completed
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Ditch & 2 Cable:		3-		10.0
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10' Stub Pole:	<i>→</i>		T	1
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BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141 AZTEC, NEW MEXICO 87410

CPS 980W

COMPANY Merid	idn	DAIL	Y DRILLING REPORT	9-15	19 67
WELL NAME:		WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:
Huerfand		178	22	26 N	pw
160	WATER AT:	FEET:	HOLE MADE:	360 ft	
		DESCRIPTION OF	FORMATION		
FROM	то		FORMATION IS		COLOR
0	30	5	and,		tan
30	130	SandySha	Sond		Grey Purpe
130	160	Wafer	Sand	•	Greg
160	170	Sand	Stone		are
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200	210	Sano	15tone		Crev
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REMARKS:	iater samp	le at 1	160 Ft.		
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MERIDIAN OIL

P. O. BOX 4289-Phone 327-0251
FARMINGTON, NM Date 7-15

DEEP WELL GROUNDBED LOG

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30-045-20282

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Loc	cation: Unit NW Sec. 22 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced	HUERFANO UNIT #178
	cps 980w
Elevation 6606' Completion Date 9/3/75 To	otal Depth 300' Land Type* N/A
Casing, Sizes, Types & Depths N/A	
If Casing is cemented, show amounts & t	ypes usedN/A
If Cement or Bentonite Plugs have been N/A	placed, show depths & amounts used
Depths & thickness of water zones with	description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 1	50'
Depths gas encountered: N/A	
Type & amount of coke breeze used: 29	00 lbs.
Depths anodes placed: 250', 240', 230', 22	0', 210', 200', 180', 170', 160', 150'
Depths vent pipes placed: N/A	e parine h
Vent pipe perforations: N/A	MAY 3 1 1991
Remarks: //gb #1.	

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

El Paso Natural Gas Company Form 7-238 (Rev. 1-69)

Volts //. 0

WELL CASING CATHODIC PROTECTION CONSTRUCTION REPORT DAILY LOG

Completion Date

Drilling Log (Attach Hereto).

Amps /5.0

Ohms Ø

Location CPS No. Well Name 72-26-10 Type & Size Bit Used Work Orde Total Lbs. Coke Used Lost Circulation Mat'l Used Anode Hole Depth Total Drilling Rig Time No. Sacks Mud Used Anode Depth #8/70 # 6.200 Anode Output (Amps) = 5 4, C # 63. #71.6 # 8 2.4 Anode Depth # 15 # 16 # 18 # 11 # 12 # 13 # 14 Anode Output (Amps) # 17 # 12 # 13 # 15 # 16 # 18 No. 8 C.P. Cable Used Total Circuit Resistance

3 x 22. All Construction Completed

GROUND BED LAYOUT SKETCH

· 45.5.55 .

9-2 47-3-7 5 DAILY DRILLING REPORT

LEASE				WELL NO.9	04 - 40	CON	TRACTOR			R	IG NO.	3991	REPO	RT NO		D	ATE		19
CEMOL			MORNIN		20 0				D	AYLIGHT						EVENING			
Driller				Total Men In C	rew.	182	Driller			Total Men In	Crew		Driller				Total Men In	Crew	
FROM	7	го	1	FORMATION	WT-BIT	R.P.M.	FROM	T	то	FORMATION	WT-B	IT R.P.M.	FROM		то	F	FORMATION	WT-BIT	R.P.
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YPE				DOWN ON KELLY			TYPE			DOWN ON KELLY			TYPE				DOWN ON KELLY		
AKE				TOTAL DEPTH			MAKE			TOTAL DEPTH			MAKE				TOTAL DEPTH		
	RECORD		MU	D, ADDITIVES USED	AND RECI	IVED		RECORD		MUD, ADDITIVES USED	AND REC	EIVED	мир	RECORD		MUD,	ADDITIVES USED	AND RECEI	VED
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EL PASO NATURAL GAS COMPANY ENGINEERING DEPARTMENT

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30-045-20290

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit SE Sec. 22 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #177
cps 981w
Elevation 6627' Completion Date 9/4/75 Total Depth 540' Land Type* N/A
Casing, Sizes, Types & Depths N/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible: Fresh, Clear, Salty, Sulphur, Etc. WET AT 330'
Depths gas encountered: N/A
Type & amount of coke breeze used: 5500 lbs.
Depths anodes placed: 495', 470', 445', 435', 425', 415', 405', 395', 385', 375'
Depths vent pipes placed: N/A
Vent pipe perforations: 200'
Remarks: (gb #1:
If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Book Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

CATHODIC PROTECTION CONSTRUCTION REPORT

CTION REPORT

Drilling Log (Attach Hereto).

Completion Date 9-4-75

Type & Size E	Fauo #	177	S.	E 22 - 2	26-10		Work Order N	81W	- ; »*(; *
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Anode Content (# 33.8	# 4 5.0	# 5 4.2	# 3.7	#745	= 442	4.8	# 103.6
Anode Depth	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20
Anode Output (Amps)	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20 U.S
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Remarks: Drilled 300'- No Water Next A.M. Wetat 330

Start Water injection at 380

12

All Construction Completed

(Signature)

GROUND BED LAYOUT SKETCH

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EL PASO NATURAL GAS COMPANY ENGINEERING DEPARTMENT

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30-045-20401

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NW Sec. 15 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #119
cps 968w
Elevation 6681 Completion Date 8/25/75 Total Depth 600' Land Type* N/A
Casing, Sizes, Types & Depths N/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible: Fresh, Clear, Salty, Sulphur, Etc. 460' DEGETIAL
Depths gas encountered: N/A MAY 31 1991
Type & amount of coke breeze used: 5500 lbs. '' CON. DIV
Depths anodes placed: 540',530', 520',510',485',475', 465', 440', 430', 420
Depths vent pipes placed: N/A
Vent pipe perforations: 200'
Remarks: gb #1

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

30-045-20401

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO

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(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Loca	tion: Unit NW Sec. 15 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced_	HUERFANO UNIT #119
	cps 968w
Elevation 6681 Completion Date 8/25/75 Tot	al Depth 600' Land Type* N/A
Casing, Sizes, Types & Depths	N/A
If Casing is cemented, show amounts & typ	es used_N/A
If Cement or Bentonite Plugs have been pl	aced, show depths & amounts used
N / A	
Depths & thickness of water zones with de	escription of water when possible:
Fresh, Clear, Salty, Sulphur, Etc	460'
Depths gas encountered: N/A	
Type & amount of coke breeze used:	5500 lbs.
Depths anodes placed: 540',530', 520',510'	,485',475', 465', 440', 430', 420
Depths vent pipes placed: N/A	
Vent pipe perforations: 200'	DECENTE
Remarks: CSb 111	1011
,	CON. CON.

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Completion Date 8-25-7

Drilling Log (Attach Hereto).

Type & Size Bit Used 63/4 Ancae Scie Peth COOO Ancae Deth 1540 = 2530 # 3520 # 45/0 # 5485 # 6475 # 7465 # 8440 # 9430 # 106 Ancae Cutput (Amps) 2 1 3.7 # 24.0 # 34.0 # 43.2 # 53.4 # 63.5 # 7 3.2 # 8 4.2 # 94.9 # 106 Anode Depth	Huer for	#119	NW 15 - Z	6-10	CPS No.	68w
600 Ancie Decth = 1540 = 2530 # 3520 # 4510 # 5485 # 6475 # 7465 # 8440 # 9430 # 106 Ancie Output (Amps) = 13.7 # 24.0 # 34.0 # 43.2 # 53.4 # 63.5 # 73.2 # 84.2. # 94.94 # 109 Anode Depth		3/4			Work Order 1	637
= 1540 = 2530 # 3520 # 4510 # 5485 # 6475 # 7465 # 8440 # 9430 # 2101. Ancel Cutput (Amps) = 15.7 # 24.0 # 34.0 # 43.2 # 53.4 # 63.5 # 73.2 # 84.2. # 94.9 # 101. Anode Depth		Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Use	No. Sacks M	ud Used•
= 1 3.7 = 24.0 = 34.0 = 43.2 = 53.4 = 63.5 = 7 3.2 = 84.2 = 94.9 = 109		# 3520 # 451	0 = 54 85 = 6	475 , 7465	#8440	430 - 62
	00 10	#34.0 #43.2	# 53.4 # 6	3.5 #73.2	#842	# 94.9 104.6
	Anode Depth	# 13 # 14	# 15 # 10	6 # 17	# 18	# 19 # 20
Anode Output (Amps) # 11 # 12 # 13 # 14 # 15 # 16 # 17 # 18 # 19 1 20 1		# 13 # 14			n 18	# 19 3 4 20
Total Circuit Resistance Volts /0.0 Amps /6.0 Ohms 0.62 S300	100	mps /6.0 Ohm	1 10	5300		No. 2 CRA Cable Used

Remarks: Drilled 100'- Dry Next A.M. - Damp at 130 & 165

Met at 460 to 480 - Pulled 3 Joints Pipe & West

After Pipe TRAiler - Down Approx 1 Hour - Blew

Water out of Hole at 420 - Coming From 460 To 4

Vent Perforated 200'

Slorry SS Coke

116

All Construction Completed

(Signature)

GROUND BED LAYOUT SKETCH

9- 21-48-25-75 ALLY DRILLING REPORT

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EL PASO NATURAL GAS COMPANY ENGINEERING DEPARTMENT

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MW gale/mol

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NW Sec. 15 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #119
cps 968w
Elevation 6681 Completion Date 8/25/75 Total Depth 600 Land Type* N/A
Casing, Sizes, Types & Depths N/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used
N/A
Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 460'
Depths gas encountered: N/A
Type & amount of coke breeze used: 5500 lbs. DIST. ?
Depths anodes placed: 540',530', 520',510',485',475', 465', 440', 430', 420
Depths vent pipes placed: N/A
Vent pipe perforations: 200'
Remarks: gb #1

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

30-045-20407

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NW Sec. 16 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #194
cps 970w
Elevation 6629 Completion Date 9/3/75 Total Depth 350' Land Type* N/A
Casing, Sizes, Types & Depths 24' OF STEEL CASING
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 155'
Depths gas encountered: N/A
Type & amount of coke breeze used: 3200 lbs.
Depths anodes placed: 305',295',265', 255', 245',235', 225',215', 205', 195
Depths vent pipes placed: N/A DEGELVEN
Vent pipe perforations: 250' MAY31 1991
Remarks: (gb.#1.)
Diez

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

Pr - Natural Gas Company - - - - - - (Nov. 1-69)

WELL CASING CATHODIC PROTECTION CONSTRUCTION REPORT DAILY LOG

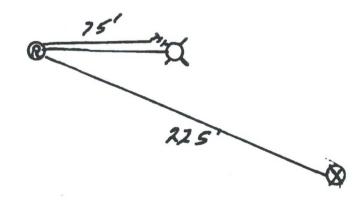
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Completion Date Drilling Log (Attach Hereto). Total Lbs. Coke Used Lost Circulation Mat'l Used Total Drilling Rig Time # 5 2 45 # 6 235 #5 4.0 #6 4.2. #7 4.0 1 8 4.2 Ancde Depth # 18 # 16 = 11 # 15 Anode Cutput (Amps) # 16 # 17 #.13 = 11 # 12 No. 8 C.P. Cable Used Total Circuit Resistance Ohms

All Construction Completed

Edual R. Paulet

GROUND BED LAYOUT SKETCH



MORGAN DRILLING COMPA

P.O. Box 326 Broken Bow, Oklahoma 74728

Ph. Office 405/584-6000 584-6860 Mobile 420-3248 Night

SERVICE ADDRESS - Bed 90 - 167-27461 INSTRUCTIONS "LITHOLOGIC LOG Time -From Material . Strata 180 1.6 155 130 312 320 310 320 356 SERVICE PERFORMED: TOTAL DEPTH 324' RIG TIME WATER TRUCK DRILLERS CERTIFICATION This well was drilled under my supervision and the report is true to the of my knowledge. Name Cl. Address _ Well driller's license number , 19. Date started _ Signed _ Date completed. Date _

912 Customer's Signature

By Eduard J. Facilitz

EL PASO NATURAL GAS COMPANY ENGINEERING DEPARTMENT

Sheet _____ of____

Date: _

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30-045-20408 DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO

(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Loca	ation: Unit NW Sec 21 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced_	HUERFANO UNIT #195
	cps 978w
Elevation 6534 Completion Date 9/2/75 Tot	cal Depth 360' Land Type* N/A
Casing, Sizes, Types & Depths	39' OF 8" PLASTIC CASING
If Casing is cemented, show amounts & typ	pes used_N/A
If Cement or Bentonite Plugs have been pl	laced, show depths & amounts used
N/A	
Depths & thickness of water zones with de	escription of water when possible:
Fresh, Clear, Salty, Sulphur, Etc.	
Depths gas encountered: N/A	
Type & amount of coke breeze used:	3500 lbs.
Depths anodes placed: 320', 310', 300', 260'	
Depths vent pipes placed: N/A	
Vent pipe perforations: 200'	DECE TO THE
Remarks: (gb #1	MAY 31 1991
	OIL CON. DIV
	191

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

,14

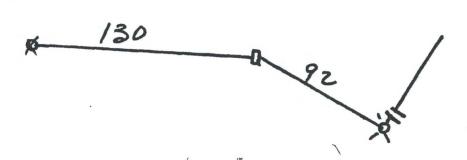
WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Completion Date 9: 2: 7:

GROUND BED LAYOUT SKETCH



DRILLING DEPARTMENT

RIG NO. 399 | REPORT NO. DATE

EVENING

In In Crew Draller Total Men In Crew

WT-BIT R.P.M. FROM TO FORMATION WT-BIT

19

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SIGNED: Toolpusher

CONTRACTOR

WELL NO. 978-W

LEASE

Computer Supervisor

EL PASO NATURAL GAS COMPANY ENGINEERING DEPARTMENT

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DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit N Sec. 16 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #194E
cps 1854w
Elevation6564' Completion Date 9/16/87 Total Depth 420' Land Type* N/A Casing, Sizes, Types & Depths 20' OF CASING
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible: Fresh, Clear, Salty, Sulphur, Etc. 120' SAMPLE TAKEN
Depths gas encountered: N/A
Type & amount of coke breeze used: N/A
Depths anodes placed: 375', 365', 355', 345', 335', 325', 315', 305', 295', 280'
Depths vent pipes placed: N/A DEGIVER
Vent pipe perforations: 320' MAY31 1991.
Remarks: (gb-#1 OIL CON. DIV.
DIST. 3

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

WELL CASING CATHODIC PROTECTION CONSTRUCTION REPORT DAILY LOG

Drilling Log (Astach Hereto)		:15-3	9401 Con	npletion Da	9-16	-87
CPS # Well Name. Line or Plant:	Work Order	2,	Scatie:		Ins. Union Check	
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Sele-26-70 Dur X60" Dur	ron	Saz	e Bet: 6 3/4	ill		<i>\$</i>
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Anode Depth . # 12 # 13 # 14 # 1	5 #	16	n 17	≈ 18	# 19	≈ 20
Anode Output (Amps)	The second secon	All the same of th	- Andrewson - Andr	# 18	# 19	# 20
Volts //: 6 Amps 2/. 2 Ohms - 5		o. 8 C.P. Cable	e Used		No. 2 C.P. Cab	ie Used
Remarks: Driller said wader	wee	\$ ax	120	01.00	nt p	ipe
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MERIDIAN OIL

P. O. BOX 4289-Phone 327-0251 FARMINGTON, NM

Date 9-16-87

DEEP WELL GROUNDBED LOG

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API WATER ANALYSIS REPORT FORM

Company MERIDIAN	OIL. Co.	Sample No.	Date Sampled
Field Ballard	Legal Description	County or Paris	sh State
Lease or Unit	Well 194E	Depth Formation 120 Grand Bes	
Type of Water (Produced, S		oint nd Bed	Sampled By
DISSOLVED SOLIDS	.`	OTHER PROPERTIES	
	mg/l me/l 3.74 16.3 16.4 0.5	pH Specific Gravity, 60/60 F. Resistivity (ohm-meters) 72	9 11 1 003 1400
		Total Dissolved	Solids (calc.)
ANIONS Chloride, Cl Sulfate, SO ₄ Carbonate, CO ₃ Bicarbonate, HCO ₂	25.5 0.7 61 9.6 19.2 0.6 57 5.9	Iron, Fe (total) Sulfide, as H ₂ S	RECOMMENDATIO
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BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141 AZTEC, NEW MEXICO 87410

CPS 1854W

OMPANY MERI	dian	DAILY	DRILLING REPORT	9-16	1987.				
WELL NAME: HG	ier fand	WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:				
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	WATER AT:	FEET:	HOLE MADE:						
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180	210	Shale			Grey				
210	260	Sandsi	(me		Crey				
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3929

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit H Sec. 15 Twp 26 Rng 10
Name of Well/Wells or Pipeline Serviced HUERFANO UNIT #176E
cps 1847w
Elevation6655' Completion Date 9/14/87 Total Depth 420' Land Type* N/A
Casing, Sizes, Types & Depths N/A
If Casing is cemented, show amounts & types used N/A
If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A
Depths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 240'
Depths gas encountered: N/A Type & amount of coke breeze used: N/A
Depths anodes placed: 380', 370', 360', 350', 340', 330', 320', 310', 2951 285'
Depths vent pipes placed: N/A DEGETOR
Vent pipe perforations: 200' MAY 31 1991
Remarks: (gb.#1 OIL CON. DIV. \ DIST. 3

^{*}Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

FM-07-,235 (**** 10-42)

CATHODIC PROTECTION CONSTRUCTION REPORT

carep 5-87

Drilling Log (Assach Here	10)			95-37	101	Completion I)ate 9-1	4-87
CPS #	Fell Name, Line of Plant:		Work Orde	n #	Statue:		Ins Union Check	
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BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141 AZTEC, NEW MEXICO 37410 Date 9-14-87

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BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141 AZTEC, NEW MEXICO 87410

CS 1847W

WELL NAME:	WELL NUMBER:	SECTION:	TOWNSHIP:	,19						
Huerfano	176 E	15	26 N	10 W						
WATER AT:	FEET:	HOLE MADE:		10 00						
240 ft		63/4	420 ft.							
	DESCRIPTION OF	FORMATION								
FROM TO)	FORMATION IS	3	COLOR						
0 30	5	11d		tan						
30 70)	and Stone		tan						
70 160	7	Shale		Grey-Purpl						
160 220) 4	Sands to ne								
220 240) L	WaterSond								
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		c S 1-								
REMARKS: Wayer	sample at 240	77								
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APPENDIX C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 97057-0939 Oil Conservation Division

1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-138 Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:												
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401												
2. Originating Site:	Invoice Information: PM: Aaron Lucero											
Trunk 2C Pipeline	Non AFE: N38434 Pay Key: CM22355											
3. Location of Material (Street Address, City, State or ULSTR):												
Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.88630 October 21												
4. Source and Description of Waste:												
Source: Natural Gas Pipeline Leak. Description: Hydrocarbon/Condensate impacted soil/Sludge associated with the remediate	tion of a natural gas pipelinte leak.											
Estimated Volume _50 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul) 430 (65 yd³ / bbls												
5. GENERATOR CERTIFICATION STATEMENT OF	WASTE STATUS											
I, Thomas Long , representative or authorized agent for Enterprise Products Openerator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the U												
regulatory determination, the above described waste is: (Check the appropriate classification)	ion)											
RCRA Exempt: Oil field wastes generated from oil and gas exploration and processempt waste. **Operator Use Only: Waste Acceptance Frequency** Monthly**	duction operations and are not mixed with non- Weekly Per Load											
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not excee characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed has subpart D, as amended. The following documentation is attached to demonstrate the the appropriate items)	zardous waste as defined in 40 CFR, part 261,											
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge	e Other (Provide description in Box 4)											
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STAT	TEMENT FOR LANDFARMS											
I, Thomas Long 10-22-18, representative for Enterprise Products Operating aut	horizes Envirotech <u>. Inc</u> to complete											
Generator Signature the required testing/sign the Generator Waste Testing Certification.												
I, Cra Cra Wheel, representative for Envirotech, Inc. representative samples of the oil field waste have been subjected to the paint filter test and have been found to conform to the specific requirements applicable to landfarms pursuant of the representative samples are attached to demonstrate the above-described waste configuration.	t to Section 15 of 19.15.36 NMAC. The results form to the requirements of Section 15 of											
5. Transporter: OFFor Subcontractors, J. P. Trucking, Sweaz	Pa, Rosanbaum, Riley											
OCD Permitted Surface Waste Management Facility												
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit # Address of Facility: Hilltop, NM Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfarm	: NM 01-0011											
	IED (Must Be Maintained As Permanent Record)											
SIGNATURE: TELEPHONE NO.:	Mental Manager DATE: 10/23/19 05-632-0615											



APPENDIX D Photographic Documentation



Photograph 1

View of the release area, facing east.



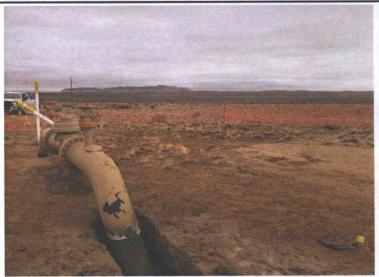
Photograph 2

View of flow path 1, facing south.



Photograph 3

View of flow path 2, facing southeast.





Photograph 4

View of the in-process excavation activities.



Photograph 5

View of the main excavation, facing west.



Photograph 6

View of the main excavation, facing west.







Photograph 7

View of the final excavation.



Photograph 8

View of the excavated flow path 1, facing north.



Photograph 9

View of the excavated flow path 2, facing south.





SITE PHOTOGRAPHS

Trunk 2C (October 2018) Pipeline Release

Photograph 10

View of the partially open excavation. The excavation will be backfilled with imported fill and contoured to the surrounding grade once permanent pipeline repairs are completed.





APPENDIX E

Table 1 - Soil Analytical Summary



TABLE 1 Trunk 2C Pipeline Release (October 2018) SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO	TPH DRO	TPH MRO	Combined TPH GRO/DRO	Combined TPH GRO/DRO/MRO	Chloride (mg/kg)
									(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
		Natural Resources		10	NE	NE	NE	50				1,000	2,500	20,000
S THE STATE OF THE						Composit	e Soil Samples	Removed by Exc	cavation					
S-7	10.26.18	C	10	<0.10	0.31	0.66	4.3	5.3	120	1,500	660	1,620	2,280	68
S-8	10.26.18	С	8	<0.097	<0.19	<0.19	0.47	0.47	<19	4,900	2,200	4,900	7,100	<30
FP-2e	10.29.18	С	0 to 3	<0.099	<0.20	<0.20	3.4	3.4	92	1,200	710	1,292	2,002	<30
						Ex	cavation Comp	osite Soil Sample	is .					
S-1	10.26.18	С	0 to 10	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.9	<50	ND	ND	<30
S-2	10.26.18	С	0 to 8	<0.021	< 0.043	<0.043	<0.085	ND	<4.3	<9.7	<48	ND	ND	<30
S-3	10.26.18	С	0 to 8	<0.021	<0.041	<0.041	<0.083	ND	<4.1	<9.9	<50	ND	ND	<30
S-4	10.26.18	С	0 to 8	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.7	<49	ND	ND	<30
S-5	10.26.18	С	0 to 10	<0.020	<0.039	<0.039	<0.079	ND	<3.9	<9.8	<49	ND	ND	<30
S-6	10.26.18	С	0 to 10	<0.020	<0.041	<0.041	<0.081	ND	<4.1	<9.7	<48	ND	ND	<30 35
S-9	10,30,18	С	11	<0.018	<0.036	<0.036	< 0.072	ND	<3.6	<9.5	<47	ND	ND	
S-10	10.31.18	С	11	<0.020	<0.041	<0.041	<0.082	ND	<4.1	12	<48	12	12	<30
					Burn Harry	FI	owpath Compo	osite Soil Sample						<30
FP-1a	10.29.18	С	0.5	<0.024	<0.047	<0.047	< 0.094	ND	<4.7	15	<50	15	15	<30
FP-1b	10.29.18	С	0.5	<0.020	<0.041	<0.041	<0.082	ND	<4.1	45	<48	45	45	<30
FP-2a	10.29.18	С	3	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.8	<49	ND	ND	<30
FP-2b	10.29.18	С	3	<0.021	<0.041	<0.041	<0.083	ND	<4.1	<9.7	<49	ND	ND	<30
FP-2c	10.29.18	С	0 to 3	<0.021	<0.043	<0.043	<0.085	ND	<4.3	<9.9	<50	ND	ND	<30
FP-2d	10.29.18	С	0 to 3	<0.022	<0.045	<0.045	<0.090	ND	<4.5	<9.4	<47	ND	ND	<30
FP-2f	10.29.18	С	1.25	<0.021	<0.041	<0.041	<0.083	ND	<4.1	160	110	160	270	<30
FP-2g	10.29.18	С	1.25	<0.020	<0.040	<0.040	<0.079	ND	<4.0	57	<47	57	57	<30
FP-2h	11.01.18	С	0 to 3	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.9	<49	ND	ND	~30

Note: Concentrations in bold and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon



Appendix F

Laboratory Data Sheets & Chain of Custody Documentation



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

October 30, 2018

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Trunk 2C October 2018

OrderNo.: 1810E11

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/27/2018 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 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Trunk 2C October 2018

Lab ID: 1810E11-001

Client Sample ID: S-1

Collection Date: 10/26/2018 10:00:00 AM

Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	ND	30		mg/Kg	20	10/28/2018 6:50:30 PM	41228
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/29/2018 2:16:14 PM	41231
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/29/2018 2:16:14 PM	41231
Surr: DNOP	113	50.6-138		%Rec	1	10/29/2018 2:16:14 PM	41231
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	10/29/2018 8:33:46 AM	41215
Surr: BFB	97.8	15-316		%Rec	1	10/29/2018 8:33:46 AM	41215
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.019		mg/Kg	1	10/29/2018 8:33:46 AM	41215
Toluene	ND	0.038		mg/Kg	1	10/29/2018 8:33:46 AM	41215
Ethylbenzene	ND	0.038		mg/Kg	1	10/29/2018 8:33:46 AM	41215
Xylenes, Total	ND	0.075		mg/Kg	1	10/29/2018 8:33:46 AM	41215
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	10/29/2018 8:33:46 AM	41215

Matrix: SOIL

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

- * 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 Quanitative 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 Page 1 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Trunk 2C October 2018

Lab ID: 1810E11-002

Client Sample ID: S-2

Collection Date: 10/26/2018 10:05:00 AM

Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: smb
Chloride	ND	30		mg/Kg	20	10/28/2018 7:02:54 PM	41228
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analys	: Irm
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/29/2018 2:41:06 PM	1 41231
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2018 2:41:06 PM	1 41231
Surr: DNOP	114	50.6-138		%Rec	1	10/29/2018 2:41:06 PM	1 41231
EPA METHOD 8015D: GASOLINE RANGE						Analys	: NSB
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	10/29/2018 8:56:24 AM	1 41215
Surr: BFB	99.4	15-316		%Rec	1	10/29/2018 8:56:24 AM	1 41215
EPA METHOD 8021B: VOLATILES						Analys	: NSB
Benzene	ND	0.021		mg/Kg	1	10/29/2018 8:56:24 AM	1 41215
Toluene	ND	0.043		mg/Kg	1	10/29/2018 8:56:24 AM	41215
Ethylbenzene	ND	0.043		mg/Kg	1	10/29/2018 8:56:24 AM	41215
Xylenes, Total	ND	0.085		mg/Kg	1	10/29/2018 8:56:24 AM	41215
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/29/2018 8:56:24 AM	41215

Matrix: SOIL

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

- * 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 Quanitative 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 Page 2 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E11

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/30/2018

CLIENT: APEX TITAN

Project: Trunk 2C October 2018

Lab ID: 1810E11-003

Matrix: SOIL

Client Sample ID: S-3

Collection Date: 10/26/2018 10:10:00 AM

Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	ND	30		mg/Kg	20	10/28/2018 7:15:19 PM	41228
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/29/2018 3:05:39 PM	41231
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/29/2018 3:05:39 PM	41231
Surr: DNOP	102	50.6-138		%Rec	1	10/29/2018 3:05:39 PM	41231
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	10/29/2018 9:19:11 AM	41215
Surr: BFB	98.0	15-316		%Rec	1	10/29/2018 9:19:11 AM	41215
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.021		mg/Kg	1	10/29/2018 9:19:11 AM	41215
Toluene	ND	0.041		mg/Kg	1	10/29/2018 9:19:11 AM	41215
Ethylbenzene	ND	0.041		mg/Kg	1	10/29/2018 9:19:11 AM	41215
Xylenes, Total	ND	0.083		mg/Kg	1	10/29/2018 9:19:11 AM	41215
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	10/29/2018 9:19:11 AM	41215

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

- * 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 Quanitative 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 Page 3 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID:

1810E11-004

Project: Trunk 2C October 2018

Matrix: SOIL

Client Sample ID: S-4

Collection Date: 10/26/2018 10:15:00 AM Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Ba	atch
EPA METHOD 300.0: ANIONS					Analyst: sr	mb
Chloride	ND	30	mg/Kg	20	10/28/2018 7:27:43 PM 4	1228
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: JI	ME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/29/2018 10:20:04 AM 4	1231
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	10/29/2018 10:20:04 AM 4	1231
Surr: DNOP	97.0	50.6-138	%Rec	1	10/29/2018 10:20:04 AM 4	1231
EPA METHOD 8015D: GASOLINE RANGE					Analyst: N	ISB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	10/29/2018 9:41:58 AM 4	1215
Surr: BFB	94.5	15-316	%Rec	1	10/29/2018 9:41:58 AM 4	1215
EPA METHOD 8021B: VOLATILES					Analyst: N	ISB
Benzene	ND	0.020	mg/Kg	1	10/29/2018 9:41:58 AM 4	1215
Toluene	ND	0.040	mg/Kg	1	10/29/2018 9:41:58 AM 4	11215
Ethylbenzene	ND	0.040	mg/Kg	1	10/29/2018 9:41:58 AM 4	11215
Xylenes, Total	ND	0.080	mg/Kg	1	10/29/2018 9:41:58 AM 4	11215
Surr: 4-Bromofluorobenzene	97.3	80-120	%Rec	1	10/29/2018 9:41:58 AM 4	11215

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 12 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-5

Project: Trunk 2C October 2018

Collection Date: 10/26/2018 10:20:00 AM

Lab ID: 1810E11-005

Matrix: SOIL

Received Date: 10/27/2018 10:10:00 AM

A 1	Result	POI	Qual	Unite	DE	Date Analyzed Batch
Analyses	Result	TQL	Quai	Units	DI	Date Analyzed Dates
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	10/28/2018 7:40:08 PM 41228
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/29/2018 10:44:31 AM 41231
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/29/2018 10:44:31 AM 41231
Surr: DNOP	90.5	50.6-138		%Rec	1	10/29/2018 10:44:31 AM 41231
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	10/29/2018 10:04:46 AM 41215
Surr: BFB	94.7	15-316		%Rec	1	10/29/2018 10:04:46 AM 41215
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	10/29/2018 10:04:46 AM 41215
Toluene	ND	0.039		mg/Kg	1	10/29/2018 10:04:46 AM 41215
Ethylbenzene	ND	0.039		mg/Kg	1	10/29/2018 10:04:46 AM 41215
Xylenes, Total	ND	0.079		mg/Kg	1	10/29/2018 10:04:46 AM 41215
Surr: 4-Bromofluorobenzene	96.9	80-120		%Rec	1	10/29/2018 10:04:46 AM 41215

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

- 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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 5 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-6

Project: Trunk 2C October 2018

Collection Date: 10/26/2018 10:25:00 AM

Lab ID: 1810E11-006

Matrix: SOIL

Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	10/28/2018 8:17:22 PM 41228
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/29/2018 11:08:50 AM 41231
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/29/2018 11:08:50 AM 41231
Surr: DNOP	91.4	50.6-138		%Rec	1	10/29/2018 11:08:50 AM 41231
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	10/29/2018 10:27:25 AM 41215
Surr: BFB	96.9	15-316		%Rec	1	10/29/2018 10:27:25 AM 41215
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	10/29/2018 10:27:25 AM 41215
Toluene	ND	0.041		mg/Kg	1	10/29/2018 10:27:25 AM 41215
Ethylbenzene	ND	0.041		mg/Kg	1	10/29/2018 10:27:25 AM 41215
Xylenes, Total	ND	0.081		mg/Kg	1	10/29/2018 10:27:25 AM 41215
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	10/29/2018 10:27:25 AM 41215

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

- * 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 Quanitative 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 Page 6 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID: 1810E11-007

Project: Trunk 2C October 2018

Matrix: SOIL

Client Sample ID: S-7

Collection Date: 10/26/2018 10:30:00 AM

Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batc
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	68	30		mg/Kg	20	10/28/2018 8:29:47 PM 4122
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: Irm
Diesel Range Organics (DRO)	1500	96		mg/Kg	10	10/29/2018 3:30:14 PM 4123
Motor Oil Range Organics (MRO)	660	480		mg/Kg	10	10/29/2018 3:30:14 PM 4123
Surr: DNOP	0	50.6-138	S	%Rec	10	10/29/2018 3:30:14 PM 4123
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSE
Gasoline Range Organics (GRO)	120	20		mg/Kg	5	10/29/2018 10:50:05 AM 412
Surr: BFB	249	15-316		%Rec	5	10/29/2018 10:50:05 AM 4121
EPA METHOD 8021B: VOLATILES						Analyst: NSE
Benzene	ND	0.10		mg/Kg	5	10/29/2018 10:50:05 AM 412
Toluene	0.31	0.20		mg/Kg	5	10/29/2018 10:50:05 AM 412
Ethylbenzene	0.66	0.20		mg/Kg	5	10/29/2018 10:50:05 AM 412
Xylenes, Total	4.3	0.40		mg/Kg	5	10/29/2018 10:50:05 AM 412
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	5	10/29/2018 10:50:05 AM 412

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 7 of 12 J
- Sample pH Not In Range P
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810E11

Date Reported: 10/30/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Trunk 2C October 2018

Project: Lab ID:

1810E11-008

Client Sample ID: S-8

Matrix: SOIL

Collection Date: 10/26/2018 10:35:00 AM

Received Date: 10/27/2018 10:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	10/28/2018 8:42:11 PM 41228
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst: Irm
Diesel Range Organics (DRO)	4900	96		mg/Kg	10	10/29/2018 11:47:46 AM 41231
Motor Oil Range Organics (MRO)	2200	480		mg/Kg	10	10/29/2018 11:47:46 AM 41231
Surr: DNOP	0	50.6-138	S	%Rec	10	10/29/2018 11:47:46 AM 41231
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	10/29/2018 11:35:22 AM 41215
Surr: BFB	116	15-316		%Rec	5	10/29/2018 11:35:22 AM 41215
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.097		mg/Kg	5	10/29/2018 11:35:22 AM 41215
Toluene	ND	0.19		mg/Kg	5	10/29/2018 11:35:22 AM 41215
Ethylbenzene	ND	0.19		mg/Kg	5	10/29/2018 11:35:22 AM 41215
Xylenes, Total	0.47	0.39		mg/Kg	5	10/29/2018 11:35:22 AM 41215
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	5	10/29/2018 11:35:22 AM 41215

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

- 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 Quanitative 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 Page 8 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810E11 30-Oct-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41228

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 41228

PQL

RunNo: 55222

Prep Date: 10/28/2018

Analysis Date: 10/28/2018

Result

SeqNo: 1836410

Units: mg/Kg HighLimit

RPDLimit %RPD

Qual

Analyte Chloride

ND

Sample ID LCS-41228

SampType: Ics

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 41228

RunNo: 55222

Units: mg/Kg

Prep Date: 10/28/2018

Analysis Date: 10/28/2018

SeqNo: 1836411

HighLimit

RPDLimit Qual

Analyte

PQL

SPK value SPK Ref Val

98.6

%RPD

15.00

SPK value SPK Ref Val %REC LowLimit

15

110

Chloride

%REC

90

1.5

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL

Reporting Detection Limit Sample container temperature is out of limit as specified Page 9 of 12

Hall Environmental Analysis Laboratory, Inc.

Result

11

WO#: 1810E11 30-Oct-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Project: 1 runk 2	C October 2018	
Sample ID MB-41231	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 41231	RunNo: 55232
Prep Date: 10/29/2018	Analysis Date: 10/29/2018	SeqNo: 1836679 Units: mg/Kg
Analyte	Result PQL SPK valu	e 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 10.0	0 115 50.6 138
Sample ID LCS-41231	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 41231	RunNo: 55232
Prep Date: 10/29/2018	Analysis Date: 10/29/2018	SeqNo: 1836680 Units: mg/Kg
Analyte	Result PQL SPK valu	ue SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	47 10 50.0	00 0 93.2 70 130
Surr: DNOP	5.1 5.00	00 102 50.6 138
Sample ID LCS-41216	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 41216	RunNo: 55232
Prep Date: 10/26/2018	Analysis Date: 10/29/2018	SeqNo: 1837270 Units: %Rec
Analyte	Result PQL SPK valu	ue SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.00	00 93.5 50.6 138
Sample ID MB-41216	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 41216	RunNo: 55232
Prep Date: 10/26/2018	Analysis Date: 10/29/2018	SeqNo: 1837271 Units: %Rec

SPK value SPK Ref Val %REC

10.00

_		***	
Q	ua	lifi	ers

Analyte

Surr: DNOP

* 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 Quanitative 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

Page 10 of 12

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

HighLimit

138

LowLimit

111

50.6

%RPD

RPDLimit

Qual

Hall Environmental Analysis Laboratory, Inc.

WO#: 1810E11

30-Oct-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41215

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Batch ID: 41215

PQL

5.0

RunNo: 55229

10/26/2018 Prep Date:

Analysis Date: 10/29/2018

SeqNo: 1837180

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result ND

SPK value SPK Ref Val %REC LowLimit

316

HighLimit

Qual

Surr: BFB

950

1100

1000

94.9

%RPD **RPDLimit**

Client ID:

Sample ID LCS-41215

SampType: LCS Batch ID: 41215

RunNo: 55229

TestCode: EPA Method 8015D: Gasoline Range

Prep Date:

LCSS

10/26/2018

Analysis Date: 10/29/2018

SeqNo: 1837181

0

SPK value SPK Ref Val %REC

Units: mg/Kg

316

Analyte Gasoline Range Organics (GRO) Surr: BFB

PQL Result 27

SPK value SPK Ref Val

25.00

1000

%REC LowLimit 107

109

HighLimit

RPDLimit

Qual

Sample ID RB

SampType: MBLK

5.0

TestCode: EPA Method 8015D: Gasoline Range

%RPD

%RPD

Client ID: PBS Batch ID: G55230

RunNo: 55230

Prep Date: Analyte

Analysis Date: 10/29/2018

SeqNo: 1837204

Units: %Rec

Surr: BFB

87.6

HighLimit 316 **RPDLimit**

Qual

Sample ID 2.5UG GRO LCS

Client ID: LCSS SampType: LCS Batch ID: **G55230** TestCode: EPA Method 8015D: Gasoline Range RunNo: 55230

15

LowLimit

75.9

15

Prep Date:

Analysis Date: 10/29/2018

SeqNo: 1837205

Units: %Rec

Result

SPK value SPK Ref Val

1000

%REC LowLimit HighLimit

%RPD

Page 11 of 12

Qual

Analyte

1000

15

Surr: BFB

1000

316

RPDLimit

- Qualifiers: Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded H Not Detected at the Reporting Limit ND
- Practical Quanitative Limit POL
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank B
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range P
- Reporting Detection Limit RL Sample container temperature is out of limit as specified

Project:

Hall Environmental Analysis Laboratory, Inc.

1.0

Trunk 2C October 2018

WO#: **1810E11**

30-Oct-18

Client: APEX TITAN

1.000

Sample ID MB-41215 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 41215 RunNo: 55229

Prep Date: 10/26/2018 Analysis Date: 10/29/2018 SeqNo: 1837199 Units: mg/Kg

RPDLimit Qual %REC LowLimit HighLimit %RPD PQL SPK value SPK Ref Val Analyte Result ND Benzene ND 0.050 Toluene 0.050 Ethylbenzene ND ND 0.10 Xylenes, Total 1.000 99.5 80 120 0.99 Surr: 4-Bromofluorobenzene

TestCode: EPA Method 8021B: Volatiles Sample ID LCS-41215 SampType: LCS RunNo: 55229 Batch ID: 41215 LCSS Client ID: SeqNo: 1837200 Units: mg/Kg Prep Date: 10/26/2018 Analysis Date: 10/29/2018 HighLimit %RPD **RPDLimit** Qual Result PQL SPK value SPK Ref Val %REC LowLimit Analyte 77.3 128 0.98 0.025 1.000 97.7 Benzene 79.2 125 0 99.8 Toluene 1.0 0.050 1.000 1.000 0 96.1 80.7 127 0.96 0.050 Ethylbenzene 3.000 0 94.5 81.6 129 2.8 0.10 Xylenes, Total

101

80

120

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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

Page 12 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **APEX AZTEC** Work Order Number: 1810E11 RcptNo: 1 Jagrie Breekfall Received By: Jazzmine Burkhead 10/27/2018 10:10:00 AM Completed By: **Anne Thome** 10/27/2018 11:12:13 AM Chain of Custody No 🗌 Not Present 1. Is Chain of Custody complete? Yes V 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? Yes V No 🗌 NA T No 🗆 NA 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C Yes V No 🗌 5. Sample(s) in proper container(s)? Yes 🗸 No 🗌 6. Sufficient sample volume for indicated test(s)? No . Yes V 7. Are samples (except VOA and ONG) properly preserved? No V NA 🗌 8. Was preservative added to bottles? Yes Yes No 🗌 No VOA Vials 9. VOA vials have zero headspace? Yes No V 10. Were any sample containers received broken? # of preserved bottles checked Yes 🗸 No 🗌 for pH: 11. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes V No 🗌 12. Are matrices correctly identified on Chain of Custody? No 🗌 13. Is it clear what analyses were requested? Yes 🗸 Yes 🗸 No 🗌 Checked by: 14. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes No 🗌 NA V Person Notified: Date | By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 16. Additional remarks: CUSTODY SEALS INTACT ON SOIL JARS/at 10/27/18 17. Cooler Information

Cooler No Temp C Condition Seal Intact Seal No Seal Date Signed By

Yes

										CHAIN OF CUSTODY RECORD
APEX Office Location 606 5 Rio Grande Suit A Aztec NM 87410 Project Manager K Summers Sampler's Name Se	Address: 490 Albuquu 9 Contact: A. Phone: 505 PO/SO #: ampler's Signature	ve Fice	NM 8	ins 1	VE		B	STED	10 feet	Lab use only Due Date: Temp. of coolers when received (C°): 2, 1 2 3 4 5 Page
Proj. No. Project Name	land fort	2	No/Type of C	Containers	3		11/3	650	3////	
725040112528 Trunkac	Coctober, 20	(8)				2	1	15		
Matrix Date Time C G r Identifying Marks	of Sample(s)	End	VOA 11L	250 ml Glass	Jar P/O		R	C		Lab Sample ID (Lab Use Only)
5 10/26/18 1000 X 5-1	O	10		1		K,	Ý	×		1816E11-00)
> 1926/1 12025 D 5-2	0	8		1		*	X	K		-002
5 96/18 1010 0 S-3.	0	8		1		×	x	x		703
5 Wallis 1015 P 5-4,	0	8	3.1	1		K	x	x		704
5 19/26/18/1030 V S-5	0	10		1		4	¥	K		705
5 1924 1025 A 5-6	0	10		i		K	0	P		706
5 19/20/18 2030 P S-7.	-	10)		4	8	P		-207
5 19/24/18 1035 P 5-8.		8		1		0	V	X		708
	E 2				+			+	125	
The second live Character DEST Duck DE	09/ Dush #1009/	Durah						90	142	
Relinquished by (Signature) Charles 10-36-18 315 Relinquished by (Signature) Date: Tin Date: Tin Date: Tin Date: Tin	ne: Received by:	(Signate (Signate	hel	10/ 10/ De	ate: 21/15 ate: 27/18 ate:	1.3	ime:	GR P	n-me Ep	ion long (EPROD) 13355 Idleman
	ne: Received by: Soil SD - Solid L	(Signate			C - Cha		ime:	SL-	sludge O - Oil	(Same Day 10-29-18)



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

November 01, 2018

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Trunk 2C October 2018

OrderNo.: 1810E97

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/31/2018 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 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-9

Project: Trunk 2C October 2018

Collection Date: 10/30/2018 1:30:00 PM

Lab ID: 1810E97-010

Matrix: MEOH (SOIL) Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	35	30	mg/Kg	20	10/31/2018 3:06:35 PM 41286
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	10/31/2018 10:22:58 AM 41282
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	10/31/2018 10:22:58 AM 41282
Surr: DNOP	102	50.6-138	%Rec	1	10/31/2018 10:22:58 AM 41282
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	10/31/2018 12:01:17 PM G55297
Surr: BFB	103	73.8-119	%Rec	1	10/31/2018 12:01:17 PM G55297
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.018	mg/Kg	1	10/31/2018 12:01:17 PM B55297
Toluene	ND	0.036	mg/Kg	1	10/31/2018 12:01:17 PM B55297
Ethylbenzene	ND	0.036	mg/Kg	1	10/31/2018 12:01:17 PM B55297
Xylenes, Total	ND	0.072	mg/Kg	1	10/31/2018 12:01:17 PM B55297
Surr: 4-Bromofluorobenzene	107	80-120	%Rec	1	10/31/2018 12:01:17 PM B55297

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

- * 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 Quanitative 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 Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1810E97

01-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41286

SampType: mblk

TestCode: EPA Method 300.0: Anions

LowLimit

TestCode: EPA Method 300.0: Anions

Client ID: Prep Date:

PBS

10/31/2018

Batch ID: 41286 Analysis Date: 10/31/2018

PQL

RunNo: 55292 SeqNo: 1840690

Units: mg/Kg

RPDLimit

Qual

Analyte Chloride

Result

ND 1.5

SPK value SPK Ref Val %REC

HighLimit

%RPD

Sample ID LCS-41286

SampType: Ics

RunNo: 55292

Client ID: LCSS Batch ID: 41286

Prep Date: 10/31/2018 Analysis Date: 10/31/2018

SeqNo: 1840691

Units: mg/Kg

Analyte

Result

LowLimit

PQL 15

%RPD

110

1.5

15.00

0

96.8

Chloride

90

Qual

SPK value SPK Ref Val %REC

HighLimit

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

Not Detected at the Reporting Limit

Practical Quanitative Limit PQL

В Analyte detected in the associated Method Blank Value above quantitation range E

Page 2 of 5

P Sample pH Not In Range

Reporting Detection Limit RL Sample container temperature is out of limit as specified

D Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded H

ND

% Recovery outside of range due to dilution or matrix

Analyte detected below quantitation limits

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810E97 01-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41282

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

Batch ID: 41282

RunNo: 55288

10/31/2018 Prep Date:

Analysis Date: 10/31/2018

ND

8.9

10.00

46.99

4.699

47.57

4.757

SeqNo: 1839483

Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)

SPK value SPK Ref Val %REC LowLimit **PQL** ND 10

50

Units: mg/Kg HighLimit

RPDLimit %RPD

Qual

Surr: DNOP Sample ID LCS-41282

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

LCSS

Batch ID: 41282

RunNo: 55288

89.3

Units: mg/Kg

138

SeqNo: 1839811

50.6

Analyte

Prep Date:

Analysis Date: 10/31/2018 Result PQL SPK value SPK Ref Val

%REC LowLimit HighLimit

%RPD **RPDLimit** Qual

Diesel Range Organics (DRO) Surr: DNOP

10/31/2018

42 10 50.00 4.3 5.000

83.5 86.1

70 130 50.6 138

Sample ID 1810E97-010AMS

SampType: MS

TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 55285

Qual

Analyte

Client ID:

Prep Date:

10/31/2018

Batch ID: 41282 Analysis Date: 10/31/2018

SeqNo: 1839831

53.5

50.6

Units: mg/Kg

Diesel Range Organics (DRO) Surr: DNOP

Client ID:

SPK value SPK Ref Val Result **PQL**

35

4.6

4.7

%REC

LowLimit

HighLimit

%RPD **RPDLimit**

Qual

Sample ID 1810E97-010AMSD

SampType: MSD

TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 55285

75.2

97.7

HighLimit

126

138

Analyte Diesel Range Organics (DRO)

Prep Date: 10/31/2018

Batch ID: 41282

94

SeqNo: 1839832

Units: mg/Kg

%RPD

RPDLimit

21.7 0

Page 3 of 5

Surr: DNOP

S-9

Result PQL 37 9.5

Analysis Date: 10/31/2018 SPK value SPK Ref Val

98.0

%REC LowLimit 76.7

53.5 50.6

126 138

0

3.28

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL **Practical Quanitative Limit**
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits J
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1810E97

01-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID	RB
Client ID:	PBS

SampType: MBLK

Batch ID: G55297

TestCode: EPA Method 8015D: Gasoline Range RunNo: 55297

BS

Analysis Date: 10/31/2018

Units: mg/Kg

HighLimit

Prep Date: Analyte

Result PQL SeqNo: 1840036

%RPD

Gasoline Range Organics (GRO)

%REC LowLimit

ND 5.0

SPK value SPK Ref Val

73.8 94.6

80.1

73.8

119

RPDLimit Qual

Surr: BFB

950

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Sample ID 2.5UG GRO LCS LCSS

Batch ID: G55297

5.0

RunNo: 55297

Prep Date:

Analysis Date: 10/31/2018

SeqNo: 1840037

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result PQL SPK value SPK Ref Val

%REC LowLimit

HighLimit

123

RPDLimit Qual

Surr: BFB

25 1100

1100

25.00 1000

944.3

1000

101 111

119

%RPD

Sample ID 1810E97-001AMS

SampType: MS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: FP-1a

Batch ID: G55297

RunNo: 55297

SeqNo: 1840038

Units: mg/Kg

128

119

Analyte

Prep Date:

Analysis Date: 10/31/2018

%REC LowLimit SPK value SPK Ref Val

0

HighLimit

Qual

Gasoline Range Organics (GRO) Surr: BFB

Result PQL 24 4.7 23.61

102 77.8 116

%RPD **RPDLimit**

Sample ID 1810E97-001AMSD

SampType: MSD

TestCode: EPA Method 8015D: Gasoline Range

Client ID: FP-1a

Batch ID: **G55297**

RunNo: 55297

Prep Date:

Analysis Date: 10/31/2018

SeqNo: 1840039

112

Units: mg/Kg

RPDLimit Qual

Analyte Gasoline Range Organics (GRO) Surr: BFB

Result **PQL** 23

1100

SPK value SPK Ref Val 23.61 4.7

944.3

%REC 97.2

LowLimit 77.8 73.8

73.8

HighLimit 128 119

5.29

%RPD

20 0 0

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Not Detected at the Reporting Limit ND
- Practical Quanitative Limit % Recovery outside of range due to dilution or matrix

Holding times for preparation or analysis exceeded

- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Page 4 of 5
- Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

0.96

WO#: 1810E97

01-Nov-18

Client:

APEX TITAN

Project:

Sample ID 100NG RTEX LCS

Trunk 2C October 2018

Sample ID RB	SampType: MBLK			Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	ID: B5	5297	F	RunNo: 5	5297					
Prep Date:	Analysis D	ate: 10	/31/2018	S	SeqNo: 1	840042	Units: mg/K	g			
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									

120

1.000

Sample ID 100NG BTEX LC	SampT	SampType: LCS TestCode: EPA Met						tiles		
Client ID: LCSS	Batch	h ID: B5	5297	F	RunNo: 5	5297				
Prep Date: Analysis Date: 10/31/2018 SeqNo: 1840043						840043	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	77.3	128			
Toluene	0.94	0.050	1.000	0	93.9	79.2	125			
Ethylbenzene	0.91	0.050	1.000	0	91.1	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	89.2	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID 1810E97-002AMS	SampT	ype: MS	;	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: FP-1b	Batch	ID: B5	5297	F	RunNo: 5	5297				
Prep Date:	Analysis D	ate: 10	/31/2018	8	SeqNo: 1	840044	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.020	0.8183	0.003731	96.2	68.5	133			
Toluene	0.82	0.041	0.8183	0.002643	99.8	75	130			
Ethylbenzene	0.80	0.041	0.8183	0	97.7	79.4	128			
Xylenes, Total	2.4	0.082	2.455	0	96.7	77.3	131			
Surr: 4-Bromofluorobenzene	0.79		0.8183		96.8	80	120			

Sample ID 1810E97-002AN	-002AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles									
Client ID: FP-1b	Client ID: FP-1b Batch ID: B55297 RunNo: 55297									
Prep Date:	Analysis D	ate: 10)/31/2018	8	SeqNo: 1	840045	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.020	0.8183	0.003731	91.8	68.5	133	4.70	20	
Toluene	0.78	0.041	0.8183	0.002643	95.4	75	130	4.52	20	
Ethylbenzene	0.76	0.041	0.8183	0	93.4	79.4	128	4.57	20	
Xylenes, Total	2.3	0.082	2.455	0	92.4	77.3	131	4.52	20	
Surr: 4-Bromofluorobenzene	0.80		0.8183		97.3	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 Quanitative 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

Page 5 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



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

Cli	ent Name:	APEX AZTE	С	Work Order N	umber: 1810E9	07	RoptNo	o: 1
0	salvad Bu			40/24/2040 0.00		Vietnin	4 llas	
	ceived By:	Victoria Ze	llar	10/31/2018 8:00		Victoria U. U.	Je arrey	
Co	mpleted By:	Erin Melen	drez	10/31/2018 8:21	:22 AM	una.	6	
Re	viewed By: E	.NH	10/3	10/31/18				
Chi	ain of Cus	tody	Projection (-				
-		ustody comple	ite?		Yes V	No [Not Present	
		sample delive			Courier			
Lo	og In							
100		npt made to co	ol the samp	les?	Yes 🗸	No _	NA 🗆	
4. \	Were all sam	ples received a	at a tempera	ture of >0° C to 6.0°C	Yes 🗹	No [□ NA □	
5.	Sample(s) in	proper contain	er(s)?		Yes 🗸	No []	
6. \$	Sufficient san	nple volume fo	r indicated t	est(s)?	Yes 🗹	No □]	
7.	Are samples (except VOA a	nd ONG) pr	operly preserved?	Yes 🗹	No 🗆]	
8. \	Was preserva	tive added to	bottles?		Yes 🗆	No ₩	NA 🗆	
9. 1	VOA vials hav	ve zero heads	ace?		Yes 🗆		No VOA Vials	-
10.	Were any sai	mple container	s received t	oroken?	Yes	No ₩	# of preserved bottles checked	10/31/18
	A DESCRIPTION OF THE PERSON OF	ork match bott ancies on chai		n	Yes 🗹	No 🗆	for pH:	or >12 unless noted)
12./	Are matrices	correctly ident	fied on Cha	in of Custody?	Yes 🗸	No 🗆	Adjusted?	
13.1	ls it clear wha	at analyses we	re requested	1?	Yes 🗸	No [
		ing times able			Yes 🗸	No [Checked by:	
Spe	cial Hand	ling (if app	licable)					
V.E	1011-2			with this order?	Yes [No [NA 🗹	
	Person	Notified:	nation is still in constitute and	D	ate:		Name of the latest and the latest an	
	By Wh	om:	***	V	ia: eMail	Phone F	ax In Person	
	Regard	ding:					The state of the s	
	Client I	Instructions:			process that the same of the same		The Party Market Resident	
16.	Additional re	emarks:						
17.	Cooler Info	CONTRACTOR OF THE PARTY OF THE	Condition	Seal Intact Seal N	lo Seal Date	Signed By	, 1	
	1	2.3	Good	Yes	ocal Date	olginou by		
	2	3.8	Good	Yes				

					/ CHAIN OF CUSTODY RECORD
×	Laboratory: 2=1	11 Environ	nenH	ANALYSIS REQUESTED	Lab use only Due Date:
APEX	Address: 4501		SNE	/0	Temp. of coolers 2.5 ig 91 €
Office Location 606 5 2.0	Contact: A			(3)	when received (C") 2,3,3.8
Grande Spit A	Contact: A	hernen		40	1 2 3 4 5
Artec NM 87-110	Phone: 575-	345 - 35	75	1	Page
Project Manager K. Summers	PO/SO#:			100	1 / / / / /
	Sampler's Signature			20/10	
C DAgonti	Cluther			W/80/ 3	1 / / / /
Proj. No. Project Name	/ 11	No/Type of Conta	ainers	W 7/3	
755040112528 TINAK 2CC	october Jois	=	lan =	73/2	/ / / / /
Matrix Date Time O r Identifying Mar	rks of Sample(s)	VOA VOA 11.11.	Glass Jar P/O	144/	Lab Sample ID (Lab Use Only)
5 1/2/1x 1330 4 5-6	3 - 1	1	1	414	-010
				1	2:
	50% Rush 2 100% Ru	A STATE OF THE PARTY OF THE PAR	7-4		
	Time: Received by: (S	ignature)	Date:	Time: NOTES	Bill to Tom Long (EPROU)
	Time: Beceived by (S	ignature)	Date:	Time: Pay	Key # RB21200
	Time: Received by: (S	ignature)	Date:	Time: Pm .	Key # RB21200 me. Eddlemen
Relinquished by (Signature) Date:	Time: Received by (8	Why viz 1013110	Date: 10/3/1/8	Time: AFE	# (Same day 10-348)
Matrix WW - Wastewater W - Water 5 Container VOA - 40 ml vial A/G - Amber / O		Liquid A - Air Bag	/ CE Cha	ropal tube SL - sludg	e O Oil



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

November 02, 2018

Kyle Summers
APEX TITAN
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Trunk 2C October 2018

OrderNo.: 1811008

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/1/2018 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 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1811008

Date Reported: 11/2/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-10

Project: Trunk 2C October 2018

Collection Date: 10/31/2018 1:00:00 PM

Lab ID: 1811008-001

Matrix: MEOH (SOIL) Received Date: 11/1/2018 8:30:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	11/1/2018 1:46:59 PM	41311
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	12	9.7	mg/Kg	1	11/1/2018 11:56:55 AM	41308
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	11/1/2018 11:56:55 AM	41308
Surr: DNOP	102	50.6-138	%Rec	1	11/1/2018 11:56:55 AM	41308
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	11/1/2018 12:15:51 PM	G55334
Surr: BFB	93.1	73.8-119	%Rec	1	11/1/2018 12:15:51 PM	G55334
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	11/1/2018 12:15:51 PM	B55334
Toluene	ND	0.041	mg/Kg	1	11/1/2018 12:15:51 PM	B55334
Ethylbenzene	ND	0.041	mg/Kg	1	11/1/2018 12:15:51 PM	B55334
Xylenes, Total	ND	0.082	mg/Kg	1	11/1/2018 12:15:51 PM	B55334
Surr: 4-Bromofluorobenzene	87.1	80-120	%Rec	1	11/1/2018 12:15:51 PM	B55334

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

- 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 Quanitative 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 Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811008 02-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41311

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: **PBS**

Prep Date:

11/1/2018

Batch ID: 41311

RunNo: 55337

Analysis Date: 11/1/2018

SeqNo: 1841818

Units: mg/Kg HighLimit

%RPD **RPDLimit**

Qual

Analyte Chloride

Result **PQL** ND 1.5

Sample ID LCS-41311

SampType: Ics

TestCode: EPA Method 300.0: Anions RunNo: 55337

Client ID: LCSS Batch ID: 41311

PQL

Units: mg/Kg

Prep Date: 11/1/2018

Analysis Date: 11/1/2018

SeqNo: 1841820

HighLimit

Qual

Analyte

1.5

95.6

Page 2 of 6

14

110

Result

15.00

SPK value SPK Ref Val %REC LowLimit

%RPD

Chloride

SPK value SPK Ref Val %REC

90

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Value above quantitation range E

Analyte detected below quantitation limits J

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811008 02-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID LCS-41301

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS

Batch ID: 41301

RunNo: 55288

Prep Date: 10/31/2018 Analysis Date: 11/1/2018

SeqNo: 1840909

Units: %Rec

Analyte

Result

SPK value SPK Ref Val

LowLimit

50.6

RPDLimit Qual

Surr: DNOP

88 9

HighLimit 138

10.00

TestCode: EPA Method 8015M/D: Diesel Range Organics

%REC

%RPD

Sample ID MB-41301 Client ID:

PRS

SampType: MBLK Batch ID: 41301

RunNo: 55288

Prep Date:

10/31/2018

SeqNo: 1840910

Units: %Rec HighLimit

Analyte

Analysis Date: 11/1/2018

Qual

Surr: DNOP

SPK value SPK Ref Val %REC LowLimit

50.6

RPDLimit

Sample ID 1811008-001AMS

SampType: MS

TestCode: EPA Method 8015M/D: Diesel Range Organics

%RPD

Client ID: S-10

Batch ID: 41308

RunNo: 55331

97.8

138

Prep Date: 11/1/2018

Analysis Date: 11/1/2018

9.8

SeqNo: 1840921

Units: mg/Kg

Analyte

PQL Result

Result

51

4.6

43

4.6

ND

9.8

SPK value SPK Ref Val %REC

11.57

LowLimit

HighLimit

%RPD **RPDLimit** Qual

Diesel Range Organics (DRO)

51 4.8

11.57 48.97 4.897

47.17

4.717

79.9 97.7

126 138

Surr: DNOP

Sample ID 1811008-001AMSD

SampType: MSD

TestCode: EPA Method 8015M/D: Diesel Range Organics

84.1

53.5

50.6

Client ID: Prep Date: 11/1/2018

Batch ID: 41308 Analysis Date: 11/1/2018 RunNo: 55331

Units: mg/Kg

126

138

0

Analyte

Diesel Range Organics (DRO)

SPK value SPK Ref Val %REC **PQL**

SegNo: 1840922

53.5

50.6

LowLimit

HighLimit

%RPD

RPDLimit 21.7 1.03

Surr: DNOP Sample ID LCS-41308

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

70

50 6

Client ID: LCSS

Batch ID: 41308

RunNo: 55332

0

Prep Date: 11/1/2018

Analysis Date: 11/1/2018

PQL

SeqNo: 1840996

SPK value SPK Ref Val %REC LowLimit

E

Units: mg/Kg

Qual

Qual

Analyte Diesel Range Organics (DRO) Result

50.00 10 5.000

%REC SPK value SPK Ref Val LowLimit 0 86.4 92.6

HighLimit %RPD **RPDLimit** 130

138

Surr: DNOP

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS 11/1/2018 Prep Date:

Sample ID MB-41308

Batch ID: 41308 Analysis Date: 11/1/2018 RunNo: 55332 SeqNo: 1840997

HighLimit

Units: mg/Kg

%RPD

RPDLimit

Qual

Analyte Diesel Range Organics (DRO)

Motor Oil Range Organics (MRO)

PQL Result ND 10

50

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Value above quantitation range

Page 3 of 6

Holding times for preparation or analysis exceeded H Not Detected at the Reporting Limit ND

POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

R Analyte detected in the associated Method Blank

Analyte detected below quantitation limits J Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811008

02-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41308

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

PBS

Batch ID: 41308

RunNo: 55332

Prep Date: 11/1/2018

Analysis Date: 11/1/2018

SeqNo: 1840997

Units: mg/Kg

Analyte

Result

SPK value SPK Ref Val

%REC LowLimit **HighLimit**

%RPD **RPDLimit**

Qual

Surr: DNOP

96.2

50.6

138

9.6

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank B

E Value above quantitation range

Analyte detected below quantitation limits

Page 4 of 6

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811008 *02-Nov-18*

Client:

APEX TITAN

Project:

Trunk 2C October 2018

TestCode: EPA Method 8015D: Gasoline Range SampType: MBLK Sample ID B29 RunNo: 55334 Client ID: Batch ID: **G55334** SeqNo: 1841189 Units: mg/Kg Analysis Date: 11/1/2018 Prep Date: SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result PQL Analyte Gasoline Range Organics (GRO) ND 5.0 1000 87.1 73.8 119 Surr: BFB 870

TestCode: EPA Method 8015D: Gasoline Range Sample ID 2.5UG GRO LCS SampType: LCS RunNo: 55334 Batch ID: G55334 Client ID: LCSS SeqNo: 1841190 Units: mg/Kg Analysis Date: 11/1/2018 Prep Date: PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result 0 116 80.1 123 Gasoline Range Organics (GRO) 29 5.0 25.00 1100 1000 109 73.8 119 Surr: BFB

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 Quanitative 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

Page 5 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1811008

02-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID B29	SampT	SampType: MBLK TestCode: EPA M					thod 8021B: Volatiles						
Client ID: PBS	Batch	n ID: B5	5334	R	tunNo: 5	5334							
Prep Date:	Analysis D	oate: 11	I/1/2018	SeqNo: 1841205			Units: mg/Kg						
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	0.89		1.000		89.5	80	120						

Sample ID 100NG BTEX LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: B5	5334	F	RunNo: 5	5334				
Prep Date:	Analysis D	ate: 11	/1/2018	S	SeqNo: 1	841206	Units: mg/K			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.6	77.3	128			
Toluene	0.94	0.050	1.000	0	94.3	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	94.5	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	96.0	81.6	129			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.8	80	120			

- * 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 Quanitative 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
- Page 6 of 6

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



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	E APEX AZTE	EC	Work	Order Number	: 1811	800			RcptNo:	1
Received By	: Victoria Ze	ellar	11/1/201	8 8:30:00 AM			Victor	ia Gell	lan	
Completed By	11/71	V1/18	11/1/201	8 8:52:57 AN	ı		in			
Choir of C	CNM									
Chain of C	of Custody compl	lete?			Yes		No	П	Not Present	
	the sample delive				Cour			_	Not I toolit E	
Log In 3. Was an a	tempt made to c	ool the samp	les?		Yes		No		NA 🗆	
							1	TV per		
4. Were all s	amples received	at a tempera	ture of >0° C to	o 6.0°C	Yes	V	No		NA 🗆	
5. Sample(s) in proper contai	ner(s)?			Yes	V	No			
6. Sufficient	sample volume fo	or indicated to	est(s)?		Yes	V	No			
7. Are sample	es (except VOA	and ONG) pro	perly preserve	d?	Yes	V	No			
8. Was prese	ervative added to	bottles?			Yes		No	V	NA 🗆	
9. VOA vials	have zero heads	space?			Yes		No		No VOA Vials	
10. Were any	sample containe	ers received b	roken?		Yes		No	V	# of preserved	"an/
CONTRACTOR OF THE PARTY OF THE	erwork match bot repancies on cha)		Yes	V	No		bottles checked for pH:	12 unless noted)
12. Are matric	es correctly ident	tifled on Chai	n of Custody?		Yes	V	No		Adjusted2	
13. Is it clear	what analyses we	ere requested	?			V	No		(X)	
	olding times able fy customer for a				Yes	~	No		Checked by:	
Special Ha	ndling (if app	olicable)								
	nt notified of all di		with this order?		Yes		No		NA 🗹	
By Reg	son Notified: Whom: parding: ent Instructions:			Date: Via:	☐ eM	ail []	Phone] Fax	☐ In Person	
16. Additions		1		3						
17. Cooler I										
Coole		Condition	Seal Intact	Seal No	Seal D	ate	Signed	Ву		
1	4.4	Good	Yes		7.	- Allegain (1)		-		
2	4.7	Good	Yes			FILTER		*********	18	

																					(CHAIN OF CUSTODY RECORD
A	A PEX	101		. 0	2	A	aboratory:	40	01	Ho	en K	ins	N	E	ANA	LYS	STED	4/00/2	//		//	Lab use only Due Date: Temp. of coolers when received (C°):
Office	Locatio	Non	1	1	0		Albegy contact:	1/92	E.	NA	^ 2	8 /1	7				/	100	0//	//	1	1 2 3 4 5
600	inde	20:0	-	40	den	-	ontact: hone:	170	712	ur	-7	0 7	_				X	E B	//		//	Page of /
HZ	see	Nm	6	5 10	710			800	, 7	73	٠ ا	//	>			1	100	4.1	/	/	//	34+(c+)1:0=4.4
		ger <u></u> \$.	20	יייט	mers		O/SO#: _	ature					J.	_		2	2	Y	1	//	/	3.71(CF)1.0=4.7
	er's Name	1-					1. 16									1	10	17	//	/		2 caples
Proj. N	Apon	ti	Proje	oct Ne	omo		NAV			No/Ti	ype of C	Contair	ners		1	X	No	0	/ /		//	2 0000
		508	rioje	TI	on K	201	actober,	201	8)	THOM	ype or c	Jornean	1010		1	1	M		/	/	//	
Matrix	Date	Time	CoEp	Grab	Identifying		of Sample(s)			VOA	1 AG	250 III	Glass	P/O	12	201	Y	/	//	//		Lab Sample 1D (Lab Use Only)
5	1/3/18	1300	¥		.80	S	5-10	-	1)				ı		4	v Z	K					-001
				_						1-1-			77 at				1				1	
							7										1	1		-57		
																		1				
		-		E 118		11		·							No.		1	F	P			
								738	1964					10.3	14				13			
								0.0	76						R. P.							
	P- 1				201			10.00					-			+			1			
										-				-		+				1		
	2										1					3 3		Tyles		1		
Turn	round time	□ Nor	mal		25% Rush	D 50	% Rush	X100%	Rush												,	10 Mg
Reling	uished by	(Signature)		3	Date: 0-3118	Tim	e: Receiv	ved by:	(Signa	()			Date			Ö	NC	Bil	1 70	3 %	n (long (EPPOD) 21200 man 4
Peting	uished by	(Sidnature)		1	Date: U3018	Tim 150		yed by:	(Signa	ture)			Date	ilis	Tin	ne: /G	Po	y 1	ey	世	RB	21200
Relinq	uished by	(Signature)			Date	Tim	e: Recei	ved by:	(Sibna	ture)	Cour	ice	Date	ing	Tin	ne:	180	1-1	HE.	135	43	4
Reling	uished by	(Signature)	J	1	Date:	192 Tim	e: Recei	ved by:	(Signa	iture)	8:	9	Date	118)	G Tin	ne:	17	*	Sa	me	da	g 11-1-18)
Matrix	w	N - Wastewa	ter		W - Water	8-	Soil SD - So	olid I	L - Liqui	d A	- Air B	ag	С	- Cha	rcoal tul	ю	SL-	sludge		liO - C		



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

November 01, 2018

Kyle Summers
APEX TITAN
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Trunk 2C October 2018

OrderNo.: 1810E97

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 10/31/2018 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 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-1a

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 12:30:00 PM

Lab ID: 1810E97-001

Matrix: MEOH (SOIL) Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed Bat	tch
EPA METHOD 300.0: ANIONS					Analyst: sm	nb
Chloride	ND	30	mg/Kg	20	10/31/2018 12:50:06 PM 412	286
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: Irm	n
Diesel Range Organics (DRO)	15	9.9	mg/Kg	1	10/31/2018 11:07:20 AM 412	282
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/31/2018 11:07:20 AM 412	282
Surr: DNOP	101	50.6-138	%Rec	1	10/31/2018 11:07:20 AM 412	282
EPA METHOD 8015D: GASOLINE RANGE				- (Analyst: NS	SB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	10/31/2018 8:36:50 AM G5	55297
Surr: BFB	102	73.8-119	%Rec	1	10/31/2018 8:36:50 AM G5	55297
EPA METHOD 8021B: VOLATILES					Analyst: NS	SB
Benzene	ND	0.024	mg/Kg	1	10/31/2018 8:36:50 AM B5	55297
Toluene	ND	0.047	mg/Kg	1	10/31/2018 8:36:50 AM B5	55297
Ethylbenzene	ND	0.047	mg/Kg	1	10/31/2018 8:36:50 AM B5	55297
Xylenes, Total	ND	0.094	mg/Kg	1	10/31/2018 8:36:50 AM B5	55297
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	10/31/2018 8:36:50 AM B5	55297

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

- 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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-1b

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 12:35:00 PM

Lab ID: 1810E97-002

Matrix: MEOH (SOIL) Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS			*		Analyst:	smb
Chloride	ND	30	mg/Kg	20	10/31/2018 1:02:30 PM	41286
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst:	Irm
Diesel Range Organics (DRO)	45	9.5	mg/Kg	1	10/31/2018 11:29:17 AM	A 41282
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	10/31/2018 11:29:17 AM	A 41282
Surr: DNOP	94.3	50.6-138	%Rec	1	10/31/2018 11:29:17 AM	A 41282
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	10/31/2018 8:59:27 AM	G55297
Surr: BFB	103	73.8-119	%Rec	1	10/31/2018 8:59:27 AM	G55297
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.020	mg/Kg	1	10/31/2018 8:59:27 AM	B55297
Toluene	ND	0.041	mg/Kg	1	10/31/2018 8:59:27 AM	B55297
Ethylbenzene	ND	0.041	mg/Kg	1	10/31/2018 8:59:27 AM	B55297
Xylenes, Total	ND	0.082	mg/Kg	1	10/31/2018 8:59:27 AM	B55297
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	10/31/2018 8:59:27 AM	B55297

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

- * 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 Quanitative 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 Page 2 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-2a

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 12:40:00 PM

Lab ID:

1810E97-003

Matrix: MEOH (SOIL)

Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: smb
Chloride	ND	30		mg/Kg	20	10/31/2018 1:14:54 PM	41286
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analys	: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/31/2018 11:51:15 A	M 41282
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/31/2018 11:51:15 A	M 41282
Surr: DNOP	96.1	50.6-138		%Rec	1	10/31/2018 11:51:15 A	M 41282
EPA METHOD 8015D: GASOLINE RANGE						Analys	: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	10/31/2018 9:22:14 AM	G55297
Surr: BFB	102	73.8-119		%Rec	1	10/31/2018 9:22:14 AM	G55297
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.019		mg/Kg	1	10/31/2018 9:22:14 AM	B55297
Toluene	ND	0.038		mg/Kg	1	10/31/2018 9:22:14 AM	B55297
Ethylbenzene	ND	0.038		mg/Kg	1	10/31/2018 9:22:14 AM	B55297
Xylenes, Total	ND	0.076		mg/Kg	1	10/31/2018 9:22:14 AM	1 B55297
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	10/31/2018 9:22:14 AM	B55297

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 13J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: FP-2b

Project: Trunk 2C October 2018 Collection Date: 10/29/2018 12:45:00 PM

Lab ID: 1810E97-004 Matrix: MEOH (SOIL) Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual U	Jnits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: smb
Chloride	ND	30	n	ng/Kg	20	10/31/2018 1:27:18 PM	41286
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.7	n	ng/Kg	1	10/31/2018 12:13:06 PI	M 41282
Motor Oil Range Organics (MRO)	ND	49	n	ng/Kg	1	10/31/2018 12:13:06 PI	M 41282
Surr: DNOP	84.6	50.6-138	9	%Rec	1	10/31/2018 12:13:06 PI	M 41282
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.1	n	ng/Kg	1	10/31/2018 9:44:56 AM	G55297
Surr: BFB	99.7	73.8-119	9	%Rec	1	10/31/2018 9:44:56 AM	G55297
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.021	n	ng/Kg	1	10/31/2018 9:44:56 AM	B55297
Toluene	ND	0.041	n	ng/Kg	1	10/31/2018 9:44:56 AM	B55297
Ethylbenzene	ND	0.041	n	ng/Kg	1	10/31/2018 9:44:56 AM	B55297
Xylenes, Total	ND	0.083	n	ng/Kg	1	10/31/2018 9:44:56 AM	B55297
Surr: 4-Bromofluorobenzene	102	80-120	9,	%Rec	1	10/31/2018 9:44:56 AM	B55297

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

- 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 Quanitative 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 Page 4 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-2c

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 12:50:00 PM

Lab ID: 1810E97-005

Matrix: MEOH (SOIL)

Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Bate	tch
EPA METHOD 300.0: ANIONS					Analyst: sml	ıb
Chloride	ND	30	mg/Kg	20	10/31/2018 2:04:32 PM 412	
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: Irm	1
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	10/31/2018 12:35:06 PM 4128	282
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/31/2018 12:35:06 PM 4128	282
Surr: DNOP	93.1	50.6-138	%Rec	1	10/31/2018 12:35:06 PM 4128	282
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSE	В
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	10/31/2018 10:07:42 AM G55	5297
Surr: BFB	101	73.8-119	%Rec	1	10/31/2018 10:07:42 AM G55	5297
EPA METHOD 8021B: VOLATILES					Analyst: NSE	В
Benzene	ND	0.021	mg/Kg	1	10/31/2018 10:07:42 AM B55	5297
Toluene	ND	0.043	mg/Kg	1	10/31/2018 10:07:42 AM B55	5297
Ethylbenzene	ND	0.043	mg/Kg	1	10/31/2018 10:07:42 AM B55	5297
Xylenes, Total	ND	0.085	mg/Kg	1	10/31/2018 10:07:42 AM B55	5297
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	10/31/2018 10:07:42 AM B55	5297

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 5 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-2d

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 12:55:00 PM

Lab ID: 1810E97-006

Matrix: MEOH (SOIL)

Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	smb
Chloride	ND	30		mg/Kg	20	10/31/2018 2:16:57 PM	
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/31/2018 12:56:57 PM	
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/31/2018 12:56:57 PM	
Surr: DNOP	96.2	50.6-138		%Rec	1	10/31/2018 12:56:57 PM	41282
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	10/31/2018 10:30:25 AM	
Surr: BFB	97.3	73.8-119		%Rec	1	10/31/2018 10:30:25 AM	
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.022		mg/Kg	1	10/31/2018 10:30:25 AM	B55297
Toluene	ND	0.045		mg/Kg	1	10/31/2018 10:30:25 AM	B55297
Ethylbenzene	ND	0.045		mg/Kg	1	10/31/2018 10:30:25 AM	B55297
Xylenes, Total	ND	0.090		mg/Kg	1	10/31/2018 10:30:25 AM	B55297
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	10/31/2018 10:30:25 AM	B55297

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

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-2e

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 1:00:00 PM

Lab ID: 1810E97-007

Matrix: MEOH (SOIL)

Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed B	Batch
EPA METHOD 300.0: ANIONS						Analyst: s	mb
Chloride	ND	30		mg/Kg	20		11286
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: T	ОМ
Diesel Range Organics (DRO)	1200	99		mg/Kg	10	10/31/2018 11:34:20 AM 4	
Motor Oil Range Organics (MRO)	710	500		mg/Kg	10	10/31/2018 11:34:20 AM 4	1282
Surr: DNOP	0	50.6-138	S	%Rec	10	10/31/2018 11:34:20 AM 4	1282
EPA METHOD 8015D: GASOLINE RANGE						Analyst: N	ISB
Gasoline Range Organics (GRO)	92	20		mg/Kg	5	10/31/2018 10:53:01 AM G	355297
Surr: BFB	316	73.8-119	S	%Rec	5	10/31/2018 10:53:01 AM G	
EPA METHOD 8021B: VOLATILES						Analyst: N	ISB
Benzene	ND	0.099		mg/Kg	5	10/31/2018 10:53:01 AM B	355297
Toluene	ND	0.20		mg/Kg	5	10/31/2018 10:53:01 AM B	355297
Ethylbenzene	ND	0.20		mg/Kg	5	10/31/2018 10:53:01 AM B	355297
Xylenes, Total	3.4	0.40		mg/Kg	5	10/31/2018 10:53:01 AM B	355297
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	5	10/31/2018 10:53:01 AM B	355297

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 7 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-2f

Project:

Trunk 2C October 2018

Collection Date: 10/29/2018 1:05:00 PM

Lab ID: 1810E97-008

Matrix: MEOH (SOIL)

Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	10/31/2018 2:41:46 PM 41286
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst: TOM
Diesel Range Organics (DRO)	160	9.7		mg/Kg	1	10/31/2018 11:10:31 AM 41282
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	10/31/2018 11:10:31 AM 41282
Surr: DNOP	99.2	50.6-138		%Rec	1	10/31/2018 11:10:31 AM 41282
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	10/31/2018 11:15:49 AM G55297
Surr: BFB	116	73.8-119		%Rec	1	10/31/2018 11:15:49 AM G55297
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	10/31/2018 11:15:49 AM B55297
Toluene	ND	0.041		mg/Kg	1	10/31/2018 11:15:49 AM B55297
Ethylbenzene	ND	0.041		mg/Kg	1	10/31/2018 11:15:49 AM B55297
Xylenes, Total	ND	0.083		mg/Kg	1	10/31/2018 11:15:49 AM B55297
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	10/31/2018 11:15:49 AM B55297

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 8 of 13 J
- Sample pH Not In Range P
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1810E97

Date Reported: 11/1/2018

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: FP-2g

Project: Trunk 2C October 2018

Collection Date: 10/29/2018 1:10:00 PM

Lab ID: 1810E97-009

CLIENT: APEX TITAN

Matrix: MEOH (SOIL)

Received Date: 10/31/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	st: smb
Chloride	ND	30		mg/Kg	20	10/31/2018 2:54:11 PI	
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analys	t: TOM
Diesel Range Organics (DRO)	57	9.4		mg/Kg	1	10/31/2018 10:46:40 A	M 41282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/31/2018 10:46:40 A	M 41282
Surr: DNOP	100	50.6-138		%Rec	1	10/31/2018 10:46:40 A	M 41282
EPA METHOD 8015D: GASOLINE RANGE						Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	10/31/2018 11:38:32 A	M G55297
Surr: BFB	110	73.8-119		%Rec	1	10/31/2018 11:38:32 A	
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.020		mg/Kg	1	10/31/2018 11:38:32 A	M B55297
Toluene	ND	0.040		mg/Kg	1	10/31/2018 11:38:32 A	M B55297
Ethylbenzene	ND	0.040		mg/Kg	1	10/31/2018 11:38:32 A	M B55297
Xylenes, Total	ND	0.079		mg/Kg	1	10/31/2018 11:38:32 A	M B55297
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	10/31/2018 11:38:32 A	M B55297

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 9 of 13 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810E97

01-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41286

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 41286

RunNo: 55292

Prep Date:

10/31/2018

Analysis Date: 10/31/2018

SeqNo: 1840690

Units: mg/Kg

Analyte

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit**

Qual

Chloride

Result ND

1.5

Batch ID: 41286

Sample ID LCS-41286

SampType: Ics

TestCode: EPA Method 300.0: Anions RunNo: 55292

Client ID:

LCSS

SeqNo: 1840691

Units: mg/Kg

Analyte

Prep Date: 10/31/2018

Analysis Date: 10/31/2018

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit**

Qual

PQL

96.8

90

110

Chloride

Result 15

1.5 15.00

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range E

J Analyte detected below quantitation limits Page 10 of 13

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810E97

01-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Truik 20	October 2018								
Sample ID MB-41282	SampType:	MBLK	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch ID:	41282	F	RunNo: 5	5288				
Prep Date: 10/31/2018	Analysis Date:	10/31/2018	5	SeqNo: 18	839483	Units: mg/k	(g		
Analyte	Result PQI	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		0							
Motor Oil Range Organics (MRO)	ND 5	0							
Surr: DNOP	8.9	10.00		89.3	50.6	138			
Sample ID LCS-41282	SampType: I	_cs	Tes	tCode: EF	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch ID: 4	11282	F	RunNo: 55	5288				
Prep Date: 10/31/2018	Analysis Date:	10/31/2018	8	SeqNo: 18	339811	Units: mg/k	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42 1	0 50.00	0	83.5	70	130			
Surr: DNOP	4.3	5.000		86.1	50.6	138			
Sample ID 1810E97-010AMS	SampType: I	MS	Tes	tCode: EP	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: S-9	Batch ID: 4	11282	F	RunNo: 55	285				
Prep Date: 10/31/2018	Analysis Date:	10/31/2018	S	SeqNo: 18	39831	Units: mg/K	(g		
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35 9.	46.99	0	75.2	53.5	126			
Surr: DNOP	4.6	4.699		97.7	50.6	138			
Sample ID 1810E97-010AMS	D SampType: N	MSD	Test	Code: EP	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: S-9	Batch ID: 4	1282	R	unNo: 55	285				
Prep Date: 10/31/2018	Analysis Date:	10/31/2018	S	eqNo: 18	39832	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37 9.	5 47.57	0	76.7	53.5	126	3.28	21.7	
Surr: DNOP	4.7	4.757		98.0	50.6	138	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 Quanitative 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

Page 11 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1810E97

01-Nov-18

Client:

APEX TITAN

Project:

Sample ID 2.5UG GRO LCS

Trunk 2C October 2018

Sample ID RB	SampT	SampType: MBLK			tCode: E	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	ID: G5	5297	F	RunNo: 5	5297				
Prep Date:	Analysis D	ate: 10	0/31/2018	S	SeqNo: 1	840036	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.6	73.8	119			

Sample ID 2.5UG GRO LCS	SampT	ype: LC	S	TestCode: EPA Method 8015D: Gasoline Range						12
Client ID: LCSS	Batch	n ID: G5	5297	F	RunNo: 5	5297				
Prep Date:	Analysis D	ate: 10)/31/2018	S	SeqNo: 1	840037	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	80.1	123			
Surr: BFB	1100		1000		111	73.8	119			

Sample ID 1810E97-001AM	S SampT	ype: MS	S	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	е	11
Client ID: FP-1a	Batch	n ID: G5	55297	F	RunNo: 5	5297				
Prep Date:	Analysis D	ate: 10	0/31/2018	S	eqNo: 1	840038	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.61	0	102	77.8	128			
Surr: BFB	1100		944.3		116	73.8	119			

Sample ID 1810	E97-001AMSD	SampT	ype: MS	SD	Tes	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: FP-1a	a	Batch	ID: G5	5297	R	unNo: 5	5297				
Prep Date:	,	Analysis D	ate: 10	0/31/2018	S	eqNo: 1	840039	Units: mg/K	g		
Analyte	1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Orgar	nics (GRO)	23	4.7	23.61	0	97.2	77.8	128	5.29	20	
Surr: BFB		1100		944.3		112	73.8	119	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range E

J Analyte detected below quantitation limits

Page 12 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: **1810E97**

01-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID RB	SampT	SampType: MBLK TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch	n ID: B5	5297	F	RunNo: 5	5297				
Prep Date:	Analysis D	ate: 10)/31/2018	8	SeqNo: 1	840042	Units: mg/k	ζg		
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	0.96		1.000		96.0	80	120			
Sample ID 100NG BTEX LCS	SampT	ype: LC	S SampType: LCS TestCode: EPA Method 8021B: Volatiles							

Client ID: LCSS	Batch	ID: B5	5297	F	RunNo: 5	5297				
Prep Date:	Analysis D	ate: 10	/31/2018	S	SeqNo: 1	840043	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	77.3	128			
Toluene	0.94	0.050	1.000	0	93.9	79.2	125			
Ethylbenzene	0.91	0.050	1.000	0	91.1	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	89.2	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID 1810E97-002AM	Samp	Гуре: М	3	Tes	tCode: E	tiles				
Client ID: FP-1b	Batc	h ID: B5	5297	F	RunNo: 5	5297				
Prep Date:	Analysis [Date: 10	0/31/2018	S	SeqNo: 1	No: 1840044 Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.020	0.8183	0.003731	96.2	68.5	133			
Toluene	0.82	0.041	0.8183	0.002643	99.8	75	130			
Ethylbenzene	0.80	0.041	0.8183	0	97.7	79.4	128			
Xylenes, Total	2.4	0.082	2.455	0	96.7	77.3	131			
Surr: 4-Bromofluorobenzene	0.79		0.8183		96.8	80	120			

Sample ID 1810E97-002AMSD SampType: MSD				TestCode: EPA Method 8021B: Volatiles								
Client ID: FP-1b	ient ID: FP-1b Batch ID: B55297					RunNo: 55297						
Prep Date:	Analysis D	ate: 10	/31/2018	S	SeqNo: 1	840045	Units: mg/k	ζg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.75	0.020	0.8183	0.003731	91.8	68.5	133	4.70	20			
Toluene	0.78	0.041	0.8183	0.002643	95.4	75	130	4.52	20			
Ethylbenzene	0.76	0.041	0.8183	0	93.4	79.4	128	4.57	20			
Xylenes, Total	2.3	0.082	2.455	0	92.4	77.3	131	4.52	20			
Surr: 4-Bromofluorobenzene	0.80		0.8183		97.3	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 Quanitative 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

Page 13 of 13

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



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

С	lient Name:	APEX AZT	EC	Work Order Nu	mber: 181	0E97		RoptNo	o: 1
Re	eceived By:	Victoria Z	ellar	10/31/2018 8:00:0	00 AM		Victoria G	ellas	
	ompleted By:	Erin Mele	ndrez	10/31/2018 8:21:2	22 AM		Victoria &	5	
(B: -	20	10/3	18					
Ch	ain of Cus	tody							
	Is Chain of C		lete?		Yes	~	No 🗌	Not Present	
2.	How was the	sample deliv	rered?		Cou	rier			
L	og In								
_	Was an atten	npt made to	cool the samp	les?	Yes	V	No 🗌	NA 🗆	
4.	Were all samp	oles received	l at a tempera	ture of >0° C to 6.0°C	Yes	V	No 🗌	NA 🗆	
5.	Sample(s) in	proper conta	iner(s)?		Yes	V	No 🗌		
6.	Sufficient sam	iple volume t	for indicated te	est(s)?	Yes	V	No 🗆		
7.	Are samples (except VOA	and ONG) pro	perly preserved?	Yes	~	No 🗌		
8.	Was preserva	tive added to	bottles?		Yes		No 🗸	NA 🗆	
9.	VOA vials hav	e zero head	space?		Yes		No Q	No VOA Vials	
10.	Were any san	nple contain	ers received b	roken?	Yes		No 🗹	# of preserved	200
	Does paperwo)	Yes	V	No 🗆	bottles checked for pH	nc>12 unless noted)
12.	Are matrices of	correctly ider	tified on Chai	n of Custody?	Yes	V	No 🗌	Adjusted?	
13.	ls it clear wha	t analyses w	ere requested	?	Yes	~	No 🗌		
	Were all holdi (If no, notify c				Yes	V	No 🗆	Checked by:	
Spe	ecial Handl	ing (if ap	olicable)						
-	THE REAL PROPERTY.			with this order?	Yes		No 🗆	NA 🗹	
	Person	Notified:		Dat	te:				
	By Who	om:	PARTY OF THE PARTY	Via	: eM	ail 🔲	Phone Fax	☐ In Person	
	Regard	ing:			A Control of the Cont	To The Obligation String Street		The same of the sa	
	Client I	nstructions:							
16.	Additional re	marks:							
17.	Cooler Infor	mation							
	Cooler No		Condition	Seal Intact Seal No	Seal D	ate	Signed By	1	
	1	2.3	Good	Yes				7	
	2	3.8	Good	Yes					

					CHAIN OF CUSTODY RECORD
=4	2	Hall Env.	ronmental	ANALYSIS REQUESTED	Lab use only Due Date:
	Laboratory:	Lob		1 1 1 1 1	
APEX ,	Address:	4901 How	Kins NE	/ / Jeg/ / /	Temp. of coolers 2.3,3
Office Location 606 5 R	40 Albegus		1 87107	19////	when received (C"):
Corande Suit A	Contact:	AFIREN	222	28 A / /	1 2 3 4 5
Aztre pm 8741		05-345.		2 E 1	/ / Pageof
Project Manager K. Summ				3/02/7//	/ / /
Sampler's Name	Sampler's Signa	ature			/ / /
CDAponti	Blath	\supset		* 2 3 1 / /	
Proj. No. Project Nam			ype of Containers	W 5/3 / / /	/ /
725040112528 TIVAK	ac Cocto Der,	2018)		6 K K	// 010507
Matrix Date Time C G r m a	Identifying Marks of Sample(s)		AVG 1. Lt. 250 ml Glass Jar P/O		1810E97 Lab Sample ID (Lab Use Only)
5 10/29/18 1000 10	FP-la	- ,5	1	v v v	-001
5 4/24/18 1235 P	F2-016	- 1.5	1	406	-002
5 1/25/18 1240 =	FP-22	- 3'		XXX	-003
5 /29/18 1245 X	FP-2b	- 3'	5	VXC	-004
5 10/18/18/18/05 4	F7-2C	0 3)	6 4 8	-005
1 1/29/18 1255 4	FP- 2 d	0 3	1	2 2 3	-006
5 18/18/1300 4	F2- 2e	0 3	t sace	k * k	-007
5 1/38/18 1305 4	FP-2f	- 1,25)	x × x	-008
5 /29/18 13/0 P	F7-29	- 125	1	v x x	-009
				1	5
			0-31-18		4 (- 14)
	Date: Time: Received 1451	ved by: (Signature)	Date:	Time: NOTES: B,1/ %	Tom long (Ethou)
Reinquished by (Signature) D	Date: Time: Received	ved by: (Signature)	Date:	Time: Pay Key 22	33355 RB21200
	ate: Time: Recei	ved by: (Signature)	Date:	Time: Pm - ME . E	your man
Relinquished by (Signature)	Date: Time: Recei	ved by: (Signature)	Union Date:	Time: AFF # 138	ene Lay 10-31-18)
	W - Water S - Soil SD - So A/G - Amber / Or Glass 1 Liter	olid L/ Liquid 250 ml - Glass	A - Air Bag C - Chr	arcoal tube SL - sludge O - Oil	



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

November 05, 2018

Kyle Summers
APEX TITAN
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603

FAX

RE: Trunk 2C October 2018

OrderNo.: 1811068

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/2/2018 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 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,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1811068

Date Reported: 11/5/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID: 1811068-001

Project: Trunk 2C October 2018

Matrix: SOIL

Client Sample ID: FP-2h

Collection Date: 11/1/2018 9:00:00 AM

Received Date: 11/2/2018 6:45:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: smb
Chloride	ND	30	mg/Kg	20	11/2/2018 1:05:54 PM	41333
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	11/2/2018 10:36:18 AM	41325
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	11/2/2018 10:36:18 AM	41325
Surr: DNOP	98.6	50.6-138	%Rec	1	11/2/2018 10:36:18 AM	41325
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	11/2/2018 8:40:17 AM	G55363
Surr: BFB	82.3	73.8-119	%Rec	1	11/2/2018 8:40:17 AM	G55363
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	11/2/2018 8:40:17 AM	B55363
Toluene	ND	0.042	mg/Kg	1	11/2/2018 8:40:17 AM	B55363
Ethylbenzene	ND	0.042	mg/Kg	1	11/2/2018 8:40:17 AM	B55363
Xylenes, Total	ND	0.084	mg/Kg	1	11/2/2018 8:40:17 AM	B55363
Surr: 4-Bromofluorobenzene	84.3	80-120	%Rec	1	11/2/2018 8:40:17 AM	B55363

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 5 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811068 05-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID MB-41333

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 41333

RunNo: 55367

Prep Date: 11/2/2018

Analysis Date: 11/2/2018

PQL

Batch ID: 41333

PQL

1.5

SeqNo: 1843065

Units: mg/Kg

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

TestCode: EPA Method 300.0: Anions

HighLimit

%RPD

RPDLimit

Chloride

ND

Sample ID LCS-41333

SampType: Ics

RunNo: 55367

Prep Date: 11/2/2018

LCSS

Analysis Date: 11/2/2018

SeqNo: 1843066

Units: mg/Kg

%RPD

Qual

110

Chloride

Client ID:

15.00

SPK value SPK Ref Val

%REC 96.0

90

RPDLimit

Result 14

1.5

LowLimit

HighLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND **Practical Quanitative Limit**

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

Value above quantitation range E

Analyte detected below quantitation limits J

Page 2 of 5

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811068

05-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID LCS-41325	SampT	ype: LC	s	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch	ID: 41	325	RunNo: 55359							
Prep Date: 11/2/2018	Analysis D	ate: 11	/2/2018	SeqNo: 1842447 Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	43	10	50.00	0	86.9	70	130				
Surr: DNOP	4.3		5.000		86.7	50.6	138				

Sample ID MB-41325	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 41	325	F	RunNo: 5	5359				
Prep Date: 11/2/2018	Analysis D	ate: 11	/2/2018	8	SeqNo: 1	842448	Units: mg/K	(g		
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	9.6		10.00		96.2	50.6	138			

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 Quanitative 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

Page 3 of 5

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811068 05-Nov-18

Client:

APEX TITAN

Trunk 2C October 2018

Sample ID	1811068-001AMS	SampT	ype: MS		Test	Code: EP	A Method	8015D: Gaso	line Rang	е	
Client ID:	FP-2h	Batch	ID: G5	5363	R	unNo: 55	363				
Prep Date:		Analysis Da	ate: 11	/2/2018	S	eqNo: 18	842497	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	4.2	21.01	0	107	77.8	128			
Surr: BFB		880		840.3		105	73.8	119			
Sample ID	1811068-001AMSI) SampT	ype: MS	SD	Test	Code: EF	A Method	8015D: Gaso	line Rang	е	
Client ID:	FP-2h	Batch	ID: G5	5363	R	tunNo: 55	5363				
Prep Date:		Analysis D	ate: 11	/2/2018	S	SeqNo: 18	342498	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	4.2	21.01	0	103	77.8	128	3.16	20	
Surr: BFB		830		840.3		99.4	73.8	119	0	0	
Sample ID	RB	SampT	ype: ME	BLK	Test	tCode: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID:	PBS	Batch	1D: G 5	5363	R	RunNo: 5	5363				
Prep Date:		Analysis D	ate: 1'	1/2/2018	S	SegNo: 18	842727	Units: mg/K	g		
Analyte											
Allalyte		Result	PQL	SPK value	SPK Ref Val	%REC		HighLimit	%RPD	RPDLimit	Qual
	ge Organics (GRO)	Result	PQL 5.0		SPK Ref Val	%REC	LowLimit		%RPD	RPDLimit	Qual
	ge Organics (GRO)		100, 100, 200	SPK value	SPK Ref Val			HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 850	100, 100, 200	1000		%REC 85.4	LowLimit 73.8				Qual
Gasoline Rang Surr: BFB	2.5UG GRO LCS	ND 850 SampT	5.0	1000	Tes	%REC 85.4	T3.8	119			Qual
Gasoline Rang Surr: BFB Sample ID	2.5UG GRO LCS LCSS	ND 850 SampT	5.0 Type: LC	1000 :S 55363	Tes F	%REC 85.4 tCode: El	73.8 PA Method	119	line Rang		Qual
Gasoline Rang Surr: BFB Sample ID Client ID:	2.5UG GRO LCS LCSS	ND 850 SampT Batch	5.0 Type: LC	1000 SS 55363 1/2/2018	Tes F	%REC 85.4 tCode: El RunNo: 5	73.8 PA Method	119 8015D: Gas o	line Rang		Qual
Gasoline Rang Surr: BFB Sample ID Client ID: Prep Date: Analyte	2.5UG GRO LCS LCSS	ND 850 SampT Batch Analysis D	5.0 Type: LC on ID: G5	1000 SS 55363 1/2/2018	Tes F S	%REC 85.4 tCode: El RunNo: 5	73.8 PA Method 5363 842728	119 8015D: Gasc Units: mg/ /	oline Rang	e	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Η

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

E Value above quantitation range

Analyte detected below quantitation limits

Page 4 of 5

Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811068

05-Nov-18

Client:

APEX TITAN

Project:

Trunk 2C October 2018

Sample ID RB	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	n ID: B5	5363	R	RunNo: 5					
Prep Date:	Analysis D	oate: 11	1/2/2018	S	SeqNo: 1	842734	Units: mg/k	(g		
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	0.87		1.000		87.2	80	120		1	

Sample ID 100NG BTEX LC	S SampT	ype: LC	S	Tes	8021B: Volat	tiles				
Client ID: LCSS	Batch	ID: B5	5363	F						
Prep Date:	Analysis D	ate: 11	1/2/2018	8	SeqNo: 1	842735	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	80.8	77.3	128			
Toluene	0.87	0.050	1.000	0	87.5	79.2	125			
Ethylbenzene	0.87	0.050	1.000	0	86.8	80.7	127			
Xylenes, Total	2.6	0.10	3.000	0	88.2	81.6	129			
Surr: 4-Bromofluorobenzene	0.84		1.000		84.3	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 Quanitative 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

Page 5 of 5

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: APEX AZTEC	Work Order Number	er: 1811068		RoptNo: 1	
Received By: Anne Thome	11/2/2018 6:45:00 A	м	anne Man		
Completed By: Anne Thorne	11/2/2018 7:02:18 AI	М	ann Ha		
Reviewed By:	11/2/18		Cina Ala		
Labeled by; A	1/02/18				
Chain of Custody	., 52, 6				
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 sar	mples?	Yes 🗸	No 🗆	NA 🗆	
4. Were all samples received at a temper	erature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗆		
6. Sufficient sample volume for indicated	i test(s)?	Yes 🗹	No 🗆		
7. Are samples (except VOA and ONG)	properly preserved?	Yes 🗸	No 🗆		
8. Was preservative added to bottles?	And the second s	Yes	No 🗹	NA 🗆	
9. VOA vials have zero headspace?		Yes 🗌	No 🗆	No VOA Vials	
10. Were any sample containers received	i broken?	Yes	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custo	dv)	Yes 🔽	No 🗆	bottles checked for pH: (<2 or >12 unless no	ted)
12. Are matrices correctly identified on Ch		Yes 🗸	No 🗆	Adjusted?	
13. Is it clear what analyses were request		Yes 🗹	No 🗆		
14. Were all holding times able to be met (If no, notify customer for authorization		Yes 🗹	No 🗆	Checked by:	
Special Handling (if applicable)					
15. Was client notified of all discrepancie	s with this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified:	Date	A STATE OF THE PARTY OF THE PAR	CHRCLANATA MALLEN CANDON CO.		
By Whom:	Via:	eMail P	hone Fax	☐ In Person	
Regarding:					
Client Instructions:				Sold State Control of the Control of	
16. Additional remarks:					
CUSTODY SEAL INTACT ON S	SOIL JAR/at 11/2/18				
17. Cooler Information	A superior section of the section of	1	otion or disperse		
Gooler No Temp % Conditio	The state of the s	Sea Date	Signed By		
1 1.0 Good	Yes				

															1.85		See Sec.				CHAIN OF CUST	ODY RECORD
	A					Laboratory:			Envi	ron	gar t.	he		ANAL		ED /	3/	//	/	/	Lab u	use only Date:
A	PEX					Address:			Han	Kin.	5 1	NE	-			/	\$	/	/	//	/ / Temp	of coolers 10
Offic	e Locatio	n 600	6.	Sui	7 A	Albequer	ane	N	m	87	109	2				1.		//	/ /	/		received (C°):
5	L'o	Par	Le			Albeguer Contact:	A	Fie	ena	~						10	/	//	/	/	1110	3 4 5
An	tec 1	IA	8	741	0	Phone: 50									1/	1	N	1	1	1	Page.	
	ect Mana					PO/SO#: _									P	100	M	/	/	//	//	
	ler's Name	gei	007			Sampler's Signa	ature								8/	10	1	//	//	/		
in the	BApon!	-;				Mall	/			-				1	80	1.	/					
Proj.	No.			ect Na					No/Ty	pe of C	ontain	ers		4	19/	10				/ /		
725	ONOLIZ	1508	1	700	nk 2	c loctobe	,20	(8)						2	7/2	13		/	//	/		
Matrix	Date	Time	Comp	rab	Identifying Ma	arks of Sample(s)	Start	End Depth	VOA	A/G 1 Lt.	250 II	Glass	P/0	1	3/1	1		//		1	Lab Sample II	O (Lab Use Only)
5	11-1-18	900	4		F7-8	4	0	3				1		4 6	p						181	1068-001
			-	-				-							-			25				
	Carrier S			1.3									ne ii			1						
											- 1			1 2	100	1						
				75												1	2	2				
											- /5				911		1	-5				
Mari		60 I T 1	-	-		51 7	TO BE		0.5					3.4			1					
							N. F.	2/11/14			7					-		/	7			
																			1			
						1											100		1			
																3.5				1		
	around time			0:	25% Rush		0100%					Chi I	24									1 .)
Relin	quished by	(Signature)		Date:	Time: Receive	ed by:	(Signa	ture)			Date	10	/23	85	NOTI	ES:	+	TO	~	long (EP	200)
Relig	quished by	(Signature)	1	Date:	Time: / Recei	ed by:	(Signa	ture)			Date	:	Time	B: A	10	111	D	A	32	1200	
	Ust	VILL	te	1		70/10		100	2	4		110	16	064	- P	ag	BU	3	=	(A)-e	man	
Relin	quished by	(Signature)		Date:	Time: Receiv	rea by:	(Signa	iture)			Date		1 851.10	- 1	m of	- /	L N	20	143	4	
Relin	quished by	(Signature)		Date:	Time: Receiv	ed by:	(Signa	ture)			Date):	Time	e:	FT I	E	1 10	28	×	long (Eli 1200 man 4 Sane buy	(11-2-18)
Matrix		W - Wastew				S - Soil SD - So Or Glass 1 Liter	lid L	- Liquio 250 ml -	d A Glass v	- Air Ba	ag outh			rcoal tube		SL - sl	udge	C	- Oil		0	



Appendix G

Regulatory Correspondence

From:

Long, Thomas

To:

"Smith, Cory, EMNRD (Cory, Smith@state.nm.us)"; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us);

"I1thomas@blm.gov"

Cc:

Stone, Brian

Subject:

FW: Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.886305

Date:

Monday, November 5, 2018 7:29:00 AM

Attachments:

Rpt 1810E11 Final v1.pdf Trunk 2C October 2018.pdf Rpt 1811008 Final v1.pdf Trunk 2C October 2018.pdf Trunk 2C October 2018.pdf

Trunk 2C excavation and sample map(2).pdf

Cory/Whitney,

Please find the attached site sketch and lab reports for the Trunk 2C excavation. All sample results are below the site specific remediation standard. Enterprise will backfill the excavation with clean imported fill material. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Tuesday, October 30, 2018 5:18 PM

To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us) <Vanessa.Fields@state.nm.us>; 'l1thomas@blm.gov'

<l1thomas@blm.gov>

Cc: Stone, Brian

bmstone@eprod.com>

Subject: FW: Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.886305

Cory,

Please find the attached lab report and site sketch for the Trunk 2C excavation. S-7 and S-8 exceeded the site specific remediation standard. As discussed per telephone conversation, we utilized a jack hammer to break up the bedrock on the base of the excavation in the area of S-7. We also resampled that area today. We will be using a jack hammer to break up the bedrock in the area of S-8 on Thursday. We will also resample that area most likely on Thursday. I will provide the lab reports and an updated site sketch as they are generated. I will continue to coordinate with you on sampling times. Please call or email if you have questions.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com From: Long, Thomas

Sent: Thursday, October 25, 2018 10:17 AM

To: 'Smith, Cory, EMNRD' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD < <u>Vanessa.Fields@state.nm.us</u>>; 'l1thomas@blm.gov' < <u>l1thomas@blm.gov</u>>

Cc: Stone, Brian < bmstone@eprod.com>

Subject: RE: Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.886305

Cory/Whitney,

This email is to notify you that Enterprise anticipates collecting soil samples for laboratory analysis at the Trunk 2C excavation at 10 a.m. on Friday, October 26, 2018. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Smith, Cory, EMNRD < Cory.Smith@state.nm.us>

Sent: Tuesday, October 23, 2018 3:25 PM

To: Long, Thomas <<u>tilong@eprod.com</u>>; Fields, Vanessa, EMNRD <<u>Vanessa.Fields@state.nm.us</u>>;

'l1thomas@blm.gov' <<u>l1thomas@blm.gov</u>> **Cc:** Stone, Brian <<u>bmstone@eprod.com</u>>

Subject: RE: Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.886305

Tom.

OCD concurs with your site assessment for the site ranking, please let us know when Enterprise is ready to sample.

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas < tilong@eprod.com>
Sent: Tuesday, October 23, 2018 1:41 PM

To: Smith, Cory, EMNRD < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD

<Vanessa.Fields@state.nm.us>; 'l1thomas@blm.gov' <l1thomas@blm.gov>

Cc: Stone, Brian < bmstone@eprod.com>

Subject: [EXT] FW: Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.886305

Cory/Vanessa/Whitney,

I am being proactive. This release seems to have substantial subsurface impact indicated from the hydro-excavation activities and it will be a reportable event. I have attached supporting documentation that this release site will fall under the third tier remediation standard (10 ppm Benzene, 50 ppm BTEX, 2,500 ppm TPH and 20,000 ppm Chloride) of the New Spill Rule. Please review the attached documentation. Please acknowledge if you agree with the proposed remediation standard. Also, we will begin remediation activities for this release tomorrow. If you have any questions, please call or email.

Tom Long 505-599-2286 (office) 505-215-4727 (Cell) tilong@eprod.com

From: Long, Thomas

Sent: Monday, October 22, 2018 10:49 AM

To: 'Smith, Cory, EMNRD (<u>Cory.Smith@state.nm.us</u>)' < <u>Cory.Smith@state.nm.us</u>>; Fields, Vanessa, EMNRD (<u>Vanessa.Fields@state.nm.us</u>>; 'l1thomas@blm.gov' < <u>l1thomas@blm.gov</u>>

Cc: Stone, Brian < bmstone@eprod.com>

Subject: Trunk 2C - UL K Section 15 T26N R10W; 36.485104, -107.886305

Cory/Whitney,

This email is a courtesy notification that Enterprise had a release of natural gas and natural gas liquids on the Truck 2C pipeline Friday, October 19, 2018 at approximately 2:30 p.m. The release is located at L K Section 15 T26N R10W; 36.485104, -107.886305. An estimated 2-3 barrels of condensate and produced water was released to the ground surface. I have attached pictures of the surface impact and after the standing liquids were recovered. We also have fenced the area off. I will keep you informed as to if this release becomes reportable per NMOCD regulation. If you have any questions, please call or email.

Sincerely,

Thomas J. Long Senior Environmental Scientist Enterprise Products Company 614 Reilly Ave. Farmington, New Mexico 87401 505-599-2286 (office) 505-215-4727 (Cell)

tjlong@eprod.com



This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.

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 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

			Respo	onsii	ole Part	У					
Responsible	e Party: Ent	terprise Field Se	ervices, LLC		OGRID: 15	51618					
Contact Nar	me: Thoma	s Long			Contact Te	elephone: 505-5	99-2286				
Contact em	ail: tjlong@	eprod.com			Incident #	ident # (assigned by OCD) N/A NCS P 10926416					
Contact ma 87401	iling addres	ss: 614 Reilly Av	e, Farmington,	NM							
			Location o	of Re	lease S	ource					
Latitude 36.7 decimal places)	13375		L	_ongitu	de <u>-108.10</u>	5496	NAD 83 in decimal degrees to 5				
Site Name L	ateral #3A	-2 Pipeline			Site Type N	Natural Gas Pi	peline				
Date Releas	e Discover	ed: 3/25/2019			Serial # (if a	applicable) TBD					
Unit Letter	Section	Township	Range		Count	tv					
F	21	29N	12W		San Ju	-	NWOCD				
	Material(s) F		Nature and				DISTRICT e volumes provided below)				
Crude O		Volume Releas				Volume Recov	vered (bbls)				
Produce	d Water	Volume Releas	sed (bbls)			Volume Recov	vered (bbls)				
			ation of dissolver r >10,000 mg/l?	d chlor	ide in the	☐ Yes ☐ No					
Condens	sate	Volume Releas	sed (bbls):			Volume Recov	vered (bbls):				
☐ Natural (Gas	Volume Releas	sed (Mcf):			Volume Recov					
○ Other (describe) Volume/Weight Released (provide units): Estimated 80 BBLs of Hydro-Static Test Water (Potable Water)											
pipeline. App	oroximately 8	30 barrels of hydro	otest water was re ately 200 feet. The	eleased e relea	to the grour sed fluids ha	nd surface and flave be contained	hydro-static testing of the Lateral 3A-2 owed south along an ephemeral wash as much as practicable. Repairs and inal C-141."				

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the in an ephemeral wash (blue line on	responsible party consider a USGS topo map) and is g	this a major release? greater the 25 barrels.	The release was located
⊠ Yes □ No				
If YES, was immediate no Vanessa Fields and Jim C	I otice given to the OCD? By whom? Griswold – NMOCD and Whitney Tho	To whom? When and by mas – BLM on January 25,	what means (phone, 2019 at 5:37 p.m. by	email, etc)? Cory Smith, phone call and email.
The responsible part	Initia y must undertake the following actions imi	I Response	eate a safety hazard that	would result in injury
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			•	
	release has been stopped.			
	has been secured to protect hum			
	s have been contained via the use			containment devices.
	recoverable materials have been			
migration of the release	bed above have <u>not</u> been underta e potable water, but some standir ne release location and remove th	ng water was left onsite, a	s and dikes were in: as that a road has to	stalled to prevent to be built in order for
remediation has begun	NMAC the responsible party may n, please attach a narrative of acti within a lined containment area (s	ons to date. If remedial e	efforts have been su	iccessfully completed or
I hereby certify that the in rules and regulations all of releases which may endal operator of liability should groundwater, surface was	nformation given above is true and co operators are required to report and/o anger public health or the environmer d their operations have failed to adeq ter, human health or the environment for compliance with any other federa	or file certain release notificant. The acceptance of a C-1 uately investigate and rement. In addition, OCD acceptant	ations and perform con 41 report by the OCD diate contamination the nce of a C-141 report	rective actions for does not relieve the nat pose a threat to
Printed Name: Jon E. F	Fields	_ Title: Director, Field En	vironmental	
Signature:	terles	Date: 4-4-19		
email: jefields@eprod				
OCD Only Received by:	>	Date:	4/19/19	,

District I 1625 N. French Dr., Hobbs, NM 88240 District II 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	

Market Street			4 8
	0000	N O to	ication
			11-2111111
			ICALIOII

MALOCE

		Release Notification		MMUCU			
			Responsible Party		:y	APR 1 8 2019	
Responsible Party: Enterprise Field Services, LLC			OGRID: 1	51618	DISTRICT III		
Contact Nar	me: Thoma	s Long		Contact T	Telephone: 505-599-2286		
Contact ema	ail: tjlong@	eprod.com		Incident #	Incident # (assigned by OCD) N/A		
Contact mai	Contact mailing address: 614 Reilly Ave, Farmington, NM 87401		NM	NCS 1911539620			
			Location o	f Release S	ource		
_atitude <u>36.8</u>	53298		L	ongitude <u>-107.69</u>	0996	NAD 83 in decimal degrees to	
Site Name S	andstone	Compressor Sta	ation	Site Type	Natural Comp	pressor Station	
Date Release Discovered: 4/2/2019		Serial # (if	f applicable): N/A				
Unit Letter	Section	Township	Range	Coun	ty		
I	32	31N	W8	San J	uan		
Surface Own	er: 🛛 Stat	e] Tribal □ Priva	te (Name:)	
		1	Nature and	Volume of I	Release		
	Material(s) F	Released (Select all t	nat apply and attach	calculations or specif	ic justification for	the volumes provided below)	
Crude Oil Volume Released (bbls)			Volume Recovered (bbls)				
☐ Produced Water Volume Released (bbls)			Volume Recovered (bbls)				
Is the concentration of dissolved chlo produced water >10,000 mg/l?		d chloride in the	☐ Yes ☐ No				
Condensate Volume Released (bbls):			Volume Recovered (bbls):				
☐ Natural (Natural Gas Volume Released (Mcf):			Volume Recovered (Mcf):			
		ide units): 3-5	Volume/Weight Recovered (provide units)				
Enterprise be	egan removir	ng the impacted so	il utilizing hand too	ls. The release be	came reportable	or skid at Sandstone Compressor Station. e per NMOCD regulation on April 9, 2019 eport will be submitted with the "Final C-	

Was this a major release? release as defined by 19.15.29.7(A) NMAC? If YES, for what reason(s) does the responsible party consider this a major release?							
☐ Yes ☐ No							
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	r must undertake the following actions immediately unless they co	uld cre	eate a safety hazard that	would result in injury			
✓ The source of the r	elease has been stopped.						
_	has been secured to protect human health and the	enviro	nment.				
	have been contained via the use of berms or dikes,			r containment devices.			
	recoverable materials have been removed and man	aged	appropriately.				
If all the actions described above have <u>not</u> been undertaken, explain why: Berms and dikes were installed to prevent migration of the release potable water, but some standing water was left onsite, as that a road has to be built in order for equipment to access the release location and remove the water.							
Per 19 15 29 8 B (4) N	NMAC the responsible party may commence remedi	ation	immediately after d	iscovery of a release. If			
remediation has begun	, please attach a narrative of actions to date. If remo	edial e	efforts have been su	uccessfully 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: Jon E.	Fields Title: Director, I	ield E	Environmental	·			
Signature: Date: 4-12-19							
email: jefields@eprod.com Telephone:							
OCD Only Received by:	In J Dat	e:	4/24/14				
Treatived by:			// /				

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	3RP-1011	
Facility ID		
Application ID		

Release Notification

Responsible Party

Deeneneilel	- Dartin Fi	4						
Responsible Party: Enterprise Field Services, LLC Contact Name: Thomas Long					OGRID: 151618			
					Contact Telephone: 505-599-2286			
Contact email:tjlong@eprod.com					Incident #	(assigned by OC	D) N/A NMOCD	
Contact ma 87401	iling addre	ss: 614 Reilly Av	/e, Farmington,	NM	NCS 1912	1335405		
Location of Release Source								
Latitude <u>36.7</u> decimal places)	729277			Longit	ude <u>-107.9</u>	56459	NAD 83 in decimal degrees to s	
Site Name V	/al Verde F	Plant			Site Type	Natural Gas P	Processing Plant	
Date Releas	se Discover	red: 4/18/2019			Serial # (if	applicable) N/A	-	
Unit Letter	Section	Township	Dongo		0	4.		
A	14	29N	Range 11W		Cour San J	-		
	Material(s) F	Released (Select all t	Nature and			ic justification for th	he volumes provided below)	
Crude O	il	Volume Releas	sed (bbls)			Volume Reco	overed (bbls)	
Produce	d Water	Volume Releas	ed (bbls)			Volume Recovered (bbls)		
			ation of dissolved r >10,000 mg/l?	d chlo	ride in the	☐ Yes ☐ N	0	
Condens	ate	Volume Releas	ed (bbls):			Volume Recovered (bbls):		
☐ Natural C	Gas	Volume Releas	ed (Mcf):			Volume Reco	overed (Mcf):	
☐ Other (describe) Volume/Weight Released (provide un Estimated 5 Barrels of Amine/Wate				volume/Weight Recovered (provide units): Unknown				
an estimated wide was imp	five barrels of acted by the	of an amine/water	mix overflow the c All release fluids	ontainr remai	ment onto the	e ground. An are lant property. F	ondary containment was full. In addition, ea approximately 30 feet long by 30 feet interprise recovered the standing liquids	



		9.1	this a major release?	
Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the res	ponsible party consider	this a major release?	
☐ Yes ⊠ No				
If YES, was immediate no	I otice given to the OCD? By whom? To v	whom? When and by wh	nat means (phone, em	ıail, etc)?
	Initial	Response		
The responsible part	ry must undertake the following actions immed	diately unless they could cre	eate a safety hazard that	would result in injury
☐ The source of the I	release has been stopped.			
	has been secured to protect human	health and the enviro	nment.	
	s have been contained via the use of			r containment devices.
	recoverable materials have been re			
			- при при при при при при при при при при	
If all the actions descri	bed above have <u>not</u> been undertake	iii, explaili wily.		
		Mar.		
remediation has begui	NMAC the responsible party may con, please attach a narrative of action within a lined containment area (see	s to date. If remedial (19.15.29.11(A)(5)(a) I	епопѕ nave been si NMAC), please attac	ch all information needed
I hereby certify that the in rules and regulations all releases which may end operator of liability should groundwater, surface was	nformation given above is true and compoperators are required to report and/or fi anger public health or the environment. Id their operations have failed to adequater, human health or the environment. It for compliance with any other federal, s	ne certain release notification. The acceptance of a C-′ tely investigate and remental and remental acceptance.	ations and perform co 141 report by the OCE ediate contamination t ance of a C-141 report	O does not relieve the hat pose a threat to
Printed Name: Jon E.	Fields	Title: Director, Field En	vironmental	
Signature:	/ " /	Date: 4-26-1	9	
email: jefields@eprod	d.com	Telephone: 713-381-	-6684	
OCD Only Received by:	a J. J.	Date:	5/3/19	

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	1011
Facility ID	
Application ID	

Release Notification

NMOCD

Respons					ole Part	У	MAY 0 6 2019	
Responsible	Responsible Party: Enterprise Field Services, LLC				OGRID: 1	51618	DISTRICT III	
Contact Name: Thomas Long					Contact Telephone: 505-599-2286			
Contact em	ail:tjlong@	eprod.com			Incident #	(assigned by OC	D) N/A	
Contact ma 87401	iling addres	s: 614 Reilly Av	e, Farmington,	NM	NC	- 19 1303	36332	
			Location o	of Re	lease S	ource		
_atitude <u>36.7</u>	789903		L	_ongitu	de <u>-107.91</u>	4550	NAD 83 in decimal degrees to	
Site Name L	ateral H-34	4 Pipeline			Site Type I	Natural Comp	pressor Gathering Pipeline	
Date Releas	e Discover	ed: 3/3/2019			Serial # (if a	applicable): NM	0024892	
Unit Letter	Section	Township	Range		Coun	ty		
D	29	30N	10W		San Ju	ıan		
	_		Tribal Priva	Volu	ıme of F		the volumes provided below)	
Crude O	il	Volume Release	sed (bbls)	oaloulati	ions or opcom	Volume Recovered (bbls)		
Produce	d Water	Volume Releas	sed (bbls)			Volume Recovered (bbls)		
		produced water	ration of dissolved er >10,000 mg/l?		ide in the	☐ Yes ☐ N		
□ Condens	sate	Volume Releas	sed (bbls): Unkno	own			overed (bbls): None	
Natural €	Gas	Volume Releas	sed (Mcf): Unkno	own	Volume Recovered (Mcf): None			
Other (describe) Volume/Weight Released (provide units): Volume/Weight Recovered (provide units)								
Cause of Release: On March 3, 2019, a third party notified Enterprise of a possible release of natural gas on the Lateral H-34 pipeline. Enterprise dispatched a technician and confirmed the release. The pipeline was isolated, depressurized, locked out and tagged out. No fluids were observed on the ground surface. Due to the adverse weather conditions and road conditions, Enterprise did not begin repairs and remediation until Monday, April 22, 2019, at which time the release was determined reportable per NMOCD regulation, due to the volume of impacted subsurface soil. A third party closure report will be submitted with the "Final C-141."								



Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the	e responsible party consider	this a major release?	
☐ Yes ⊠ No				
If YES, was immediate no	ptice given to the OCD? By whom?	To whom? When and by wh	nat means (phone, em	ail, etc)?
	Initia	al Response		
The responsible part	y must undertake the following actions im	mediately unless they could cre	eate a safety hazard that	would result in injury
☐ The source of the r	elease has been stopped.			
☐ The impacted area	has been secured to protect hun	nan health and the enviro	nment.	
□ Released materials	s have been contained via the use	e of berms or dikes, abso	rbent pads, or other	containment devices.
All free liquids and	recoverable materials have been	removed and managed	appropriately.	
migration of the release equipment to access the	bed above have <u>not</u> been undertage potable water, but some standing release location and remove the	ng water was left onsite, a ne water	as that a road has to	be built in order for
remediation has begun if the release occurred of the release occurred of the release occurred of the release occurred operator of liability should groundwater, surface wat	MMAC the responsible party may an please attach a narrative of activithin a lined containment area (sufformation given above is true and copperators are required to report and/or anger public health or the environment of their operations have failed to adequer, human health or the environment for compliance with any other federal	ons to date. If remedial eee 19.15.29.11(A)(5)(a) Normplete to the best of my known file certain release notificant. The acceptance of a C-1 uately investigate and remedia. In addition, OCD acceptant.	efforts have been sur IMAC), please attact owledge and understantions and perform corn 41 report by the OCD diate contamination thance of a C-141 report of	nd that pursuant to OCD rective actions for does not relieve the at pose a threat to
Printed Name:Jon & Signature:		Title: <u>Director, Environme</u> Date:		
email: <u>jefields@eprod.</u>		Telephone: _713-381-6	6684	
OCD Only Received by:		Date:	5/10/19	

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	3RD-1011
Facility ID	
Application ID	

Release Notification

Responsible Party

					•			
Responsible Party: Enterprise Field Services, LLC					OGRID: 151618			
Contact Name: Thomas Long				Contact T	Contact Telephone: 505-599-2286			
Contact email:tjlong@eprod.com				Incident #	(assigned by OCD) N/A			
Contact mail 87401	ing addres	s: 614 Reilly Av	e, Farmington,	NM NCS I	913740101			
			Location o	of Release S	Source			
_atitude <u>36.54</u> decimal places)	49313		, , ,L	ongitude <u>-107.54</u>	9324	NAD 83 in decimal degrees to		
Site Name La	ateral C-7	Loop Pipeline		Site Type	Natural Gas Pipelin	е		
Date Release	e Discovere	ed: 4/25/2019	=	Serial # (if	applicable) N/A			
						NMOCD		
Unit Letter	Section	Township	Range	Coun		MMOCD		
G	25	27N	9W	San J	uan	MAY 1 6 2019		
Surface Owne		1	Nature and	volume of l		DISTRICT III		
Crude Oi		Volume Releas	sed (bbls)		Volume Recovered	(bbls)		
Produced	d Water	Volume Releas	sed (bbls)		Volume Recovered (bbls)			
			ration of dissolve r >10,000 mg/l?	d chloride in the	☐ Yes ☐ No			
□ Condens	ate	Volume Releas	sed (bbls): Unkn	own	Volume Recovered (bbls): None			
			own	Volume Recovered (Mcf): None				
Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)					covered (provide units)			
technician wa	us dispatche was blown d	d and confirmed the down, depressurized ected area. On M.	e release. An area ed, locked out and av 2. 2019. Enterp	a of approximately t tagged out. Enterp rise began the repai	hree feet in diameter wa rise recovered the relea irs and remediation and	the Lateral C-7 Loop pipeline. As impacted by the released fluids ased fluids as much as practicable determined this release reportable ubmitted with the "Final C-141."		



		-		
10/ 10:	If YES, for what reason(s) does the r	osnonsible party consider th	nis a major release?	
Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the r	esponsible party consider ti	iis a major release :	
☐ Yes ⊠ No				
If YES, was immediate no	Lotice given to the OCD? By whom? To	whom? When and by wha	at means (phone, em	nail, etc)?
		Response		
The responsible part	y must undertake the following actions imm	ediately unless they could crea	ite a safety hazard that	would result in injury
	release has been stopped.			
	has been secured to protect huma			
□ Released materials	s have been contained via the use	of berms or dikes, absor	bent pads, or other	r containment devices.
	recoverable materials have been	emoved and managed a	ppropriately.	
If all the actions descri	bed above have <u>not</u> been undertak	en, explain why:		
				ė ,
		11-41 1		incovery of a release. If
remediation has begun	NMAC the responsible party may on, please attach a narrative of action within a lined containment area (se	ns to date. If remedial ef	fforts have been su	accessfully completed or
I hereby certify that the in	oformation given above is true and con	plete to the best of my kno	wledge and understa	and that pursuant to OCD
rules and regulations all or releases which may enda operator of liability should groundwater, surface wa	operators are required to report and/or anger public health or the environment d their operations have failed to adequ ster, human health or the environment. If for compliance with any other federal,	file certain release notificat . The acceptance of a C-14 ately investigate and remed In addition, OCD acceptan	ions and perform co the occ liate contamination the ce of a C-141 report	rrective actions for 0 does not relieve the 1 hat pose a threat to
Printed Name: Jon E.	Fields	Title: Director, Field Env		
Signature:		Date: 5-9-19		
email: jefields@eprod	d.com	Telephone: 713-381-6	6684	
OCD Only Received by:	my J. J	Date:	5/17/19	

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	3RP-1011
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enterprise Field Services, LLC			OGRID: 151618					
Contact Nam	e: Thomas	Long			Contact Telephone: 505-599-2286			
Contact email:tjlong@eprod.com				Incident # (assigned by OCD): NCS1833939663				
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401								
			Location	of R	elease So	urce		
Latitude 36.8	21676		Longitude -	-108.03	6399	(NAD 83 in decimal degrees to	5 decimal places)	
Site Name Ut	ton #100				Site Type N	latural Gas Gathering Pipeline		
Date Release	Discovered:	11/16/2018			Serial Num	ber (if applicable): N/A		
** ***		m 1:	P				OCD	
Unit Letter M	Section 7	Township 30N	Range 11W		Count San Ju		nen	
IVI	/	3019	11 W		- Can ou		1 2019	
Surface Owner			Nature and	d Vol	ume of F	Release ustification for the volumes provided below	witten	
Crude Oil		Volume Release		Calculati	ons of specific	Volume Recovered (bbls)		
Produced	Water	Volume Release	d (bbls)			Volume Recovered (bbls)		
		Is the concentrat	ion of dissolved c >10,000 mg/l?	chloride	in the	n the Yes No		
☐ Condensate Volume Released (bbls): 10-15 Barrels			arrels	Volume Recovered (bbls): None				
□ Natural Gas			Volume Recovered (Mcf): None					
Other (describe) Volume/Weight Released (provide units):				s): Volume/Weight Recovered (provide units)				
owner also nout. An area or remediated to Remediation wide by appropriate to the control of the	otified San J of approxima o the most s was comple oximately 18	Juan County Fire Dately eight feet in detringent NMOCD reted on December 3 feet deep. Appr	Department as a puriameter was imparemediation standa 10, 2018. The fir oximately 660 cub	recaution acted with ard (10 nal excaptic bic yard	on. The pipe th condensat ppm Benzen avation dime s of hydroca	natural gas release on the Utton #1 line was isolated, depressurized, lo e. Enterprise determined this releas ie, 50 ppm BTEX, 100 ppm TPH arnsions measured approximately 47 rbon impacted soil were excavated baure report is included with this "Fire the was sure to be the sure report is included with this "Fire the was sure report in the sure report is included with this "Fire the was sure report in the sure report in the sure report is included with the sure report in the sure report	cked out and tagged se was required to be ad 600 ppm chloride) feet long by 21 feet and transported to a	



Form C-141 Page 2

State of New Mexico Oil Conservation Division

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: Jon E Fields Title: Director, Field Environmental Date: 4- E-19 Telephone: 713-381-6684	
OCD Only	
Received by:	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate an 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:	id le
Printed Name: Cory Title: Environmental Spec.	

ENSOLUM

CLOSURE REPORT

Property:

Utton #100 Pipeline Release (2018) SW ¼, S7 T30N R11W San Juan County, New Mexico

March 18, 2019 Ensolum Project No. 05A1226042

Prepared for:

Enterprise Field Services, LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long

Prepared by:

Chad D'Aponti Staff Scientist

Kyle Summers, CPG Project Manager

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CLOSURE REPORT

Utton #100 Pipeline Release (2019) SW ¼, S7 T30N R11W San Juan County, New Mexico

Ensolum Project No. 05A1226042

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Utton #100 Pipeline Release (2018)
Location:	36.8216° North, 108.0363° West Southwest (SW) ¼ of Section 7, Township 30 North, Range 11 West San Juan County, New Mexico
Property:	Private Land (English Kenneth W and Rosemary)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On November 16, 2018, a release of natural gas occurred from the Utton #100 pipeline. On December 4, 2018, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria concentrations.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site. Supporting documentation and figures associated with the following bullets are provided in **Appendix B**.

Numerous water wells were identified within half-mile of the Site on the OSE Water Rights
Reporting System (WRRS) database with an average depth to water of 24 feet below grade
surface. The exact location of many of the water wells is unknown, however based on visual
identification the closet identified water well is located approximately 154 feet west of the Site.



- The Site is located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located approximately 40 feet from a seasonal irrigation ditch drainage that is identified as a "blue line" on the United States Geological Survey (USGS) topographic map.
- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.
- The Site is not located within 300 feet from a permanent residence, school, hospital, institution or church. The nearest permanent residence is located approximately 314 feet southeast of the Site excavation.
- According to the OSE WRSS database there are private, domestic fresh water wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database there are fresh water wells identified within 1,000 feet of the Site as declared in the previous bullet.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

	Closure Criteria f	or Soils Impacted by a Rele	ease
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
≤ 50 feet	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg



3.0 SOIL REMEDIATION ACTIVITIES

On November 16, 2018, a release of natural gas was identified from the Utton #100 pipeline. The pipeline was temporarily taken out of service pending repairs. On December 4, 2018, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release. During the pipeline repair and corrective action activities, OFT Construction, Inc. provided heavy equipment and labor support, while Apex Companies, LLC (Apex) provided environmental consulting support.

Information, data, and conclusions provided in the following sections and attached figures are based on information provided by Apex to Enterprise, and eyewitness accounts.

The final excavation measured approximately 47 feet long and 21 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 18 feet bgs.

The lithology encountered during the completion of closure activities consisted primarily of unconsolidated silty sand and cobbles, underlain by silty clay.

A total of approximately 660 cubic yards of petroleum hydrocarbon affected soils were transported to the Industrial Ecosystems, Inc. (IEI) landfarm on Crouch Mesa, near Aztec, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix B**. The additional 5 yards documented on the C-138 is from an adjacent site (Utton #100 Well Tie release) and is not associated with this release. The excavation was backfilled with imported fill then contoured to surrounding grade.

Figure 3 is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

4.0 SOIL SAMPLING PROGRAM

Based on information supplied by Enterprise, Apex field screened soil samples from the excavation utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp and a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system to guide excavation extents.

Apex's soil sampling program included the collection of 12 composite soil samples (S-1 through S-12) from the sidewalls and the base of the final excavation for laboratory analysis. A New Mexico EMNRD OCD representative was on Site during the final confirmation sampling events.

The samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021/#8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0.

Enterprise Field Services, LLC Closure Report Utton #100 Pipeline Release (2018) March 18, 2019



Laboratory analytical results are summarized in **Table 1** in **Appendix D**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix E**.

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride concentrations or laboratory practical quantitation limits (PQLs) associated with the composite soil samples (S-1 through S-12) remaining in place to the New Mexico EMNRD OCD closure criteria.

- Laboratory analytical results indicate benzene concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicate that total BTEX concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- Laboratory analytical results indicate chloride concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 600 mg/kg.

Laboratory analytical results are summarized in Table 1 in Appendix D.

7.0 RECLAMATION AND RE-VEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding grade. Enterprise will re-seed the Site with an approved seeding mixture at the beginning of the next favorable growing season.

8.0 FINDINGS AND RECOMMENDATION

On November 16, 2018, a release of natural gas occurred from the Utton #100 pipeline. On December 4, 2018, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- A total of 12 composite soil samples were collected from the final excavation. Based on soil analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.
- A total of approximately 660 cubic yards of petroleum hydrocarbon affected soils were transported to the IEI landfarm on Crouch Mesa, near Aztec, New Mexico for disposal/remediation. The additional 5 yards documented on the C-138 is from an adjacent site (Utton #100 Well Tie release) and is not associated with this release. The excavation will be backfilled with imported fill and contoured to surrounding grade once permanent pipeline repairs are completed.



Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings, and recommendations are based solely upon data available to Ensolum at the time of these services.

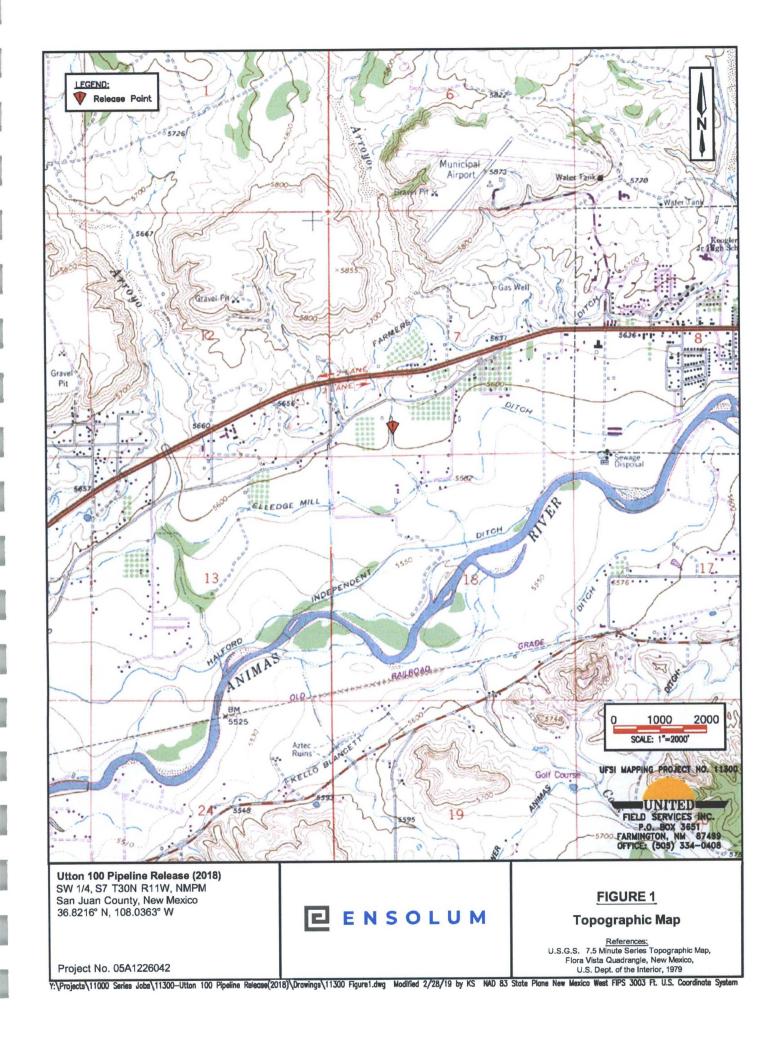
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Products Operating LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise Products Operating LLC and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



APPENDIX A

Figures





Utton 100 Pipeline Release (2018) SW 1/4, S7 T30N R11W, NMPM San Juan County, New Mexico 36.8216° N, 108.0363° W

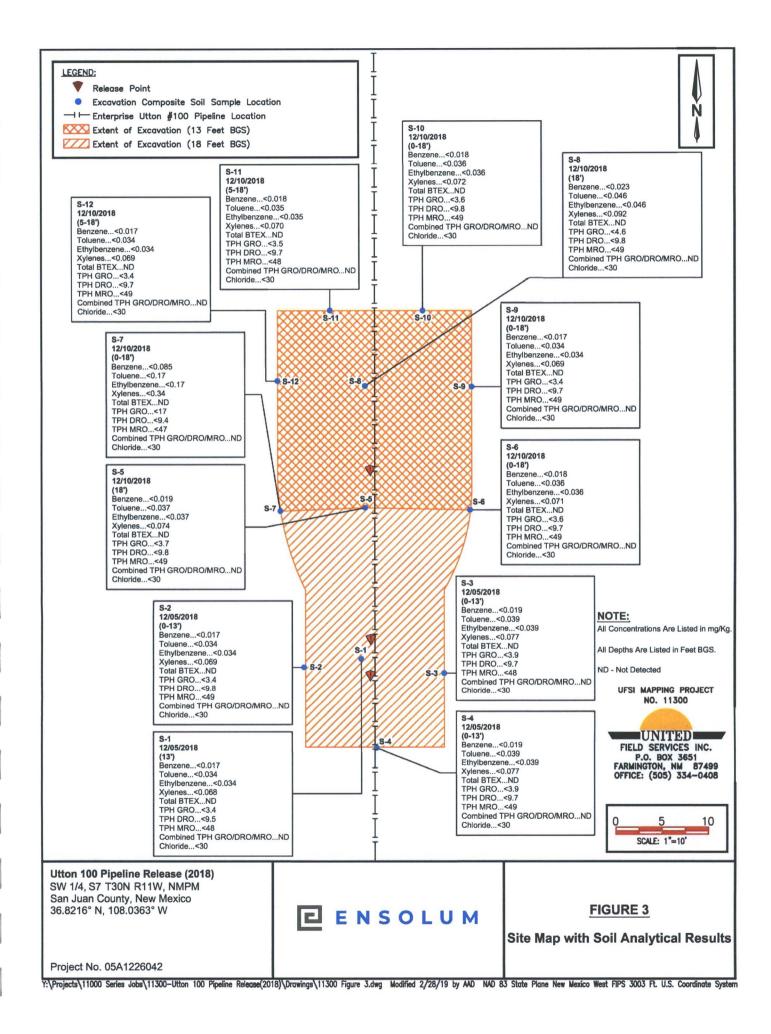
ENSOLUM

FIGURE 2 **Site Vicinity Map**

References:
Bing Maps, © 2019 Microsoft Corporation, © 2019 Digital Globe,
© CNES (2019) Distribution Airbus DS, © 2019 HERE

Project No. 05A1226042

Y:\Projects\11000 Series Jobs\11300-Utton 100 Pipeline Release(2018)\Drawings\11300 Figure 2.dwg Modified 2/28/19 by CB NAD 83 State Plane New Mexico West FIPS 3003 Ft. U.S. Coordinate System





APPENDIX B

Siting Figures and Documentation



New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

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

closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

water right me.y	POD Sub-		0	Q	^							Donth	Donth	Water
POD Number	Code basin C	ounty				Sec	Tws	Rng	X	Y	Distance		Company of the Company	Water Column
SJ 03484	SJAR	SJ	3	4	3	07	30N	11W	229260	4079252*	168	75		
SJ 01492	SJAR	SJ			3	07	30N	11W	229151	4079565* 🌑	173	60	22	38
SJ 01425	SJAR	SJ		4	3	07	30N	11W	229361	4079353* 🌑	196	55	25	30
SJ 01468	SJAR	SJ		4	3	07	30N	11W	229361	4079353*	196	60	25	35
SJ 01310	SJAR	SJ		3	3	07	30N	11W	228950	4079364* 🌑	220	80	50	30
SJ 01484	SJAR	SJ		3	3	07	30N	11W	228950	4079364* 🌑	220	61	10	51
SJ 02006	SJAR	SJ	2	4	3	07	30N	11W	229460	4079452* 🌑	297	50	24	26
SJ 02005	SJAR	SJ	4	4	3	07	30N	11W	229460	4079252*	323	55	20	35
SJ 02715	SJAR	SJ	4	4	3	07	30N	11W	229460	4079252* 🌑	323	68	20	48
SJ 03630	SJAR	SJ	3	3	3	07	30N	11W	228849	4079263* 🌑	344	68	24	44
SJ 02805	SJAR	SJ	1	2	1	18	30N	11W	229252	4079049*	353	60		
SJ 02996	SJAR	SJ	1	2	1	18	30N	11W	229252	4079049*	353	50	25	25
SJ 03463	SJAR	SJ	1	2	1	18	30N	11W	229252	4079049* 🌑	353	70	20	50
SJ 01172	SJAR	SJ		2	3	07	30N	11W	229375	4079755* 🌑	416	50	30	20
SJ 03794 POD1	SJAR	SJ	3	1	3	07	30N	11W	228894	4079720 🌑	427	44	27	17
SJ 04048 POD1	SJAR	SJ	3	3	3	07	30N	11W	228774	4079213 🌑	433	52	4	48
SJ 03854 POD1	SJAR	SJ	1	1	1	18	30N	11W	228780	4079133 🌑	467	45	20	25
SJ 03917 POD1	SJAR	SJ	2	4	4	12	30N	12W	228634	4079449 🌑	537	55	35	20
SJ 00162	SJAR	SJ	3	1	4	07	30N	11W	229663	4079644* 🌑	554	58	23	35
SJ 00329	SJAR	SJ	3	1	4	07	30N	11W	229663	4079644* 🌑	554	63	20	43
SJ 00620	SJAR	SJ	3	1	4	07	30N	11W	229663	4079644* 🌑	554	52	35	17
SJ 00679	SJAR	SJ	3	1	4	07	30N	11W	229663	4079644* 🌑	554	48	22	26
SJ 03895 POD1	SJAR	SJ	2	2	2	13	30N	12W	228697	4079099 🌑	555	75	20	55
SJ 01404	SJAR	SJ		3	4	07	30N	11W	229745	4079344* 🌑	578	40	15	25
SJ 01667	SJAR	SJ		3	4	07	30N	11W	229745	4079344* 🌑	578	41	21	20
SJ 03911 POD1	SJAR	SJ	2	2	2	13	30N	12W	228698	4079018 🌑	601	68	30	38

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

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

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

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

(In feet)

water right file.)	ciosea)	(4	uai	lers	aı	e 51	nanes	ot to larg	gest) (I	NADOS O IIVI III IIIE	elers)	(iii ieet)	
	POD Sub-		Q										Depth	
POD Number SJ 00932	Code basin Co SJAR	SJ						Rng 11W	229452	450	Distance 613	Well 32	The state of the s	Column 17
SJ 02803	SJAR	SJ	2	2	2	13	30N	12W	228642	4079077*	613	68	43	25
SJ 00643	SJAR	SJ		4	4	12	30N	12W	228554	4079379*	614	75	51	24
SJ 01316	SJAR	SJ	3	1	1	18	30N	11W	228838	4078862*	625	46	12	34
SJ 03152	SJAR	SJ	3	1	1	18	30N	11W	228838	4078862* 🍪	625	52	22	30
SJ 03215	SJAR	SJ	3	1	1	18	30N	11W	228838	4078862* 🌑	625	52	9	43
SJ 03783 POD1	SJAR								228856	4078816 🌍	655	61	15	46
SJ 02936	SJAR	SJ	1	1	4	07	30N	11W	229663	4079844* 🌑	669	38	30	8
SJ 00358	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	61	38	23
SJ 00387	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055* 🌑	673			
SJ 00389	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055* 🌑	673	53		
SJ 00397	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	56	35	21
SJ 00415	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	53	40	13
SJ 00688	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	70	58	12
SJ 00689	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	78	65	13
SJ 00690	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	60		
SJ 00739	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	70	58	12
SJ 00748	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	60	41	19
SJ 00806	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	38	20	18
SJ 00882	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	60	50	10
SJ 00889	SJAR	SJ	3	4	1	07	30N	11W	229289	4080055*	673	55		
SJ 00601		SJ	2	3	4	07	30N	11W	229844	4079443*	677	40	22	18
SJ 00604	SJAR	SJ	2	3	4	07	30N	11W	229844		677	38	22	16
SJ 00918		SJ	2	3	4	07	30N	11W	229844		677	35	14	21
SJ 00919	SJAR	SJ	2	3	4	07	30N	11W	229844	4079443*	677	35	12	23
SJ 00920	SJAR	SJ	2	3	4	07	30N	11W	229844	4079443*	677	35	12	23
SJ 02194	SJAR	SJ				07	30N	11W	229553	4079967*	691	59	22	37
SJ 00135	SJAR	SJ		1	4	07	30N	11W	229764	4079745*	691	180	23	157
SJ 00769	SJAR	SJ		1	4	07	30N	11W	229764	4079745* 🌑	691	50	14	36
ALLEGA I														

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

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

closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

	POD Sub-		Q	0	O							Denth	Denth	Water
POD Number	Code basin	County				ec ·	Tws	Rng	X	Y	Distance	THE RESERVE AND PARTY OF THE PA	Contract of the last of the la	Column
SJ 01406	SJAR	SJ		1	4	07	30N	11W	229764	4079745* 🌑	691	45	12	33
SJ 04047 POD1	SJAR	SJ	3	1	1	18	30N	11W	228779	4078817 🌑	695	60	18	42
SJ 03808 POD1	SJAR	SJ	1	3	1	18	30N	12W	229248	4078685 🌑	711	42	9	33
SJ 00322	SJAR	SJ	1	4	4	12	30N	12W	228453	4079478* 🍪	720	66	40	26
SJ 03176 POD2	SJAR	SJ	1	4	1	18	30N	11W	229174	4078671	721	56	12	44
SJ 01403	SJAR	SJ	4	2	2	13	30N	12W	228642	4078877* 🌑	737	51	15	36
SJ 02114	SJAR	SJ	4	2	2	13	30N	12W	228642	4078877* 🌑	737	49		
SJ 02906	SJAR	SJ	4	1	4	07	30N	11W	229863	4079644* 🌑	738	45	24	21
SJ 03757 POD1	SJAR	SJ		4	4	12	30N	12W	228428	4079355 🌑	740	22	12	10
SJ 04026 POD1	SJAR	SJ	3	1	2	18	30N	11W	229605	4078787 🌑	746	34	10	24
SJ 03176	SJAR	SJ	1	4	1	18	30N	11W	229244	4078646* 🌑	750	48	20	28
SJ 03177	SJAR	SJ	2	4	1	18	30N	11W	229444	4078646* 🌑	796	37	15	22
SJ 03344	SJAR	SJ	2	4	1	18	30N	11W	229444	4078646* 🌑	796	100	8	92

Average Depth to Water:

24 feet

Minimum Depth:

4 feet

Maximum Depth:

65 feet

Record Count: 68

UTMNAD83 Radius Search (in meters):

Easting (X): 229168.42

Northing (Y): 4079392.87

Radius: 804.67



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(R=POD has been replaced		
and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4	=SE)
C=the file is closed) (i	(quarters are smallest to largest)	(NAD83 UTM in met

	(acre ft per	annum)				C=the file is closed)				Ilest to largest		UTM in meters)	
	Sub				Well			999					
WR File Nbr	basin Use Diversi	on Owner	Count	y POD Number	Tag	Code Grant	Source		Sec	Tws Rng	X	Y	Distance
SJ 03484	SJAR DOM	0 RONALD BACHMAN	SJ	SJ 03484				3 4 3	07	30N 11W	229260	4079252*	168
SJ 01492	SJAR DOM	3 R. J. YOUNG	SJ	SJ 01492			Shallow	3	07	30N 11W	229151	4079565*	173
SJ 01425	SJAR DOM	3 MARVIN IVY	SJ	SJ 01425			Shallow	4 3	07	30N 11W	229361	4079353*	196
SJ 01434	SJAR DOM	3 RUTH FRANCIS TAPIA	SJ	SJ 01434				4 3	07	30N 11W	229361	4079353*	196
SJ 01468	SJAR DOM	3 TOMMY H. JOURDEN	SJ	SJ 01468			Shallow	4 3	07	30N 11W	229361	4079353*	196
SJ 01749	SJAR DOM	3 DELBERT DECK	SJ	SJ 01749				4 3	07	30N 11W	229361	4079353*	196
SJ 01310	SJAR DOM	3 R. H. SUTTON	SJ	SJ 01310			Shallow	3 3	07	30N 11W	228950	4079364*	220
SJ 01484	SJAR DOM	3 RONALD L. CUSTER	SJ	SJ 01484			Shallow	3 3	07	30N 11W	228950	4079364*	220
SJ 02006	SJAR DOM	3 KENNETH ENGLISH	SJ	SJ 02006			Shallow	2 4 3	07	30N 11W	229460	4079452*	297
SJ 02005	SJAR DOM	3 DALE D. ROBERTS	SJ	SJ 02005			Shallow	4 4 3	07	30N 11W	229460	4079252*	323
SJ 02561	SJAR DOM	3 SERGIO CASTILLO	SJ	SJ 02561				4 4 3	07	30N 11W	229460	4079252*	323
SJ 02715	SJAR DOM	3 RUDY R. SALAZAR	SJ	SJ 02715			Shallow	4 4 3	07	30N 11W	229460	4079252*	323
SJ 03630	SJAR DOM	3 ALYCE MAESTAS	SJ	SJ 03630			Shallow	3 3 3	07	30N 11W	228849	4079263*	344
SJ 02805	SJAR DOM	3 CARL D. COLE	SJ	SJ 02805				1 2 1	18	30N 11W	229252	4079049*	353
SJ 02996	SJAR DOM	3 KEITH W. JOHNSON	SJ	SJ 02996			Shallow	1 2 1	18	30N 11W	229252	4079049*	353
SJ 03463	SJAR DOM	3 WILLIS KNIGHT	SJ	SJ 03463			Shallow	1 2 1	18	30N 11W	229252	4079049*	353
SJ 01172	SJAR DOM	3 ANDY PRADA	SJ	SJ 01172			Shallow	2 3	07	30N 11W	229375	4079755*	416
SJ 00768	SJAR DOM	3 LEROY ENGLISH	SJ	SJ 00768				1 3	07	30N 11W	228960	4079765*	426

*UTM location was derived from PLSS - see Help

2/18/19 9:38 AM

Page 1 of 5

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

Shallow 3 1 1 18 30N 11W 228838 4078862*

ACTIVE & INACTIVE POINTS OF DIVERSION

625

(acre ft per annum)					and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE) C=the file is closed) (quarters are smallest to largest) (NAD83 UTI						UTM in meters)		
	Sub				Well	C-tric file is dioded)	(quu	qq		moot to largeot/			
WR File Nbr	basin Use Diversi	on Owner	County	POD Number	Tag	Code Grant	Source			Tws Rng	X	Y	Distance
SJ 03794	SJAR DOM	1 JOHN FAIRHURST	SJ	SJ 03794 POD1			Shallow	3 1 3	3 07	30N 11W	228894	4079720	427
SJ 04048	SJAR DOL	3 JEANIE L. HENLEY	SJ	SJ 04048 POD1			Shallow	3 3 3	3 07	30N 11W	228773	4079213 🌑	433
SJ 03854	SJAR DOL	3 MADALINE R. ADAIR	SJ	SJ 03854 POD1			Shallow	1 1	1 18	30N 11W	228779	4079133 🌑	467
SJ 00336	SJAR DOM	0 CARL D COLE	SJ	SJ 00336				2	1 18	30N 11W	229353	4078950*	479
SJ 00150	SJAR DOM	0 JERRY W. STOTTS	SJ	SJ 00150				4 4 4	1 12	30N 12W	228653	4079278*	528
SJ 03917	SJAR DOM	1 ALFRED SALAZAR	SJ	SJ 03917 POD1			Shallow	2 4	12	30N 12W	228633	4079449 🌑	537
SJ 03575	SJAR IRR	30 CLARENCE R. (ROD) HANCOCK, JR.	SJ	SJ 03575				2 2 3	3 07	30N 11W	229474	4079854*	553
SJ 00162	SJAR DOM	3 JIMMY D. GERMANY	SJ	SJ 00162			Shallow	3 1	4 07	30N 11W	229663	4079644*	554
SJ 00329	SJAR DOM	3 GORDON N CRANE	SJ	SJ 00329			Shallow	3 1	4 07	30N 11W	229663	4079644*	554
SJ 00620	SJAR DOM	3 GORDON N. CRANE	SJ	SJ 00620			Shallow	3 1	4 07	30N 11W	229663	4079644* 🍪	554
SJ 00679	SJAR DOM	3 CALVIN REED	SJ	SJ 00679			Artesian	3 1	4 07	30N 11W	229663	4079644* 🎳	554
SJ 01104	SJAR DOM	3 J. C. OR MARY FINCHER	SJ	SJ 01104				3 1	4 07	30N 11W	229663	4079644*	554
SJ 03895	SJAR DOL	3 LORRIE A. SMITH	SJ	SJ 03895 POD1			Shallow	2 2 2	2 13	30N 12W	228697	4079099 🌑	555
SJ 01404	SJAR DOM	3 TOMMY E. CHESNUT	SJ	SJ 01404			Shallow	3 4	4 07	30N 11W	229745	4079344* 🍪	578
SJ 01667	SJAR DOM	3 MICHAEL R. HUDDLESTON	SJ	SJ 01667			Shallow	3 4	4 07	30N 11W	229745	4079344* 🍪	578
SJ 03911	SJAR DOL	3 CHRISSY GREENLEAF	SJ	SJ 03911 POD1			Shallow	2 2 2	2 13	30N 12W	228697	4079018 🌑	601
SJ 00932	SJAR DOM	3 ALEX D. MOORE	SJ	SJ 00932			Shallow	4 2	1 18	30N 11W	229452	4078849*	613
SJ 02803	SJAR MUL	3 JOHN R. OR JANIE TIPTON	SJ	SJ 02803			Shallow	2 2 2	2 13	30N 12W	228642	4079077*	613
SJ 00554	SJAR DOM	0 JIMMY D. WORRELL	SJ	SJ 00554				4	1 12	30N 12W	228554	4079379*	614
SJ 00643	SJ DOM	3 ROLDAN ARCHULETA	SJ	SJ 00643			Shallow	4	1 12	30N 12W	228554	4079379*	614
SJ 01316	SJAR DOM	3 DONALD R. EASTERLING	SJ	SJ 01316			Shallow	3 1	1 18	30N 11W	228838	4078862*	625

SJ SJ 03152

Page 2 of 5

SJAR DOM

*UTM location was derived from PLSS - see Help

2/18/19 9:38 AM

3 PAUL WHITLOCK

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) C=the file is closed)

NR File Natr		Sub	amany			Well	C-tile lile is cio.	seu)	qqq		liest to largest)	(10.1200		
SU0398	WR File Nbr	basin Use Diversi	on Owner	County	POD Number		Code Grant		Source 6416 4	Sec	AND DESCRIPTION OF THE PARTY OF			Distance
SU02936 SUAR DOM SUCHALERTY SUSU00358 Shallow 1 1 4 07 30N 11W 229683 4079844* 666 658 657	SJ 03215	SJAR DOM	3 JAMES PIPER	SJ	SJ 03215				Shallow 3 1	18	30N 11W	228838	4078862*	625
\$\begin{align*} \begin{align*} \begin{align*} \begin{align*} \begin{align*} \begin{align*} \begin{align*} \begin{align*} \begin* \begin{align*} \begin* \begin{align*} \begin* \begin{align*} \begin* \begin{align*} \begin* \begin* \begin{align*} \begin* \begin* \begin{align*} \begin* \begin{align*} \begin* \begin* \begin* \begin* \begin* \begin* \begin* \begin{align*} \begin* \begi	SJ 03783	SJAR DOM	1 RUBY MORRISON		SJ 03783 POD1				Shallow			228856	4078816	655
\$1,00367 \$ JAR DOM 3 DOUG M. CLOW \$ J. \$1,00387 \$ Shallow 3 4 1 07 30N 11W 229289 4080055* 6 673 \$ S1,00389 \$ S1,00389 \$ S	SJ 02936	SJAR DOM	3 JOHN A. GARCIA	SJ	SJ 02936				Shallow 1 1 4	07	30N 11W	229663	4079844* 🍪	669
Signose Sign	SJ 00358	SJAR DOM	3 TOM D. FLAHERTY	SJ	SJ 00358				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00397 SJAR DOM 3 CLYDE GREENE SJ SJ 00397 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00415 SJAR DOM 3 A. M. CHAPMAN SJ SJ 00688 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00688 SJAR DOM 3 LENN CHAPMAN SJ SJ 00688 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00689 SJAR DOM 3 ROBIN BUTNER SJ SJ 00689 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00690 SJAR DOM 3 HERNANDO GARCIA SJ SJ 00690 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00739 SJAR DOM 3 JIMMIE STEELE SJ SJ 00747 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00746 SJAR DOM 3 DANIEL VIGIL SJ SJ 00748 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00861 SJAR DOM 3 DANIEL VIGIL SJ SJ 00866 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 673 SJ 00889 SJAR DOM 3 LENN DOM 3 LENN DOM 3 LENN DOM 3 LENN DOM	SJ 00387	SJAR DOM	3 DOUG M. CLOW	SJ	SJ 00387				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00415 SJAR DOM 3 A.M. CHAPMAN SJ SJ 00415 Shallow 3 4 1 07 30N 11W 229289 4080055*	SJ 00389	SJAR DOM	3 DENNIS O. FLAHERTY	SJ	SJ 00389				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00688 SJAR DOM 3 LENN CHAPMAN SJ SJ 00688 Shallow 3 4 1 07 30N 11W 229289 4080055*	SJ 00397	SJAR DOM	3 CLYDE GREENE	SJ	SJ 00397				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00689 SJAR DOM 3 ROBIN BUTNER SJ SJ 00689 Shallow 3 4 1 07 30N 11W 229289 4080055*	SJ 00415	SJAR DOM	3 A. M. CHAPMAN	SJ	SJ 00415				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00690 SJAR DOM 3 HERNANDO GARCIA SJ SJ 00690 Shallow 3 4 1 07 30N 11W 229289 4080055*	SJ 00688	SJAR DOM	3 LENN CHAPMAN	SJ	SJ 00688				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00739 SJAR DOM 3 BILLY NIX SJ SJ 00739 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00747 SJAR DOM 3 JIMMIE STEELE SJ SJ 00747 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00748 SJAR DOM 3 DANIEL VIGIL SJ SJ 00748 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00806 SJAR DOM 3 BEN BACON SJ SJ 00861 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00851 SJAR DOM 3 LONNIE SMITH SJ SJ 00882 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00882 SJAR DOM 3 W. R. STEARNS SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00889 SJAR DOM 3 DOUGLAS FLAHERTY SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00930 SJAR DOM 3 RICHARD LEE SJ SJ 00930 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00801 SJAR DOM 3 CHARLES WIGGINS SJ SJ 01380 Shallow 2 3 4 07 30N 11W 229289 4080055* € 673 SJ 00801 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00801 Shallow 2 3 4 07 30N 11W 229289 4080055* € 673	SJ 00689	SJAR DOM	3 ROBIN BUTNER	SJ	SJ 00689				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00747 SJAR DOM 3 JIMMIE STEELE SJ SJ 00748 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 00748 SJAR DOM 3 DANIEL VIGIL SJ SJ 00748 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 00806 SJAR DOM 3 BEN BACON SJ SJ 00806 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 00851 SJAR DOM 3 LONNIE SMITH SJ SJ 00851 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 00882 SJAR DOM 3 W. R. STEARNS SJ SJ 00882 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 00889 SJAR DOM 3 DOUGLAS FLAHERTY SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 00930 SJAR DOM 3 RICHARD LEE SJ SJ 00930 3 4 1 07 30N 11W 229289 4080055* ○ 673 SJ 01380 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229289 4080055* ○ 673 SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229289 4080055* ○ 673	SJ 00690	SJAR DOM	3 HERNANDO GARCIA	SJ	SJ 00690				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00748 SJAR DOM 3 DANIEL VIGIL SJ SJ 00748 Shallow 3 4 1 07 30N 11W 229289 4080055*	SJ 00739	SJAR DOM	3 BILLY NIX	SJ	SJ 00739				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00806 SJAR DOM 3 BEN BACON SJ SJ 00806 Shallow 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 00851 SJAR DOM 3 LONNIE SMITH SJ SJ 00851 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 00882 SJAR DOM 3 W. R. STEARNS SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 00889 SJAR DOM 3 DOUGLAS FLAHERTY SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 00930 SJAR DOM 3 RICHARD LEE SJ SJ 00930 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 01380 SJAR DOM 3 S.J. FLAHERTY SJ SJ 01380 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229844 4079443* № 677	SJ 00747	SJAR DOM	3 JIMMIE STEELE	SJ	SJ 00747				3 4	07	30N 11W	229289	4080055*	673
SJ 00851 SJAR DOM 3 LONNIE SMITH SJ SJ 00851 3 4 1 07 30N 11W 229289 4080055*	SJ 00748	SJAR DOM	3 DANIEL VIGIL	SJ	SJ 00748				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00882 SJAR DOM 3 W. R. STEARNS SJ SJ 00882 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00889 SJAR DOM 3 DOUGLAS FLAHERTY SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00930 SJAR DOM 3 RICHARD LEE SJ SJ 00930 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 01380 SJAR DOM 3 S. J. FLAHERTY SJ SJ 01380 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229844 4079443* € 677	SJ 00806	SJAR DOM	3 BEN BACON	SJ	SJ 00806				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00889 SJAR DOM 3 DOUGLAS FLAHERTY SJ SJ 00889 Shallow 3 4 1 07 30N 11W 229289 4080055* 673 SJ 00930 SJAR DOM 3 RICHARD LEE SJ SJ 00930 3 4 1 07 30N 11W 229289 4080055* 673 SJ 01380 SJAR DOM 3 S.J. FLAHERTY SJ SJ 01380 3 4 1 07 30N 11W 229289 4080055* 673 SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229844 4079443* 677	SJ 00851	SJAR DOM	3 LONNIE SMITH	SJ	SJ 00851				3 4	07	30N 11W	229289	4080055*	673
SJ 00930 SJAR DOM 3 RICHARD LEE SJ 00930 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 01380 SJAR DOM 3 S. J. FLAHERTY SJ SJ 01380 3 4 1 07 30N 11W 229289 4080055* № 673 SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229844 4079443* № 677	SJ 00882	SJAR DOM	3 W. R. STEARNS	SJ	SJ 00882				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 01380 SJAR DOM 3 S. J. FLAHERTY SJ SJ 01380 3 4 1 07 30N 11W 229289 4080055* € 673 SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229844 4079443* € 677	SJ 00889	SJAR DOM	3 DOUGLAS FLAHERTY	SJ	SJ 00889				Shallow 3 4	07	30N 11W	229289	4080055*	673
SJ 00601 SJAR DOM 3 CHARLES WIGGINS SJ SJ 00601 Shallow 2 3 4 07 30N 11W 229844 4079443* 677	SJ 00930	SJAR DOM	3 RICHARD LEE	SJ	SJ 00930				3 4	07	30N 11W	229289	4080055*	673
	SJ 01380	SJAR DOM	3 S. J. FLAHERTY	SJ	SJ 01380				3 4	07	30N 11W	229289	4080055*	673
SJ 00604 SJAR DOM 3 FEXIX B. WAKEFIELD SJ SJ 00604 Shallow 2 3 4 07 30N 11W 229844 4079443* 677	SJ 00601	SJAR DOM	3 CHARLES WIGGINS	SJ	SJ 00601				Shallow 2 3 4	1 07	30N 11W	229844	4079443*	677
	SJ 00604	SJAR DOM	3 FEXIX B. WAKEFIELD	SJ	SJ 00604				Shallow 2 3	1 07	30N 11W	229844	4079443*	677

*UTM location was derived from PLSS - see Help

(acre ft per annum)

2/18/19 9:38 AM

Page 3 of 5

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters) C=the file is closed)

Sub Well q q q Source 6416 4 Sec Tws Rng WR File Nbr basin Use Diversion Owner **County POD Number** Tag Code Grant X Υ Distance 3 CHARLES R. ROBISON 4079443* SJAR DOM SJ 00789 SJ SJ 00789 2 3 4 07 30N 11W 229844 677 SJ 00918 SJAR DOM 3 TED BUSH SJ 00918 Shallow 2 3 4 07 30N 11W 4079443* 677 SJAR DOM 3 DAVE COLESON SJ 00919 SJ 00919 Shallow 2 3 4 07 30N 11W SJ 229844 4079443* 677 SJ 00920 SJAR DOM 3 BILLIE FERRELL SJ 00920 Shallow 2 3 4 07 30N 11W 229844 4079443* 677 SJ 02194 SJ 02194 3 DAVID SHYROCK SJAR DOM SJ Shallow 07 30N 11W 229553 4079967* 691 SJ 00135 SJAR DOM 3 RICHARD A. GILL SJ 00135 Shallow 1 4 07 30N 11W 229764 4079745* 691 SJAR DOM 0 CLARK E. DANNAR SJ 00483 SJ 00483 SJ 1 4 07 30N 11W 229764 4079745* 691 SJAR DOM 3 VICKEY BREWTON 4079745* SJ 00769 SJ 00769 Shallow 1 4 07 30N 11W 229764 691 SJ 01166 SJAR DOM 3 MICHAEL J. DEGNER SJ SJ 01166 1 4 07 30N 11W 229764 4079745* 691 SJ 01406 SJAR DOM 3 CLARK DANNAR SJ 01406 SJ Shallow 1 4 07 30N 11W 229764 4079745* 691 SJ 04047 SJAR DOL 3 JEANIE L. HENLEY SJ 04047 POD1 Shallow 3 1 1 18 30N 11W 228778 4078817 695 SJ 03808 SJAR DOM 1 FIRST FEDERAL BANK SJ 03808 POD1 Shallow 1 3 1 18 30N 12W 229248 4078685 711 SJ 00322 SJAR DOM 3 JACK O HARRIS SJ 00322 1 4 4 12 30N 12W 228453 4079478* 720 SJ 03176 POD2 SJ 03176 SJAR DOL 3 JOE A. GARCIA SJ Shallow 1 4 1 18 30N 11W 229173 4078671 721 SJ 01403 SJAR DOM 3 JOE WILLIAMS SJ 01403 Shallow 4 2 2 13 30N 12W 228642 4078877* 737 SJ 02114 SJAR DOM 3 RONALD HILGERT SJ 02114 Shallow 4 2 2 13 30N 12W 228642 4078877* 737 SJ 02619 SJAR DOM 0 LINCOLN OR JEANNETTE SJ 02619 4 2 2 13 30N 12W 228642 4078877* 737 FOI KERS SJ 02906 SJ 02906 SJAR DOM 3 CATHRYINE R. LEONARD SJ Shallow 4 1 4 07 30N 11W 229863 4079644* 738 SJ 03757 SJAR DOM 1 NINA BURGESS SJ 03757 POD1 Shallow 4 4 12 30N 12W 228428 4079355 740 SJAR DOM SJ 04026 0 CONNIE JOHNSTON SJ 04026 POD1 SJ Shallow 3 1 2 18 30N 11W 229604 4078787 746 SJ 03176 SJAR DOL 3 JOE A. GARCIA SJ 03176 Shallow 1 4 1 18 30N 11W 229244 4078646* 750 SJ 02317 SJAR DOM 3 ALLEEN LAVENDER SJ 02317 SJ 1 2 2 13 30N 12W 228442 4079077* 792

*UTM location was derived from PLSS - see Help

(acre ft per annum)

2/18/19 9:38 AM

Page 4 of 5

Tag Code Grant

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed)

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

Well

q q q Source 6416 4 Sec Tws Rng X Y

Shallow 2 4 1 18 30N 11W Shallow 2 4 1 18 30N 11W

229444 4078646*

Distance 229444 4078646* 796 796

Record Count: 86

WR File Nbr

SJ 03177

SJ 03344

UTMNAD83 Radius Search (in meters):

Sub

SJAR STK

SJAR DOM

(acre ft per annum)

3 JOE A. GARCIA

3 CHRISTINE SPEARS

basin Use Diversion Owner

Easting (X): 229168.42 Northing (Y): 4079392.87 Radius: 804.67

County POD Number

SJ SJ 03177

SJ SJ 03344

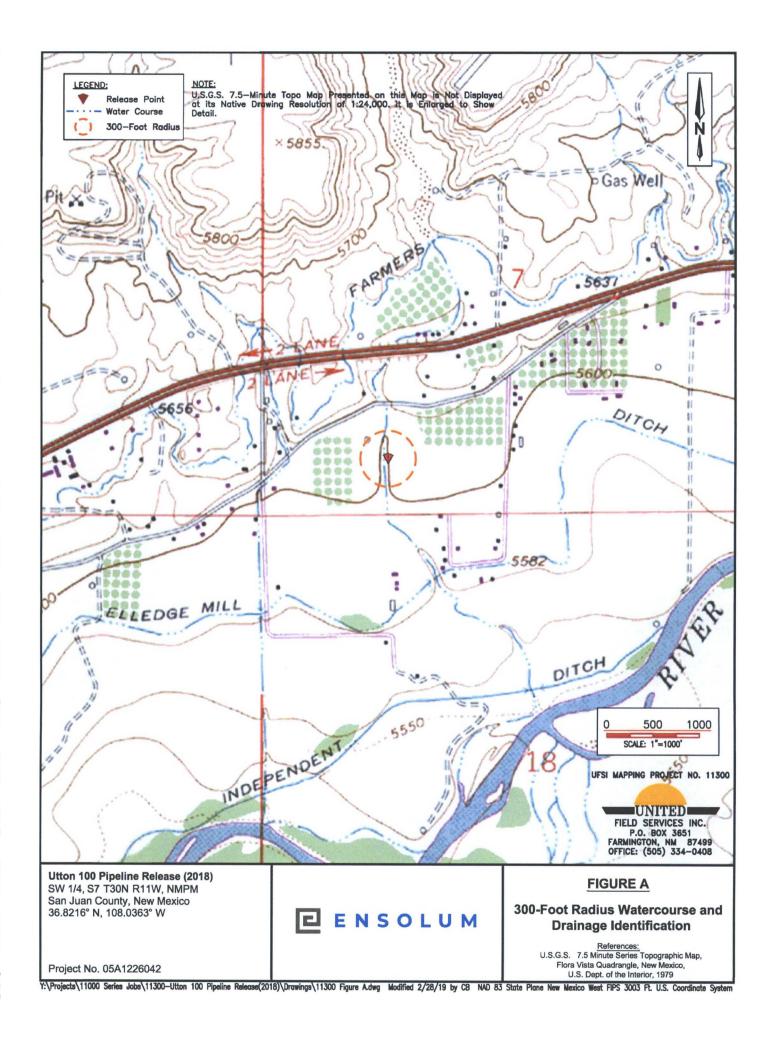
Sorted by: Distance

*UTM location was derived from PLSS - see Help

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

2/18/19 9:38 AM

Page 5 of 5





Utton 100 Pipeline Release (2018) SW 1/4 S7, T30N, R11W, NMPM San Juan County, New Mexico 36.8216° N, 108.0363° W



FIGURE B

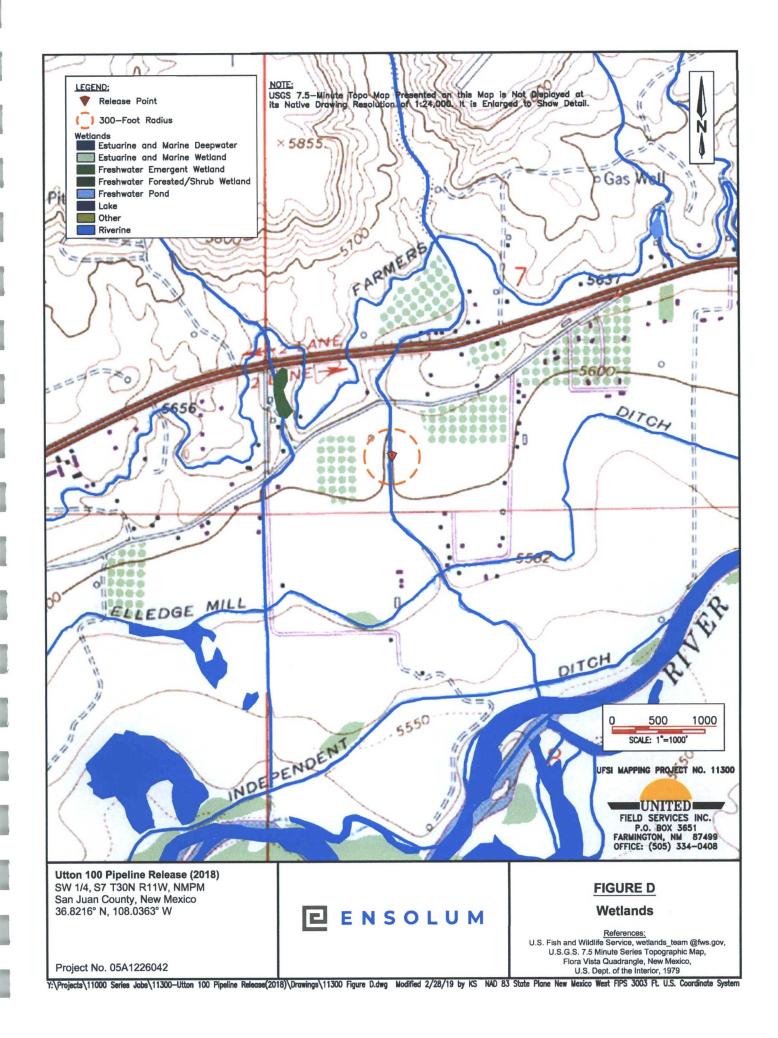
300-Foot Radius Occupied Structure Identification

References:
Bing Maps, © 2019 Microsoft Corporation, © 2019 Digital Globe,
© CNES (2019) Distribution Airbus DS

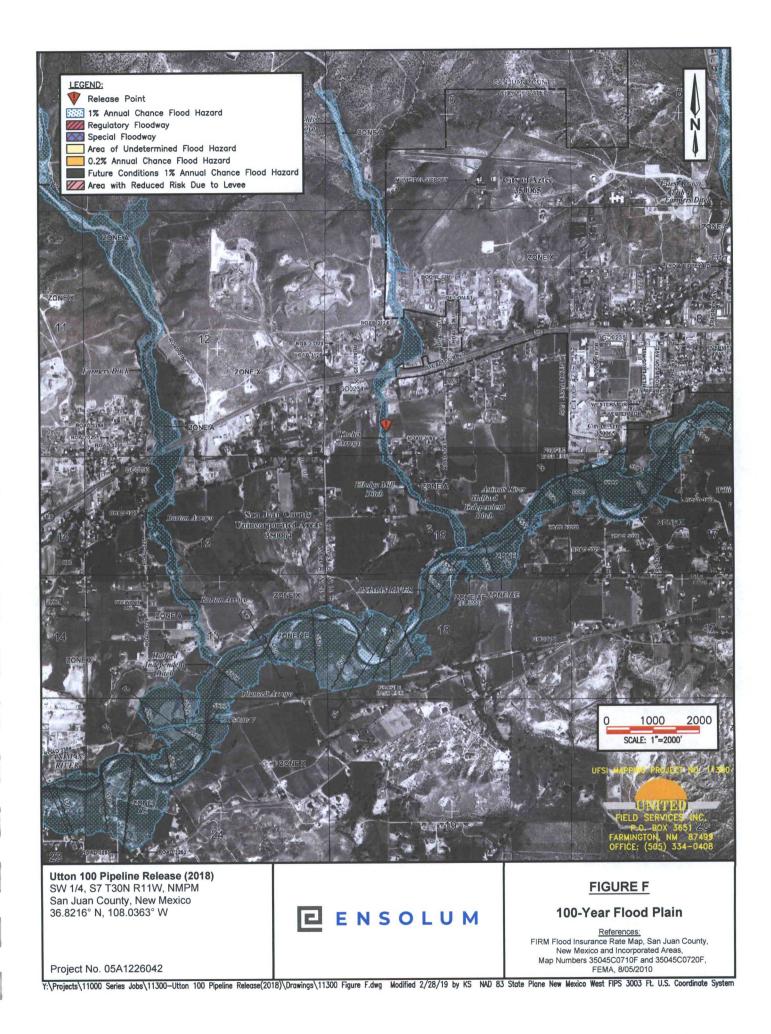
Project No. 05A1226042

Y:\Projects\11000 Series Jobs\11300-Utton 100 Pipeline Release(2018)\Drawings\11300 FigureB.dwg Modified 3/15/19 by AD NAD 83 State Plane New Mexico West FIPS 3003 Ft. U.S. Coordinate System











APPENDIX C

Executed C-138 Solid Waste Acceptance Form

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

State of New Mexico Energy Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

Form C-138 Revised 08/01/11

DECLIEST FOR APPROVAL TO ACCEPT SOLID WASTE

REQUEST FOR AFFROVAL TO ACCEPT SOLID WASTE
1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: Utton #100 Pipeline
3. Location of Material (Street Address, City, State or ULSTR): Section 7 T30N R11W; 36.821826; -108.036323 4. Source and Description of Waste: Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line 12/5/18 - 31044
4. Source and Description of Waste: Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas Liquids (Condensate and Water) Estimated Volume 50 yd bbls Known Volume (to be entered by the operator at the end of the haul)
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Thomas Long , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature 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: (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. **Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
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 in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Thomas Long 12-4-18, representative for Enterprise Products Operating authorizes IEI, Inc. to complete Generator Signature
the required testing/sign the Generator Waste Testing Certification. I,
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B Address of Facility: #49 CR 2150 Aztec, New Mexico
Address of Facility: #49 CR 2150 Aztec, New Mexico Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfill Other M-7
Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: Stay Alencia TITLE: Clark DATE: 12/4/18
IGNATURE: TELEPHONE NO.: 505-632-1782 Surface Waste Management Facility Authorized Agent

12/4/18



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services LLC Closure Report Utton #100 MC Pipeline Release Ensolum Project No. 05A1226042



Photograph 1

View of the release area.



Photograph 2

View of the release area, facing north.



Photograph 3

View of the in-process excavation activities.



SITE PHOTOGRAPHS

Enterprise Field Services LLC Closure Report Utton #100 MC Pipeline Release Ensolum Project No. 05A1226042



Photograph 4

View of the in-process excavation activities.



Photograph 5

View of the in-process excavation activities.



Photograph 6

View of the in-process excavation activities.



SITE PHOTOGRAPHS

Enterprise Field Services LLC Closure Report Utton #100 MC Pipeline Release Ensolum Project No. 05A1226042



Photograph 7

View of the final excavation, facing north.



Photograph 8

View of the final excavation, facing south.



Photograph 9

View of the final excavation after initial restoration.





APPENDIX E

Table – 1 Soil Analytical Summary



TABLE 1 UTTON #100 Pipeline Release SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (mg/kg)	Chloride (mg/kg)
		Natural Resources sion, Closure Crite	s Department, Oil eria	10	NE	NE	NE	50				100	600
						Excavation Cor	nposite Soil San	ples					
S-1	12.05.18	С	13	<0.017	< 0.034	<0.034	<0.068	ND	<3.4	<9.5	<48	ND	<30
S-2	12.05.18	С	0 to 13	<0.017	< 0.034	<0.034	< 0.069	ND	<3.4	<9.8	<49	ND	<30
S-3	12.05.18	С	0 to 13	<0.019	< 0.039	<0.039	<0.077	ND	<3.9	<9.7	<48	ND	<30
S-4	12.05.18	С	0 to 13	<0.019	< 0.039	<0.039	<0.077	ND	<3.9	<9.7	<49	ND	<30
S-5	12.10.18	С	18	<0.019	< 0.037	<0.037	< 0.074	ND	<3.7	<9.8	<49	ND	<30
S-6	12.10.18	С	0 to 18	<0.018	<0.036	<0.036	< 0.071	ND	<3.6	<9.7	<49	ND	<30
S-7	12.10.18	С	0 to 18	<0.085	<0.17	<0.17	< 0.34	ND	<17	<9.4	<47	ND	<30
S-8	12.10.18	С	18	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.8	<49	ND	<30
S-9	12.10.18	С	0 to 18	<0.017	<0.034	< 0.034	< 0.069	ND	<3.4	<9.7	<49	ND	<30
S-10	12.10.18	С	0 to 18	<0.018	<0.036	< 0.036	< 0.072	ND	<3.6	<9.8	<49	ND	<30
S-11	12.10.18	С	5 to 18	<0.018	<0.035	< 0.035	<0.070	ND	<3.5	<9.7	<48	ND	<30
S-12	12.10.18	С	5 to 18	<0.017	<0.034	< 0.034	<0.069	ND	<3.4	<9.7	<49	ND	<30

Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



Appendix F

Laboratory Data Sheets & Chain of Custody Document



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

December 10, 2018

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A Aztec, NM 87410

FAX

RE: UTTON 100

TEL: (903) 821-5603

OrderNo.: 1812266

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/6/2018 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 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,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1812266

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: UTTON 100

Lab ID: 1812266-001

TITAN Client Sample ID: S-1

Matrix: SOIL

Collection Date: 12/5/2018 9:00:00 AM Received Date: 12/6/2018 8:10:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	12/6/2018 11:35:05 AM	41936
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	12/6/2018 11:05:00 AM	41933
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/6/2018 11:05:00 AM	41933
Surr: DNOP	105	50.6-138	%Rec	1	12/6/2018 11:05:00 AM	41933
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	12/6/2018 9:47:18 AM	41923
Surr: BFB	92.3	73.8-119	%Rec	1	12/6/2018 9:47:18 AM	41923
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.017	mg/Kg	1	12/6/2018 9:47:18 AM	41923
Toluene	ND	0.034	mg/Kg	1	12/6/2018 9:47:18 AM	41923
Ethylbenzene	ND	0.034	mg/Kg	1	12/6/2018 9:47:18 AM	41923
Xylenes, Total	ND	0.068	mg/Kg	1	12/6/2018 9:47:18 AM	41923
Surr: 4-Bromofluorobenzene	99.0	80-120	%Rec	1	12/6/2018 9:47:18 AM	41923

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

- * 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 Quanitative 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 Page 1 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812266

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-2

Project: UTTON 100

Collection Date: 12/5/2018 9:05:00 AM

Lab ID: 1812266-002

Matrix: SOIL

Received Date: 12/6/2018 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	12/6/2018 11:47:29 AM	41936
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/6/2018 11:29:23 AM	41933
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2018 11:29:23 AM	41933
Surr: DNOP	101	50.6-138		%Rec	1	12/6/2018 11:29:23 AM	41933
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/6/2018 10:10:56 AM	41923
Surr: BFB	94.0	73.8-119		%Rec	1	12/6/2018 10:10:56 AM	41923
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.017		mg/Kg	1	12/6/2018 10:10:56 AM	41923
Toluene	ND	0.034		mg/Kg	1	12/6/2018 10:10:56 AM	41923
Ethylbenzene	ND	0.034		mg/Kg	1	12/6/2018 10:10:56 AM	41923
Xylenes, Total	ND	0.069		mg/Kg	1	12/6/2018 10:10:56 AM	41923
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/6/2018 10:10:56 AM	41923

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

- * 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 Quanitative 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 Page 2 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812266

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: UTTON 100

Lab ID: 1812266-003

Client Sample ID: S-3

Collection Date: 12/5/2018 9:10:00 AM

Received Date: 12/6/2018 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	12/6/2018 11:59:54 AM	41936
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/6/2018 11:53:39 AM	41933
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/6/2018 11:53:39 AM	41933
Surr: DNOP	101	50.6-138		%Rec	1	12/6/2018 11:53:39 AM	41933
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	12/6/2018 10:34:29 AM	41923
Surr: BFB	95.7	73.8-119		%Rec	1	12/6/2018 10:34:29 AM	41923
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.019		mg/Kg	1	12/6/2018 10:34:29 AM	41923
Toluene	ND	0.039		mg/Kg	1	12/6/2018 10:34:29 AM	41923
Ethylbenzene	ND	0.039		mg/Kg	1	12/6/2018 10:34:29 AM	41923
Xylenes, Total	ND	0.077		mg/Kg	1	12/6/2018 10:34:29 AM	41923
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/6/2018 10:34:29 AM	41923

Matrix: SOIL

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

- * 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 Quanitative 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 Page 3 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812266

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: UTTON 100

Lab ID: 1812266-004 Client Sample ID: S-4

Collection Date: 12/5/2018 9:15:00 AM

Received Date: 12/6/2018 8:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	30		mg/Kg	20	12/6/2018 12:12:18 PM	41936
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/6/2018 12:18:09 PM	41933
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/6/2018 12:18:09 PM	41933
Surr: DNOP	104	50.6-138		%Rec	1	12/6/2018 12:18:09 PM	41933
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	12/6/2018 10:58:05 AM	41923
Surr: BFB	94.3	73.8-119		%Rec	1	12/6/2018 10:58:05 AM	41923
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.019		mg/Kg	1	12/6/2018 10:58:05 AM	41923
Toluene	ND	0.039		mg/Kg	1	12/6/2018 10:58:05 AM	41923
Ethylbenzene	ND	0.039		mg/Kg	1	12/6/2018 10:58:05 AM	41923
Xylenes, Total	ND	0.077		mg/Kg	1	12/6/2018 10:58:05 AM	41923
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	12/6/2018 10:58:05 AM	41923

Matrix: SOIL

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 8 J
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812266

10-Dec-18

Client:

APEX TITAN

Project:

UTTON 100

Sample ID MB-41936

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: Prep Date:

PBS

Batch ID: 41936

RunNo: 56128

Units: mg/Kg

Analyte

12/6/2018

Analysis Date: 12/6/2018 PQL

SeqNo: 1875855 SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

Chloride

ND 1.5

SampType: Ics

RunNo: 56128

TestCode: EPA Method 300.0: Anions

Client ID: Prep Date:

LCSS

Sample ID LCS-41936

Batch ID: 41936

Analyte

12/6/2018

Analysis Date: 12/6/2018

PQL

1.5

SeqNo: 1875856

Units: mg/Kg

RPDLimit Qual

Chloride

Result 14

Result

SPK value SPK Ref Val 15.00

0

%REC 95.0

90

LowLimit

%RPD

HighLimit 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В 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 Detection Limit
- Sample container temperature is out of limit as specified

Page 5 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812266

10-Dec-18

Client:

APEX TITAN

Project:

UTTON 100

Sample ID LCS-41933

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

LCSS

Batch ID: 41933

RunNo: 56125

92.5

103

SeqNo: 1874925

%RPD

Prep Date:

12/6/2018

Analysis Date: 12/6/2018

PQL

SeqNo: 1874924

Units: mg/Kg

HighLimit

Analyte Diesel Range Organics (DRO)

46 10 50.00 5.2 5.000

SPK value SPK Ref Val %REC LowLimit

130

138

RPDLimit Qual

Qual

Surr: DNOP

Sample ID MB-41933

SampType: MBLK

Result

TestCode: EPA Method 8015M/D: Diesel Range Organics

%RPD

Client ID: Prep Date: 12/6/2018

Surr: DNOP

PBS

Batch ID: 41933 Analysis Date: 12/6/2018

PQL

10

RunNo: 56125

Units: mg/Kg

HighLimit

RPDLimit

Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)

Result ND

ND 50 11

10.00

SPK value SPK Ref Val

106

%REC

50.6

LowLimit

70

50.6

138

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- Practical Quanitative Limit **PQL**
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E

P

- I
 - Sample pH Not In Range
- RL Reporting Detection Limit Sample container temperature is out of limit as specified

Value above quantitation range

Analyte detected below quantitation limits

Page 6 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812266

10-Dec-18

Client:

APEX TITAN

Project:

UTTON 100

Sample ID MB-41923

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

LowLimit

73.8

Client ID:

PBS

Batch ID: 41923

PQL

5.0

RunNo: 56129

Prep Date: 12/5/2018 Analysis Date: 12/6/2018

Analyte

Result

SeqNo: 1875699

Units: mg/Kg HighLimit

%RPD **RPDLimit**

Gasoline Range Organics (GRO)

LCSS

ND 960

1000

SPK value SPK Ref Val

96.3

119

Surr: BFB

Client ID:

Sample ID LCS-41923

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

%REC

RunNo: 56129

Prep Date: 12/5/2018 Analysis Date: 12/6/2018

Batch ID: 41923

SeqNo: 1875700

Units: mg/Kg

Analyte

Result PQL

SPK value SPK Ref Val 25.00

%REC 103

LowLimit 80.1

%RPD HighLimit **RPDLimit** Qual 123

Gasoline Range Organics (GRO) Surr: BFB

26 5.0 1100 1000

107

0

73.8

119

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
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- I Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 7 of 8

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812266

10-Dec-18

Client:

APEX TITAN

Project:

UTTON 100

Sample ID MB-41923	TestCode: EPA Method 8021B: Volatiles									
Client ID: PBS	F	RunNo: 56129								
Prep Date: 12/5/2018 Analysis Date: 12/6/2018 SeqNo: 18					875708	Units: mg/K	(g			
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 LCS-41923	S	TestCode: EPA Method 8021B: Volatiles										
Client ID: LCSS	R	RunNo: 56129										
Prep Date: 12/5/2018	Analysis D	Date: 12	2/6/2018	S	SeqNo: 1							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.98	0.025	1.000	0	98.0	80	120					
Toluene	1.0	0.050	1.000	0	102	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: 4-Bromofluorobenzene	1.1		1.000		106	80	120					

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- **PQL** Practical Quanitative Limit
- % 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
 - Sample pH Not In Range
- RL Reporting Detection Limit

P

Sample container temperature is out of limit as specified

Page 8 of 8



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:	APEX AZTEC	Work Order Number:	1812	2266			RcptNo: 1	
Received By:	Jazzmine Burkhead	12/6/2018 8:10:00 AM		Á	goir Bou	M.		
Completed By:	Anne Thorne	12/6/2018 8:17:38 AM			am	2/-	_	
Reviewed By:	TO	12/6/18						
Capiled		8	,	*				
Chain of Cus	tody							
1. Is Chain of Cu	ustody complete?		Yes	✓	No		Not Present	
2. How was the	sample delivered?		Cour	<u>ier</u>				
Log In								
	pt made to cool the samples	?	Yes	✓	No		NA 🗆	
4. Were all samp	ples received at a temperature	e of >0° C to 6.0°C	Yes	✓	No		NA 🗆	
5. Sample(s) in	proper container(s)?		Yes	✓	No			
6. Sufficient sam	ple volume for indicated test(s)?	Yes	✓	No			
7. Are samples (except VOA and ONG) prope	rly preserved?	Yes	✓	No		_	
8. Was preservat	tive added to bottles?		Yes		No	~	NA 🗆	
9. VOA vials hav	e zero headspace?		Yes		No		No VOA Vials	
10. Were any san	nple containers received broke	en?	Yes		No	V	# of preserved	
11 Bass same	oda mandali la edda Lab a la O		Yes		No		bottles checked	
	ork match bottle labels? ancies on chain of custody)		res	V 1	NO	_	for pH: (<2 or >12	unless noted)
12. Are matrices of	correctly identified on Chain of	Custody?	Yes	~	No		Adjusted?	**
13. Is it clear what	analyses were requested?		Yes	Y	No			
	ng times able to be met? ustomer for authorization.)		Yes	✓	No		Checked by:	
	ing (if applicable)							
	tified of all discrepancies with	this order?	Yes		No		NA 🗸	
Person	Notified:	Date	WATER IN			andersoner.		
By Who	TO A STATE OF THE PARTY OF THE	Via:	eMa	iil Phor	ne 🗆	Fax	In Person	
Regardi	CONTRACTOR DE LA CONTRA		-I	restremental production of the control of the contr		O MILES SALES		
Client In	structions:		20020000000				AND A LOCAL DESIGNATION OF THE PARTY OF THE	
16. Additional ren	marks: CUSTOO	ly Seals In-	tac	f on s	sal	Ja	rs / pt 12/06/18	•
17. Cooler Infon	mation						,	
Cooler No.	Temp C Condition S	eal Intact Seal No Seal	eal Da	ite Sig	ned [3у 💮		
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6	rande	. Su	11	14	Contact:	A.	Fre	cem	an						V	1	0		/	/)	/	/ /			1 2	3	4 5	
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	ler's Name				Sampler's Si	11	//								1	1					/	/ /						- 1
C	DIA	ponti			Cons	the	48							4	P	V	/	/	,	/ /	/	/ /						- 1
Proj.	No.		Proje		ame # 100			No/Ty	rpe of C	Contain	ers		1	(1)	9	N	/	/	/	/	/	/						- 1
	0410/10		C	G		- 5		4	15. 1		co.		n	1/3	4/2	y												
Matrix	Date	Time	OE P	rab	Identifying Marks of Sample(Star	End	VOA	APP 1	250 ml	Glas	P.		1	14	/	/						Lal	b Sai	mple ID	Lab Use	Only)	
5	125-18	900	p		5-1		13				1		Y	X	X									j	812	216	TH	П
-	125-18		8		5-2	0	13				l		4	×	K									+			202	- 1
	12-5-18		V	-	5-3	0	13				1		x	×	×												03	
5	12-5-18		D		5-4	0	13			1	Ī		X	x	x												204	
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rienno	uisned by (oignature)			Date: Time: Ref	civjoru Dy	, (Signa	ture)			Date		Co	wie	1	1	So	em	e	d	en	7	12	1-6	-18			
Matrix Contai		V - Wastewa A - 40 ml via			W - Water S - Soil SD - A/G - Amber / Or Glass 1 Liter	Solid	L - Liquio 250 ml -	d A Glass v	- Air Ba vide ma	ag outh			rcoal tu lastic o			- sluc	lge		0 - 0)il	0	. ,						

Apex TITAN, Inc. • 606 S. Rio Grande, Suite A, Downstairs • Aztec, New Mexico 87410 • Office: 505-334-5200 • Fax: 505-334-5204



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

December 13, 2018

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: UTTON 100

OrderNo.: 1812510

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 12/11/2018 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 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,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-5

Project: UTTON 100

Collection Date: 12/10/2018 1:00:00 PM

Lab ID: 1812510-001

Matrix: SOIL

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	ND	30	mg/Kg	20	12/11/2018 11:25:52 AM 42028
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: Irm
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	12/11/2018 10:02:10 AM 42024
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	12/11/2018 10:02:10 AM 42024
Surr: DNOP	90.9	50.6-138	%Rec	1	12/11/2018 10:02:10 AM 42024
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	12/11/2018 9:39:04 AM 42011
Surr: BFB	98.1	73.8-119	%Rec	1	12/11/2018 9:39:04 AM 42011
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	12/11/2018 9:39:04 AM 42011
Toluene	ND	0.037	mg/Kg	1	12/11/2018 9:39:04 AM 42011
Ethylbenzene	ND	0.037	mg/Kg	1	12/11/2018 9:39:04 AM 42011
Xylenes, Total	ND	0.074	mg/Kg	1	12/11/2018 9:39:04 AM 42011
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	12/11/2018 9:39:04 AM 42011

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

- * 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 Quanitative 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 Page 1 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-6

Project: UTTON 100

Collection Date: 12/10/2018 1:05:00 PM

Lab ID: 1812510-002

Matrix: SOIL

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	12/11/2018 11:38:16 AM 42028
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst: Irm
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/11/2018 10:24:11 AM 42024
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/11/2018 10:24:11 AM 42024
Surr: DNOP	92.0	50.6-138		%Rec	1	12/11/2018 10:24:11 AM 42024
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	12/11/2018 10:02:25 AM 42011
Surr: BFB	95.4	73.8-119		%Rec	1	12/11/2018 10:02:25 AM 42011
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	12/11/2018 10:02:25 AM 42011
Toluene	ND	0.036		mg/Kg	1	12/11/2018 10:02:25 AM 42011
Ethylbenzene	ND	0.036		mg/Kg	1	12/11/2018 10:02:25 AM 42011
Xylenes, Total	ND	0.071		mg/Kg	1	12/11/2018 10:02:25 AM 42011
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/11/2018 10:02:25 AM 42011

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

- 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 Quanitative 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 Page 2 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-7

Project: UTTON 100

Collection Date: 12/10/2018 1:10:00 PM

Lab ID: 1812510-003

Matrix: SOIL

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	ND	30	mg/Kg	20	12/11/2018 11:50:41 AM 42028
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: Irm
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	12/11/2018 10:46:08 AM 42024
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/11/2018 10:46:08 AM 42024
Surr: DNOP	95.5	50.6-138	%Rec	1	12/11/2018 10:46:08 AM 42024
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	17	mg/Kg	5	12/11/2018 10:25:56 AM 42011
Surr: BFB	94.1	73.8-119	%Rec	5	12/11/2018 10:25:56 AM 42011
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.085	mg/Kg	5	12/11/2018 10:25:56 AM 42011
Toluene	ND	0.17	mg/Kg	5	12/11/2018 10:25:56 AM 42011
Ethylbenzene	ND	0.17	mg/Kg	5	12/11/2018 10:25:56 AM 42011
Xylenes, Total	ND	0.34	mg/Kg	5	12/11/2018 10:25:56 AM 42011
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	5	12/11/2018 10:25:56 AM 42011

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

- * 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 Quanitative 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 Page 3 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-8

Project: UTTON 100

Collection Date: 12/10/2018 1:15:00 PM

Lab ID: 1812510-004

Matrix: SOIL

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	12/11/2018 12:03:05 PM 42028
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analyst: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/11/2018 11:07:52 AM 42024
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/11/2018 11:07:52 AM 42024
Surr: DNOP	99.6	50.6-138		%Rec	1	12/11/2018 11:07:52 AM 42024
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/11/2018 10:49:28 AM 42011
Surr: BFB	95.5	73.8-119		%Rec	1	12/11/2018 10:49:28 AM 42011
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/11/2018 10:49:28 AM 42011
Toluene	ND	0.046		mg/Kg	1	12/11/2018 10:49:28 AM 42011
Ethylbenzene	ND	0.046		mg/Kg	1	12/11/2018 10:49:28 AM 42011
Xylenes, Total	ND	0.092		mg/Kg	1	12/11/2018 10:49:28 AM 42011
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/11/2018 10:49:28 AM 42011

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

- * 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 Quanitative 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 Page 4 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-9

Project: UTTON 100

Collection Date: 12/10/2018 1:20:00 PM

Lab ID: 1812510-005

Matrix: SOIL

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	ND	30	mg/Kg	20	12/11/2018 12:15:29 PM 42028
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: Irm
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/11/2018 11:29:56 AM 42024
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	12/11/2018 11:29:56 AM 42024
Surr: DNOP	94.8	50.6-138	%Rec	1	12/11/2018 11:29:56 AM 42024
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	12/11/2018 11:12:59 AM 42011
Surr: BFB	95.8	73.8-119	%Rec	1	12/11/2018 11:12:59 AM 42011
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.017	mg/Kg	1	12/11/2018 11:12:59 AM 42011
Toluene	ND	0.034	mg/Kg	1	12/11/2018 11:12:59 AM 42011
Ethylbenzene	ND	0.034	mg/Kg	1	12/11/2018 11:12:59 AM 42011
Xylenes, Total	ND	0.069	mg/Kg	1	12/11/2018 11:12:59 AM 42011
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	12/11/2018 11:12:59 AM 42011

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

- * 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 Quanitative 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 Page 5 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: UTTON 100

Lab ID: 1812510-006

Client Sample ID: S-10

Collection Date: 12/10/2018 1:25:00 PM

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: smb
Chloride	ND	30	mg/Kg	20	12/11/2018 12:27:53	PM 42028
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analy	/st: Irm
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	12/11/2018 11:51:49	AM 42024
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	12/11/2018 11:51:49	AM 42024
Surr: DNOP	93.2	50.6-138	%Rec	1	12/11/2018 11:51:49	AM 42024
EPA METHOD 8015D: GASOLINE RANGE					Analy	/st: NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	12/11/2018 11:36:16	AM 42011
Surr: BFB	93.3	73.8-119	%Rec	1	12/11/2018 11:36:16	AM 42011
EPA METHOD 8021B: VOLATILES					Analy	/st: NSB
Benzene	ND	0.018	mg/Kg	1	12/11/2018 11:36:16	AM 42011
Toluene	ND	0.036	mg/Kg	1	12/11/2018 11:36:16	AM 42011
Ethylbenzene	ND	0.036	mg/Kg	1	12/11/2018 11:36:16	AM 42011
Xylenes, Total	ND	0.072	mg/Kg	1	12/11/2018 11:36:16	AM 42011
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1	12/11/2018 11:36:16	AM 42011

Matrix: SOIL

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

- * 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 Quanitative 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 Page 6 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: UTTON 100

Lab ID: 1812510-007

Client Sample ID: S-11

ON 100

Collection Date: 12/10/2018 1:30:00 PM

Matrix: SOIL Received Date: 12/11/2018 8:15:00 AM

Result	PQL	Qual Units	DF	Date Analyzed Batch
				Analyst: smb
ND	30	mg/Kg	20	12/11/2018 12:40:18 PM 42028
ANICS				Analyst: Irm
ND	9.7	mg/Kg	1	12/11/2018 12:13:52 PM 42024
ND	48	mg/Kg	1	12/11/2018 12:13:52 PM 42024
134	50.6-138	%Rec	1	12/11/2018 12:13:52 PM 42024
				Analyst: NSB
ND	3.5	mg/Kg	1	12/11/2018 11:59:48 AM 42011
95.5	73.8-119	%Rec	1	12/11/2018 11:59:48 AM 42011
				Analyst: NSB
ND	0.018	mg/Kg	1	12/11/2018 11:59:48 AM 42011
ND	0.035	mg/Kg	1	12/11/2018 11:59:48 AM 42011
ND	0.035	mg/Kg	1	12/11/2018 11:59:48 AM 42011
ND	0.070	mg/Kg	1	12/11/2018 11:59:48 AM 42011
103	80-120	%Rec	1	12/11/2018 11:59:48 AM 42011
	ND ANICS ND ND 134 ND 95.5	ND 30 ANICS ND 9.7 ND 48 134 50.6-138 ND 3.5 95.5 73.8-119 ND 0.018 ND 0.035 ND 0.035 ND 0.070	ND 30 mg/Kg ANICS ND 9.7 mg/Kg ND 48 mg/Kg 134 50.6-138 %Rec ND 3.5 mg/Kg 95.5 73.8-119 %Rec ND 0.018 mg/Kg ND 0.035 mg/Kg ND 0.035 mg/Kg ND 0.035 mg/Kg ND 0.070 mg/Kg	ND 30 mg/Kg 20 ANICS ND 9.7 mg/Kg 1 ND 48 mg/Kg 1 134 50.6-138 %Rec 1 ND 3.5 mg/Kg 1 95.5 73.8-119 %Rec 1 ND 0.018 mg/Kg 1 ND 0.035 mg/Kg 1 ND 0.035 mg/Kg 1 ND 0.035 mg/Kg 1 ND 0.070 mg/Kg 1

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

- * 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 Quanitative 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 Page 7 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812510

Date Reported: 12/13/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-12

Project: UTTON 100

Collection Date: 12/10/2018 1:35:00 PM

Lab ID: 1812510-008

Matrix: SOIL Received Date

Received Date: 12/11/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	ND	30		mg/Kg	20	12/11/2018 12:52:43 PM 42028
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst: Irm
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/11/2018 12:35:56 PM 42024
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/11/2018 12:35:56 PM 42024
Surr: DNOP	104	50.6-138		%Rec	1	12/11/2018 12:35:56 PM 42024
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/11/2018 12:23:20 PM 42011
Surr: BFB	96.5	73.8-119		%Rec	1	12/11/2018 12:23:20 PM 42011
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	12/11/2018 12:23:20 PM 42011
Toluene	ND	0.034		mg/Kg	1	12/11/2018 12:23:20 PM 42011
Ethylbenzene	ND	0.034		mg/Kg	1	12/11/2018 12:23:20 PM 42011
Xylenes, Total	ND	0.069		mg/Kg	1	12/11/2018 12:23:20 PM 42011
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/11/2018 12:23:20 PM 42011

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

- * 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 Quanitative 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 Page 8 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812510

13-Dec-18

Client:

APEX TITAN

Project:

UTTON 100

Sample ID MB-42028

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: Prep Date:

PBS

Batch ID: 42028

RunNo: 56244

Units: mg/Kg

RPDLimit

Qual

Analyte

12/11/2018

Analysis Date: 12/11/2018

SeqNo: 1880206 SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

%RPD

Chloride

Result ND PQL 1.5

1.5

TestCode: EPA Method 300.0: Anions

Sample ID LCS-42028 Client ID:

LCSS

SampType: Ics

Batch ID: 42028

RunNo: 56244

Units: mg/Kg

Prep Date: 12/11/2018

Analysis Date: 12/11/2018

SeqNo: 1880207

RPDLimit Qual

Analyte

PQL SPK value SPK Ref Val

%REC

95.8

90

110

Chloride

14

15.00

HighLimit

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

9.2

10.00

WO#: 1812510

13-Dec-18

Client:

APEX TITAN

Project.

LITTON 100

Project: UTTON	100			
Sample ID LCS-42024	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 42024	RunNo: 56237		
Prep Date: 12/11/2018	Analysis Date: 12/11/2018	SeqNo: 1878763	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	49 10 50.00	0 97.6 70	130	
Surr: DNOP	4.5 5.000	90.8 50.6	138	
Sample ID MB-42024	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	e Organics
Client ID: PBS	Batch ID: 42024	RunNo: 56237		
Prep Date: 12/11/2018	Analysis Date: 12/11/2018	SeqNo: 1878765	Units: mg/Kg	
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	9.7 10.00	97.2 50.6	138	
Sample ID LCS-42041	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	e Organics
Client ID: LCSS	Batch ID: 42041	RunNo: 56237		
Prep Date: 12/11/2018	Analysis Date: 12/12/2018	SeqNo: 1881116	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.4 5.000	87.7 50.6	138	
Sample ID MB-42041	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	e Organics
Client ID: PBS	Batch ID: 42041	RunNo: 56237		
Prep Date: 12/11/2018	Analysis Date: 12/12/2018	SeqNo: 1881117	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual

Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- **PQL** Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- P Sample pH Not In Range Reporting Detection Limit
- Sample container temperature is out of limit as specified

E Value above quantitation range

92.0

50.6

138

Page 10 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812510

13-Dec-18

Client:

APEX TITAN

Project:

UTTON 100

Sample ID MB-42011	SampT	SampType: MBLK		Tes	TestCode: EPA Method 8015D: Gasoline Range				е	
Client ID: PBS	Batcl	n ID: 42	011	F	RunNo: 5	6245				
Prep Date: 12/10/2018	Analysis D	ate: 12	2/11/2018	S	SeqNo: 1	879235	Units: mg/K	g		
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		101	73.8	119			
Sample ID LCS-42011	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range									

Client ID: LCSS Batch ID: 42011 RunNo: 56245 Analysis Date: 12/11/2018 SeqNo: 1879236 Prep Date: 12/10/2018 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0 Gasoline Range Organics (GRO) 25 5.0 25.00 101 80.1 123 Surr: BFB 1100 1000 111 73.8 119

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 Quanitative 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

Page 11 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

1.1

WO#:

1812510

13-Dec-18

Client:

APEX TITAN

Project:

Surr: 4-Bromofluorobenzene

UTTON 100

Sample ID MB-42011	SampT	уре: МЕ	BLK	Test	TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch	Batch ID: 42011		R	RunNo: 56245					
Prep Date: 12/10/2018	Analysis D	ate: 12	2/11/2018	S	eqNo: 1	879250	Units: mg/K	g		
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								

107

80

120

1.000

Sample ID LCS-42011	Sampi	ype: LC	5	res	Code: El	A Method	8021B: Vola	iles		
Client ID: LCSS	Batch	ID: 420	011	R	RunNo: 5	6245				
Prep Date: 12/10/2018	Analysis D	ate: 12	2/11/2018	S	SeqNo: 1	879251	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.6	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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 Quanitative 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
 - 1. II N. I. D.
- P Sample pH Not In Range
- RL Reporting Detection Limit
 W Sample container temperature is out of limit as specified

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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: APEX AZTEC	Work Order Nun	nber: 1812510		RcptNo	: 1
Received By: Anne Thorne	12/11/2018 8:15:0		Aone An	_	
Completed By: Anne Thorne	12/11/2018 8:21:1	0 AM	aone Sha	_	
Reviewed By: 50 Labeled by: AT 12/11/1	12/11/18				
Chain of Custody 1. Is Chain of Custody complete?		Yes 🗹	No 🗆	Not Present	
			NO _	Not Flesent	
2. How was the sample delivered?		Courier			
Log In 3. Was an attempt made to cool the sample	es?	Yes 🗹	No 🗆	NA 🗆	
4. Were all samples received at a temperat	ure of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗆		
6. Sufficient sample volume for indicated te	st(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) pro	perly preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes	No 🗸	NA \square	
9. VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials	
10. Were any sample containers received br	oken?	Yes 🗌	No 🗹		***
				# of preserved bottles checked	
11. Does paperwork match bottle labels?		Yes 🗸	No 🗌	for pH:	
(Note discrepancies on chain of custody)				(<2 oi Adjusted?	>12 unless noted)
12. Are matrices correctly identified on Chain		Yes 🗹	No □	Adjusted 1	
13. Is it clear what analyses were requested? 14. Were all holding times able to be met?		Yes ✓ Yes ✓	No 🗆	Checked by:	
(If no, notify customer for authorization.)		Yes 🗹	NO L	Criecked by.	
Special Handling (if applicable)					
15. Was client notified of all discrepancies w	ith this order?	Yes	No 🗌	NA 🗸	
Person Notified:	Date	2 I	CONTRACTOR DE CO		7
By Whom:	Via:		none Fax	In Person	
Regarding:	ATTACAMENT AND AND AND AND AND AND AND AND AND AND		The Particular Section of the Sectio	THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO	
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16. Additional remarks:			the second contract		
17. Cooler Information Cooler No Temp °C Condition 1 1.1 Good	Seal Intact Seal No Yes	Seal Date	Signed By		

			CHAIN OF CUSTODY RECORD				
*	Hell En Laboratory:	vironmental les	ANALYSIS REQUESTED Lab use only Due Date:				
APEX	Address: 4901 Ha	mikes NE					
	Albumierave	Nm 87109	Temp. of coolers (When received (C°):				
Office Location 606 5 his Grande Suit A	Contact: A. Pres	eman	when received (C°):				
Arte Non 87410	Phone: 505-34						
Project Manager K Summars	PO/SO#:						
Sampler's Name	Sampler's Signature		B 3 / / / /				
CDAponti	Mutto						
Proj. No. Project Name 735040113540 UTT on #100		No/Type of Containers	14369				
725040112540 UTTON # 100		4 0 0					
рь	Se of Sample(s)	VOA A/G 1Lt. 250 ml Glass Jar P/O	Lab Sample ID (Lab Use Only)				
5 13/10/18 1300 4 5-5	- 18		¥40 1812510-001				
S 19/10/1x 1305 A 5-6	0 18		X Q N COZ				
5 Plate 1310 0 5.7 5 Plate 1315 0 5-8	0 18		V X V 703				
	- 18		X X K COY				
5-9	0 18		X K K 705				
- 10/18 1325 V S-10			X & X - w6				
3 1/0/18 1330 B S-12	5 18		707 T				
5 17018 1335 V arm 5 13	-Was 18	morning	T A A				
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S P/10/18 1335 4 S-12 Turn around time	5 18		X x X 308				
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12/10/1 /86	elinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: Pm - Tom long 12/11/18 08/15						
Relinquished by (Signature)	ellinquished by (Signature) Date: Time: Received by: (Signature) Date: Time: AFE # 38687						
Relinquished by (Signature) Date: Til	me: Received by: (Signat	ure) Date:	Time: (6 - 1) (3-(1-18)				
Matrix WW - Wastewater W - Water S -							

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	388-1011
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible	Party: Ente	rprise Field Ser	vices, LLC	OGRID: 1	OGRID: 151618		
Contact Nam	e: Thomas	Long		Contact Te	Contact Telephone: 505-599-2286		
Contact emai	l:tjlong@ep	orod.com		Incident #	Incident # (assigned by OCD): NUF 1904250458		
Contact mail	ing address:	614 Reilly Ave,	, Farmington, NM	141			
			Location o	f Release So	ource		
atitude 36.8	2060		Longitude -10	8.03720	(NAD 83 in deci	mal degrees to 5 decimal places)	
Site Name Ut	ton #100 E	og Leg Releas	е	Site Type I	Site Type Natural Gas Gathering Pipeline		
Date Release	Discovered:	1/10/2019	e	Serial Num	Serial Number (if applicable): N/A		
Unit Letter	Section	Township	Range	Coun	ty	NHOOD	
M	7	30N	11W	San Juan		NMOCD	
Surface Owner	r: State	Federal T	ribal Nature and			DISTRICT III	
	Materia			lculations or specific	justification for the volum	nes provided below)	
Crude Oil		Volume Release	ed (bbls)		Volume Recovered (bbls)		
Produced Water		Volume Released (bbls)			Volume Recovered	l (bbls)	
		Is the concentration of dissolved chloride in the produced water >10,000 mg/l?			Yes No		
○ Condensate		Volume Released (bbls): 3-5 Barrels			Volume Recovered (bbls): None		
☐ Natural Gas		Volume Released (Mcf):			Volume Recovered	l (Mcf):	
Other (describe)		Volume/Weight Released (provide units):			Volume/Weight Recovered (provide units)		
on the groun conditions an activities on feet deep. A	nd surface of ad at the land January 24, approximatel	of approximately to lowner request, E 2019. The final ex y 39 cubic yards o	wo feet in diameter nterprise did not initia xcavation dimensions	was affected by ate remediation acts measured approted soil were except to the control of the co	released fluids. Ductivities until January a eximately 15 feet long avated and transporte	on the Utton #100 Dog Leg. An are to the inclement weather, mudd 22, 2019 and completed remediation by 12 feet wide by approximately and to a New Mexico Oil Conservation	

Form C-141 Page 2

State of New Mexico Oil Conservation Division

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

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.

□ 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: Jon E. Fields Title: Director, Field Environmental
Printed Name: Jon E. Fields Title: Director, Field Environmental Date: 5-Z-19
email: jefields@eprod.com Telephone: 713-381-6684
OCD Only
Received by: 60 DIF Date: 5/16/19
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: Title:



CLOSURE REPORT

Property:

Utton #100 Dog Leg Release (2019) SW ¼, S7 T30N R11W San Juan County, New Mexico

March 29, 2019 Ensolum Project No. 05A12260041

Prepared for:

Enterprise Field Services, LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long

Prepared by:

Chad D'Aponti Staff Scientist

Kyle Summers, CPG Sr. Project Manager

umms

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CLOSURE REPORT

Utton #100 Dog Leg Release (2019) SW ¼, S7 T30N R11W San Juan County, New Mexico

Ensolum Project No. 05A1226041

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Utton #100 Dog Leg Release (2019)
Location:	36.8206° North, 108.0372° West Southwest (SW) ¼ of Section 7, Township 30 North, Range 11 West San Juan County, New Mexico
Property:	Private Land (Jaquez Chris V and Jeanette L Trust)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On January 10, 2019, a release of natural gas was discovered at the Utton #100 Dog Leg. On January 22, 2019, Enterprise initiated activities to remediate potential petroleum hydrocarbon impact resulting from the release.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria concentrations.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site. Supporting documentation and figures associated with the following bullets are provided in **Appendix B**.

Numerous water wells were identified within half-mile of the Site on the OSE Water Rights
Reporting System (WRRS) database with an average depth to water of 23 feet below grade
surface. The exact location of many of the water wells is unknown, however based on visual
identification the closet identified water well is located approximately 192 feet northwest of the Site.



- The Site is located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located within 40 feet of a seasonal irrigation ditch drainage that is identified as a "blue line" on the United States Geological Survey (USGS) topographic map.
- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.
- The Site is located within 300 feet of a permanent residence, school, hospital, institution or church. The nearest permanent residence is located approximately 220 feet southeast of the Site excavation.
- Based on information identified in the OSE WRSS database there are private, domestic fresh water wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- Based on information identified in the OSE WRSS database there are fresh water wells within 1,000 feet of the Site as declared in the previous bullet.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3. The Site is located approximately 1,200 feet from the Aztec, NM municipal boundary.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

	Closure Criteria f	or Soils Impacted by a Rel	ease
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg
-	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
≤ 50 feet	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg



3.0 SOIL REMEDIATION ACTIVITIES

On January 22, 2019, Enterprise initiated activities to remediate potential petroleum hydrocarbon impact resulting from the release. During the pipeline repair and corrective action activities, HALO Construction, Inc. provided heavy equipment and labor support, while Apex Companies, LLC (Apex) provided environmental consulting support.

Information, data, and conclusions provided in the following sections and attached figures are based on information provided by Apex to Enterprise, and eyewitness accounts.

The final primary excavation measured approximately 15 feet long and 12 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 5 feet bgs.

The lithology encountered during the completion of closure activities consisted primarily of unconsolidated silty sand and cobbles.

A total of approximately 39 cubic yards of petroleum hydrocarbon affected soils were transported to the Industrial Ecosystems, Inc. (IEI) landfarm on Crouch Mesa, near Aztec, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance forms are provided in **Appendix C**. The C-138 for the nearby Utton #100 Pipeline Release Site is also included, as the January 11, 2019 load out was apparently added to the pipeline release C-138 before being added to the Dog Leg C-138. The excavation was backfilled with imported fill and contoured to the original grade.

Figure 3 is a map that identifies approximate soil sample locations that depicts the approximate dimensions of the excavation with respect to the pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix D**.

4.0 SOIL SAMPLING PROGRAM

Based on information supplied by Enterprise, Apex field screened soil samples from the excavation utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp and a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system to guide excavation extents.

Apex's soil sampling program included the collection of 1 composite soil sample (S-1) from the sidewalls and the base of the final excavation for laboratory analysis. A New Mexico EMNRD OCD representative was on Site during the confirmation sampling event.

The soil sample was collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The sample was relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil sample were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021/#8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0.

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



6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride concentrations or laboratory practical quantitation limits (PQLs) associated with composite soil sample S-1 to the New Mexico EMNRD OCD closure criteria.

- Laboratory analytical results indicate benzene concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicate that total BTEX concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- Laboratory analytical results indicate chloride concentrations for soils remaining in place do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 600 mg/kg.

Laboratory analytical results are summarized in Table 1 in Appendix E.

7.0 RECLAMATION AND RE-VEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding grade. At the landowner's discretion, Enterprise may re-seed the Site with an approved seeding mixture at the beginning of the next favorable growing season.

8.0 FINDINGS AND RECOMMENDATION

On January 10, 2019, a release of natural gas was discovered at the Utton #100 Dog Leg. On January 22, 2019, Enterprise initiated activities to remediate potential petroleum hydrocarbon impact resulting from the release.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- One (1) composite soil sample was collected from the excavation. Based on soil analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.
- A total of approximately 39 cubic yards of petroleum hydrocarbon affected soils were transported to the IEI landfarm on Crouch Mesa, near Aztec, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and contoured to original grade.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.



9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 Additional Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings, and recommendations are based solely upon data available to Ensolum at the time of these services.

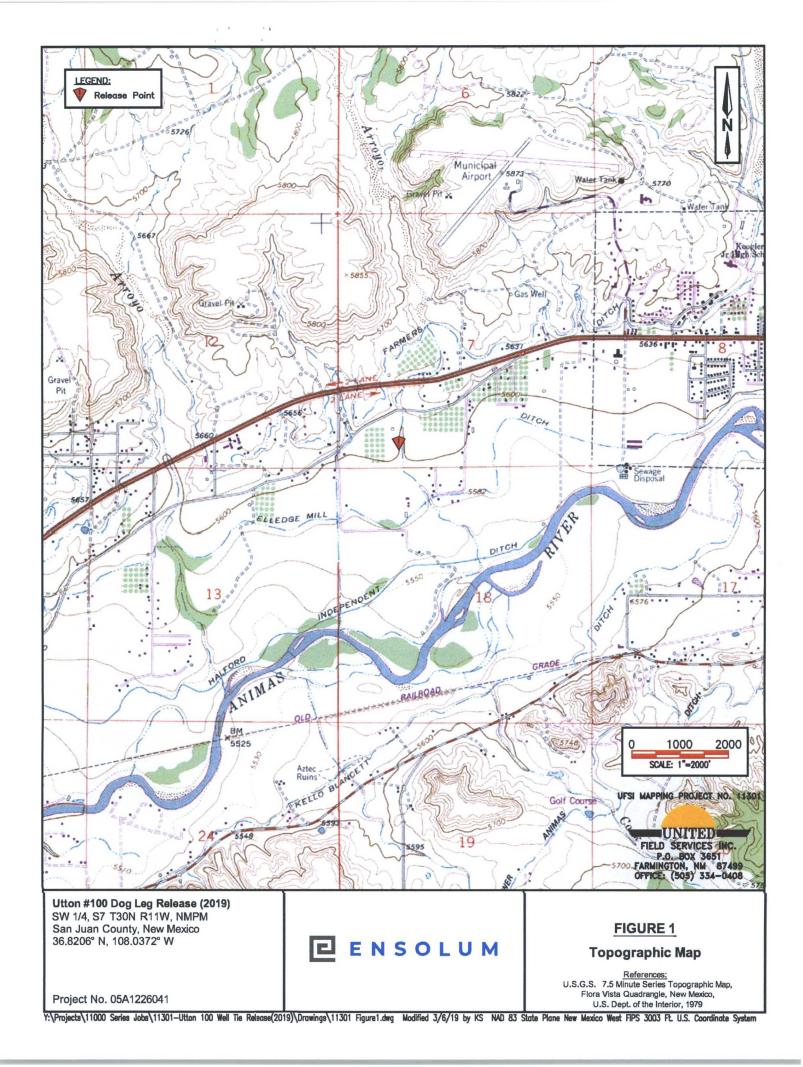
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Products Operating LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise Products Operating LLC and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



APPENDIX A

Figures





Utton #100 Dog Leg Release (2019) SW 1/4, S7 T30N R11W, NMPM San Juan County, New Mexico 36.8206°N, 108.0372°W



FIGURE 2 **Site Vicinity Map**

References:
Bing Maps, © 2019 Microsoft Corporation, © 2019 Digital Globe,
© CNES (2019) Distribution Airbus DS, © 2019 HERE

Project No. 05A1226041



Release Point

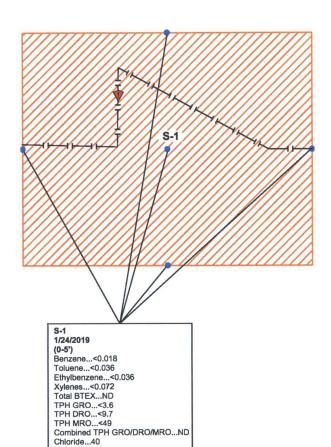
Excavation Composite Soil Sample Aliquot Location



— ← Enterprise Utton #100 Dog Leg/Pipeline Location

Extent of Excavation





UFSI MAPPING PROJECT NO. 11301

UNITED FIELD SERVICES INC. P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408

All Concentrations Are Listed in mg/Kg.

All Depths Are Listed in Feet BGS.

ND - Not Detected

1 2 3 4 SCALE: 1"=5"

Utton #100 Dog Leg Release (2019) SW 1/4 S7, T30N, R11W, NMPM San Juan County, New Mexico 36.8206° N, 108.0372° W



FIGURE 3

Site Map with Soil Analytical Results

Project No. 05A1226041



APPENDIX B

Siting Figures and Documentation



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned, C=the file is

closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

	POD Sub-		Q	0	0							Danie	D41-	Water
POD Number	Code basin	County				Sec	Tws	Rng	x	- Y "	Distance		Depth Water	Column
SJ 03484	SJAR	SJ	3	4	3	07	30N	11W	229260	4079252* 🌑	146	75		
SJ 01310	SJAR	SJ		3	3	07	30N	11W	228950	4079364* 🌑	189	80	50	30
SJ 01484	SJAR	SJ		3	3	07	30N	11W	228950	4079364* 🌑	189	61	10	51
SJ 01425	SJAR	SJ		4	3	07	30N	11W	229361	4079353* 🌑	259	55	25	30
SJ 01468	SJAR	SJ		4	3	07	30N	11W	229361	4079353* 🌑	259	60	25	35
SJ 02805	SJAR	SJ	1	2	1	18	30N	11W	229252	4079049* 🌑	261	60		
SJ 02996	SJAR	SJ	1	2	1	18	30N	11W	229252	4079049* 🌑	261	50	25	25
SJ 03463	SJAR	SJ	1	2	1	18	30N	11W	229252	4079049* 🌑	261	70	20	50
SJ 03630	SJAR	SJ	3	3	3	07	30N	11W	228849	4079263* 🌑	266	68	24	44
SJ 01492	SJAR	SJ			3	07	30N	11W	229151	4079565* 🌑	296	60	22	38
SJ 02005	SJAR	SJ	4	4	3	07	30N	11W	229460	4079252* 🌑	345	55	20	35
SJ 02715	SJAR	SJ	4	4	3	07	30N	11W	229460	4079252* 🌑	345	68	20	48
SJ 04048 POD1	SJAR	SJ	3	3	3	07	30N	11W	228774	4079213 🌑	345	52	4	48
SJ 03854 POD1	SJAR	SJ	1	1	1	18	30N	11W	228780	4079133 🌑	362	45	20	25
SJ 02006	SJAR	SJ	2	4	3	07	30N	11W	229460	4079452* 🌑	389	50	24	26
SJ 03895 POD1	SJAR	SJ	2	2	2	13	30N	12W	228697	4079099	451	75	20	55
SJ 03911 POD1	SJAR	SJ	2	2	2	13	30N	12W	228698	4079018 🌑	487	68	30	38
SJ 01316	SJAR	SJ	3	1	1	18	30N	11W	228838	4078862*	494	46	12	34
SJ 03152	SJAR	SJ	3	1	1	18	30N	11W	228838	4078862*	494	52	22	30
SJ 03215	SJAR	SJ	3	1	1	18	30N	11W	228838	4078862*	494	52	9	43
SJ 03794 POD1	SJAR	SJ	3	1	3	07	30N	11W	228894	4079720 🌑	500	44	27	17
SJ 02803	SJAR	SJ	2	2	2	13	30N	12W	228642	4079077*	511	68	43	25
SJ 03917 POD1	SJAR	SJ	2	4	4	12	30N	12W	228634	4079449 🌑	513	55	35	20
SJ 03783 POD1	SJAR								228856	4078816 🌑	522	61	15	46
SJ 00932	SJAR	SJ	4	2	1	18	30N	11W	229452	4078849* 🌑	540	32	15	17
SJ 01172	SJAR	SJ		2	3	07	30N	11W	229375	4079755* 🌑	549	50	30	20
*UTM location was derived fro	om PLSS - see l	Help												

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

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

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

water right file.)	closed)	,	•					st to lar	gest)) AD83 UTM in n	neters)	(In feet)	
POD Number	POD Sub-	Country	ALC: Y	Q 16		6	T	Pos		x	Y	Distance	THE RESERVE OF THE PARTY OF THE		Water
SJ 04047 POD1	Code basin SJAR	SJ						11W	2287		4078817	The second secon	60		Column 42
SJ 00643	SJAR	SJ		4	4	12	30N	12W	2285	54	4079379* 🌑	571	75	51	24
SJ 03808 POD1	SJAR	SJ	1	3	1	18	30N	12W	2292	248	4078685 🌑	600	42	9	33
SJ 03176 POD2	SJAR	SJ	1	4	1	18	30N	11W	2291	74	4078671 🌑	602	56	12	44
SJ 01403	SJAR	SJ	4	2	2	13	30N	12W	2286	42	4078877* 🌍	615	51	15	36
SJ 02114	SJAR	SJ	4	2	2	13	30N	12W	2286	642	4078877* 🥞	615	49		
SJ 01404	SJAR	SJ		3	4	07	30N	11W	2297	45	4079344* 🌑	634	40	15	25
SJ 01667	SJAR	SJ		3	4	07	30N	11W	2297	45	4079344* 🌑	634	41	21	20
SJ 03176	SJAR	SJ	1	4	1	18	30N	11W	2292	244	4078646* 🌑	638	48	20	28
SJ 00162	SJAR	SJ	3	1	4	07	30N	11W	2296	63	4079644* 🥙	662	58	23	35
SJ 00329	SJAR	SJ	3	1	4	07	30N	11W	2296	63	4079644* 🌑	662	63	20	43
SJ 00620	SJAR	SJ	3	1	4	07	30N	11W	2296	63	4079644* 🌑	662	52	35	17
SJ 00679	SJAR	SJ	3	1	4	07	30N	11W	2296	63	4079644* 🌑	662	48	22	26
SJ 03526	SJAR	SJ	1	3	1	18	30N	11W	2288	328	4078660* 🌑	675	40		
SJ 04026 POD1	SJAR	SJ	3	1	2	18	30N	11W	2296	05	4078787 🌑	688	34	10	24
SJ 03757 POD1	SJAR	SJ		4	4	12	30N	12W	2284	28	4079355 🌑	691	22	12	10
SJ 00322	SJAR	SJ	1	4	4	12	30N	12W	2284	53	4079478* 🌑	693	66	40	26
SJ 03177	SJAR	SJ	2	4	1	18	30N	11W	2294	44	4078646* 🌑	706	37	15	22
SJ 03344	SJAR	SJ	2	4	1	18	30N	11W	2294	44	4078646* 🌑	706	100	8	92
SJ 01401	SJAR	SJ		3	1	18	30N	11W	2289	29	4078561*	734	44	12	32
SJ 01733	SJAR	SJ		3	1	18	30N	11W	2289	29	4078561*	734	29	9	20
SJ 01738	SJAR	SJ		3	1	18	30N	11W	2289	29	4078561* 🥌	734	33	6	27
SJ 01786	SJAR	SJ		3	1	18	30N	11W	2289	29	4078561*	734	35	10	25
SJ 00601	SJAR	SJ	2	3	4	07	30N	11W	2298	344	4079443* 🥞	749	40	22	18
SJ 00604	SJAR	SJ	2	3	4	07	30N	11W	2298	44	4079443* 🥞	749	38	22	16
SJ 00918	SJAR	SJ	2	3	4	07	30N	11W	2298	344	4079443* 🌑	749	35	14	21
SJ 00919	SJAR	SJ	2	3	4	07	30N	11W	2298	44	4079443* 🌑	749	35	12	23
SJ 00920	SJAR	SJ	2	3	4	07	30N	11W	2298	44	4079443* 🌑	749	35	12	23
SJ 02936	SJAR	SJ	1	1	4	07	30N	11W	2296	63	4079844* 🌑	792	38	30	8

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

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

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

(quarters are smallest to largest) closed)

(NAD83 UTM in meters)

(In feet)

	POD Sub-		Q	0	0							Donth	Donth	Water
POD Number C	ode basin	County	10.322			ec	Tws	Rng	x	Y	Distance			Column
SJ 00358	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055*	802	61	38	23
SJ 00387	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802			
SJ 00389	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	53		
SJ 00397	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	56	35	21
SJ 00415	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	53	40	13
SJ 00688	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055*	802	70	58	12
SJ 00689	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	78	65	13
SJ 00690	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	60		
SJ 00739	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	70	58	12
SJ 00748	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	60	41	19
SJ 00806	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	38	20	18
SJ 00882	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	60	50	10
SJ 00889	SJAR	SJ	3	4	1 (07	30N	11W	229289	4080055* 🌑	802	55		
SJ 00135	SJAR	SJ		1	4 (07	30N	11W	229764	4079745* 🌑	803	180	23	157
SJ 00769	SJAR	SJ		1	4 (07	30N	11W	229764	4079745* 🌑	803	50	14	36
SJ 01406	SJAR	SJ		1	4 (07	30N	11W	229764	4079745*	803	45	12	33

Average Depth to Water:

23 feet

Minimum Depth:

4 feet

Maximum Depth:

65 feet

Record Count: 71

UTMNAD83 Radius Search (in meters):

Easting (X): 229114.93

Northing (Y): 4079271.14

Radius: 804.67



(acre ft per annum)

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

	Sub				Well	C-trie lile is closed)	(quai	999		liest to largest)	(11112001	, , , , , , , , , , , , , , , , , , , ,		
WR File Nbr SJ 03484	basin Use Diversion SJAR DOM	on Owner C 0 RONALD BACHMAN	,	POD Number SJ 03484	Tag	Code Grant	Source			Tws Rng 30N 11W	X 229260	Y 4079252*	Distance 146	
SJ 01310	SJAR DOM	3 R. H. SUTTON	SJ	SJ 01310			Shallow	3 3	07	30N 11W	228950	4079364*	189	
SJ 01484	SJAR DOM	3 RONALD L. CUSTER	SJ	SJ 01484			Shallow	3 3	07	30N 11W	228950	4079364*	189	
SJ 01425	SJAR DOM	3 MARVIN IVY	SJ	SJ 01425			Shallow	4 3	07	30N 11W	229361	4079353*	259	
SJ 01434	SJAR DOM	3 RUTH FRANCIS TAPIA	SJ	SJ 01434				4 3	07	30N 11W	229361	4079353*	259	
SJ 01468	SJAR DOM	3 TOMMY H. JOURDEN	SJ	SJ 01468			Shallow	4 3	07	30N 11W	229361	4079353*	259	
SJ 01749	SJAR DOM	3 DELBERT DECK	SJ	SJ 01749				4 3	07	30N 11W	229361	4079353*	259	
SJ 02805	SJAR DOM	3 CARL D. COLE	SJ	SJ 02805				1 2 1	18	30N 11W	229252	4079049*	261	
SJ 02996	SJAR DOM	3 KEITH W. JOHNSON	SJ	SJ 02996			Shallow	1 2 1	18	30N 11W	229252	4079049*	261	
SJ 03463	SJAR DOM	3 WILLIS KNIGHT	SJ	SJ 03463			Shallow	1 2 1	18	30N 11W	229252	4079049*	261	
SJ 03630	SJAR DOM	3 ALYCE MAESTAS	SJ	SJ 03630			Shallow	3 3 3	07	30N 11W	228849	4079263*	266	
SJ 01492	SJAR DOM	3 R. J. YOUNG	SJ	SJ 01492			Shallow	3	07	30N 11W	229151	4079565*	296	
SJ 02005	SJAR DOM	3 DALE D. ROBERTS	SJ	SJ 02005			Shallow	4 4 3	07	30N 11W	229460	4079252*	345	
SJ 02561	SJAR DOM	3 SERGIO CASTILLO	SJ	SJ 02561				4 4 3	07	30N 11W	229460	4079252*	345	
SJ 02715	SJAR DOM	3 RUDY R. SALAZAR	SJ	SJ 02715			Shallow	4 4 3	07	30N 11W	229460	4079252*	345	
SJ 04048	SJAR DOL	3 JEANIE L. HENLEY	SJ	SJ 04048 POD1			Shallow	3 3 3	07	30N 11W	228773	4079213 🌑	345	
SJ 03854	SJAR DOL	3 MADALINE R. ADAIR	SJ	SJ 03854 POD1			Shallow	1 1 1	18	30N 11W	228779	4079133	362	
SJ 02006	SJAR DOM	3 KENNETH ENGLISH	SJ	SJ 02006			Shallow	2 4 3	07	30N 11W	229460	4079452*	389	

*UTM location was derived from PLSS - see Help

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

	(acre it per			MAC-III	C-trie file is closed)	(que		mailest to largest)	(, , , , , , , , , , , , , , , , , , ,	SERVE SERVE SERVICE AND A SERV	
WR File Nbr	Sub	law Comes	Count	Well y POD Number Tag	Code Grant	Source	q q q	ec Tws Rng	x	Y	Distance
SJ 00336	basin Use Diversi SJAR DOM	0 CARL D COLE	SJ	SJ 00336	Code Grant	Source		18 30N 11W	229353	4078950*	399
SJ 03895	SJAR DOL	3 ROBERT A. SMITH	SJ	SJ 03895 POD1		Shallow	2 2 2	13 30N 12W	228697	4079099 🌑	451
SJ 00150	SJAR DOM	0 JERRY W. STOTTS	SJ	SJ 00150			4 4 4	12 30N 12W	228653	4079278*	461
SJ 03911	SJAR DOL	3 CHRISSY GREENLEAF	SJ	SJ 03911 POD1		Shallow	2 2 2	13 30N 12W	228697	4079018	487
SJ 01316	SJAR DOM	3 DONALD R. EASTERLING	SJ	SJ 01316		Shallow	3 1 1	18 30N 11W	228838	4078862*	494
SJ 03152	SJAR DOM	3 PAUL WHITLOCK	SJ	SJ 03152		Shallow	3 1 1	18 30N 11W	228838	4078862*	494
SJ 03215	SJAR DOM	3 JAMES PIPER	SJ	SJ 03215		Shallow	3 1 1	18 30N 11W	228838	4078862*	494
SJ 03794	SJAR DOM	1 JOHN FAIRHURST	SJ	SJ 03794 POD1		Shallow	3 1 3	07 30N 11W	228894	4079720 🌑	500
SJ 02803	SJAR MUL	3 JOHN R. OR JANIE TIPTON	SJ	SJ 02803		Shallow	2 2 2	13 30N 12W	228642	4079077*	511
SJ 03917	SJAR DOM	1 ALFRED SALAZAR	SJ	SJ 03917 POD1		Shallow	2 4 4	12 30N 12W	228633	4079449	513
SJ 00768	SJAR DOM	3 LEROY ENGLISH	SJ	SJ 00768			1 3	07 30N 11W	228960	4079765*	517
SJ 03783	SJAR DOM	1 RUBY MORRISON		SJ 03783 POD1		Shallow			228856	4078816	522
SJ 00932	SJAR DOM	3 ALEX D. MOORE	SJ	SJ 00932		Shallow	4 2 1	18 30N 11W	229452	4078849* 🌑	540
SJ 01172	SJAR DOM	3 ANDY PRADA	SJ	SJ 01172		Shallow	2 3	07 30N 11W	229375	4079755* 🌑	549
SJ 04047	SJAR DOL	3 JEANIE L. HENLEY	SJ	SJ 04047 POD1		Shallow	3 1 1	18 30N 11W	228778	4078817 🌑	565
SJ 00554	SJAR DOM	0 JIMMY D. WORRELL	SJ	SJ 00554			4 4	12 30N 12W	228554	4079379*	571
SJ 00643	SJ DOM	3 ROLDAN ARCHULETA	SJ	SJ 00643		Shallow	4 4	12 30N 12W	228554	4079379*	571
SJ 03808	SJAR DOM	1 FIRST FEDERAL BANK	SJ	SJ 03808 POD1		Shallow	1 3 1	18 30N 12W	229248	4078685	600
SJ 03176	SJAR DOL	3 JOE A. GARCIA	SJ	SJ 03176 POD2		Shallow	1 4 1	18 30N 11W	229173	4078671 🌑	602
SJ 01403	SJAR DOM	3 JOE WILLIAMS	SJ	SJ 01403		Shallow	4 2 2	13 30N 12W	228642	4078877* 🌑	615
SJ 02114	SJAR DOM	3 RONALD HILGERT	SJ	SJ 02114		Shallow	4 2 2	13 30N 12W	228642	4078877* 🍪	615
SJ 02619	SJAR DOM	0 LINCOLN OR JEANNETTE FOLKERS	SJ	SJ 02619			4 2 2	13 30N 12W	228642	4078877* 🌑	615
*UTM location wa	s derived from PLSS										

2/15/19 3:36 PM

(acre ft per annum)

Page 2 of 5

ACTIVE & INACTIVE POINTS OF DIVERSION

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(acre ft per annum)

	(acre ft pe	r annum)				C=the file is closed)	(qua	rters a	ire sina	mest it	largest)	(IANDOO	o Hwi iii iiiotoro)	
	Sub				Well		0	q q		T	Des	x	Υ	Distance
WR File Nbr SJ 01404	basin Use Divers	3 TOMMY E. CHESNUT		y POD Number SJ 01404	Tag	Code Grant	Source Shallow		4 07			229745	4079344*	634
SJ 01667	SJAR DOM	3 MICHAEL R. HUDDLESTON	SJ	SJ 01667			Shallow	3	4 07	30N	11W	229745	4079344*	634
SJ 03176	SJAR DOL	3 JOE A. GARCIA	SJ	SJ 03176			Shallow	1 4	1 18	30N	11W	229244	4078646*	638
SJ 00162	SJAR DOM	3 JIMMY D. GERMANY	SJ	SJ 00162			Shallow	3 1	4 07	30N	11W	229663	4079644*	662
SJ 00329	SJAR DOM	3 GORDON N CRANE	SJ	SJ 00329			Shallow	3 1	4 07	30N	11W	229663	4079644*	662
SJ 00620	SJAR DOM	3 GORDON N. CRANE	SJ	SJ 00620			Shallow	3 1	4 07	30N	11W	229663	4079644*	662
SJ 00679	SJAR DOM	3 CALVIN REED	SJ	SJ 00679			Artesian	3 1	4 07	30N	11W	229663	4079644*	662
SJ 01104	SJAR DOM	3 J. C. OR MARY FINCHER	SJ	SJ 01104				3 1	4 07	30N	11W	229663	4079644* 🌑	662
SJ 03526	SJAR DOM	0 RICHARD HENLEY	SJ	SJ 03526				1 3	1 18	30N	11W	228828	4078660*	675
SJ 03575	SJAR IRR	30 CLARENCE R. (ROD) HANCOCK,	SJ	SJ 03575				2 2	3 07	30N	11W	229474	4079854*	684
SJ 04026	SJAR DOM	JR. 0 CONNIE JOHNSTON	SJ	SJ 04026 POD1			Shallow	3 1	2 18	30N	11W	229604	4078787 🌑	688
SJ 03757	SJAR DOM	1 NINA BURGESS	SJ	SJ 03757 POD1			Shallow	4	4 12	30N	12W	228428	4079355 🌑	691
SJ 00322	SJAR DOM	3 JACK O HARRIS	SJ	SJ 00322			Shallow	1 4	4 12	30N	12W	228453	4079478*	693
SJ 02317	SJAR DOM	3 ALLEEN LAVENDER	SJ	SJ 02317				1 2	2 13	30N	12W	228442	4079077*	700
SJ 03177	SJAR STK	3 JOE A. GARCIA	SJ	SJ 03177			Shallow	2 4	1 18	30N	11W	229444	4078646*	706
SJ 03344	SJAR DOM	3 CHRISTINE SPEARS	SJ	SJ 03344			Shallow	2 4	1 18	30N	11W	229444	4078646*	706
SJ 01401	SJAR DOM	3 STEVE CHRISTENSEN	SJ	SJ 01401			Shallow	3	1 18	30N	11W	228929	4078561*	734
SJ 01515	SJAR DOM	3 GLENN FREIDLINE	SJ	SJ 01515				3	1 18	30N	11W	228929	4078561*	734
SJ 01733	SJAR DOM	0 ROY DAVIN	SJ	SJ 01733			Shallow	3	1 18	30N	11W	228929	4078561*	734
			SJ	SJ 01733 X				3	1 18	30N	11W	228929	4078561*	734
SJ 01738	SJAR DOM	3 JOHN RODGERS	SJ	SJ 01738			Shallow	3	1 18	30N	11W	228929	4078561*	734
SJ 01786	SJAR DOM	3 DALE BURNS	SJ	SJ 01786			Shallow	3	1 18	30N	11W	228929	4078561*	734

^{*}UTM location was derived from PLSS - see Help

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed)

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

	(acre it p	er armam)					to Technique to Sea reto a lare les			AMERICAN STREET			
WR File Nbr	Sub basin Use Dive	rsion Owner	County	y POD Number	We Ta	II g Code Grant			Sec	Tws Rng	х	Y	Distance
SJ 00601	SJAR DOM	3 CHARLES WIGGINS	SJ	SJ 00601			Shallo	v 234	07	30N 11W	229844	4079443*	749
SJ 00604	SJAR DOM	3 FEXIX B. WAKEFIELD	SJ	SJ 00604			Shallo	v 2 3 4	07	30N 11W	229844	4079443*	749
SJ 00789	SJAR DOM	3 CHARLES R. ROBISON	SJ	SJ 00789				2 3 4	07	30N 11W	229844	4079443*	749
SJ 00918	SJAR DOM	3 TED BUSH	SJ	SJ 00918			Shallo	w 2 3 4	07	30N 11W	229844	4079443*	749
SJ 00919	SJAR DOM	3 DAVE COLESON	SJ	SJ 00919			Shallo	w 2 3 4	07	30N 11W	229844	4079443* 🌑	749
SJ 00920	SJAR DOM	3 BILLIE FERRELL	SJ	SJ 00920			Shallo	w 2 3 4	07	30N 11W	229844	4079443* 🌑	749
SJ 02936	SJAR DOM	3 JOHN A. GARCIA	SJ	SJ 02936			Shallo	w 114	07	30N 11W	229663	4079844* 🌑	792
SJ 00358	SJAR DOM	3 TOM D. FLAHERTY	SJ	SJ 00358			Shallo	w 3 4 1	07	30N 11W	229289	4080055*	802
SJ 00387	SJAR DOM	3 DOUG M. CLOW	SJ	SJ 00387			Shallo	w 3 4 1	07	30N 11W	229289	4080055*	802
SJ 00389	SJAR DOM	3 DENNIS O. FLAHERTY	SJ	SJ 00389			Shallo	w 3 4 1	07	30N 11W	229289	4080055*	802
SJ 00397	SJAR DOM	3 CLYDE GREENE	SJ	SJ 00397			Shallo	w 3 4 1	07	30N 11W	229289	4080055*	802
SJ 00415	SJAR DOM	3 A. M. CHAPMAN	SJ	SJ 00415			Shallo	w 3 4 1	07	30N 11W	229289	4080055*	802
SJ 00688	SJAR DOM	3 LENN CHAPMAN	SJ	SJ 00688			Shallo	w 3 4 1	07	30N 11W	229289	4080055* 🎳	802
SJ 00689	SJAR DOM	3 ROBIN BUTNER	SJ	SJ 00689			Shallo	w 3 4 1	07	30N 11W	229289	4080055*	802
SJ 00690	SJAR DOM	3 HERNANDO GARCIA	SJ	SJ 00690			Shallo	w 3 4 1	07	30N 11W	229289	4080055* 🎳	802
SJ 00739	SJAR DOM	3 BILLY NIX	SJ	SJ 00739			Shallo	w 3 4 ′	07	30N 11W	229289	4080055* 🌑	802
SJ 00747	SJAR DOM	3 JIMMIE STEELE	SJ	SJ 00747				3 4	07	30N 11W	229289	4080055*	802
SJ 00748	SJAR DOM	3 DANIEL VIGIL	SJ	SJ 00748			Shallo	w 3 4	1 07	30N 11W	229289	4080055*	802
SJ 00806	SJAR DOM	3 BEN BACON	SJ	SJ 00806			Shallo	w 3 4	1 07	30N 11W	229289	4080055* 🎳	802
SJ 00851	SJAR DOM	3 LONNIE SMITH	SJ	SJ 00851				3 4	1 07	30N 11W	229289	4080055*	802
SJ 00882	SJAR DOM	3 W. R. STEARNS	SJ	SJ 00882			Shallo	w 3 4	1 07	30N 11W	229289	4080055*	802
SJ 00889	SJAR DOM	3 DOUGLAS FLAHERTY	SJ	SJ 00889			Shallo	w 3 4	1 07	30N 11W	229289	4080055*	802

*UTM location was derived from PLSS - see Help

(acre ft per annum)

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed) (quarters are smalles

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

		AND THE PROPERTY OF THE PROPER			10000		MERCHANIST AND THE PARTY.	A SMISSING				MAN DAN BEAUTIFUL TO STORE			
WR File Nbr SJ 00930	Sub basin Use Diversion SJAR DOM	on Owner 3 RICHARD LEE		POD Number SJ 00930	Well Tag	Code Grant	Sou	rce (q q q 6416 4 3 4 1	Sec	Tws F		X 289	Y 4080055*	Distance 802
SJ 01380	SJAR DOM	3 S. J. FLAHERTY	SJ	SJ 01380					3 4 1	07	30N 1	1W 2292	289	4080055*	802
SJ 00135	SJAR DOM	3 RICHARD A. GILL	SJ	SJ 00135			Sha	llow	1 4	07	30N 1	11W 2297	7 64	4079745* 🌑	803
SJ 00483	SJAR DOM	0 CLARK E. DANNAR	SJ	SJ 00483					1 4	07	30N 1	11W 2297	7 64	4079745* 🌑	803
SJ 00769	SJAR DOM	3 VICKEY BREWTON	SJ	SJ 00769			Sha	llow	1 4	07	30N 1	11W 2297	′ 64	4079745* 🌑	803
SJ 01166	SJAR DOM	3 MICHAEL J. DEGNER	SJ	SJ 01166					1 4	07	30N 1	11W 2297	764	4079745* 🌑	803
SJ 01406	SJAR DOM	3 CLARK DANNAR	SJ	SJ 01406			Sha	llow	1 4	07	30N 1	11W 2297	764	4079745* 🌑	803

Record Count: 91

UTMNAD83 Radius Search (in meters):

(acre ft per annum)

Easting (X): 229114.93

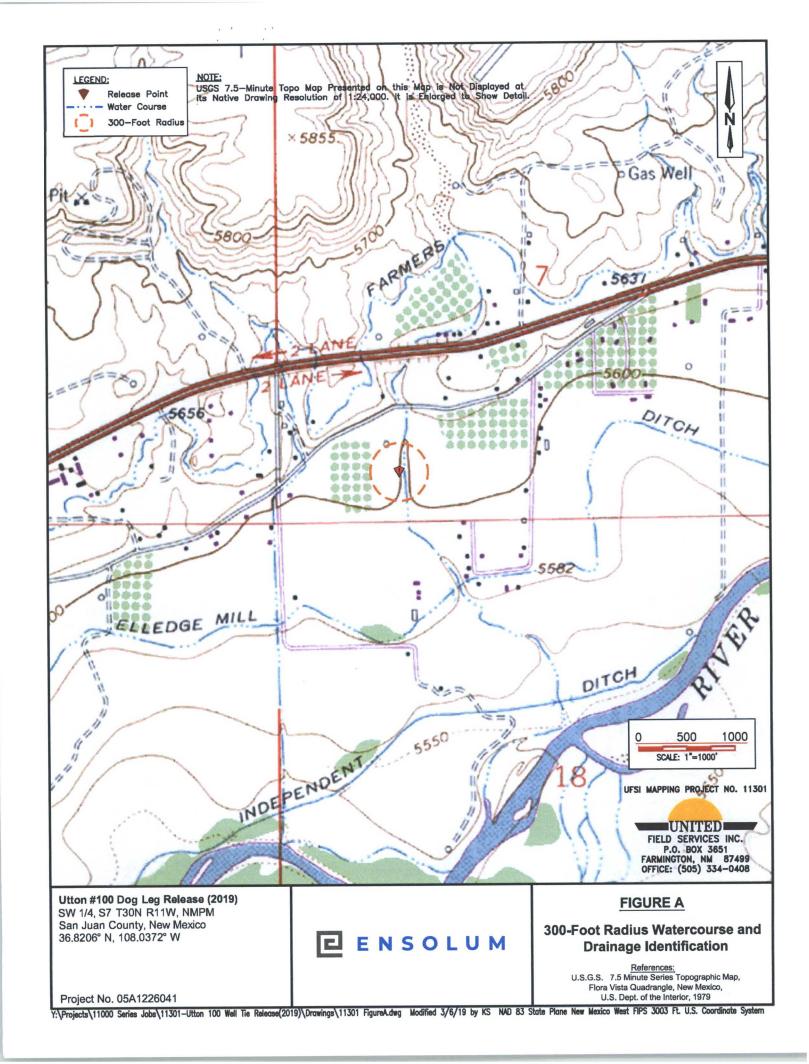
Northing (Y): 4079271.14

Radius: 804.67

Sorted by: Distance

*UTM location was derived from PLSS - see Help

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

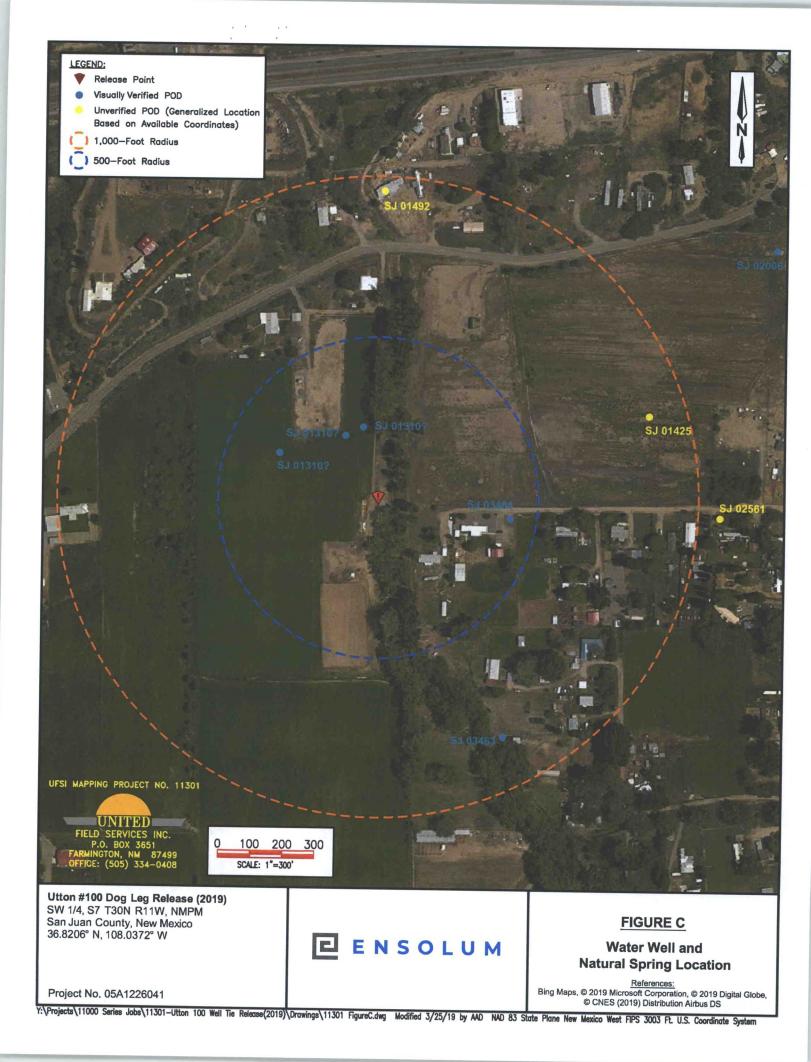


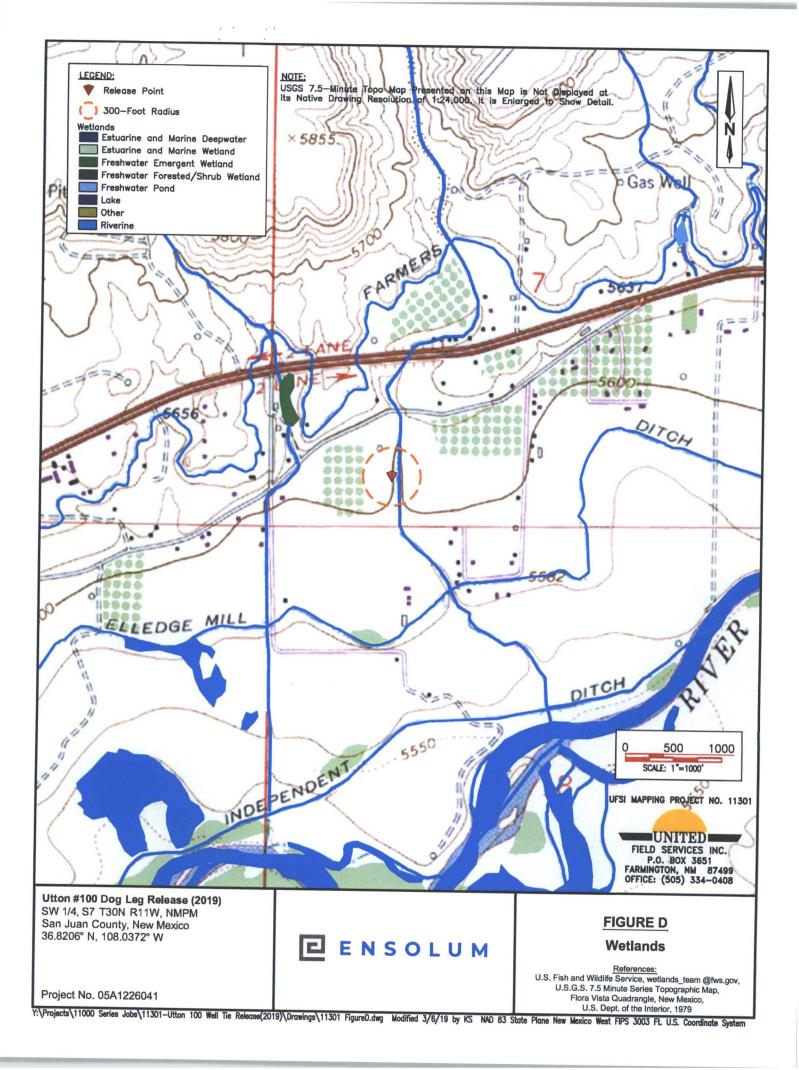


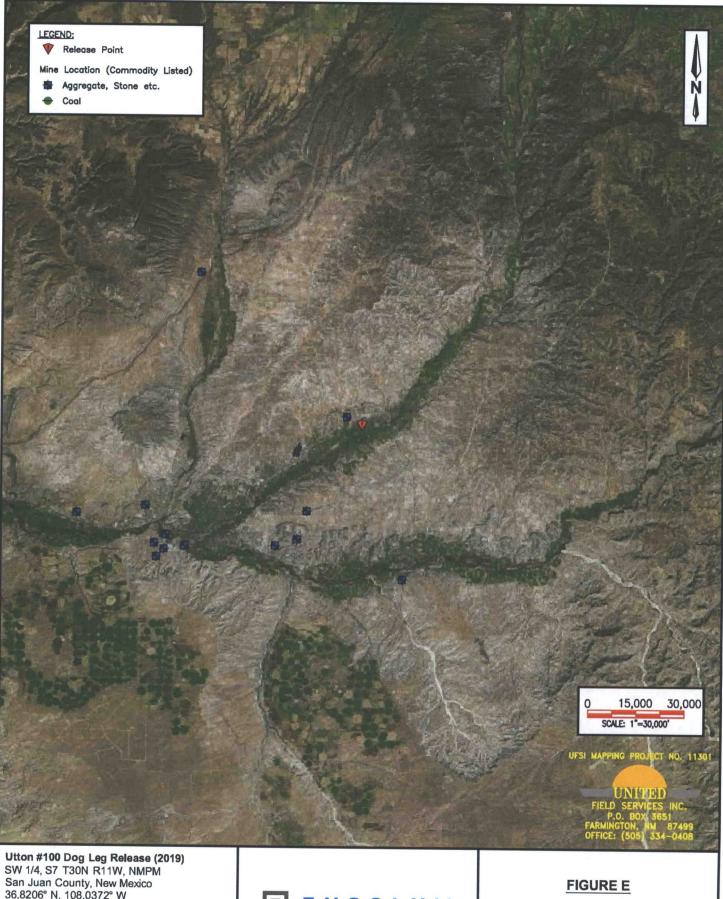


300-Foot Radius **Occupied Structure Identification**

References:
Bing Maps, © 2019 Microsoft Corporation, © 2019 Digital Globe,
© CNES (2019) Distribution Airbus DS







SW 1/4, S7 T30N R11W, NMPM San Juan County, New Mexico 36.8206° N, 108.0372° W

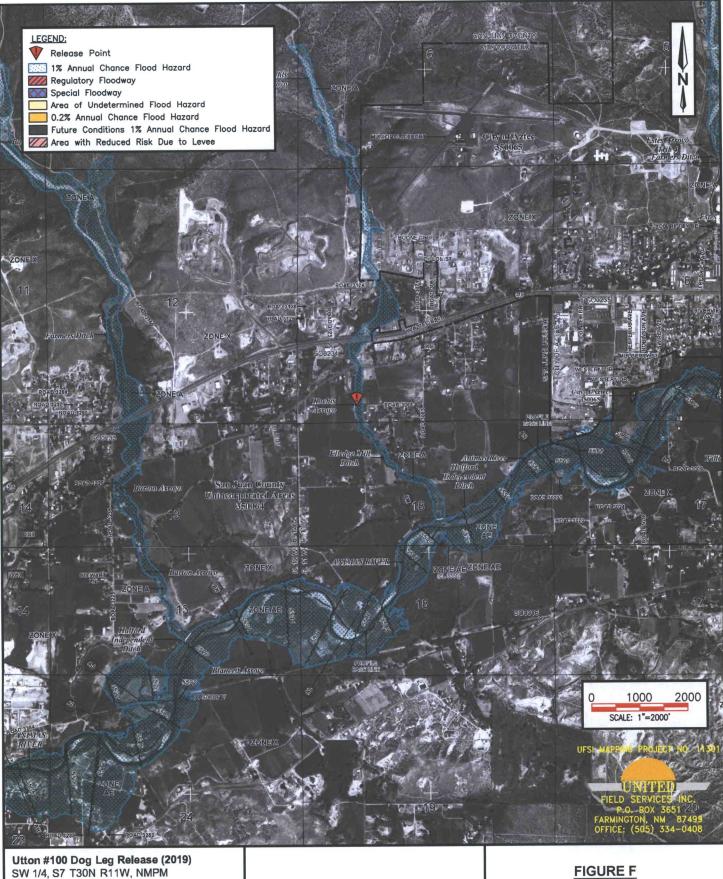
ENSOLUM

Mines, Mills and Quarries

References:
Bing Maps, © 2019 Microsoft Corporation Earthstar
Geographics SIO

Project No. 05A1226041

Y:\Projects\11000 Series Jobs\11301-Utton 100 Well Tie Release(2019)\Drawings\11301 FigureE.dwg Modified 3/6/19 by KS NAD 83 State Plane New Mexico West FIPS 3003 Ft. U.S. Coordinate System



SW 1/4, S7 T30N R11W, NMPM San Juan County, New Mexico 36.8206° N, 108.0372° W

ENSOLUM

100-Year Flood Plain

References: FIRM Flood Insurance Rate Map, San Juan County, New Mexico and Incorporated Areas, Map Numbers 35045C0710F and 35045C0720F, FEMA, 8/05/2010

Project No. 05A1226041



APPENDIX C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
120 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138 Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: Utton #100 Pipeline Dogleg
3. Location of Material (Street Address, City, State or ULSTR): Section 7 T30N R11W; 36.820076, -108.037206
4. Source and Description of Waste: Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas Liquids (Condensate and Water) Estimated Volume 5 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul)
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Thomas Long , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 19 regulatory determination, the above described waste 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. Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
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 in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Thomas Long 1-11-19, representative for Enterprise Products Operating authorizes IEI, Inc. to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.
I,
5. Transporter: OFT and Subcontractors OCD Power itted Surface Worte Management Facilities
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B Address of Facility: #49 CR 2150 Aztec, New Mexico
Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfarm Dandfill Other
Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record)
DENTED (Must be Maintained As Fermanent Record) DENTED (Must be Maintained As Fermanent Record) DATE: 1/11/19 TELEPHONE NO.: 505-632-1782

District I
1625 N. French Dr., Hobbs, NM 88240
District III
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138 Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

REQUEST FOR AFFROVAL TO ACCEPT SOLID WASTE
1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: Utton #100 Pipeline
3. Location of Material (Street Address, City, State or ULSTR): Section 7 T30N R11W; 36.821826; -108.036323 4. Source and Description of Waste: Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas I iquids (Condensate and Wester)
4. Source and Description of Waste: Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas Liquids (Condensate and Water) Estimated Volume 50 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul)
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
1, Thomas Long representative or authorized agent for Enterprise Products Operating do hereby Generator Signature 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: (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. **Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load**
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 in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Thomas Long 12-4-18, representative for Enterprise Products Operating authorizes IEI, Inc. to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.
I,
Address of Facility: #49 CR 2150 Aztec, New Mexico
Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfill Other Wester Assertance States
Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: Story Henrio TITLE: Clark DATE: 12/4/18
IGNATURE: Surface Waste Management Facility Authorized Agent TELEPHONE NO.: 505-632-1782

12/4/18



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Utton #100 Dog Leg Release (2019) Ensolum Project No. 05A1226041



Photograph 1

View of the release area.



Photograph 2

View of the in-process excavation activities.



Photograph 3

View of the in-process excavation activities.



SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Utton #100 Dog Leg Release (2019) Ensolum Project No. 05A1226041



Photograph 4

View of the final excavation after initial restoration.





APPENDIX E

Table – 1 Soil Analytical Summary



TABLE 1 UTTON #100 Dog Leg Release (2019) SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	BULLETING HERETON BUILDING	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Closure Criteria				10	NE	NE	NE	50				100	600
					Mary Company	Excavation Cor	nposite Soil San	nple	CONTRACT CONTRACT		40年的18%		
S-1	1.24.19	С	0 to 5	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.7	<49	ND	40

Note: Concentrations in bold and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



Appendix F

Laboratory Data Sheets & Chain of Custody Document



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

April 10, 2019

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: UTTON 100 Dog Leg

OrderNo.: 1901974

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/25/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 28, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1901974

Date Reported: 4/10/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-1

Project:

UTTON 100 Dog Leg

Collection Date: 1/24/2019 2:00:00 PM

Lab ID:

1901974-001

Matrix: MEOH (SOIL)

Received Date: 1/25/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	40	30	mg/Kg	20	1/25/2019 10:33:30 AM	42810
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/25/2019 12:23:01 PM	42809
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/25/2019 12:23:01 PM	42809
Surr: DNOP	108	50.6-138	%Rec	1	1/25/2019 12:23:01 PM	42809
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	1/25/2019 11:11:33 AM	42805
Surr: BFB	95.7	73.8-119	%Rec	1	1/25/2019 11:11:33 AM	42805
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.018	mg/Kg	1	1/25/2019 11:11:33 AM	42805
Toluene	ND	0.036	mg/Kg	1	1/25/2019 11:11:33 AM	42805
Ethylbenzene	ND	0.036	mg/Kg	1	1/25/2019 11:11:33 AM	42805
Xylenes, Total	ND	0.072	mg/Kg	1	1/25/2019 11:11:33 AM	42805
Surr: 4-Bromofluorobenzene	95.3	80-120	%Rec	1	1/25/2019 11:11:33 AM	42805

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

WO#:

1901974

10-Apr-19

Client:

APEX TITAN

Project:

UTTON 100 Dog Leg

Sample ID: MB-42810

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 42810

PQL

RunNo: 57260

1/25/2019

Analysis Date: 1/25/2019

SeqNo: 1915828

SPK value SPK Ref Val %REC LowLimit

0

Units: mg/Kg

HighLimit

RPDLimit %RPD

Qual

Analyte Chloride

Prep Date:

1.5 ND

Result

Sample ID: LCS-42810

SampType: Ics

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 42810

RunNo: 57260

Prep Date: 1/25/2019

Units: mg/Kg

Analysis Date: 1/25/2019

SeqNo: 1915854

HighLimit

%RPD **RPDLimit**

Qual

Analyte Chloride

PQL SPK value SPK Ref Val %REC LowLimit 15

15.00

97.2

Qualifiers:

Holding times for preparation or analysis exceeded **PQL** Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL Sample container temperature is out of limit as specified at testcode

Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1901974

10-Apr-19

Client:

APEX TITAN

Project:

UTTON 100 Dog Leg

Sample ID: MB-42809	SampType	: MBLK	Test	Code: EPA	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID:	42809	R	unNo: 572	248				
Prep Date: 1/25/2019	Analysis Date:	1/25/2019	Se	eqNo: 191	15020	Units: mg/K	g		
Analyte	Result Po	QL SPK value	SPK Ref Val	%REC I	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10							
Motor Oil Range Organics (MRO)	ND	50							
Surr: DNOP	9.5	10.00		94.7	50.6	138			
Sample ID: LCS-42809	SampType	: LCS	Test	Code: EPA	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: LCSS	Batch ID:	42809	R	unNo: 572	248				
Prep Date: 1/25/2019	Analysis Date:	1/25/2019	S	eqNo: 191	15353	Units: mg/K	g		
Analyte	Result Po	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10 50.00	0	106	63.9	124			
Surr: DNOP	4.7	5.000		93.7	50.6	138			
Sample ID: 1901974-001AMS	SampType	: MS	Test	Code: EPA	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: S-1	Batch ID:	42809	R	unNo: 572	248				
Prep Date: 1/25/2019	Analysis Date:	1/25/2019	S	eqNo: 191	15364	Units: mg/K	g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10 49.80	0	117	53.5	126			
Surr: DNOP	5.3	4.980		106	50.6	138			

Sample ID: 1901974-001AMSD	SampT	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-1	Batch	ID: 428	309	RunNo: 57248							
Prep Date: 1/25/2019	Analysis D	Analysis Date: 1/25/2019			SeqNo: 1915446 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	52	9.8	48.92	0	106	53.5	126	11.6	21.7		
Surr: DNOP	5.0		4.892		103	50.6	138	0	0		

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

WO#:

1901974

10-Apr-19

Client:

APEX TITAN

Project:

UTTON 100 Dog Leg

Sample ID: MB-42805

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS

Batch ID: 42805

PQL

5.0

RunNo: 57264

1/24/2019

Prep Date:

Analysis Date: 1/25/2019

1000

SeqNo: 1915632

Units: mg/Kg

%RPD

Analyte

SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit Qual

Gasoline Range Organics (GRO)

960

96.4

73.8

TestCode: EPA Method 8015D: Gasoline Range

119

Surr: BFB

Sample ID: LCS-42805

SampType: LCS

Batch ID: 42805

%REC

RunNo: 57264

Prep Date: 1/24/2019

Client ID: LCSS

Result

ND

Analysis Date: 1/25/2019

SeqNo: 1915633

Units: mg/Kg

Gasoline Range Organics (GRO)

Result PQL

SPK value SPK Ref Val 5.0 25.00

110

LowLimit 80.1 73.8

HighLimit %RPD 123

119

Qual

Surr: BFB

28 1100

1000

108

RPDLimit

Qualifiers:

H Holding times for preparation or analysis exceeded Practical Quanitative Limit **PQL**

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL.

Sample container temperature is out of limit as specified at testcode

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1901974

10-Apr-19

Client:

APEX TITAN

Project:

UTTON 100 Dog Leg

Sample ID: MB-42805 TestCode: EPA Method 8021B: Volatiles SampType: MBLK RunNo: 57264 Client ID: PBS Batch ID: 42805 Analysis Date: 1/25/2019 SeqNo: 1915665 Units: mg/Kg Prep Date: 1/24/2019 SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result PQL 0.025 ND Benzene Toluene ND 0.050 0.050 Ethylbenzene ND Xylenes, Total ND 0.10 1.000 95.8 80 120 0.96 Surr: 4-Bromofluorobenzene

Sample ID: LCS-42805	SampT	ype: LC	S	Tes							
Client ID: LCSS	Batch	n ID: 42 8	805	F	RunNo: 5						
Prep Date: 1/24/2019	Analysis D	ate: 1/2	25/2019	S	SeqNo: 1	915666	Units: mg/K	mg/Kg			
Analyte	Result PQL SPK value S			SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.92	0.025	1.000	0	92.4	80	120				
Toluene	0.97	0.050	1.000	0	96.7	80	120				
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120				
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120				
Surr: 4-Bromofluorobenzene	0.99		1.000		99.1	80	120				

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode



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: APEX AZTEC	Work Order Num	ber: 190197	74		RcptN	lo: 1
Received By: Desiree Dominguez	1/25/2019 8:15:00	AM	T	2		
Completed By: Erin Melendrez	1/25/2019 8:36:05	AM	U.	us	-3	
Reviewed By: DAD 1/25/19 LB: 4 01/25/19						
Chain of Custody	The state of the s					
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	e of >0° C to 6.0°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) prope	erly preserved?	Yes 🗸	No			
8. Was preservative added to bottles?		Yes	No	✓	NA 🗌	
9. VOA vials have zero headspace?		Yes	No		No VOA Vials	
10. Were any sample containers received broken	en?	Yes	No	V	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸] No		bottles checked for pH:	or >12 unless noted)
12. Are matrices correctly identified on Chain of	f Custody?	Yes 🗸	No		Adjusted?	
13. Is it clear what analyses were requested?		Yes 🗸				
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗸	No		Checked by:	
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:			WORKSHIP OF THE PARTY OF THE PA			
Client Instructions:		erinkala innecentri elementanakologisti gerinakologisti.				
16. Additional remarks:						
the state of the second	Geal Intact Seal No	Seal Date	Signed I	Зу		

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID		
District RP	1011	
Facility ID		
Application ID		

Release Notification

Responsible Party

		тсор		ic i ait	9			
Responsible Party:	Enterprise Field S	ervices, LLC	(OGRID: 151618				
Contact Name: The	mas Long		(Contact Telephone: 505-599-2286				
Contact email:tjlon	g@eprod.com	-	I	Incident # (assigned by OCD) N/A				
Contact mailing add	lress: 614 Reilly Av	ve, Farmington,	NM	N	CS1915551167			
		Location o	of Rel	ease S	ource			
atitude 36.754705 lecimal places)		L	_ongitud	le <u>-107.91</u>	NAD 83 in decimal degrees to			
Site Name Lateral H	I-35 Pipeline		S	Site Type I	Natural Compressor Gathering Pipeline			
Date Release Disco	vered: 5/16/2019		S	Serial # (if a	applicable): NM 0 025717			
Unit Letter Section	n Township	Range		Coun				
E 29	30N	10W		San Ju	ıan			
		Nature and			2.0 M//L			
Material Crude Oil	(s) Released (Select all to Volume Released)		calculatio	ns or specifi	c justification for the volumes provided below) Volume Recovered (bbls)			
☐ Produced Water				Volume Recovered (bbls)				
		ration of dissolved er >10,000 mg/l?	d chloric	de in the				
□ Condensate	Volume Release	sed (bbls): Unkno	own		Volume Recovered (bbls): None			
Natural Gas	Volume Releas	sed (Mcf): Unkno	own		Volume Recovered (Mcf): None			
Other (describe)	Volume/Weigh	t Released (prov	ide units	nits): Volume/Weight Recovered (provide units)				
dispatched a technicia observed on the groun	an and confirmed the nd surface. Enterprise	release. The pipeli begin the repairs a	ine was i and reme	solated, de ediation on	e of natural gas on the Lateral H-35 pipeline. Enterprise epressurized, locked out and tagged out. No fluids were May 24, 2019, at which time the release was determined il. A third party closure report will be submitted with the			



144 - 412	If VEC for what recogn(s) does the		this	
Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the	responsible party consider	tnis a major release?	
☐ Yes ⊠ No				
If YES, was immediate no	tice given to the OCD? By whom? T	o whom? When and by wh	nat means (phone, em	iail, etc)?
	Initia	l Response		
The responsible party	must undertake the following actions imm	nediately unless they could cre	ate a safety hazard that	would result in injury
☐ The source of the re	elease has been stopped.			
	has been secured to protect huma	an health and the enviro	nment.	
□ Released materials	have been contained via the use	of berms or dikes, absor	rbent pads, or other	containment devices.
	recoverable materials have been	emoved and managed a	appropriately.	
migration of the release	ped above have <u>not</u> been undertal e potable water, but some standing se release location and remove the	water was left onsite, a		
remediation has begun	IMAC the responsible party may on the party may one of action of action within a lined containment area (see	ns to date. If remedial e	fforts have been su	ccessfully completed or
rules and regulations all o releases which may enda operator of liability should groundwater, surface wat	formation given above is true and con perators are required to report and/or nger public health or the environment their operations have failed to adequ er, human health or the environment. for compliance with any other federal,	file certain release notifical. The acceptance of a C-1ately investigate and remedin addition, OCD acceptar	tions and perform cor 41 report by the OCD diate contamination th nce of a C-141 report	does not relieve the nat pose a threat to
Printed Name: Jon E. F	Fields	Title: Director, Field Env	vironmental	
Signature:	tul	Date: 5-30-19		
email: jefields@eprod	.com	Telephone: 713-381-66	684	
			91	
OCD Only Received by:	de	Date:	6/4/19	

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

A third party closure report is included with this "Final." C-141.

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: Ente	rprise Field Ser	vices, LLC		OGRID: 1	51618			
Contact Nam	e: Thomas	Long			Contact Te	lephone: 505-59	9-2286		
Contact emai	l:tjlong@ep	orod.com			Incident # (assigned by OCD): NVF1900853946				
Contact mail 87401	ing address:	614 Reilly Ave,	Farmington, N	М					
			Location	of R	elease So	ource			
atitude 36.9	11549		Longitude :	-107.71	13513	(NAD 83	in decimal degrees to 5 decimal places)		
Site Name Ox	cnard #332	?			Site Type N	latural Gas Ga	thering Pipeline		
Date Release	Discovered:	12/12/2018			Serial Num	ber (if applicable):			
Unit Letter	Section	Township	Range		Count	ty			
J	7	31N	8W		San Ju	ian	NMOCD		
Surface Owner	·· State	M Federal □ Ti	ribal Private (/	Name:	RIM		MAR 2 2 2019		
difface Owner	State	Z rederar 11							
			Nature and	d Vol	lume of F	Release	DISTRICT III		
				calculat	ions or specific		plumes provided below)		
Crude Oil		Volume Release	ed (bbls)			Volume Recove	ered (bbls)		
Produced	Water	Volume Release	ed (bbls)			Volume Recovered (bbls)			
		Is the concentrate produced water	tion of dissolved c >10,000 mg/l?	hloride	in the	Yes No			
	te		ed (bbls): Estimate	ed 5-7	BBLs	Volume Recove	ered (bbls): None		
Natural G	as	Volume Release	ed (Mcf): 10.69 MC	CF		Volume Recove	ered (Mcf): None		
Other (de	scribe)	Volume/Weight	Released (provide	e units)):	Volume/Weight Recovered (provide units)			
Enterprise ter There were n of impacted s standard (10	chnician was o fluids obse ubsurface so ppm Benzer	s dispatched and erved on the ground oils. Enterprise de ne, 50 ppm BTEX,	confirmed the rele d surface. Enterpri stermined this relea 100 ppm TPH and measured approximation	ease. T ise dete ase was d 600 p mately	The pipeline vermined this required to lopm Chloride). 75 feet long by	vas isolated, dep release reportable be remediated to . Repairs are rem by 10 feet wide by	elease on the Oxnard #332 pipeline. A ressurized, locked out and tagged out on December 21, 2018 due the volume the most stringent NMOCD remediation were completed on December 7.5 feet deep. Approximately 96 cubition Division approved land farm facility		

Form C-141 Page 2

State of New Mexico Oil Conservation Division

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.

□ 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: Jon E. Fields Title: Director, Field Environmental Date: 3-8-19
Signature: Date: 3-8-19
email: jefields@eprod.com Telephone: 713-381-6684
Received by: Date: 3/22/19
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: Title: Environment Sec.
Time Value. Div



CLOSURE REPORT

Property:

Oxnard #332 Pipeline Release SE ¼, S7 T31N R8W San Juan County, New Mexico

February 28, 2019 Ensolum Project No. 05A1226036

Prepared for:

Enterprise Field Services LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long NMOCD

MAR 2 2 2019

DISTRICT III

Prepared by:

Chad D'Aponti

Field Environmental Scientist

Ranee Deechilly Staff Scientist

Kyle Summers, CPG Sr. Project Manager

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CLOSURE REPORT

Oxnard #332 Pipeline Release SE ¼, S7 T31N R8W San Juan County, New Mexico

Ensolum Project No. 05A1226036

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Oxnard #332 Pipeline Release (Site)
Location:	36.9115° North, 107.7135° West Southeast (SE) ¼ of Section 7, Township 31 North, Range 8 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On December 12, 2018, a release of natural gas was identified by a third party. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On December 17, 2018, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release. The pipeline was subsequently repaired and placed back into service.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.

 No water wells were identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database.



- Two (2) cathodic-protection well records were found in the New Mexico EMNRD imaging database within the approximate one (1) mile search radius. The closest and shallowest water recorded for a cathodic-protection well within the search area was 80 feet below grade surface (bgs) at the Quinn #8 and #337 (Unit B, Sec 18 T31N R8W) which is approximately 0.6 miles from the Site. The cathodic-protection well for Oxnard #333 and #3 (Unit C, Sec 8 T31N R8W) located approximately 0.8 miles from the Site indicates a depth to water of 300 feet bgs.
- The Site is located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse. The closest "blue line" ephemeral wash is located approximately 264 feet south of the site.
- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.
- The Site is not located within 300 feet from a permanent residence, school, hospital, institution or church.
- No springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes were identified within 500 feet of the Site.
- No fresh water wells or springs were identified within 1,000 feet of the Site.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is not located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

	Closure Criteria f	or Soils Impacted by a Rel	ease
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg
≤ 50 feet	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
Due to	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
Watercourse	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg



3.0 SOIL REMEDIATION ACTIVITIES

On December 17, 2018, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release. The pipeline was subsequently repaired and placed back into service. During the pipeline repair and corrective action activities West States Energy Contactors, Inc, provided heavy equipment and labor support, while Apex Companies, LLC (Apex) provided environmental consulting support.

Information, data, and conclusions provided in the following sections and attached figures are based on information provided by Apex to Enterprise, and eyewitness accounts.

The final excavation measured approximately 75 feet long and 10 feet wide. The maximum depth of the excavation measured approximately 7.5 feet bgs.

The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand underlain by sandstone.

A total of approximately 96 cubic yards (cy) of petroleum hydrocarbon affected soils and 65 barrels (bbls) of hydro-excavation cuttings and water were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix B**. The excavation was backfilled with imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils, and then contoured to surrounding grade.

Figure 3 is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

4.0 SOIL SAMPLING PROGRAM

Based on information supplied by Enterprise, Apex field screened soil samples from the excavation utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp and a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system to guide excavation extents.

Apex's soil sampling program included the collection of 15 composite soil samples (S-1 through S-15) from the sidewalls and the base of the final excavation for laboratory analysis. In addition, three (3) composite stockpiled soil samples (SP-1 through SP-3) were collected from the soils that were segregated for potential reuse, to confirm the material was suitable to remain on-Site. The New Mexico EMNRD OCD instructed Enterprise to proceed with sampling, although a New Mexico EMNRD OCD representative was not on-Site to witness the sampling events. Soils associated with composite soil sample S-2 and stockpiled soil sample SP-1 were removed from the Site and transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation.

Soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.



5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021/#8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0.

Laboratory analytical results are summarized in **Table 1** in **Appendix D**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix E**.

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) associated with composite soil samples (S-1, S-3 through S-15, SP-2 and SP-3) to the New Mexico EMNRD OCD closure criteria. Soils associated with composite soil sample S-2 and stockpiled soil sample SP-1 were removed from the Site and transported to Envirotech landfarm for disposal/remediation and are not included in the following discussion.

- Laboratory analytical results indicate benzene concentrations for soils remaining in place and the reused stockpiled soils do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicate that total BTEX concentrations for soils remaining in place and the reused stockpiled soils do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples S-1 and S-4 collected from soils remaining in place indicate a combined TPH GRO/DRO/MRO concentration of 19 mg/kg and 9.8 mg/kg, respectively, which are below the New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for composite soil samples S-3, S-13, and S-14 collected from soils remaining in place indicate chloride concentrations ranging from 39 mg/kg (S-3) to 290 mg/kg (S-13); these concentrations are below the New Mexico EMNRD OCD closure criteria of 600 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site do not exceed the laboratory PQLs or the New Mexico EMNRD OCD closure criteria of 600 mg/kg.

Laboratory analytical results are summarized in Table 1 (Appendix D).

7.0 RECLAMATION AND RE-VEGETATION

The excavation was backfilled with imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils, and then contoured to the surrounding grade. Enterprise will re-seed the Site with a BLM Farmington Field Office approved seeding mixture at the beginning of the next favorable growing season.



8.0 FINDINGS AND RECOMMENDATION

On December 12, 2018, a release of natural gas was identified by a third party. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On December 17, 2018, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release. The pipeline was subsequently repaired and placed back into service.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- A total of 15 composite soil samples were collected from the final excavation for laboratory analysis. In addition, three (3) composite stockpile soil samples were collected from stockpiled soils. Based on soil laboratory analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.
- A total of approximately 96 cubic yards of petroleum hydrocarbon affected soils and 65 bbls of hydro-excavation cuttings and water were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils, and then contoured to surrounding grade.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 Additional Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings, and recommendations are based solely upon data available to Ensolum at the time of these services.

9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Field Services LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise Field Services LLC and Ensolum. Any

Enterprise Field Services, LLC Closure Report Oxnard #332 Pipeline Release February 28, 2019

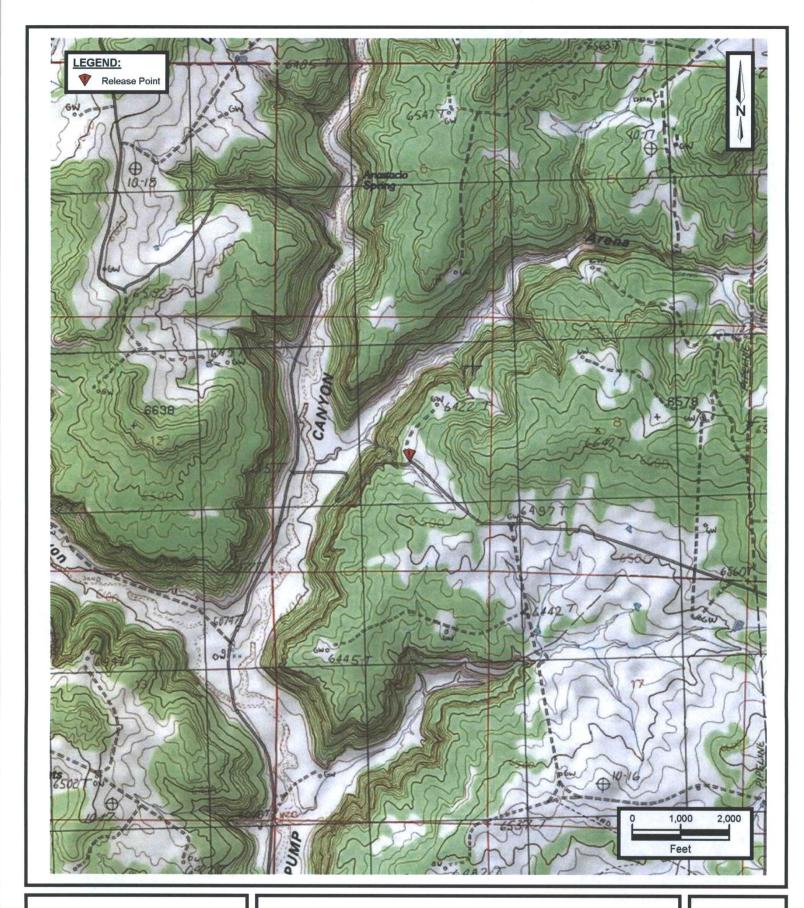


unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



APPENDIX A

Figures





Environmental & Hydrogeologic Consultants

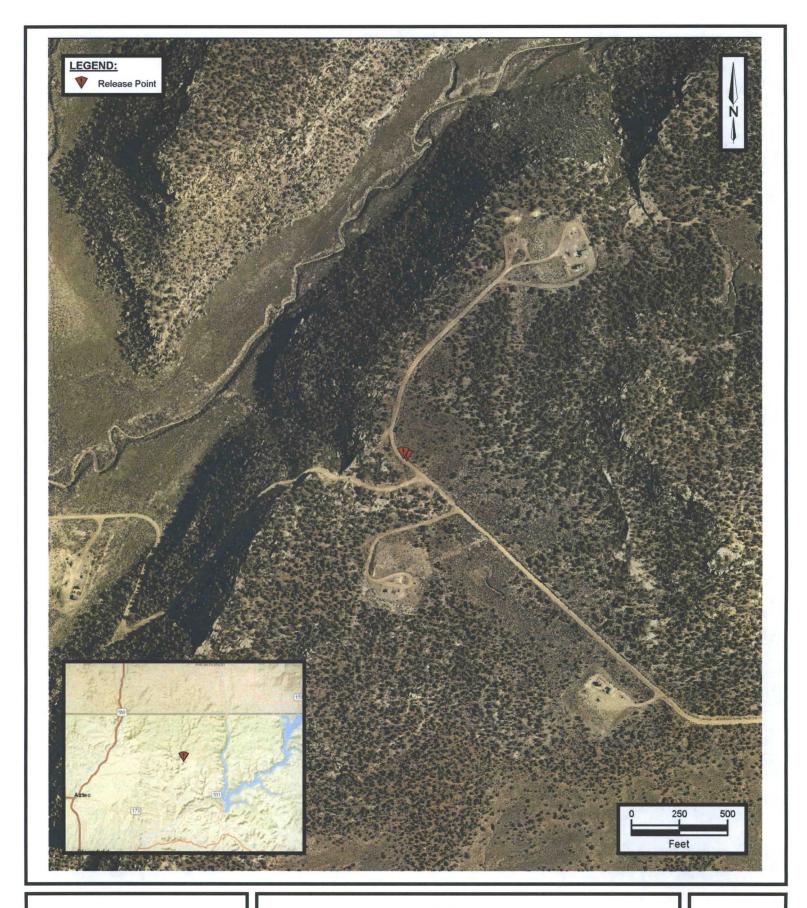
Topographic Map

ENTERPRISE FIELD SERVICES LLC OXNARD #332 PIPELINE RELEASE SE ¼, S7 T31N R8W, San Juan County, New Mexico 36.9115° N, 107.7135° W

PROJECT NUMBER: 05A1226036

FIGURE

1





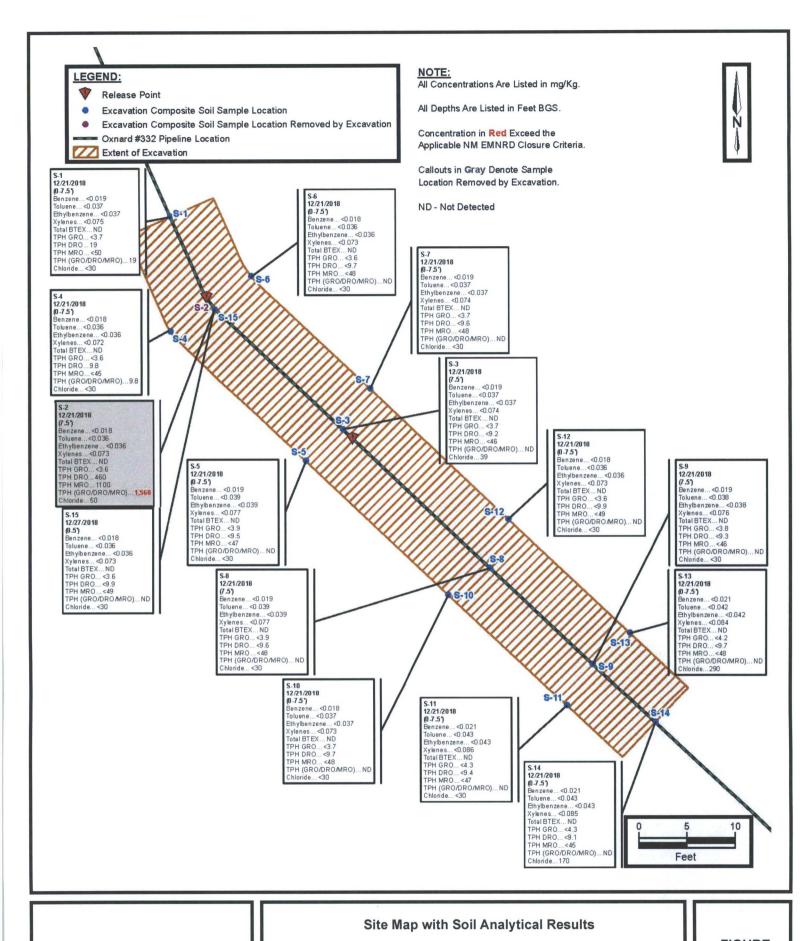
Site Vicinity Map

ENTERPRISE FIELD SERVICES LLC OXNARD #332 PIPELINE RELEASE SE ¼, S7 T31N R8W, San Juan County, New Mexico 36.9115° N, 107.7135° W

PROJECT NUMBER: 05A1226036

FIGURE

2





ENTERPRISE FIELD SERVICES LLC OXNARD #332 PIPELINE RELEASE

OXNARD #332 PIPELINE RELEASE SE ¼, S7 T31N R8W, San Juan County, New Mexico 36.9115° N, 107.7135° W

PROJECT NUMBER: 05A1226036

FIGURE

3



APPENDIX B

Executed C-138 Solid Waste Acceptance Form

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

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 97057-8963 Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

REQUEST FOR ALL ROYAL TO ACCEL I SOLLD WASTE
1. Generator Name and Address: 2. Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401 Invoice Information: PM: Howard Roddy Pay Key: RB21200
3. Originating Site: Oxnard #332
4. Location of Material (Street Address, City, State or ULSTR): UL J Section 7 T31 R8W; 36.911549, -107.713513 Pec. 2018
 Source and Description of Waste: Hydrocarbon impacted soil/sludge from remediation activities associated with a natural gas pipeline release. Estimated Volume 80 yd³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 96/65 yd³/bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Thomas Long representative or authorized agent for Enterprise Field Services, LLC do hereby PRINT & SIGN NAME 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: (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.
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 in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, 12-13-18 representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.
I, Crea Crabbell , representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
6. Transporter: Riley Industrials West States, Prado Farms, HBL CMTR
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-8011 Address of Facility: Hilltop, NM
Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Industry Industry Injection Inj
Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: Management Facility Authorized Agent DENIED (Must Be Maintained As Permanent Record) PRINT NAME: DENIED (Must Be Maintained As Permanent Record) TITLE: Enuivo Management DATE: 12/19/18 TELEPHONE NO.: 505-632-0615



APPENDIX C

Photographic Documentation

Enterprise Field Services, LLC Closure Report Oxnard #332 Pipeline Release Ensolum Project No. 05A1226036



Photograph 1

View of the in-process excavation activities, facing southeast.



Photograph 2

View of the excavation, facing southeast.



Photograph 3

View of the excavation, facing northwest.



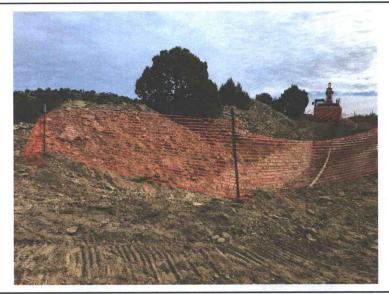
SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Oxnard #332 Pipeline Release Ensolum Project No. 05A1226036



Photograph 4

View of the stockpiled soils.



Photograph 5

View of the final excavation after initial restoration.





APPENDIX D

Table 1 – Soil Analytical Summary



TABLE 1 Oxnard #332 Pipeline Release SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Closure Criteria				10	NE	NE	NE	50				100	600
					HICKORY THE SE	xcavation Soil Samp	le Removed by	Excavation					
S-2	12.21.18	С	7.5	<0.018	< 0.036	<0.036	< 0.073	ND	<3.6	460	1,100	1,560	50
				Sto	ckpile Composit	e Soil Sample Remo	ved and Transp	orted to Envirotech	Landfarm				
SP-1	12.21.18	С	Stockpile	<0.020	<0.040	<0.040	<0.080	ND	<4.0	150	400	550	<30
	Charles and	全国的 自己的	W		Property and Assessment Assessmen	Stockpile Com	posite Soil Sam	ples				The second second	
SP-2	12.21.18	С	Stockpile	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.2	<46	ND	<30
SP-3	12.21.18	С	Stockpile	<0.021	<0.041	<0.041	<0.082	ND	<4.1	<9.3	<46	ND	130
							nposite Soil San			A SECTION OF SECTION	The state of the s	the wife of the state of	
S-1	12.21.18	С	0 to 7.5	<0.019	<0.037	<0.037	<0.075	ND	<3.7	19	<50	19	<30
S-3	12.21.18	С	7.5	<0.019	<0.037	<0.037	<0.074	ND	<3.7	<9.2	<46	ND	39
S-4	12.21.18	С	0 to 7.5	<0.018	<0.036	<0.036	<0.072	ND	<3.6	9.8	<45	9.8	<30
S-5	12.21.18	С	0 to 7.5	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.5	<47	ND	<30
S-6	12.21.18	С	0 to 7.5	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<9.7	<48	ND	<30
S-7	12.21.18	С	0 to 7.5	<0.019	<0.037	<0.037	<0.074	ND	<3.7	<9.6	<48	ND	<30
S-8	12.21.18	С	7.5	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.6	<48	ND	<30
S-9	12.21.18	С	7.5	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.3	<46	ND	<30
S-10	12.21.18	С	0 to 7.5	<0.018	< 0.037	<0.037	< 0.073	ND	<3.7	<9.7	<48	ND	<30
S-11	12.21.18	С	0 to 7.5	<0.021	< 0.043	<0.043	<0.086	ND	<4.3	<9.4	<47	ND	<30
S-12	12.21.18	С	0 to 7.5	<0.018	<0.036	<0.036	< 0.073	ND	<3.6	<9.9	<49	ND	<30
S-13	12.21.18	С	0 to 7.5	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.7	<48	ND	290
S-14	12.21.18	С	0 to 7.5	<0.021	<0.043	<0.043	<0.085	ND	<4.3	<9.1	<45	ND	170
S-15	12.27.18	С	8.5	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<9.9	<49	ND	<30

Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon



Appendix E

Laboratory Data Sheets & Chain of Custody Documentation



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

December 27, 2018

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Oxnard 332

OrderNo.: 1812D38

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/22/2018 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 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1812D38

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Oxnard 332

Lab ID: 1812D38-001

Client Sample ID: SP-1

Collection Date: 12/21/2018 1:15:00 PM

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	ND	30	mg/Kg	20	12/26/2018 11:32:19 AM 42295
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	12/24/2018 2:54:26 PM G56570
Surr: BFB	93.3	70-130	%Rec	1	12/24/2018 2:54:26 PM G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: TOM
Diesel Range Organics (DRO)	150	9.4	mg/Kg	1	12/24/2018 12:56:22 PM 42290
Motor Oil Range Organics (MRO)	400	47	mg/Kg	1	12/24/2018 12:56:22 PM 42290
Surr: DNOP	99.4	50.6-138	%Rec	1	12/24/2018 12:56:22 PM 42290
EPA METHOD 8260B: VOLATILES SHORT LIST	г				Analyst: DJF
Benzene	ND	0.020	mg/Kg	1	12/24/2018 2:54:26 PM S56570
Toluene	ND	0.040	mg/Kg	1	12/24/2018 2:54:26 PM S56570
Ethylbenzene	ND	0.040	mg/Kg	1	12/24/2018 2:54:26 PM S56570
Xylenes, Total	ND	0.080	mg/Kg	1	12/24/2018 2:54:26 PM S56570
Surr: 4-Bromofluorobenzene	98.8	70-130	%Rec	1	12/24/2018 2:54:26 PM S56570
Surr: Toluene-d8	96.4	70-130	%Rec	1	12/24/2018 2:54:26 PM S56570

Matrix: SOIL

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

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 Quanitative 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 Page 1 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1812D38

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN Client Sample ID: SP-2

 Project:
 Oxnard 332
 Collection Date: 12/21/2018 1:20:00 PM

 Lab ID:
 1812D38-002
 Matrix: SOIL
 Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL (Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	ND	30	mg/Kg	20	12/26/2018 12:09:32 PM 42295
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	12/24/2018 3:23:39 PM G56570
Surr: BFB	96.9	70-130	%Rec	1	12/24/2018 3:23:39 PM G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	12/24/2018 12:08:27 PM 42290
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	12/24/2018 12:08:27 PM 42290
Surr: DNOP	90.0	50.6-138	%Rec	1	12/24/2018 12:08:27 PM 42290
EPA METHOD 8260B: VOLATILES SHORT LIST	•				Analyst: DJF
Benzene	ND	0.021	mg/Kg	1	12/24/2018 3:23:39 PM S56570
Toluene	ND	0.042	mg/Kg	1	12/24/2018 3:23:39 PM S56570
Ethylbenzene	ND	0.042	mg/Kg	1	12/24/2018 3:23:39 PM S56570
Xylenes, Total	ND	0.084	mg/Kg	1	12/24/2018 3:23:39 PM S56570
Surr: 4-Bromofluorobenzene	99.5	70-130	%Rec	1	12/24/2018 3:23:39 PM S56570
Surr: Toluene-d8	104	70-130	%Rec	1	12/24/2018 3:23:39 PM S56570

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

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 Quanitative 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 Page 2 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1812D38

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Oxnard 332

TITAN Client Sample ID: SP-3

Lab ID: 1812D38-003

Project:

Matrix: SOIL

Collection Date: 12/21/2018 1:25:00 PM **Received Date:** 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	130	30	mg/Kg	20	12/26/2018 12:21:57 PM 42295
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	12/24/2018 3:52:51 PM G565
Surr: BFB	93.9	70-130	%Rec	1	12/24/2018 3:52:51 PM G565
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	12/24/2018 12:32:24 PM 42290
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	12/24/2018 12:32:24 PM 42290
Surr: DNOP	90.6	50.6-138	%Rec	1	12/24/2018 12:32:24 PM 42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: DJF
Benzene	ND	0.021	mg/Kg	1	12/24/2018 3:52:51 PM S565
Toluene	ND	0.041	mg/Kg	1	12/24/2018 3:52:51 PM S565
Ethylbenzene	ND	0.041	mg/Kg	1	12/24/2018 3:52:51 PM S565
Xylenes, Total	ND	0.082	mg/Kg	1	12/24/2018 3:52:51 PM S565
Surr: 4-Bromofluorobenzene	99.2	70-130	%Rec	1	12/24/2018 3:52:51 PM S5657
Surr: Toluene-d8	101	70-130	%Rec	1	12/24/2018 3:52:51 PM S5657

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

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 Quanitative 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 Page 3 of 7
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1812D38

27-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID MB-42295

SampType: MBLK

PQL

TestCode: EPA Method 300.0: Anions

Client ID: **PBS**

Prep Date:

Batch ID: 42295

Result

RunNo: 56583

12/26/2018

Analysis Date: 12/26/2018

SPK value SPK Ref Val

SeqNo: 1894143

Units: mg/Kg

HighLimit

RPDLimit %RPD

Qual

Analyte Chloride

ND 1.5

Sample ID LCS-42295

SampType: LCS

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID: LCSS

Batch ID: 42295

RunNo: 56583

%REC

Prep Date: 12/26/2018 Analysis Date: 12/26/2018

SeqNo: 1894144

Units: mg/Kg

Analyte

SPK value SPK Ref Val Result

%REC

%RPD **RPDLimit**

15.00

93.6

LowLimit

HighLimit

Chloride

110

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

В 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 Detection Limit Sample container temperature is out of limit as specified Page 4 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812D38**

27-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID MB-42290 SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 42290			RunNo: 56567							
Prep Date: 12/24/2018 Analysis Date: 12/24/2018			2/24/2018	S	SeqNo: 1	892577	Units: mg/Kg				
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	8.6		10.00		85.8	50.6	138				

Sample ID LCS-42290 SampType: LCS					Code: El	PA Method	d 8015M/D: Diesel Range Organics				
Client ID: LCSS	Batch	ID: 42	290	R	tunNo: 5	6567					
Prep Date: 12/24/2018	Analysis Da	ate: 12	2/24/2018	S	eqNo: 1	892578	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	39	10	50.00	0	78.4	70	130				
Surr: DNOP	4.2		5.000		84.7	50.6	138				

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 Quanitative 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 Detection Limit
- W Sample container temperature is out of limit as specified

Page 5 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812D38

27-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID rb	SampType: MBLK TestCode: EPA Method 8						8260B: Vola	tiles Short	List	
Client ID: PBS	Batch	n ID: S5	6570	F	6570					
Prep Date:	Analysis D	ate: 12	2/24/2018	S	SeqNo: 18	892731	Units: mg/k	(g		
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	0.48		0.5000		96.2	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.4	70	130			
Surr: Toluene-d8	0.48		0.5000		95.9	70	130			

Sample ID 100ng Ics	SampT	ype: LC	CS TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: LCSS	Batch	n ID: S5	6570	RunNo: 56570							
Prep Date:	Analysis D	ate: 12	2/24/2018	S	SeqNo: 1	892747	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	106	70	130				
Toluene	1.1	0.050	1.000	0	110	70	130				
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130				
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.8	70	130				
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130				
Surr: Toluene-d8	0.54		0.5000		108	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 Quanitative 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 Detection Limit
- W Sample container temperature is out of limit as specified

Page 6 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812D38

27-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID rb SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: PBS Batch ID: G56570 RunNo: 56570 Prep Date: Analysis Date: 12/24/2018 SeqNo: 1892772 Units: mg/Kg %RPD Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit **RPDLimit** Qual ND 5.0 Gasoline Range Organics (GRO) 480 500.0 97.0 70 130

Sample ID 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: LCSS Batch ID: G56570 RunNo: 56570 Prep Date: Analysis Date: 12/24/2018 SeqNo: 1892792 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 102 70 130 Surr: BFB 500 500.0 99.3 70 130

- * 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 Quanitative 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
- Page 7 of 7

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



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: APEX AZTEC	Work Order Number: 1812D38		RcptNo: 1	
Received By: John Caldwell Completed By: Leah Baca	12/22/2018 8:00:00 AM 12/24/2018 8:05:25 AM	Abrilland Land Bren		,
Reviewed By: 50 12-24-18		7	Lahele	d by
Chain of Custody 1. Is Chain of Custody complete? 2. How was the sample delivered?	Yes ✓ <u>Courier</u>	No □ No	ot Present 🗌	<i>b</i>
Log In 3. Was an attempt made to cool the samples?	Yes ✓	No 🗀	NA 🗆	
4. Were all samples received at a temperature	of >0° C to 6.0°C Yes ✓	No 🗆	NA 🗆	
5. Sample(s) in proper container(s)?	Yes 🗹	No 🗆		
6. Sufficient sample volume for indicated test(s7. Are samples (except VOA and ONG) proper8. Was preservative added to bottles?		No □ No □ No ☑	NA 🗆	
9. VOA vials have zero headspace? 10. Were any sample containers received broke	Yes ✓ Yes □	No 🗸	/OA Vials preserved	10 12
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹		es checked	noted)
12. Are matrices correctly identified on Chain of 13. Is it clear what analyses were requested?	Custody? Yes ✓ Yes ✓	No 🗆	Adjusted?	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by:	
Special Handling (if applicable)	_	_	_	
15. Was client notified of all discrepancies with Person Notified:		No L	NA 🗹	
By Whom: Regarding: Client Instructions:	Date	Phone Fax In	Person	
16. Additional remarks:		-		
17. Cooler Information Cooler No Temp °C Condition Set 1 5.3 Good	eal Intact Seal No Seal Date	Signed By		

CHAIN OF CUSTODY RECORD Hall Environmental ANALYSIS Lab use only Due Date: Laboratory: Analysis Laboratery REQUESTED **APEX** 4901 Hawkins NE Address: when received (C°): 5-3 Temp. of coolers Albuqueque, NM 87109 Office Location 606 S. RIO Grande Suite A Contact: Aztec, NM 87410 Project Manager PO/SO #: _ Sampler's Name Sampler's Signature Rance Decchilles Project Name Proj. No. No/Type of Containers Oxnard #332 72504011255 Comp End A/G 1LL. 250 ml Glass Jar P/O Identifying Marks of Sample(s) Matrix Date Lab Sample ID (Lab Use Only) 812038-601 12/21/18 1315 12/21/18 1320 X -002 12/21/18 -003 SAME DAY ☐ 25% Rush 3.200% Rush Turn around time ■ Normal ☐ 50% Rush Received by: (Signature) Date: Time: NOTES: Relinquished by (Signature) Time: PM-Tom Long 12/18 | 80| Time: Paykey - CM 22355 Non APE - N 38923 Relinquished by (Signature) Date: Time: Date: 12-22-18 Received by: (Signature) Date: Date: Time: Relinquished by (Signature) Time: Relinquished by (Signature) Received by: (Signature) Date: Time: Date: Time: C - Charcoal tube O - Oil W - Water S - Soil SD - Solid A - Air Bag SL - sludge Matrix WW - Wastewater L - Liquid 250 ml - Glass wide mouth P/O - Plastic or other VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter Container



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

December 27, 2018

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Oxnard 332

OrderNo.: 1812D39

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 14 sample(s) on 12/22/2018 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 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN

Client Sample ID: S-1

Collection Date: 12/21/2018 12:00:00 PM **Project:** Oxnard 332 1812D39-001 Matrix: SOIL Received Date: 12/22/2018 8:00:00 AM Lab ID:

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	12/26/2018 9:48:22 AM	42294
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	12/24/2018 4:21:57 PM	G56570
Surr: BFB	95.2	70-130	%Rec	1	12/24/2018 4:21:57 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	: TOM
Diesel Range Organics (DRO)	19	9.9	mg/Kg	1	12/24/2018 12:40:56 PI	M 42290
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	12/24/2018 12:40:56 PI	M 42290
Surr: DNOP	92.7	50.6-138	%Rec	1	12/24/2018 12:40:56 PI	M 42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: DJF
Benzene	ND	0.019	mg/Kg	1	12/24/2018 4:21:57 PM	S56570
Toluene	ND	0.037	mg/Kg	1	12/24/2018 4:21:57 PM	S56570
Ethylbenzene	ND	0.037	mg/Kg	1	12/24/2018 4:21:57 PM	S56570
Xylenes, Total	ND	0.075	mg/Kg	1	12/24/2018 4:21:57 PM	S56570
Surr: 4-Bromofluorobenzene	96.4	70-130	%Rec	1	12/24/2018 4:21:57 PM	S56570
Surr: Toluene-d8	102	70-130	%Rec	1	12/24/2018 4:21:57 PM	S56570

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 18 J
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN Client Sample ID: S-2

Project: Oxnard 332 **Collection Date:** 12/21/2018 12:05:00 PM

Lab ID: 1812D39-002 Matrix: SOIL Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	50	30		mg/Kg	20	12/26/2018 10:00:47 Al	VI 42294
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	: DJF
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	12/24/2018 4:51:41 PM	G56570
Surr: BFB	94.5	70-130		%Rec	1	12/24/2018 4:51:41 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst	: TOM
Diesel Range Organics (DRO)	460	94		mg/Kg	10	12/24/2018 3:07:20 PM	42290
Motor Oil Range Organics (MRO)	1100	470		mg/Kg	10	12/24/2018 3:07:20 PM	42290
Surr: DNOP	0	50.6-138	S	%Rec	10	12/24/2018 3:07:20 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst	DJF
Benzene	ND	0.018		mg/Kg	1	12/24/2018 4:51:41 PM	S56570
Toluene	ND	0.036		mg/Kg	1	12/24/2018 4:51:41 PM	S56570
Ethylbenzene	ND	0.036		mg/Kg	1	12/24/2018 4:51:41 PM	S56570
Xylenes, Total	ND	0.073		mg/Kg	1	12/24/2018 4:51:41 PM	S56570
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	12/24/2018 4:51:41 PM	S56570
Surr: Toluene-d8	97.3	70-130		%Rec	1	12/24/2018 4:51:41 PM	S56570

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

Qualifiers: Value exceeds Maximum Contaminant Level. Analyte detected in the associated Method Blank В Sample Diluted Due to Matrix D E Value above quantitation range Analyte detected below quantitation limits Page 2 of 18 H Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P Sample pH Not In Range PQL Practical Quanitative Limit Reporting Detection Limit % Recovery outside of range due to dilution or matrix Sample container temperature is out of limit as specified

Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN Client Sample ID: S-3

 Project:
 Oxnard 332
 Collection Date: 12/21/2018 12:10:00 PM

 Lab ID:
 1812D39-003
 Matrix: SOIL
 Received Date: 12/22/2018 8:00:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: smb 39 30 mg/Kg 12/26/2018 10:13:11 AM 42294 20 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF Gasoline Range Organics (GRO) ND 3.7 12/24/2018 5:21:18 PM G56570 mg/Kg 1 Surr: BFB 92.4 70-130 %Rec 1 12/24/2018 5:21:18 PM G56570 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND 9.2 mg/Kg 12/24/2018 3:01:33 PM 42290 1 Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 12/24/2018 3:01:33 PM 42290 Surr: DNOP 90.0 50.6-138 %Rec 1 12/24/2018 3:01:33 PM 42290 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF Benzene ND 0.019 12/24/2018 5:21:18 PM \$56570 mg/Kg 1 Toluene ND 0.037 mg/Kg 1 12/24/2018 5:21:18 PM S56570 Ethylbenzene ND 0.037 mg/Kg 12/24/2018 5:21:18 PM \$56570 1 Xylenes, Total ND 0.074 mg/Kg 1 12/24/2018 5:21:18 PM \$56570 Surr: 4-Bromofluorobenzene 97.5 70-130 %Rec 12/24/2018 5:21:18 PM S56570 1 Surr: Toluene-d8 100 70-130 %Rec 12/24/2018 5:21:18 PM \$56570

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

- 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 Quanitative 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 Page 3 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Oxnard 332

Lab ID: 1812D39-004 Client Sample ID: S-4

Collection Date: 12/21/2018 12:15:00 PM

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: smb
Chloride	ND	30	mg/Kg	20	12/26/2018 10:25:36 AM	
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	12/24/2018 5:50:26 PM	
Surr: BFB	90.2	70-130	%Rec	1	12/24/2018 5:50:26 PM	
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	9.8	9.1	mg/Kg	1	12/24/2018 1:54:10 PM	
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	12/24/2018 1:54:10 PM	
Surr: DNOP	95.9	50.6-138	%Rec	1	12/24/2018 1:54:10 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	DJF
Benzene	ND	0.018	mg/Kg	1	12/24/2018 5:50:26 PM	
Toluene	ND	0.036	mg/Kg	1	12/24/2018 5:50:26 PM	S56570
Ethylbenzene	ND	0.036	mg/Kg	1	12/24/2018 5:50:26 PM	S56570
Xylenes, Total	ND	0.072	mg/Kg	1	12/24/2018 5:50:26 PM	S56570
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	12/24/2018 5:50:26 PM	S56570
Surr: Toluene-d8	95.2	70-130	%Rec	1	12/24/2018 5:50:26 PM	S56570

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 18 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1812D39

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project:

Lab ID:

Oxnard 332

1812D39-005

Client Sample ID: S-5

Collection Date: 12/21/2018 12:20:00 PM

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	12/26/2018 10:38:00 AM	/ 1 42294
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	12/24/2018 6:19:56 PM	G56570
Surr: BFB	89.7	70-130	%Rec	1	12/24/2018 6:19:56 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	12/24/2018 2:18:28 PM	42290
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	12/24/2018 2:18:28 PM	42290
Surr: DNOP	95.3	50.6-138	%Rec	1	12/24/2018 2:18:28 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.019	mg/Kg	1	12/24/2018 6:19:56 PM	S56570
Toluene	ND	0.039	mg/Kg	1	12/24/2018 6:19:56 PM	S56570
Ethylbenzene	ND	0.039	mg/Kg	1	12/24/2018 6:19:56 PM	S56570
Xylenes, Total	ND	0.077	mg/Kg	1	12/24/2018 6:19:56 PM	S56570
Surr: 4-Bromofluorobenzene	92.1	70-130	%Rec	1	12/24/2018 6:19:56 PM	S56570
Surr: Toluene-d8	98.8	70-130	%Rec	1	12/24/2018 6:19:56 PM	S56570

Matrix: SOIL

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

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 18 J
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1812D39

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Oxnard 332

Lab ID: 1812D39-006

Client Sample ID: S-6

Collection Date: 12/21/2018 12:25:00 PM

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	12/26/2018 10:50:25 AM	/I 42294
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	12/24/2018 6:49:23 PM	G56570
Surr: BFB	94.3	70-130	%Rec	1	12/24/2018 6:49:23 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/24/2018 2:42:54 PM	42290
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/24/2018 2:42:54 PM	42290
Surr: DNOP	97.5	50.6-138	%Rec	1	12/24/2018 2:42:54 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.018	mg/Kg	1	12/24/2018 6:49:23 PM	S56570
Toluene	ND	0.036	mg/Kg	1	12/24/2018 6:49:23 PM	S56570
Ethylbenzene	ND	0.036	mg/Kg	1	12/24/2018 6:49:23 PM	S56570
Xylenes, Total	ND	0.073	mg/Kg	1	12/24/2018 6:49:23 PM	S56570
Surr: 4-Bromofluorobenzene	97.1	70-130	%Rec	1	12/24/2018 6:49:23 PM	S56570
Surr: Toluene-d8	100	70-130	%Rec	1	12/24/2018 6:49:23 PM	S56570

Matrix: SOIL

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

- 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 Quanitative 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 Page 6 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN

Client Sample ID: S-7

Project:

Oxnard 332

Collection Date: 12/21/2018 12:30:00 PM

Lab ID:

1812D39-007

Matrix: SOIL

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	12/26/2018 11:02:50 AM	/I 42294
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	12/24/2018 7:18:45 PM	G56570
Surr: BFB	91.1	70-130	%Rec	1	12/24/2018 7:18:45 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	12/24/2018 2:09:46 PM	42290
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/24/2018 2:09:46 PM	42290
Surr: DNOP	92.2	50.6-138	%Rec	1	12/24/2018 2:09:46 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.019	mg/Kg	1	12/24/2018 7:18:45 PM	S56570
Toluene	ND	0.037	mg/Kg	1	12/24/2018 7:18:45 PM	S56570
Ethylbenzene	ND	0.037	mg/Kg	1	12/24/2018 7:18:45 PM	S56570
Xylenes, Total	ND	0.074	mg/Kg	1	12/24/2018 7:18:45 PM	S56570
Surr: 4-Bromofluorobenzene	97.1	70-130	%Rec	1	12/24/2018 7:18:45 PM	S56570
Surr: Toluene-d8	94.6	70-130	%Rec	1	12/24/2018 7:18:45 PM	S56570

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

- 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 Quanitative 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 Page 7 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 12/27/2018

Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-8

Project: Oxnard 332 **Collection Date:** 12/21/2018 12:35:00 PM

Lab ID: 1812D39-008 Matrix: SOIL Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	12/26/2018 11:15:15 AM	/I 42294
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	12/24/2018 7:48:02 PM	G56570
Surr: BFB	93.8	70-130	%Rec	1	12/24/2018 7:48:02 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	12/24/2018 2:33:49 PM	42290
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/24/2018 2:33:49 PM	42290
Surr: DNOP	92.6	50.6-138	%Rec	1	12/24/2018 2:33:49 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.019	mg/Kg	1	12/24/2018 7:48:02 PM	S56570
Toluene	ND	0.039	mg/Kg	1	12/24/2018 7:48:02 PM	S56570
Ethylbenzene	ND	0.039	mg/Kg	1	12/24/2018 7:48:02 PM	S56570
Xylenes, Total	ND	0.077	mg/Kg	1	12/24/2018 7:48:02 PM	S56570
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	12/24/2018 7:48:02 PM	S56570
Surr: Toluene-d8	101	70-130	%Rec	1	12/24/2018 7:48:02 PM	S56570

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

- * 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 Quanitative 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 Page 8 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-9

Project: Oxnard 332

Collection Date: 12/21/2018 12:40:00 PM

Lab ID: 1812D39-009

Matrix: SOIL Receiv

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	smb
Chloride	ND	30		mg/Kg	20	12/26/2018 11:52:29 AM	/I 42294
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	DJF
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/24/2018 8:17:19 PM	G56570
Surr: BFB	95.5	70-130		%Rec	1	12/24/2018 8:17:19 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/24/2018 1:52:23 PM	42290
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/24/2018 1:52:23 PM	42290
Surr: DNOP	88.4	50.6-138		%Rec	1	12/24/2018 1:52:23 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	DJF
Benzene	ND	0.019		mg/Kg	1	12/24/2018 8:17:19 PM	S56570
Toluene	ND	0.038		mg/Kg	1	12/24/2018 8:17:19 PM	S56570
Ethylbenzene	ND	0.038		mg/Kg	1	12/24/2018 8:17:19 PM	S56570
Xylenes, Total	ND	0.076		mg/Kg	1	12/24/2018 8:17:19 PM	S56570
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	12/24/2018 8:17:19 PM	S56570
Surr: Toluene-d8	98.6	70-130		%Rec	1	12/24/2018 8:17:19 PM	S56570

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

- * 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 Quanitative 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 Page 9 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-10

Project: Oxnard 332

Collection Date: 12/21/2018 12:45:00 PM

Lab ID: 1812D39-010

Matrix: SOIL Received Dat

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	12/26/2018 12:04:54 PM	/I 42294
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	12/24/2018 8:46:31 PM	G56570
Surr: BFB	95.4	70-130	%Rec	1	12/24/2018 8:46:31 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/24/2018 1:30:08 PM	42290
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/24/2018 1:30:08 PM	42290
Surr: DNOP	87.8	50.6-138	%Rec	1	12/24/2018 1:30:08 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.018	mg/Kg	1	12/24/2018 8:46:31 PM	S56570
Toluene	ND	0.037	mg/Kg	1	12/24/2018 8:46:31 PM	S56570
Ethylbenzene	ND	0.037	mg/Kg	1	12/24/2018 8:46:31 PM	S56570
Xylenes, Total	ND	0.073	mg/Kg	1	12/24/2018 8:46:31 PM	S56570
Surr: 4-Bromofluorobenzene	97.2	70-130	%Red	1	12/24/2018 8:46:31 PM	S56570
Surr: Toluene-d8	104	70-130	%Red	1	12/24/2018 8:46:31 PM	S56570

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

- 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 Quanitative 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 Page 10 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN Client Sample ID: S-11

 Project:
 Oxnard 332
 Collection Date: 12/21/2018 12:50:00 PM

 Lab ID:
 1812D39-011
 Matrix: SOIL
 Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Unit	s DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/k	g 20	12/26/2018 10:05:27 AM	/ 1 42295
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.3	mg/k	g 1	12/24/2018 9:15:38 PM	G56570
Surr: BFB	96.1	70-130	%Re	c 1	12/24/2018 9:15:38 PM	G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.4	mg/k	g 1	12/24/2018 1:07:57 PM	42290
Motor Oil Range Organics (MRO)	ND	47	mg/k	g 1	12/24/2018 1:07:57 PM	42290
Surr: DNOP	88.5	50.6-138	%Re	c 1	12/24/2018 1:07:57 PM	42290
EPA METHOD 8260B: VOLATILES SHORT LIST	•				Analyst	DJF
Benzene	ND	0.021	mg/k	g 1	12/24/2018 9:15:38 PM	S56570
Toluene	ND	0.043	mg/k	g 1	12/24/2018 9:15:38 PM	S56570
Ethylbenzene	ND	0.043	mg/k	.g 1	12/24/2018 9:15:38 PM	S56570
Xylenes, Total	ND	0.086	mg/h	g 1	12/24/2018 9:15:38 PM	S56570
Surr: 4-Bromofluorobenzene	95.7	70-130	%Re	c 1	12/24/2018 9:15:38 PM	S56570
Surr: Toluene-d8	101	70-130	%Re	c 1	12/24/2018 9:15:38 PM	S56570

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

- 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 Quanitative 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 Page 11 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/27/2018

CLIENT: APEX TITAN Client Sample ID: S-12

 Project:
 Oxnard 332
 Collection Date: 12/21/2018 12:55:00 PM

 Lab ID:
 1812D39-012
 Matrix: SOIL
 Received Date: 12/22/2018 8:00:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed **Batch** Analyst: smb **EPA METHOD 300.0: ANIONS** Chloride ND 12/26/2018 10:17:51 AM 42295 30 mg/Kg Analyst: DJF **EPA METHOD 8015D MOD: GASOLINE RANGE** 12/24/2018 9:44:43 PM G56570 Gasoline Range Organics (GRO) ND 3.6 mg/Kg 12/24/2018 9:44:43 PM G56570 Surr: BFB 100 70-130 %Rec 1 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 12/24/2018 12:45:56 PM 42290 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 12/24/2018 12:45:56 PM 42290 Surr: DNOP 93.7 50.6-138 %Rec 1 12/24/2018 12:45:56 PM 42290 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF 12/24/2018 9:44:43 PM S56570 Benzene ND 0.018 mg/Kg 1 Toluene ND 0.036 mg/Kg 1 12/24/2018 9:44:43 PM S56570 Ethylbenzene ND 0.036 mg/Kg 1 12/24/2018 9:44:43 PM S56570 ND 12/24/2018 9:44:43 PM S56570 Xylenes, Total 0.073 mg/Kg Surr: 4-Bromofluorobenzene 99.8 70-130 %Rec 12/24/2018 9:44:43 PM S56570 Surr: Toluene-d8 70-130 12/24/2018 9:44:43 PM S56570 107 %Rec

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

- 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 Quanitative 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 Page 12 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1812D39

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Oxnard 332

Lab ID: 1812D39-013

Client Sample ID: S-13

Collection Date: 12/21/2018 1:00:00 PM

Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	290	30	mg/Kg	20	12/26/2018 10:30:16 AM 42295
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	12/24/2018 10:13:46 PM G56570
Surr: BFB	97.0	70-130	%Rec	1	12/24/2018 10:13:46 PM G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	12/24/2018 12:23:49 PM 42290
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	12/24/2018 12:23:49 PM 42290
Surr: DNOP	88.8	50.6-138	%Rec	1	12/24/2018 12:23:49 PM 42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: DJF
Benzene	ND	0.021	mg/Kg	1	12/24/2018 10:13:46 PM S56570
Toluene	ND	0.042	mg/Kg	1	12/24/2018 10:13:46 PM S56570
Ethylbenzene	ND	0.042	mg/Kg	1	12/24/2018 10:13:46 PM S56570
Xylenes, Total	ND	0.084	mg/Kg	1	12/24/2018 10:13:46 PM S56570
Surr: 4-Bromofluorobenzene	97.5	70-130	%Rec	1	12/24/2018 10:13:46 PM S56570
Surr: Toluene-d8	100	70-130	%Rec	1	12/24/2018 10:13:46 PM S56570

Matrix: SOIL

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

- 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 Quanitative 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 Page 13 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 12/27/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-14

Project: Oxnard 332 **Collection Date:** 12/21/2018 1:05:00 PM

Lab ID: 1812D39-014 Matrix: SOIL Received Date: 12/22/2018 8:00:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed Batch
EPA METHOD 300.0: ANIONS					Analyst: smb
Chloride	170	30	mg/Kg	20	12/26/2018 10:42:40 AM 42295
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	12/24/2018 10:42:48 PM G56570
Surr: BFB	99.5	70-130	%Rec	1	12/24/2018 10:42:48 PM G56570
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: TOM
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	12/24/2018 12:01:55 PM 42290
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	12/24/2018 12:01:55 PM 42290
Surr: DNOP	93.6	50.6-138	%Rec	1	12/24/2018 12:01:55 PM 42290
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: DJF
Benzene	ND	0.021	mg/Kg	1	12/24/2018 10:42:48 PM S56570
Toluene	ND	0.043	mg/Kg	1	12/24/2018 10:42:48 PM S56570
Ethylbenzene	ND	0.043	mg/Kg	1	12/24/2018 10:42:48 PM S56570
Xylenes, Total	ND	0.085	mg/Kg	1	12/24/2018 10:42:48 PM S56570
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	12/24/2018 10:42:48 PM S56570
Surr: Toluene-d8	102	70-130	%Rec	1	12/24/2018 10:42:48 PM S56570

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

- 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 Quanitative 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 Page 14 of 18
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1812D39

27-Dec-18

APEX TITAN Client: Oxnard 332 Project:

Sample ID MB-42294 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 42294 RunNo: 56582

Prep Date: 12/26/2018 Analysis Date: 12/26/2018 SegNo: 1894004 Units: mg/Kg

RPDLimit Result SPK value SPK Ref Val %REC LowLimit %RPD Qual Analyte PQL HighLimit

Chloride ND 1.5

Sample ID LCS-42294 TestCode: EPA Method 300.0: Anions SampType: LCS

Client ID: LCSS Batch ID: 42294 RunNo: 56582

SeqNo: 1894005 Prep Date: 12/26/2018 Analysis Date: 12/26/2018 Units: mg/Kg

RPDLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual

90 14 1.5 15.00 0 92.7 110 Chloride

Sample ID MB-42295 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: Batch ID: 42295 PBS RunNo: 56583

Prep Date: 12/26/2018 Analysis Date: 12/26/2018 SeqNo: 1894143 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Chloride ND 1.5

Sample ID LCS-42295 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 42295 RunNo: 56583

Prep Date: 12/26/2018 Analysis Date: 12/26/2018 SeqNo: 1894144 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** LowLimit **HighLimit** Qual

Chloride 14 1.5 15.00 93.6 90 110

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded Η

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

В Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 15 of 18

P Sample pH Not In Range

Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

39

4.2

10

50.00

5.000

WO#: **1812D39**

27-Dec-18

Client:

APEX TITAN

Project:

Diesel Range Organics (DRO)

Surr: DNOP

Oxnard 332

Sample ID MB-42290	SampType:	MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID:	42290	RunNo: 56567
Prep Date: 12/24/2018	Analysis Date:	12/24/2018	SeqNo: 1892577 Units: mg/Kg
Analyte	Result PQ	L 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	8.6	10.00	85.8 50.6 138
Sample ID LCS-42290	SampType:	LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID:	42290	RunNo: 56567
Prep Date: 12/24/2018	Analysis Date:	12/24/2018	SeqNo: 1892578 Units: mg/Kg
Analyte	Result PQ	L SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

0

78.4

84.7

70

50.6

130

138

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 Quanitative 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

Page 16 of 18

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812D39

27-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID rb	SampT	ype: ME	BLK	TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBS	Batch	Batch ID: \$56570			RunNo: 5	6570					
Prep Date:	Analysis D	Analysis Date: 12/24/2018			SeqNo: 1892731			Units: mg/Kg			
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	0.48		0.5000		96.2	70	130				
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130				
Surr: Dibromofluoromethane	0.48		0.5000		95.4	70	130				
Surr: Toluene-d8	0.48		0.5000		95.9	70	130				

Sample ID 100ng Ics	SampT	ype: LC	S	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List		
Client ID: LCSS	Batch	ID: S5	6570	F	RunNo: 56570						
Prep Date:	Analysis D	ate: 12	2/24/2018	S	SeqNo: 1	892747	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	106	70	130				
Toluene	1.1	0.050	1.000	0	110	70	130				
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130				
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.8	70	130				
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130				
Surr: Toluene-d8	0.54		0.5000		108	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 Quanitative 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

Page 17 of 18

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

RPDLimit

1812D39

27-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID rb

SampType: MBLK

TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: G56570

RunNo: 56570

Prep Date:

Analyte

Analysis Date: 12/24/2018 PQL

5.0

SeqNo: 1892772

LowLimit

Units: mg/Kg

130

Gasoline Range Organics (GRO)

Result ND

%REC

HighLimit

Qual

Surr: BFB

480

500.0

SPK value SPK Ref Val

97.0

70

Sample ID 2.5ug gro Ics

SampType: LCS

TestCode: EPA Method 8015D Mod: Gasoline Range

%RPD

%RPD

Client ID:

LCSS

Batch ID: G56570

RunNo: 56570

Prep Date:

Analysis Date: 12/24/2018

SeqNo: 1892792

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result **PQL** %REC LowLimit HighLimit

RPDLimit

SPK value SPK Ref Val 25 5.0 25.00

130

Qual

Surr: BFB

102 70 500 500.0 99.3 70 130

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Η
- Not Detected at the Reporting Limit
- Practical Quanitative Limit **PQL**
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 18 of 18

- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified



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:	APEX AZTEC	Work Order Numb	er: 1812	2D39	RcptNo: 1					
Received By:	John Caldwell	12/22/2018 8:00:00	AM		Glm C.U.	inel				
Completed By:	Leah Baca	12/24/2018 8:15:22	AM		John Sha	6				
Reviewed By:	JU 12.24.18				1-101-12		eled by			
Chain of Cus	<u>tody</u>									
1. Is Chain of Co	ustody complete?		Yes	\checkmark	No 🗌	Not Present				
2. How was the	sample delivered?		Cou	rier						
Log In										
	npt made to cool the samples?		Yes	\checkmark	No 🗆	NA 🗆				
4. Were all samp	oles received at a temperature	of >0° C to 6.0°C	Yes	✓	No 🗌	NA 🗆				
5. Sample(s) in p	proper container(s)?		Yes	✓	No 🗌					
6. Sufficient sam	ple volume for indicated test(s	s)?	Yes	\checkmark	No 🗆					
7. Are samples (except VOA and ONG) proper	fy preserved?	Yes	V	No 🗌					
	tive added to bottles?		Yes		No 🗸	NA 🗆				
9. VOA vials hav	e zero headspace?		Yes	V	No 🗆	No VOA Vials	1,6			
10. Were any san	nple containers received broke	en?	Yes		No 🗸	# of preserved	1820110			
11. Does paperwo	ork match bottle labels?		Yes	~	No 🗆	bottles checked for pH:	10 (0)			
	ancies on chain of custody)		100			(<2 or	>12 unless noted)			
12. Are matrices of	correctly identified on Chain of	Custody?	Yes	V	No 🗌	Adjusted?				
13. Is it clear what	t analyses were requested?		Yes	V	No 🗌	1				
	ng times able to be met? ustomer for authorization.)		Yes	~	No 🗌	Checked by:				
	ing (if applicable)									
	tified of all discrepancies with	this order?	Yes		No 🗌	NA 🗹				
Person	Notified:	Date								
By Who	om:	Via:	eM	ail 🗌	Phone Tax	In Person				
Regardi	ing:		CARELANDER SE JACONE DE	*************						
Client Ir	nstructions:									
16. Additional rei	marks:					E-183	1			
17. Cooler Infor Gooler No	district the second second	eal Intact Seal No	Seal D	ate	Signed By	A control of the cont				

CHAIN OF CUSTODY RECORD Lab use only ANALYSIS Hau Environmental Due Date: REQUESTED Laboratory: Analysis Laboratory State Address: 4901 Hawkins NE Temp. of coolers THE GESTDES INTES when received (C°): Albuquerque, NM 87/09 Office Location Contact: 606 5 RTD Corande Switch A Freeman of 2 Aztec, NM 87410 Phone: 505-345-3975 Are for Kisummers Project Manager seenstes PO/SO#: Sampler's Name Sampler's Signature Rance Deechilly Proj. No. Project Name No/Type of Containers Dxnard #332 725040117554 CoEp Start End A/G 1Lt. 250 ml Glass Jar P/O VOA Identifying Marks of Sample(s) Matrix Date Lab Sample ID (Lab Use Only) 1812039-001 12/21/8 1200 12/21/18 -002 1205 12/21/8/1210 -003 12/21 - 004 - 005 1220 - 006 1225 -007 -000 -009 -010 SAME DAY 3400% Rush ☐ 25% Rush ☐ 50% Rush □ Normal NOTES: PM-Tom Long Received by: (Signature) Time: Relinquished by (Signature) Date: Time: MILIA 801 12|21 Date: 12/21/18 Soi Paykey- CM22355 Received by (Signature) Date! Time: Relinquished by (Signature) Time: 12-2218 0800 1910 Non AFE- N 38923 Time: Date: Date: Relinquished by (Signature) Time: Date: Time: Received by: (Signature) Relinquished by (Signature) Date: Time: C - Charcoal tube SL - sludge O - Oil W - Water S - Soil SD - Solid L - Liquid A - Air Bag Matrix WW - Wastewater P/O - Plastic or other A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth VOA - 40 ml vial

Container

				CHAIN OF CUSTODY RECORD
-4	Han En	unonmental	Analysis	Lab use only
	Laboratory: Ana		REQUESTED / &	Due Date:
APEX	Address: 4961	Hand inc DA	1 1	
	Address: VIGOT	NAN COLIN	- / 3/	Temp. of coolers when received (C°).
Office Location	Contact: A	1 1VM 8700	- <u>\</u>	1 2 3 4 5
6006 5 Plo Grande SurteA			-]	Page 2 of 2
Project Manager K. Symmes	Phone: 505		- Ray 2	/ / / / Fage
	PO/SO#:	eenotes	=	
Ranee Deechilly	Sampler's Signature Public P		ETEX GOZIMEOS	/ / / / / /
Proj. No. Project Name	-	No/Type of Containers		
	6 #332		-	
Matrix Date Time C G G G G G G G G G G G G G G G G G G	ks of Sample(s)	VOA VOA 1 Lt. 250 mi Glass Jar	0/4	Lab Sample ID (Lab Use Only)
5 12 11 12 1250 X S-	41		$\times \times \times$	1912039-011
	12)	メメノ	-012
	13	3	\times	-08
	-14)	+ + X	
	VAS			

SName - Darry Bush	FOO! Duch Diane! Duch		41/	
	150% Rush \$\frac{100% Rush}{100% Rush}		Time: NOTES:	DM -Tom/una
	bi Murwa	Jt 12/2	118 1861	PM-Tom Lung Pay key - CM 22355
Relinquished by (Signature) Date 12 21 k Polinquished by (Signature) Date	Time: Received by: (Sign	fature) Date	Time:	
Relinquished by (Signature) Date:	Time: Received by: (Sign		. Time:	NUNAFE - N 38923
	Time: Received by: (Sign	nature) Date	Time:	DAY
Relinquished by (Signature) Date:	neceived by, (Sigi	Date	Tillio.	
Matrix WW - Wastewater W - Water Container VOA - 40 ml vial A/G - Amber / O	S - Soil SD - Solid L - Liqu r Glass 1 Liter 250 ml		Charcoal tube SL - sludge - Plastic or other	O - Oil



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

December 31, 2018

Kyle Summers

APEX TITAN

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Oxnard 332

OrderNo.: 1812E52

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/28/2018 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 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,

Andy Freeman

Laboratory Manager

andyst

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1812E52

Date Reported: 12/31/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: S-15

Project: Oxnard 332 **Collection Date:** 12/27/2018 12:00:00 PM

Lab ID: 1812E52-001 Matrix: MEOH (SOIL) Received Date: 12/28/2018 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	30		mg/Kg	20	12/28/2018 11:27:42 AM	A 42356
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	AG
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	12/28/2018 10:57:10 AM	M B56651
Surr: BFB	95.8	70-130		%Rec	1	12/28/2018 10:57:10 AM	/I B56651
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/28/2018 11:00:20 AM	A 42355
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/28/2018 11:00:20 AM	A 42355
Surr: DNOP	87.8	50.6-138		%Rec	1	12/28/2018 11:00:20 AM	A 42355
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst	AG
Benzene	ND	0.018		mg/Kg	1	12/28/2018 10:57:10 AM	/ A56651
Toluene	ND	0.036		mg/Kg	1	12/28/2018 10:57:10 AM	/I A56651
Ethylbenzene	ND	0.036		mg/Kg	1	12/28/2018 10:57:10 AM	/I A56651
Xylenes, Total	ND	0.073		mg/Kg	1	12/28/2018 10:57:10 AM	/I A56651
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	12/28/2018 10:57:10 AM	/I A56651
Surr: Toluene-d8	95.1	70-130		%Rec	1	12/28/2018 10:57:10 AM	/I A56651

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	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 Page 1 of 6
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1812E52

31-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID MB-42356

SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

LowLimit

Client ID: **PBS**

12/28/2018

Batch ID: 42356 Analysis Date: 12/28/2018 RunNo: 56645

%REC

Prep Date: Analyte

Result PQL SeqNo: 1896539

Units: mg/Kg

%RPD

%RPD

HighLimit

RPDLimit

Qual

Chloride

ND 1.5

Sample ID LCS-42356

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 42356

RunNo: 56645

12/28/2018 Analyte

Analysis Date: 12/28/2018

SeqNo: 1896540

Units: mg/Kg

HighLimit

SPK value SPK Ref Val %REC 0

93.8

RPDLimit

Chloride

Prep Date:

15.00

SPK value SPK Ref Val

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 2 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Result

42

4.4

10

WO#: **1812E52**

31-Dec-18

Client:

APEX TITAN

Project:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

Oxnard 332

Sample ID MB-42355 Client ID: PBS		e: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 56641						
Prep Date: 12/28/2018	Analysis Date			lo: 1895558	Units: mg/K	g				
Analyte	Result I	PQL SPK value	SPK Ref Val %I	REC LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0	10.00		90.4 50.6	138					
Sample ID LCS-42355	SampTyp	e: LCS	TestCod	e: EPA Method	8015M/D: Die	sel Rang	e Organics			
Client ID: LCSS	Batch II	D: 42355	Runi	lo: 56641						
Prep Date: 12/28/2018	Analysis Date	e: 12/28/2018	Seq	lo: 1895559	Units: mg/K	g				

%REC

84.2

87.5

LowLimit

70

50.6

HighLimit

130

138

%RPD

RPDLimit

Qual

SPK value SPK Ref Val

50.00

5.000

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 Quanitative 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 Detection Limit
- W Sample container temperature is out of limit as specified

n range

Page 3 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812E52 31-Dec-18

Client: Project: APEX TITAN

Oxnard 332

Project: Oxnard 3	32									
Sample ID 100ng Ics	SampT	ype: LC	s	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID: LCSS	Batch	n ID: A5	6651	F	RunNo: 5	6651				
Prep Date:	Analysis D	ate: 12	2/28/2018	8	SeqNo: 1	895685	Units: mg/F	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.9	70	130			
Toluene	0.89	0.050	1.000	0	88.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.4	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.9	70	130			
Surr: Toluene-d8	0.48		0.5000		96.1	70	130			
Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID: PBS	Batch	n ID: A5	6651	F	RunNo: 5	66651				
Prep Date:	Analysis D	ate: 12	2/28/2018	S	SeqNo: 1	895693	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
thylbenzene	ND	0.050								
(ylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.7	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.4	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.7	70	130			
Surr: Toluene-d8	0.49		0.5000		97.0	70	130			
Sample ID 1812e52-001ams	SampT	ype: MS	3	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID: S-15	Batch	n ID: A5	6651	F	RunNo: 5	6651				
Prep Date:	Analysis D	ate: 12	2/28/2018	\$	SeqNo: 1	896255	Units: mg/h	K g		
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.018	0.7262	0	93.4	68.9	131			
oluene	0.67	0.036	0.7262	0	91.6	64.3	137			
Surr: 1,2-Dichloroethane-d4	0.33		0.3631		90.7	70	130			
Surr: 4-Bromofluorobenzene	0.36		0.3631		98.9	70	130			
Surr: Dibromofluoromethane	0.35		0.3631		97.1	70	130			
Surr: Toluene-d8	0.34		0.3631		94.6	70	130			
Sample ID 1812e52-001ams	SampT	уре: МS	SD	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID: S-15	Batch	n ID: A5	6651	F	RunNo: 5	6651				
Prep Date:	Analysis D)ate: 12	2/29/2018	5	SeqNo: 1	896256	Units: mg/F	(g		
Analyte	Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.018	0.7262	0	92.1	68.9	131	1.43	20	
Toluene	0.67	0.036	0.7262	0	91.7	64.3	137	0.0764	20	
Qualifiers:										

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
 - Page 4 of 6
- P Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812E52

31-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID 1812e52-001amsd	SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: S-15	Batch	Batch ID: A56651 RunNo: 56651								
Prep Date:	Analysis Da	ate: 12	2/29/2018	S	SeqNo: 1	896256	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.34		0.3631		93.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.35		0.3631		97.2	70	130	0	0	
Surr: Dibromofluoromethane	0.35		0.3631		97.7	70	130	0	0	
Surr: Toluene-d8	0.34		0.3631		94.4	70	130	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 Quanitative 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 Detection Limit
- W Sample container temperature is out of limit as specified

Page 5 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1812E52

31-Dec-18

Client:

APEX TITAN

Project:

Oxnard 332

Sample ID 2.5ug gro lcs	SampT	ype: LC	s	TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batcl	h ID: B5	6651	R	6651					
Prep Date:	Analysis D	Date: 12	2/28/2018	SeqNo: 1895702 Units: mg/Kg			(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	490		500.0		98.8	70	130			
CompType: MDLK TestCode: EDA Method 901ED Medi Geogline Pange										

Sample ID rb	SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range									
Client ID: PBS	Batch ID: B56651 RunNo: 56651									
Prep Date:	Analysis D	ate: 12	2/28/2018	S	eqNo: 1	895703	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		98.8	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
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- E Value above quantitation range
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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:	APEX AZTEC	Work Order Nur	nber: 1812E52		RcptNo: 1	
				27		
Received By:	Jazzmine Burkhead	12/28/2018 8:20:0	0 AM	und		
Completed By:	Erin Melendrez	12/28/2018 8:26:3	4 AM	mas	-	
Reviewed By:	DAD 12/28/18 NM 17/78/19	8				
Chain of Cus	stody					
1. Is Chain of C	sustody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the	sample delivered?		Courier			
Log In						
	mpt made to cool the samp	oles?	Yes 🗸	No 🗌	NA 🗆	
4. Were all sam	ples received at a tempera	ature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
5. Sample(s) in	proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient san	nple volume for indicated t	test(s)?	Yes 🗹	No 🗌		
7. Are samples	(except VOA and ONG) pr	operly preserved?	Yes 🗹	No 🗌		
8. Was preserva	ative added to bottles?		Yes	No 🗸	NA 🗆	
9. VOA vials hav	ve zero headspace?		Yes	No 🗌	No VOA Vials 🗹	
10. Were any sai	mple containers received	broken?	Yes	No 🗸	# of preserved	119
11. Does paperwe	ork match bottle labels?		Yes 🗸		bottles checked for pH:	211
	ancies on chain of custod	y)				2 unless noted)
12. Are matrices	correctly identified on Cha	in of Custody?	Yes 🗹	No 🗆	Adjusted?	
	at analyses were requested	d?	Yes 🗸	No 🗆 <	NY N	
	ing times able to be met? sustomer for authorization.)	Yes 🗹	No 🗆	Checked by:	
Special Hand	ling (if applicable)					
15. Was client no	otified of all discrepancies	with this order?	Yes	No 🗌	NA 🗹	
Person	Notified:	Date	e:			
By Who	om:	Via	eMail F	Phone Fax [In Person	
Regard	ling:	Manufacture and the second of		of definition with at the debut Air six the imposticity often	AATAGO GO E VIII VAANA KARA KARA KARA KARA KARA KARA KARA	
Client I	nstructions:	A 460° MANA PARAMATAN PARAMATAN NA SIA SIA SIA KAMPANCAN NA SIA MANAMATAN NA SIA SIA SIA SIA SIA SIA SIA SIA SIA SI	A Principal Control of		w desirt das de estimos desta como esta esche con sociales de "	
16. Additional re	emarks:					
17. Cooler Info	rmation					
Cooler No	Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By		
1	5.4 Good	Yes				

CHAIN OF CUSTODY RECORD Lab use only **ANALYSIS** Hall Environmental Due Date: REQUESTED Laboratory: Lab Address: 4901 Hawkins NE Temp. of coolers Office Location 666 S R, o when received (C°): 5,4°(Albuquerque NM 87107 Contact: A Freeman Phone: 505-345-3575 Project Manager K. Summers PO/SO#: _ Sampler's Name Sampler's Signature Project Name No/Type of Containers Oxward # 332 725040112554 1812E52 Identifying Marks of Sample(s)

Start
Depth
Depth A/G 1Lt. 250 ml Glass Jar P/O Matrix Date Lab Sample ID (Lab Use Only) 4 1227/11/200 -001 5-15 Turn around time □ Normal ☐ 25% Rush ☐ 50% Rush 100% Rush Time: /603 NOTES: Pay Key # RB21200 Date: Relinquished by (Signature) Date: Time: Received by: (Signature) 12-12-18 Relinquished by (Signature) Received by: (Signature) Time: 08:20 Courself n Ton Long
Time: AFE * N 38923 Date: Time: 12/28/18 Modul NA 12/27/18 Comme Em Relinquished by (Signature) Received by: (Signature) Date: Time: Relinguished by (Signature) Date: Time: Date: Time: Received by: (Signature) W - Water S - Soil SD - Solid C - Charcoal tube SL - sludge Matrix WW - Wastewater L - Liquid A - Air Bag A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

VOA - 40 ml vial

Container

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: Ente	rprise Field Ser	vices, LLC	OGRID: 151618					
Contact Nam	e: Thomas	Long		Contact Telephone: 505-599-2286					
Contact ema	il:tjlong@ep	orod.com			Incident # (assigned by OCD): NVF190174916				
Contact mail 87401	ing address:	614 Reilly Ave,	Farmington, N	NUF1901749164					
			Location	of R	elease So	ource			
Latitude 36.7	7370		Longitude <u>-1</u>	07.632	240	(NAD 83 in	n decimal deg	rees to 5 decimal places)	
Site Name El	PNG D Cor	n #5A			Site Type N	latural Gas M	etering T	npe	
Date Release	Discovered:	1/2/2019			Serial Num	ber (if applicable):	N/A		
Unit Letter	Unit Letter Section Township Range						and date.	NMOCD	
D	36	30N	8W		San Juan			MAY 1 0 2019	
Surface Owne	r: X State	Federal T	ribal Private (A	Vame <u>:</u>				HSTRICT) III	
			Nature and	l Vol	ume of F	Release			
	Materia	l(s) Released (Select a	ll that apply and attach	calculat	ions or specific	iustification for the	volumes prov	ided below)	
Crude Oi		Volume Release				Volume Recov			
Produced	Water	Volume Release	ed (bbls)			Volume Recovered (bbls)			
		Is the concentra produced water	tion of dissolved cl >10,000 mg/l?	hloride	in the	☐ Yes ☐ No			
⊠ Condensa	ate	Volume Release	ed (bbls): 3-5 Bar	rels	F	Volume Recovered (bbls): None			
Natural C	as	Volume Release	ed (Mcf): 1,197			Volume Recovered (Mcf): None			
Other (de	Other (describe) Volume/Weight Released (provide units): Volume/Weight Recovered (provide units)								
An Enterprise MCF was cal was removed and road co approximate	e technician lculated. And and transponditions, rely 40 feet lonted and transpondite	was dispatched an area on the snow orted to a New Mex mediation activitien g by 30 feet wide asported to a New	nd the meter tube v of approximately 1: cico Oil Conservation es were not comp by approximately 1	was ison 2 feet I on Division Division 1.5 feet	plated, depressiong by 12 fee sion approved until March t deep. App	ssurized, locked et wide was affe d land farm facili 4, 2019. The roximately 120 o	out and tag cted by rele ty. Due to the final excav cubic yards	EPNG D Com #5A meter tube. gged out. A gas loss of 1, 197 eased fluids. The affect snow he adverse weather conditions vation dimensions measured of hydrocarbon impacted soil A third party closure report is	



Form	C-141
Page 2	

State of New Mexico Oil Conservation Division

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: Jon E. Fields Title: Director, Field Environmental
Printed Name:
Signature: Awt. Full Date: 5-2-19
email: jefields@eprod.com Telephone: 713-381-6684
OCD Only
Received by: Date: 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:



CLOSURE REPORT

Property:

EPNG D Com 5A Meter Run Release NW ¼, S36 T30N R8W San Juan County, New Mexico

April 17, 2019 Ensolum Project No. 05A1226031

Prepared for:

Enterprise Field Services, LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Thomas Long

Prepared by:

Chad D'Aponti

Field Environmental Scientist

Ranee Deechilly Staff Scientist

Kyle Summers, CPG Sr. Project Manager

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CLOSURE REPORT

EPNG D Com 5A Meter Run Release NW ¼, S36 T30N R8W San Juan County, New Mexico

Ensolum Project No. 05A1226031

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)				
Site Name:	Site Name: EPNG D Com 5A Meter Run Release (Site)				
Location:	36.7737° North, 107.6324° West Northwest (NW) ¼ of Section 36, Township 30 North, Range 8 West San Juan County, New Mexico				
Property:	New Mexico State Land Office				
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)				

On January 2, 2019, a release of natural gas was identified at the Site by a third party. Enterprise verified the release and subsequently isolated and locked the meter run out of service. On January 3, 2019, Enterprise performed initial response activities by removing visibly impacted material from the ground surface. Further remediation activities were temporarily postponed due to adverse weather and ground conditions. On March 1, 2019, Enterprise resumed activities to remediate petroleum hydrocarbon impact resulting from the release.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.



- No water wells were identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database. It appears that a POD (SP 03870) was filed for a construction project within one-half mile, but it appears to be related to the San Juan River, as opposed to groundwater (attached).
- Two (2) cathodic-protection wells were identified near the Site. The cathodic-protection well (EPNG Com D #5A) located at the well adjacent to the Site indicates a depth to water of approximately 90 feet below grade surface (bgs). Cathodic-protection well Blanco Com #6 (Unit NE, Sec 36 T36N R8W), located approximately 0.5 miles from the Site and at a lower elevation, indicates a depth to water of 70 feet bgs.
- The Site is not located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse.
- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution or church.
- No springs, or private domestic fresh water wells used by less than five (5) households for domestic
 or stock watering purposes were identified within 500 feet of the Site.
- No fresh water wells or springs were identified within 1,000 feet of the Site.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is not located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:



	Closure Criteria f	or Soils Impacted by a Rele	ease
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
	Chloride	EPA 300.0 or SM4500 CI B	10,000 mg/kg
50 feet to 100	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
,	(GRO+DRO)	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

3.0 SOIL REMEDIATION ACTIVITIES

On January 3, 2019, Enterprise initiated activities to remediate potential petroleum hydrocarbon impact resulting from the release. Due to adverse weather and ground conditions remediation activities were temporarily postponed, resuming on March 1, 2019. During the remediation and corrective action activities West States Energy Contactors, Inc, provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 40 feet long and 30 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 1.5 feet bgs.

The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand underlain by sandstone.

A total of approximately 120 cubic yards (cy) of petroleum hydrocarbon affected soils (and seven (7) barrels (bbls) of mixed snow and soil) were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance forms are provided in **Appendix B**. The excavation was backfilled with imported fill and then contoured to surrounding grade.

Figure 3 is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the meter run/pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened soil samples from the excavation utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp and a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system to guide excavation extents.

Ensolum's soil sampling program included the collection of six (6) composite soil samples (S-1 through S-6) from the sidewalls and base of the final excavation for laboratory analysis. The New Mexico EMNRD



OCD provided verbal approval to proceed with the sampling event, although a New Mexico EMNRD OCD representative was not on-Site during the sampling activities.

Soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0.

Laboratory analytical results are summarized in **Table 1** in **Appendix D**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix E**.

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) associated with the composite soil samples (S-1 through S-6) to the applicable New Mexico EMNRD OCD closure criteria.

- The laboratory analytical results for composite soil samples S-5 and S-6, collected from soils remaining in place, indicate benzene concentrations of 0.020 milligrams per kilogram (mg/kg) and 0.022 mg/kg, respectively, which do not exceed the New Mexico EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate benzene is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for composite soil samples S-1, S-3, S-5, and S-6, collected from soils remaining in place, indicate total BTEX concentrations ranging from 0.15 mg/kg (S-3) to 1.6 mg/kg (S-5), which do not exceed the New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate total BTEX is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for composite soil samples S-1, S-3, S-5, and S-6, collected from soils remaining in place, indicate combined TPH GRO/DRO concentrations ranging from 13 mg/kg (S-1) to 28 mg/kg (S-3), which do not exceed the New Mexico EMNRD OCD closure criteria of 1,000 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 1,000 mg/kg.
- The laboratory analytical results for composite soil samples S-1, S-3, S-5, and S-6, collected from soils remaining in place, indicate combined TPH GRO/DRO/MRO concentrations ranging from 13 mg/kg (S-1) to 28 mg/kg (S-3), which do not exceed the New Mexico EMNRD OCD closure criteria of 2,500 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present in



concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 2,500 mg/kg.

 The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate chloride is not present in concentrations greater than laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 10,000 mg/kg for chlorides.

Laboratory analytical results are summarized in Table 1 (Appendix D).

7.0 RECLAMATION AND RE-VEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding grade. The area will continue to be utilized as a driving surface.

8.0 FINDINGS AND RECOMMENDATION

On January 2, 2019, a release of natural gas was identified at the Site by a third party. Enterprise verified the release and subsequently isolated and locked the meter run out of service. On January 3, 2019, Enterprise performed initial response activities by removing visibly impacted material from the ground surface. Further remediation activities were temporarily postponed due to adverse weather and ground conditions. On March 1, 2019, Enterprise resumed activities to remediate petroleum hydrocarbon impact resulting from the release.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- A total of six (6) composite soil samples were collected from the walls and floor of the final excavation for laboratory analysis. Based on soil laboratory analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.
- A total of approximately 120 cubic yards of petroleum hydrocarbon affected soils and seven (7) bbls of mixed snow and soil were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and then contoured to surrounding grade.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.



9.2 Additional Limitations

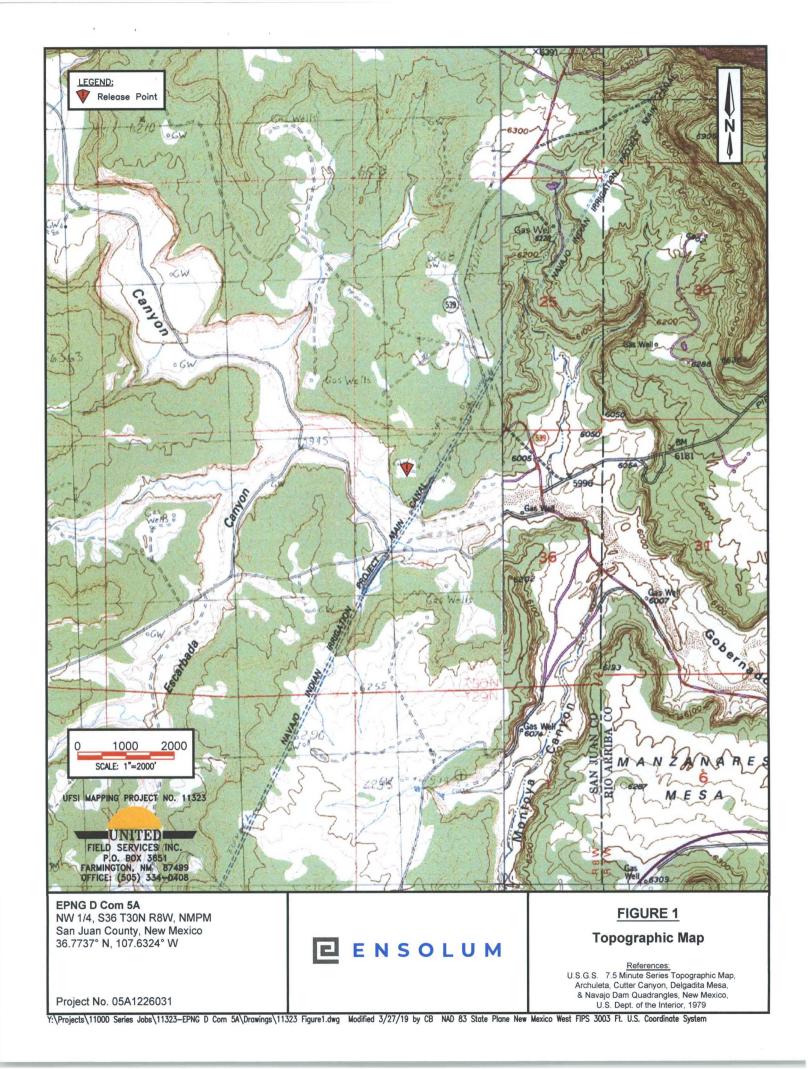
Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings, and recommendations are based solely upon data available to Ensolum at the time of these services.

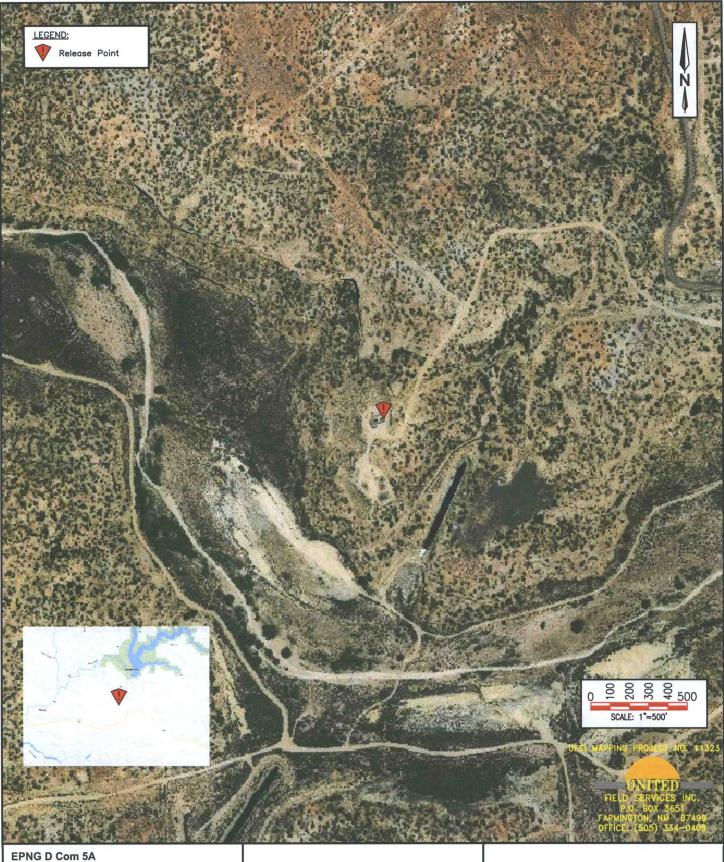
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Products Operating LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise Products Operating LLC and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

APPENDIX A

Figures





EPNG D Com 5A NW 1/4, S36 T30N R8W, NMPM San Juan County, New Mexico 36.7737° N, 107.6324° W



FIGURE 2 **Site Vicinity Map**

References:
Bing Maps, © 2019 Microsoft Corporation, © 2019 Digital Globe,
© CNES (2019) Distribution Airbus DS, © 2019 HERE

Project No. 05A1226031

LEGEND:



EPNG D Com 5A

NW 1/4, S36 T30N R8W, NMPM San Juan County, New Mexico

36.7737° N, 107.6324° W

Project No. 05A1226031

Release Point

Combined floor and side wall 5-part composite samples

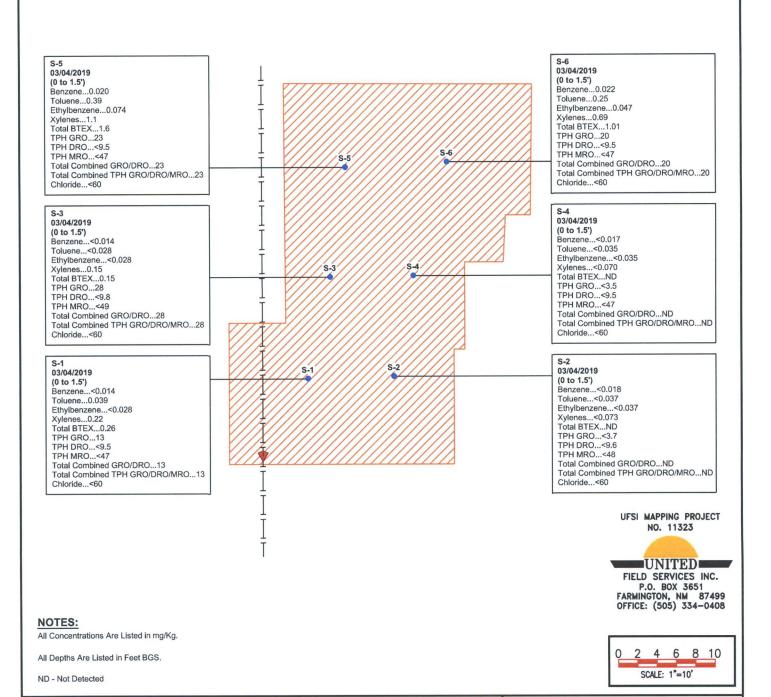
→ FPNG D Com 5A Meter Run/Pipeline Location

Extent of Excavation (1.5 Feet BGS)



FIGURE 3

Site Map with Soil Analytical Results



E ENSOLUM

APPENDIX B

Executed C-138 Solid Waste Acceptance Forms

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 97857-0967 Revised August 1, 2011

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

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

TELOCOLI TOTALIA I TOTALI DE LA COLLEGIA DEL COLLEGIA DEL COLLEGIA DE LA COLLEGIA
 Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401 Invoice Information: PM: Gary Turner Pay Key: AM14058
3. Originating Site: EPNG D Com #5A
4. Location of Material (Street Address, City, State or ULSTR): UL D Section 36 T30N R8W; 36.7737, -107.6324 Vanuary 2019
 4. Source and Description of Waste: Hydrocarbon/Methanol impacted soil from remediation activities associated with a natural gas meter tube release. 5. Estimated Volume 5 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul) yd³ / bbls
5. Estimated Volume _5 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul)/ yd²/bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
1, Thomas Long representative or authorized agent for Enterprise Field Services, LLC do 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: (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. **Operation Use Only Waste Acceptance of Control o
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 in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, There Lay 1-2-19, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to Generator Signature complete the required testing/sign the Generator Waste Testing Certification.
I, Grea Cvab (vec), representative for Envirotech. Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
Transporter: West States Energy Contractors West 5 tates
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011 Address of Facility: Hilltop, NM
Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfarm Dandfill Other
Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: GREY CRACKED TITLE: ENDWO MANAGER DATE: 1/3/19
SIGNATURE: TELEPHONE NO.: 505-632-0615 Surface Waste Management Facility Authorized Agent

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

1040 ...

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 97057-0969Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

 Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401 	Invoice Information: AFE: N41236 PM: Gary Turner Pay Key: AM14058
3. Originating Site: EPNG D Com #5A	
4. Location of Material (Street Address, City, State or ULSTR): UL D Section 36 T30N R8W; 36.7737, -107.6324	March 2019
 4. Source and Description of Waste: Hydrocarbon/Methanol impacted soil from remember tube release. 5. Estimated Volume 5 bls Known Volume (to be entered by the operation) 	
I, Thomas Long representative or authorized agent for Enterprise Field PRINT & SIGN NAME Certify that according to the Resource Conservation and Recovery Act (RCRA) and the Uregulatory determination, the above described waste is: (Check the appropriate classification)	Services, LLC do hereby AME US Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and gas exploration and pro- exempt waste. Operator Use Only: Waste Acceptance Frequency \(\square\$ Monthly	duction operations and are not mixed with non- w Weekly Per Load
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exce characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed ha subpart D, as amended. The following documentation is attached to demonstrate the the appropriate items)	zardous waste as defined in 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledg	e Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STA	TEMENT FOR LANDFARMS
I, Jhow Log 3-1-19, representative for Enterprise Field Services, LLC authorize Environmental Signature complete the required testing/sign the Generator Waste Testing Certification.	virotech, Inc. to
I, Greg Cva 5 tree, representative for Envirotech, representative samples of the oil field waste have been subjected to the paint filter test are have been found to conform to the specific requirements applicable to landfarms pursual of the representative samples are attached to demonstrate the above-described waste con 19.15.36 NMAC.	it to Section 15 of 19.15.36 NMAC. The results
6. Transporter: West States Energy Contractors (4)	
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: N Address of Facility: Hilltop, NM	M 01-0011
Method of Treatment and/or Disposal: ☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐	Landfill Other
Waste Acceptance Status:	ED (Must Be Maintained As Permanent Record)
PRINT NAME: Greg Crabbree TITLE: Environ	Adulyer DATE: 3/1/19
SIGNATURE: TELEPHONE NO.:	505-632-0615

APPENDIX C

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report EPNG D Com 5A Meter Run Release Ensolum Project No. 05A1226031



Photograph 1

Photograph Description: View of the release area.



Photograph 2

Photograph Description: View of the inprocess excavation activities.



Photograph 3

Photograph Description: View of the inprocess excavation activities.



SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report EPNG D Com 5A Meter Run Release Ensolum Project No. 05A1226031



Photograph 4

Photograph Description: View of the inprocess excavation activities.



Photograph 5

Photograph Description: View of the inprocess excavation activities.



Photograph 6

Photograph Description: View of the final excavation. (The standing water is from a post-remediation rain event).



SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report EPNG D Com 5A Meter Run Release Ensolum Project No. 05A1226031



Photograph 7

Photograph Description: View of the final excavation. (The standing water is from a post-remediation rain event).



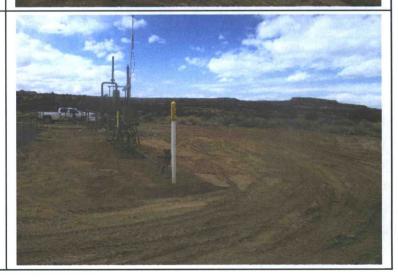
Photograph 8

Photograph Description: View of the final excavation after initial restoration.



Photograph 9

Photograph Description: View of the final excavation after initial restoration.



APPENDIX D

Table 1 – Soil Analytical Summary



TABLE 1 EPNG D Com 5A Meter Run Release SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined GRO/DRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
		Natural Resources		10	NE	NE	NE	50				1,000	2,500	10,000
						Exc	avation Compo	osite Soil Sample	S				阿尔拉斯斯斯	
S-1	3.04.19	С	0 to 1.5	<0.014	0.039	<0.028	0.22	0.26	13	<9.5	<47	13	13	<60
S-2	3.04.19	С	0 to 1.5	<0.018	< 0.037	<0.037	< 0.073	ND	<3.7	<9.6	<48	ND	ND	<60
S-3	3.04.19	С	0 to 1.5	<0.014	<0.028	<0.028	0.15	0.15	28	<9.8	<49	28	28	<60
S-4	3.04.19	С	0 to 1.5	<0.017	<0.035	<0.035	<0.070	ND	<3.5	<9.5	<47	ND	ND	<60
S-5	3.04.19	С	0 to 1.5	0.020	0.39	0.074	1.1	1.6	23	<9.5	<47	23	23	<60
S-6	3.04.19	С	0 to 1.5	0.022	0.25	0.047	0.69	1.01	20	<9.5	<47	20	20	<60

Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon

APPENDIX E

Laboratory Data Sheets & Chain of Custody Documentation



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

March 06, 2019

Kyle Summers ENSOLUM 606 S. Rio Grande Suite A

Aztec, NM 87410 TEL: (903) 821-5603

FAX:

RE: EPNG D COM 5A

OrderNo.: 1903138

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/5/2019 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 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,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Project: EPNG D COM 5A

Lab ID: 1903138-001

Client Sample ID: S-1

Collection Date: 3/4/2019 11:30:00 AM

Received Date: 3/5/2019 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/5/2019 11:28:00 AM	43497
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/5/2019 10:15:23 AM	43496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/5/2019 10:15:23 AM	43496
Surr: DNOP	81.5	70-130		%Rec	1	3/5/2019 10:15:23 AM	43496
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	13	2.8		mg/Kg	1	3/5/2019 9:52:08 AM	G58117
Surr: BFB	156	73.8-119	S	%Rec	1	3/5/2019 9:52:08 AM	G58117
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.014		mg/Kg	1	3/5/2019 9:52:08 AM	B58117
Toluene	0.039	0.028		mg/Kg	1	3/5/2019 9:52:08 AM	B58117
Ethylbenzene	ND	0.028		mg/Kg	1	3/5/2019 9:52:08 AM	B58117
Xylenes, Total	0.22	0.056		mg/Kg	1	3/5/2019 9:52:08 AM	B58117
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	3/5/2019 9:52:08 AM	B58117

Matrix: SOIL

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

- 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 Quanitative Limit
- % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits Page 1 of 11 J
- Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1903138

Date Reported: 3/6/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: EPNG D COM 5A

Collection Date: 3/4/2019 11:35:00 AM

Lab ID: 1903138-002

Matrix: SOIL Received

Received Date: 3/5/2019 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	60		mg/Kg	20	3/5/2019 11:40:25 AM	43497
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/5/2019 10:39:40 AM	43496
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/5/2019 10:39:40 AM	43496
Surr: DNOP	81.9	70-130		%Rec	1	3/5/2019 10:39:40 AM	43496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	3/5/2019 10:15:50 AM	G58117
Surr: BFB	107	73.8-119		%Rec	1	3/5/2019 10:15:50 AM	G58117
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.018		mg/Kg	1	3/5/2019 10:15:50 AM	B58117
Toluene	ND	0.037		mg/Kg	1	3/5/2019 10:15:50 AM	B58117
Ethylbenzene	ND	0.037		mg/Kg	1	3/5/2019 10:15:50 AM	B58117
Xylenes, Total	ND	0.073		mg/Kg	1	3/5/2019 10:15:50 AM	B58117
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	3/5/2019 10:15:50 AM	B58117

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

- 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 Quanitative 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 Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1903138

Date Reported: 3/6/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

EPNG D COM 5A

Lab ID: 1903138-003

Project:

Client Sample ID: S-3

Collection Date: 3/4/2019 11:40:00 AM

Received Date: 3/5/2019 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/5/2019 11:52:49 AM	43497
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/5/2019 11:03:59 AM	43496
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/5/2019 11:03:59 AM	43496
Surr: DNOP	82.2	70-130		%Rec	1	3/5/2019 11:03:59 AM	43496
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	28	2.8		mg/Kg	1	3/5/2019 10:39:38 AM	G58117
Surr: BFB	284	73.8-119	S	%Rec	1	3/5/2019 10:39:38 AM	G58117
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.014		mg/Kg	1	3/5/2019 10:39:38 AM	B58117
Toluene	ND	0.028		mg/Kg	1	3/5/2019 10:39:38 AM	B58117
Ethylbenzene	ND	0.028		mg/Kg	1	3/5/2019 10:39:38 AM	B58117
Xylenes, Total	0.15	0.056		mg/Kg	1	3/5/2019 10:39:38 AM	B58117
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	1	3/5/2019 10:39:38 AM	B58117

Matrix: SOIL

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

- * 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 Quanitative 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 Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1903138

Date Reported: 3/6/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: EPNG D COM 5A

Collection Date: 3/4/2019 11:45:00 AM

Lab ID: 1903138-004

Matrix: SOIL

Received Date: 3/5/2019 8:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	3/5/2019 12:05:13 PM	43497
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	Irm
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	3/5/2019 11:28:16 AM	43496
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	3/5/2019 11:28:16 AM	43496
Surr: DNOP	83.3	70-130	%Rec	1	3/5/2019 11:28:16 AM	43496
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	3/5/2019 11:03:27 AM	G58117
Surr: BFB	102	73.8-119	%Rec	1	3/5/2019 11:03:27 AM	G58117
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.017	mg/Kg	1	3/5/2019 11:03:27 AM	B58117
Toluene	ND	0.035	mg/Kg	1	3/5/2019 11:03:27 AM	B58117
Ethylbenzene	ND	0.035	mg/Kg	1	3/5/2019 11:03:27 AM	B58117
Xylenes, Total	ND	0.070	mg/Kg	1	3/5/2019 11:03:27 AM	B58117
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	3/5/2019 11:03:27 AM	B58117

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

- * 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 Quanitative 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 Page 4 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1903138

Date Reported: 3/6/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Project: EPNG D COM 5A

Lab ID: 1903138-005

Client Sample ID: S-5

Collection Date: 3/4/2019 11:50:00 AM

Received Date: 3/5/2019 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/5/2019 12:17:38 PM	43497
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/5/2019 12:02:20 PM	43496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/5/2019 12:02:20 PM	43496
Surr: DNOP	82.3	70-130		%Rec	1	3/5/2019 12:02:20 PM	43496
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	23	3.0		mg/Kg	1	3/5/2019 11:26:47 AM	G58117
Surr: BFB	180	73.8-119	S	%Rec	1	3/5/2019 11:26:47 AM	G58117
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.020	0.015		mg/Kg	1	3/5/2019 11:26:47 AM	B58117
Toluene	0.39	0.030		mg/Kg	1	3/5/2019 11:26:47 AM	B58117
Ethylbenzene	0.074	0.030		mg/Kg	1	3/5/2019 11:26:47 AM	B58117
Xylenes, Total	1.1	0.059		mg/Kg	1	3/5/2019 11:26:47 AM	B58117
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	3/5/2019 11:26:47 AM	B58117

Matrix: SOIL

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

- 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 Quanitative 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 Page 5 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1903138

Date Reported: 3/6/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Project: EPNG D COM 5A

Lab ID: 1903138-006

Client Sample ID: S-6

Collection Date: 3/4/2019 11:55:00 AM

Received Date: 3/5/2019 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	ND	60		mg/Kg	20	3/5/2019 12:30:02 PM	43497
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/5/2019 12:26:33 PM	43496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/5/2019 12:26:33 PM	43496
Surr: DNOP	85.2	70-130		%Rec	1	3/5/2019 12:26:33 PM	43496
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	20	3.6		mg/Kg	1	3/5/2019 11:50:02 AM	G58117
Surr: BFB	138	73.8-119	S	%Rec	1	3/5/2019 11:50:02 AM	G58117
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	0.022	0.018		mg/Kg	1	3/5/2019 11:50:02 AM	B58117
Toluene	0.25	0.036		mg/Kg	1	3/5/2019 11:50:02 AM	B58117
Ethylbenzene	0.047	0.036		mg/Kg	1	3/5/2019 11:50:02 AM	B58117
Xylenes, Total	0.69	0.072		mg/Kg	1	3/5/2019 11:50:02 AM	B58117
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	3/5/2019 11:50:02 AM	B58117

Matrix: SOIL

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

- 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 Quanitative 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 Page 6 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903138

06-Mar-19

Client:

ENSOLUM

Project:

EPNG D COM 5A

Sample ID: MB-43497

SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID: PBS

Batch ID: 43497

RunNo: 58116

Units: mg/Kg

Prep Date: Analyte

3/5/2019

Analysis Date: 3/5/2019

SeqNo: 1949532

HighLimit

RPDLimit

%RPD

Qual

Chloride

PQL ND

Sample ID: LCS-43497

SampType: LCS

TestCode: EPA Method 300.0: Anions

%REC

Client ID: LCSS Batch ID: 43497

RunNo: 58116

Prep Date: 3/5/2019 Analysis Date: 3/5/2019

PQL

SeqNo: 1949533

Units: mg/Kg HighLimit

%RPD **RPDLimit** Qual

Analyte

SPK value SPK Ref Val

92.1

SPK value SPK Ref Val %REC

90

110

15.00 14 1.5 Chloride

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank B

Value above quantitation range E

Analyte detected below quantitation limits

Page 7 of 11

Sample pH Not In Range

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903138 06-Mar-19

Client:

ENSOLUM

Project:

EPNG D COM 5A

Sample ID: 1903138-006AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: S-6	Batch	ID: 434	196	R	tunNo: 58	8108					
Prep Date: 3/5/2019	Analysis Da	ate: 3/	5/2019	S	eqNo: 1	948967	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	47	9.9	49.31	1.951	92.0	53.5	126				
Surr: DNOP	3.9		4.931		78.6	70	130				

Sample ID: 1903138-006AMSD	Samply	e: MS	SD	res	Code: E	A Method	8015W/D: DI	esei Kange	Organics		
Client ID: S-6	Batch I	D: 43 4	496	R	RunNo: 58	8108					
Prep Date: 3/5/2019	Analysis Da	e: 3 /	5/2019	S	SeqNo: 19	948968	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	47	9.9	49.55	1.951	90.0	53.5	126	1.60	21.7		
Surr: DNOP	3.9		4.955		78.1	70	130	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 Quanitative 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

Page 8 of 11

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903138

06-Mar-19

Client:

ENSOLUM

EDNG D COM 54

Project: EPNG	D COM 5A								
Sample ID: RB	SampType: N	IBLK	Test	Code: EP	A Method	8015D: Gasoli	ine Range	е	
Client ID: PBS	Batch ID: 6	S58117	R	tunNo: 58	117				
Prep Date:	Analysis Date:	3/5/2019	S	SeqNo: 19	49356	Units: mg/Kg	I		
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.				70.0	440			
Surr: BFB	970	1000		96.9	73.8	119			
Sample ID: 2.5UG GRO LC	SampType: L	.cs	Test	tCode: EP	A Method	8015D: Gasol	ine Range	е	
Client ID: LCSS	Batch ID: 0	G58117	R	RunNo: 58	3117				
Prep Date:	Analysis Date:	3/5/2019	S	SeqNo: 19	49357	Units: mg/Kg	3		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27 5.		0	107	80.1	123			
Surr: BFB	1100	1000		112	73.8	119			
Sample ID: 1903138-001AN	SampType: I	MS	Tes	tCode: EP	A Method	8015D: Gasol	ine Rang	е	
Client ID: S-1	Batch ID: 0	G58117	F	RunNo: 58	3117				
Prep Date:	Analysis Date:	3/5/2019	8	SeqNo: 19	949358	Units: mg/Kg	3		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29 2.		13.30	112	69.1	142			S
Surr: BFB	940	560.5		167	73.8	119			3
Sample ID: 1903138-001A	SampType: I	MSD	Tes	tCode: EF	PA Method	8015D: Gasol	ine Rang	е	
Client ID: S-1	Batch ID: (G58117	F	RunNo: 58	3117				
Prep Date:	Analysis Date:	3/5/2019	5	SeqNo: 19	949359	Units: mg/Kg	g		
Analyte	Result PQI	_ SPK value	SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28 2.	_	13.30	102	69.1	142	5.15	20	0
Surr: BFB	870	560.5		155	73.8	119	0	0	S
Sample ID: MB-43474	SampType: I	MBLK	Tes	tCode: EF	PA Method	8015D: Gasol	line Rang	е	
Client ID: PBS	Batch ID:	43474	F	RunNo: 58	8117				
Prep Date: 3/4/2019	Analysis Date:	3/5/2019	5	SeqNo: 19	949360	Units: %Rec			
Analyte	Result PQI	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910	1000		90.7	73.8	119			
Sample ID: LCS-43474	SampType:	LCS	Tes	stCode: EF	PA Method	8015D: Gaso	line Rang	je	
Client ID: LCSS	Batch ID:	43474	F	RunNo: 58	8117				
Prep Date: 3/4/2019	Analysis Date:	3/5/2019	;	SeqNo: 1	949361	Units: %Rec	;		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	1000	1000		104	72.0	110			

Qualifiers:

Surr: BFB

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

1000

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank В

73.8

119

E Value above quantitation range

104

Analyte detected below quantitation limits

Page 9 of 11

Sample pH Not In Range

1000

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903138

06-Mar-19

Client:

ENSOLUM

Project:

EPNG D COM 5A

Sample ID: RB	SampT	SampType: MBLK TestCode: EPA Method				8021B: Volat	les			
Client ID: PBS	Batch	1D: B5	8117	F	tunNo: 5	8117				
Prep Date:	Analysis D	ate: 3/	5/2019	S	SeqNo: 1	949386	Units: mg/K	g		
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: 100NG BTEX LCS	Samp	ype: LC	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	n ID: B5	8117	F	RunNo: 5	58117				
Pren Date:	Analysis D)ate: 3/	5/2019	5	SegNo: 1	1949387	Units: mg/K	g		

O										
Prep Date:	Analysis Date: 3/5/2019			8	SeqNo: 1949387			Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.9	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			
					10 1 -		0004P 1/-1-			

Sample ID: 1903138-002AMS	SampT	ype: MS	3	Test	tCode: El	PA Method	8021B: Volat	iles		
Client ID: S-2	Batch	ID: B5	8117	R	RunNo: 5	8117				
Prep Date:	Analysis D	ate: 3/	5/2019	S	SeqNo: 1	949388	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.018	0.7321	0	100	63.9	127			
Toluene	0.77	0.037	0.7321	0.01230	103	69.9	131			
Ethylbenzene	0.77	0.037	0.7321	0.009444	103	71	132			
Xylenes, Total	2.3	0.073	2.196	0.03207	105	71.8	131			
Surr: 4-Bromofluorobenzene	0.74		0.7321		101	80	120			

Sample ID: 1903138-002AMSI	S ampT	ype: MS	D	TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch	ID: B5	8117	R	RunNo: 5					
Prep Date:	Analysis D	ate: 3/	5/2019	S	SeqNo: 1	949389	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.018	0.7321	0	95.1	63.9	127	5.19	20	
Toluene	0.74	0.037	0.7321	0.01230	99.3	69.9	131	4.05	20	
Ethylbenzene	0.73	0.037	0.7321	0.009444	99.0	71	132	4.24	20	
Xylenes, Total	2.2	0.073	2.196	0.03207	101	71.8	131	3.90	20	
Surr: 4-Bromofluorobenzene	0.69		0.7321		94.9	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 Quanitative 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

Page 10 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903138

06-Mar-19

Client:

ENSOLUM

Project:

EPNG D COM 5A

Sample ID: MB-43474

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Client ID:

PBS

Batch ID: 43474

PQL

RunNo: 58117

Analysis Date: 3/5/2019

Prep Date: 3/4/2019

SeqNo: 1949390

Units: %Rec HighLimit

Analyte

Result

SPK value SPK Ref Val

Surr: 4-Bromofluorobenzene

0.99

1.000

SPK value SPK Ref Val %REC

%REC LowLimit

120

RPDLimit Qual

TestCode: EPA Method 8021B: Volatiles

99.0

%RPD

Sample ID: LCS-43474

Client ID: LCSS SampType: LCS Batch ID: 43474

RunNo: 58117

80

Prep Date: 3/4/2019

Analysis Date: 3/5/2019

SeqNo: 1949391

Units: %Rec

%RPD **RPDLimit**

Surr: 4-Bromofluorobenzene

Result

Analyte

Page 11 of 11

1.000

LowLimit

Qual

1.0

102

HighLimit

Qualifiers:

H

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Not Detected at the Reporting Limit ND Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Holding times for preparation or analysis exceeded

Analyte detected in the associated Method Blank

Analyte detected below quantitation limits J

Value above quantitation range Sample pH Not In Range

Reporting Detection Limit RI.

E

Sample container temperature is out of limit as specified



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: EN	NSOLUM AZTEC	Work Order Number:	1903138		RcptNo:	1
Received By: A	nne Thorne	3/5/2019 8:20:00 AM		anne II-	_	
Completed By: A	Inne Thorne	3/5/2019 8:38:46 AM		anne Am		
Reviewed By:	OI	1/5/19		Cine you		
106.100	by: AT 03/05	119				
Chain of Custod		,,,				
1. Is Chain of Custo			Yes 🗹	No 🗌	Not Present	
2. How was the san			Courier			
	•					
Log In				N: 🗆	NA [7]	
3. Was an attempt r	made to cool the samples?		Yes 🗸	No 🗌	NA 🗀	
A Mare all samples	received at a temperature	of >0° C to 6 0°C	Yes 🗸	No 🗆	NA 🗆	
4. Were all samples	received at a temperature	01 20 0 10 0.0 0	165		NA L	
5. Sample(s) in prop	per container(s)?		Yes 🗹	No 🗌		
C Sufficient comple	volume for indicated test(s		Yes 🗸	No 🗆		
	ept VOA and ONG) proper		Yes 🗸	No 🗆		
8. Was preservative		ly preserveu?	Yes 🗆	No 🗹	NA 🗆	
O. Was pleservative	added to bottles?		165	NO E		
9. VOA vials have ze	ero headspace?		Yes	No 🗌	No VOA Vials 🗹	
10. Were any sample	e containers received broke	en?	Yes	No 🗹	# of preserved	
					bottles checked	
11. Does paperwork	match bottle labels? ies on chain of custody)		Yes 🗸	No 🗆	for pH:	>12 unless noted)
	ectly identified on Chain of	Custody?	Yes 🗸	No 🗆	Adjusted?	
	alyses were requested?		Yes 🗸	No 🗆		2
14. Were all holding t		¥	Yes 🗸	No 🗆	Checked by:	
(If no, notify custo	omer for authorization.)			L		
Special Handling	(if applicable)					
15. Was client notifie	ed of all discrepancies with	this order?	Yes	No 🗌	NA 🗸	
Person Not	tified:	Date	ACCEPTAGE AND AC			
By Whom:		Via:	eMail Ph	one 🗌 Fax	n Person	
Regarding:		Remille a de la company de la company de la company de la company de la company de la company de la company de				
Client Instr	uctions:					
16. Additional remar	rks:					
CUSTODY	SEALS INTACT ON SOIL	JARS/at 3/5/19				
17. Cooler Informa		n hiện giữ là họi địa hại nhiệc giữa dian chữa dian chi các các	5455 <u>11</u> 5512 palendosto			
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Chain-of-Custody Record			Turn-Around	Time:			1	4					E	AUX/	/T E	•	B.1 E	a E	NT	- 4 -		
Client:	Ens	olom		☐ Standard	OX.	Rush	3-5-19		Back!	H	_									/TC		
			Project Name	e:		Com 5A										tal.co				,,,		
Mailing	Address	1061	S. Rio Grande	EPNG	1		Com 37		10	N1 H								M 87	′1 ∩ 0			
Sui	LA	A.L.	NM 874/0	Project #:				1		el. 50								-4107				
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	r Fax#:		~	Project Mana	ger:	Kul	Le Summers	_								\Box						
QA/QC	Package:							3021	IS OF	/ MF			8		, SC	PCB's						
□ Star	ndard		☐ Level 4 (Full Validation)	KSumn	12/5	0	ensdom.com	9	9	RO			SIMS)		, PO	2 P(
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□ NEL		□ Otne	r	⊘ ⊓ loe	>∑e¥(e l		ENKO, paten	2 /+	+ Ш	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	504	or 8	SIS	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082		8270 (Semi-VOA)	Y			Air Bubbles (Y or N)
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Date:	Time:	Relinguish	nd bur	Received by:	<u> </u>		Date Time	Do	nork						1	144					\perp	\perp
3-4-19	(460	Reinquisn	and the second s	MA J	1		21.1	Rei	пагк	s: p	ay	K.	ey,	7	tm	19	0.5	8				
Date:	Time:	Relinquish	ed by:	Received by:			74 19 1400 Date Time	+		AF	E	t h	14	رُّوراً	36							
3/4/19 1751 Christialibeles			V/1	Received by: Date Time Remarks: Pay Key Am 14058 Pm - Tom Long Received by: Date Time Pm - Tom Long AFE & N41236 Sane Day 3-5-19																		
If necessary samples submitted to Hall Environmental may be sub-				ontracted to other a	ccredited	aboratorie		is possi	bitity.	Anv su	ıb-con	tracte	d data	will be	clear	ly note	ated or	n the a	nalytic	al repo	rt.	

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: Ent	erprise Field Se	ervices, LLC	0	GRID: 15	51618			
Contact Nan	ne: Thoma	s Long		Co	ontact Te	elephone: 505-599-2286			
Contact ema	ail:tjlong@	eprod.com		In	cident#	(assigned by OCD) N/A			
Contact mail	ling addres	s: 614 Reilly Av	e, Farmington,	NM /	21519	716850662			
			Location o	of Rele	ase S	Source			
Latitude 36.8 decimal places)	67573		L	Longitude	-107.97	73699 NAD 83 in decima	l degrees to 5		
	ateral H-8	(X-91419) Pipeli	ne	Sit	te Type I	Natural Gathering Pipeline			
Date Release	e Discover	ed: 5/25/2019		Se	erial # (if a	(if applicable): N/A			
Unit Letter	Section	Township	Range		Count				
ı	27	31N	11W		San Ju	NMOCD NMOCD	deports the participant		
Surface Owne			Nature and	Volum	ne of F	Release JUN 0 7 201	19 1		
Crude Oi		Volume Releas	ed (bbls)	Calculation	o or opcom	Volume Recovered (bbls)			
Produced	Water	Volume Releas	ed (bbls)			Volume Recovered (bbls)			
			ation of dissolve r >10,000 mg/l?		e in the	☐ Yes ☐ No			
□ Condens	ate	Volume Releas	sed (bbls): ~ 1 B	BL		Volume Recovered (bbls): None			
Natural €	Bas	Volume Releas	ed (Mcf): Unknown	own		Volume Recovered (Mcf): None			
Other (describe) Volume/Weight Released (provide u			vide units)	ts): Volume/Weight Recovered (provide units)					
Cause of Release: On May 25, 2019, Enterprise responded to a release of natural gas on the Lateral H-8 (X-91419) pipeline. The release was a result of a private property owner driving a steel stake through a four inch natural gas gathering pipeline. No fire or injuries resulted from this event. The fire department was notified and responded to secure the affected area. Approximately one barrel of condensate was released to the ground surface. The pipeline was isolated, depressurized, locked out and tagged out. The impacted surface soil was remediated. Permanent repairs and remediation are in the scheduling process. A third party closure report will be submitted with the "Final C-141."									



Was this a major	If YES, for what reason(s) does the	responsible party consider t	this a major release?	Emergency services
release as defined by 19.15.29.7(A) NMAC?	responded to the release and there	was a reasonable threat to	the public and enviro	nment.
⊠ Yes □ No				
If YES, was immediate no NMOCD on 5-25-19 at 7:	 otice given to the OCD? By whom? 58 p.m. followed by an email notification	To whom? When and by on.	what means (phone,	email, etc)? Cory Smith -
	Initia	I Response		
The responsible part	y must undertake the following actions imm	nediately unless they could crea	ate a safety hazard that	would result in injury
☐ The source of the r	release has been stopped.			
	has been secured to protect huma	an health and the enviror	nment.	
□ Released materials	s have been contained via the use	of berms or dikes, absor	bent pads, or other	containment devices.
	recoverable materials have been	removed and managed a	appropriately.	
migration of the release equipment to access the	e potable water, but some standing ne release location and remove the	g water was left onsite, b e water.	ecause a road has	to be built in order for
remediation has begun	NMAC the responsible party may on the property may on the property of action within a lined containment area (see	ns to date. If remedial e	fforts have been su	ccessfully completed or
I hereby certify that the in rules and regulations all of releases which may enda operator of liability should groundwater, surface wat	offormation given above is true and consperators are required to report and/or anger public health or the environment of their operations have failed to adequater, human health or the environment for compliance with any other federal,	file certain release notificat The acceptance of a C-14 ately investigate and remed In addition, OCD acceptan	tions and perform cor 41 report by the OCD diate contamination th nce of a C-141 report	rective actions for does not relieve the lat pose a threat to
Printed Name: Jon 5	Fields	Title: Director, Field Env	rironmental	
Signature:	1. trust	Date: 6-5-19		
email: jefields@eprod.	.com	_ Telephone:	6684	
OCD Only Received by:	z J /	Date:	6/17/19	

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	/6//	
Facility ID		
Application ID		

Release Notificat					ation		NMOC	D
Responsible Party					ty		JUN 1 7	2019
Responsible	e Party: Ent	erprise Field Se	ervices, LLC	OGRID:	151618		DISTRICT	111
Contact Nar	me: Thoma	s Long		Contact	Telephone: 505	5-599-2286		-
Contact em	ail: tjlong@	eprod.com		Incident	# (assigned by OC	D) N/A		
Contact ma 87401	iling addres	s: 614 Reilly Av	e, Farmington,	NM	NCS1915	541940		
			Location o	of Release	Source			
Latitude 36.3	33375		Longitude_	-107.213957		_NAD 83 in deci	mal degrees to 5 dec	imal places)
Site Name L	ateral L-11	Valve		Site Type	Natural Gas	Gathering Pi	peline Valve	
Date Release Discovered: 5/13/2019				Serial #	if applicable):			
Unit Letter	Section	Township	Range	Cou	nty	1		
E	1	24N	3W	San	Juan	1		
Surface Own	er: Stat	e] Tribal ☐ Priva	ate (Name: Jica	illa Apache Tı	ribe)	
		1	Nature and	Volume of	Release			
	Material(s) F	Released (Select all t	hat apply and attach	calculations or spec	ific justification for	the volumes pro	ovided below)	
☐ Crude O		Volume Releas				overed (bbls)		
☐ Produce	d Water	Volume Releas	, ,			overed (bbls))	
			ation of dissolve		Yes I	No		- 1
⊠ Condens	produced water >10,000 mg/l? Condensate Volume Released (bbls): Estimated 3-				Volume Red	overed (bbls)): None	
☐ Natural Gas Volume Released (Mcf):				Volume Rec	overed (Mcf)	:		
Other (describe) Volume/Weight Released (provide un			vide units):	Volume/Wei	ght Recovere	ed (provide units))	
Cause of Release: On May 13, 2019, Enterprise responded to a possible release of condensate on the Lateral L-11 pipeline valve. Enterprise dispatched a technician and confirmed the release. The pipeline was isolated, depressurized, locked out and tagged out. An area of approximately 12 feet long by two feet wide was affected by the release fluids. Enterprise began the remediation on May 31, 2019, and determined the release was reportable per NMOCD regulation on June 3, 2019, due to the volume of impacted subsurface soil. A third party closure report will be submitted with the "Final C-141."								

2

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the	responsible party consider	this a major release?					
☐ Yes ⊠ No	☐ Yes ⊠ No							
				"				
If YES, was immediate no	tice given to the OCD? By whom? T	o whom? When and by wi	nat means (pnone, en	nall, etc)?				
	Initia	l Response						
The responsible part	y must undertake the following actions imn	nediately unless they could cre	eate a safety hazard that	would result in injury				
☐ The source of the r	elease has been stopped.							
	has been secured to protect hum	an health and the enviro	nment.					
□ Released materials	s have been contained via the use	of berms or dikes, abso	rbent pads, or other	r containment device	s.			
	recoverable materials have been	removed and managed	appropriately.					
migration of the release	If all the actions described above have <u>not</u> been undertaken, explain why: Berms and dikes were installed to prevent migration of the release potable water, but some standing water was left onsite, as that a road has to be built in order for equipment to access the release location and remove the water.							
remediation has begun	NMAC the responsible party may on the party may on the party may on the party of action within a lined containment area (see	ons to date. If remedial e	efforts have been su	accessfully completed	d or			
I hereby certify that the in rules and regulations all of releases which may enda operator of liability should groundwater, surface was	oformation given above is true and corresponding to report and/or anger public health or the environment of their operations have failed to adequater, human health or the environment for compliance with any other federal.	r file certain release notifica t. The acceptance of a C-1 lately investigate and reme In addition, OCD accepta	ations and perform con 141 report by the OCD diate contamination the nce of a C-141 report	rrective actions for does not relieve the nat pose a threat to	D			
Printed Name: Jon E	Fields	Title: Director, Field Er						
Signature:	1. Kuly	_ Date: <u>6 -6-19</u>			6			
	email: jefields@eprod.com Telephone: 713-381-6684							
		1						
OCD Only Received by:	my State	/ 	6/17/19					
(3		, , ,					

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 OC	D District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

			Resp	onsible P	Party	
Responsible Party: Enterprise Field Services, LLC OGRID: 15				RID: 151618		
Contact Nam	e: Thomas	Long		Cont	ntact Telephone: 505-599-2286	
Contact email:tjlong@eprod.com					ident # (assigned by OCD) N/A	
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401					NCS191685 4049	
			Location	of Releas	ise Source	
Latitude 36.9	1645		Longit	ude <u>-107.697</u>	NAD 83 in decimal degrees to 5 decimal places)	
Site Name Ox	knard #334	IS		Site 7	Type Natural Gas Gathering Pipeline	
Date Release	Discovered:	5/3/2019		Seria	al # (if applicable) NM 108646	
Unit Letter	Section	Township	Range		County	
В	8	31N	8W	S	San Juan	
Surface Owne		Federal Tr	Nature and	d Volume	e of Release specific justification for the volumes provided below)	
Crude Oi		Volume Release		realeulations of s	Volume Recovered (bbls)	
Produced	Water	Volume Release	d (bbls)		Volume Recovered (bbls)	
		Is the concentrate produced water	cion of dissolved c >10,000 mg/l?	chloride in the	ne Yes No	
⊠ Condensa	ate	Volume Release	d (bbls): Unknow	n at this tim	ne Volume Recovered (bbls): None	
			ed (Mcf): Unknow	ne. Volume Recovered (Mcf): None		
Other (describe) Volume/Weight Released (provide units) Volume/V					Volume/Weight Recovered (provide units)	
Cause of Release: On May 3, 2019, an Enterprise technician discovered a release of natural gas on the Oxnard #334S pipeline. The pipeline was isolated, depressurized, locked out and tagged out. There were no fluids observed on the ground surface. The repairs and remediation were initiated on June 4, 2019 and Enterprise determined this release reportable after review of laboratory analysis on June 5, 2018, due the volume of impacted subsurface soils. Enterprise has determined this release is required to be remediated to the most stringent NMOCD remediation standard (10 ppm Reparene 50 ppm RTEX 100 ppm TPH and 600 ppm Chloride). A third party closure report will be submitted						

remediation standard (10 ppm Benzene, 50 ppm BTEX, 100 ppm TPH and 600 ppm Chloride). A third party closure with the "Final C-141."

JUN 1 7 2019

DISTRICT III



Was this a major	If VES for what reason(s) do	es the responsible party consider	this a major release?	
release as defined by	11 125, for what reason(s) ac	es me responsion party comme	,	
19.15.29.7(A) NMAC?				
☐ Yes ⊠ No				
If YES, was immediate n	otice given to the OCD? By w	hom? To whom? When and by	what means (phone, e	mail, etc)?
	*]	Initial Response		
The responsible	party must undertake the following act	ions immediately unless they could create	e a safety hazard that would	d result in injury
The source of the rele	ease has been stopped.			
	as been secured to protect huma	in health and the environment.		
	-	of berms or dikes, absorbent pads	s. or other containmen	it devices.
		removed and managed appropris		
If all the actions describe	ed above have <u>not</u> been undertal	ken, explain why.		
D 1015200D (1) ND	AAC da a sa a citta a cata a cata		ataly ofter discovery o	for release If remediation
has begun, please attach	a narrative of actions to date.	commence remediation immedia If remedial efforts have been su	accessfully completed	or if the release occurred
within a lined containme	ent area (see 19.15.29.11(A)(5)(a) NMAC), please attach all info	rmation needed for cle	osure evaluation.
I hereby certify that the info	ormation given above is true and co	omplete to the best of my knowledge	and understand that pur	suant to OCD rules and
regulations all operators are	e required to report and/or file certa timent. The acceptance of a C-141	in release notifications and perform report by the OCD does not relieve t	he operator of liability s	hould their operations have
failed to adequately investig	gate and remediate contamination t	hat pose a threat to groundwater, sur	face water, human healt	h or the environment. In
addition, OCD acceptance of and/or regulations.	of a C-141 report does not relieve t	he operator of responsibility for com	pliance with any other is	ederal, state, or local laws
Printed Name: Jon E. Fie	elds	Title: Director, Field Environ	mental	
	6/1	10		
Signature:	1. Tues			
email: jefields@eprod.c	com	Telephone: 713-381-6684		
-	-	/		
OCD Only		7)	/	
Received by:		Date: 6/7	1/19	
The control of	<u> </u>			

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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

			Kesp	onsi	die Party	y		
Responsible Party: Enterprise Field Services, LLC OGRID:			OGRID: 1	51618				
Contact Name: Thomas Long Contact Te				elephone: 505-599-2286				
Contact ema	il:tjlong@e	prod.com			Incident #	(assigned by OCD):	NVF1907733404	4
Contact mail 87401	ling address:	614 Reilly Ave,	Farmington, N	М				
			Location	of R	elease So	ource		
Latitude 36.5	90988		Longitude -	<u>-107.74</u>	7339	(NAD 8	83 in decimal degrees to	5 decimal places)
Site Name La	teral C-11	Drip Tank			Site Type N	latural Gas C	ondensate Tank	
Date Release	Discovered	2/24/2019			Serial Num	ber (if applicable)	: N/A	
Unit Letter	Section	Township	Range		County			NMOCD
E	12	27N	9W		San Juan			
Courfe on O			" 1				ı	MAY 1 6 2019
Surface Owner	r: State	☐ Federal ⊠ Tr	ibal Private (A	Vame <u>: 1</u>	Navajo Natio	on	ום	STRICT III
			Nature and	Vol	ume of F	Release		1000
	Materia	l(s) Released (Select al	l that apply and attach	calculati	ons or specific i	justification for the	volumes provided belov	v)
Crude Oil		Volume Release	d (bbls)		,	Volume Recovered (bbls)		
Produced	Water	Volume Release	d (bbls)			Volume Recovered (bbls)		
		Is the concentrat	ion of dissolved cl	hloride	in the	Yes No	0	
Condensa Condensa	te		d (bbls): Estima t	ted 10	-20 BBLs	Volume Recovered (bbls): Estimated 10-20 BBLs		
☐ Natural Gas Volume Released (Mcf):				Volume Recovered (Mcf):				
Other (describe) Volume/Weight Released (provide units):			8	Volume/Weight Recovered (provide units)				
The release of structure. The liner was ther	was a result condensate pressure w	of someone shoo inside the second ashed. Enterprise	ting holes in the tale lary containment we coordinated with N	ank. T vas rem VMOCE	he condensationed utilizing to inspect to	ate was release g a vacuum truc he liner. No dam	ed inside a lined se	teral C-11 Drip Tank. condary containment nk was replaced. The in the liner. No fluids this "Final C-141."

Form C-141 Page 2

State of New Mexico Oil Conservation Division

Incident ID	,
District RP	3
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: Jon E. Fields Title: Director, Field Environmental
Printed Name: Jon E. Fields Title: Director, Field Environmental Signature: Date: 5-9-19
email: jefields@eprod.com Telephone: 713-381-6684
OCD Only
Received by: Date: 5/16/19
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: Title: Figure 1. Title:

Enterprise Field Services, LLC Lateral C-11 Drip Tank UL E Section12 T27N R9W; 36.590988 -107.747339

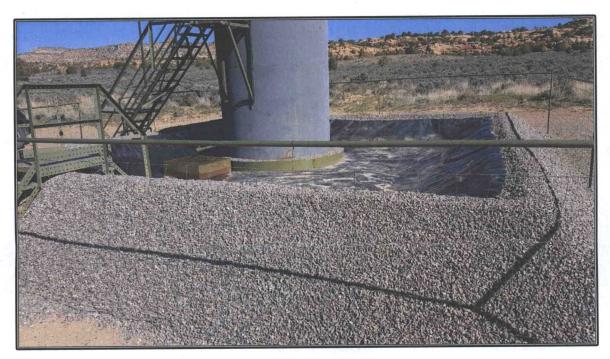


Photo 1: View to the North.

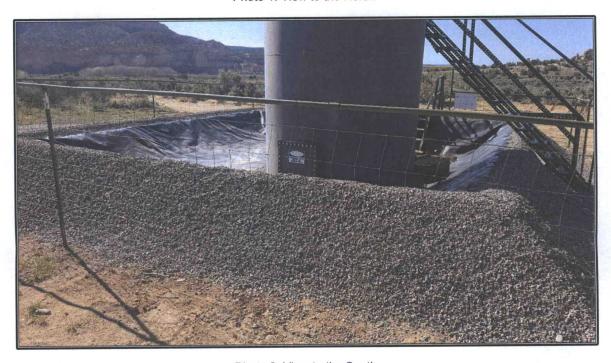


Photo 2: View to the South.

Enterprise Field Services, LLC Lateral C-11 Drip Tank UL E Section12 T27N R9W; 36.590988 -107.747339

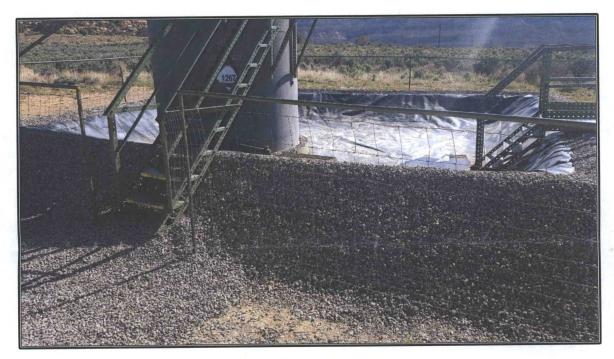


Photo 3: View to the East.

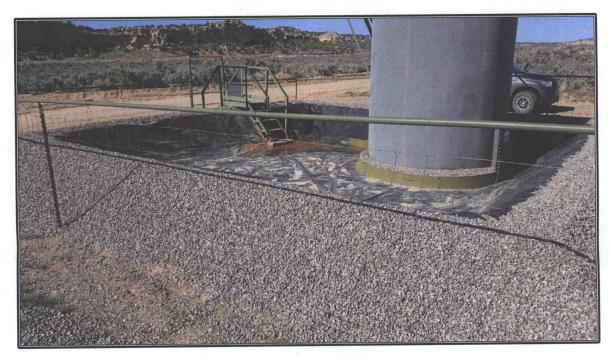


Photo 4: View to the West.

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	10/1
Facility ID	
Application ID	

Release Notification

NMOCD

ILIN 2 & 2010

		Respo	nsible Par	ty	JON 2 4 2019	
Responsible Party: Ente	erprise Field S	ervices, LLC	OGRID: 1	51618	DISTRICT III	
Contact Name: Thomas			Contact T	elephone: 505	5-599-2286	
Contact email:tjlong@e	eprod.com		Incident #	(assigned by OC	CD) NCS1916849922	
Contact mailing address 87401	s: 614 Reilly Av	re, Farmington, N	IM			
		Location of	Release S	Source		
_atitude <u>36.79392</u> decimal places)		Lor	ngitude <u>-107.997</u>	780	NAD 83 in decimal degrees to 5	
Site Name Bruington G	IC 1B		Site Type	Natural Gath	ering Pipeline	
Date Release Discovere	ed: 6/5/2019		Serial # (if	applicable): NM	0 010996	
Unit Letter Section	Township	Range	Cour	nty		
M 2	30N	11W	San J	uan		
Material(s) R		Nature and \			the volumes provided below)	
☐ Crude Oil	Volume Releas			Volume Rec	covered (bbls)	
☐ Produced Water	Volume Releas	sed (bbls)		Volume Recovered (bbls)		
		ration of dissolved er >10,000 mg/l?	chloride in the	☐ Yes ☐ I		
☐ Condensate	Volume Releas	sed (bbls):			covered (bbls):	
☐ Natural Gas	Volume Releas			Volume Recovered (Mcf):		
☑ Other (describe): Volume/Weight Released (provide un			de units):	Volume/Wei Unknown	ight Recovered (provide units)	
Hydro-static test Unknown				Olikilowii		
water						
Cause of Release: On June 5, 2019, Enterprise had a rupture on the Bruington G 1B natural gas pipeline while conducting a hydro-static pressure test. No fluids were observed on the ground surface. No washes were affected. The pipeline was isolated, depressurized, locked out and tagged out. Repairs and remediation began on June 14, 2019 and Enterprise determined this release reportable on June 17, 2019 due the volume of impacted subsurface soil. A third party closure report will be submitted with the "Final C-141."						



Was this a major release as defined by 19.15.29.7(A) NMAC?	ty consider this a major release?					
☐ Yes ☒ No						
If YES, was immediate notice given to the OCD? By whom? To whom?						
Ti 125, was ininiediate notice given to the COD. By whom: To whom:						
Initial Respons	se					
The responsible party must undertake the following actions immediately unless the	ney could create a safety hazard that would result in injury					
☐ The impacted area has been secured to protect human health and to the impacted area has been secured to protect human health and to the impacted area has been secured to protect human health and to the impacted area has been secured to protect human health and to the impacted area has been secured to protect human health and to the impacted area has been secured to protect human health and to the impacted area has been secured to protect human health and to the impacted area.	the environment.					
Released materials have been contained via the use of berms or di	kes, absorbent pads, or other containment devices.					
All free liquids and recoverable materials have been removed and r	managed appropriately.					
If all the actions described above have <u>not</u> been undertaken, explain why: Berms and dikes were installed to prevent migration of the release potable water, but some standing water was left onsite, because a road has to be built in order for equipment to access the release location and remove the water.						
Per 19.15.29.8 B. (4) NMAC the responsible party may commence renremediation has begun, please attach a narrative of actions to date. If I	nediation immediately after discovery of a release. If					
if the release occurred within a lined containment area (see 19.15.29.11) for closure evaluation.						
I hereby certify that the information given above is true and complete to the best rules and regulations all operators are required to report and/or file certain releases which may endanger public health or the environment. The acceptant operator of liability should their operations have failed to adequately investigate groundwater, surface water, human health or the environment. In addition, OC operator of responsibility for compliance with any other federal, state, or local land.	ase notifications and perform corrective actions for ice of a C-141 report by the OCD does not relieve the e and remediate contamination that pose a threat to CD acceptance of a C-141 report does not relieve the					
Printed Name:Jon E. Fields Title: Director,	, Environmental					
Signature: Date: 6	-18-19					
email: _ jefields@eprod.com	713-381-6684					
OCD Only Received by:	Date: 6/27/19					

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: Enterprise Field Services, LLC				OGRID: 151618				
Contact Name: Thomas Long				Contact Telephone: 505-599-2286				
Contact ema	ail: tjlong@	eprod.com			Incident #	(assigned by OCL	D) N/A	
Contact mai	iling addres	s: 614 Reilly Av	e, Farmington,	NM	NX	5191903	1097	
			Location of	of R	elease S	ource		
Latitude 36.6 decimal places)	328523		[_ongit	ude <u>-108.01</u>	0080	NAD 83 in decimal degrees to 8	
Site Name L	ateral 2B-2	23 Drip Tank			Site Type I	Natural Gas C	ondensate Tank	
Date Releas	e Discover	ed: 6/21/2019			Serial # (if a	applicable) NM 0	021702	
Unit Letter	Section	Township	Range		Coun	-	NMOCD	
N	28	28N	11W		San Ju	ian	1111 0 - 0010	
Surface Own			Nature and	Vol	ume of F		DISTRICT III the volumes provided below)	
☐ Crude O		Volume Releas				Volume Reco	overed (bbls)	
Produce	d Water	Volume Releas	sed (bbls)			Volume Recovered (bbls)		
		produced wate	ation of dissolve r >10,000 mg/l?			☐ Yes ☐ No		
□ Condens	sate	Volume Releas	sed (bbls): Estim	nated	40 BBLs	Volume Reco	overed (bbls): Estimated 40 BBLs	
☐ Natural Gas Volume Released (Mcf):					Volume Reco			
Other (describe) Volume/Weight Released (provide unit				nits)	its) Volume/Weight Recovered (provide units)			
release was estimated 40 containment	a result of some of the source	someone shooting condensate was re	holes in the tank. eleased into the lintruck. Enterprise	The ned se will co	condensate to econdary cont pordinated with	ank was pumpe tainment structu	ate on the Lateral 2B-23 Drip Tank. The d down by utilizing a vacuum truck. An re. The condensate form the secondary spect the liner after it has been properly	



Was this a major	If YES, for what reason(s) does the	responsible party consider	this a major release?	The volume released
release as defined by 19.15.29.7(A) NMAC?	exceeded 25 barrels.	responsible party consider	uno a major rotodos.	The volume followed
⊠ Yes □ No				
If VES, was immediate n	ctice given to the OCD? By whom?	To whom? When and hy	what means (phone	email etc)? Cory Smith
	email), Jim Griswold, NMOCD (email			
	Initia	al Response		
The responsible party	y must undertake the following actions im	mediately unless they could cre	ate a safety hazard that	would result in injury
☐ The source of the r	elease has been stopped.			
	has been secured to protect hum	nan health and the enviro	nment.	
□ Released materials	have been contained via the use	e of berms or dikes, absor	bent pads, or other	containment devices.
	recoverable materials have been	removed and managed a	appropriately.	
If all the actions describ	oed above have <u>not</u> been underta	aken, explain why:		
D 40 45 00 0 D (4) h	11.1.0 d	P - 0 1	Part I and Part I	
remediation has begun	NMAC the responsible party may please attach a narrative of acti	commence remediation in onsity date. If remedial e	mmediately after di fforts have been su	scovery of a release. If
if the release occurred	within a lined containment area (s			
	formation given above is true and co			
releases which may enda operator of liability should groundwater, surface wat	operators are required to report and/o inger public health or the environmer if their operations have failed to adequer, human health or the environment for compliance with any other federa	nt. The acceptance of a C-14 uately investigate and remed . In addition, OCD acceptar	41 report by the OCD diate contamination th ace of a C-141 report	does not relieve the at pose a threat to
Printed Name: <u>Jon-</u> {	. Fields	Title: <u>Director, Environme</u>		
Signature:	ve. teud	_ Date:6 - Z7 - 10	<u> </u>	
email: _ <u>jefields@eprod.</u>	com	Telephone: _713-381-6	684	
	A			
OCD Only Received by:	4.4	Date:	7/9/19	