3R-1012

Release Report/ General Correspondence

Enterprise RA

Date: Jun-Dec 2018

pJK1424833743

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 Cooms

Form C-141 Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

DISTRICT III

				Sa	nta Fe	e, INIVI 87	505			100	**	
		F	Releas	e Notific	ation	and C	orrective	Actio	on			
					OP	ERATOR	2] Initial	Report	\boxtimes	Final Report
Name of C							omas Long					
Address 6				VI 87401		<u> </u>	No. 505-599- 2					
Facility Na	me Latera	1 2C-24 Pi	peline			Facility Typ	e Natural Gas	s Gath	ering Pi	peline		
Surface O	wner Jica ı	rilla Apach	e Tribe	Mineral C	Owner .	Jicarilla A	pache Tribe		Serial	No. N/A		
				LOCA		OF REI	EASE					
Unit Letter C	Section 11	Township 24N	Range 5W	Feet from the 408	North/ Line					County Rio Arri	ba	
		La	atitude <u>3</u>	6.332369 L	ongitu	de107.3	32138 NAD83					
				NAT	URE	OF RELI	EASE					
Type of Rel				s Liquids		Gas 5-7 E	f Release 3.31 M BBLs Condensa	ate		Recovere		
Source of R			on			3/9/2018	Hour of Occurre at 12:41 p.m.		3/9/2018	d Hour of I 3 at 12:41	p.m.	
Was Immed	liate Notice		⊠ Yes	Пиоп	lot	If YES, To Sandoval	Whom? : Notifi	ication (Cory Smit	h – NMOC	CD; Ho	bson
Required					VOL	Sandovai	- JALI O					
By Whom?							Hour March 9, 2					
Was a Wate	ercourse Re		⊠ Yes	☐ No		If YES, Vo	olume Impacting	the Wa	atercourse	Э.		
If a Waterco	ourse was Ir	npacted, De	scribe Full	y.* The releas	e is loca	ated in a sm	all ephemeral w	ash. No	fluids we	ere observ	ed on	the ground
Describe Ca 24 pipeline.	Enterprise	confirmed th	ne release	and isolated,			hird party report sed out and tagg					
		leted on Apr			ntamina	ant mass wa	is removed by n	nechani	cal excav	ation Th	e final	excavation
dimensions impacted so	measured a oil were exca	approximatel	y 26 feet I ransported	ong by 13.5 fe I to a New Me	et wide	by 14 feet	deep. Approxin	nately 2	20 cubic	yards of h	ydroca	rbon
rules and re which may relieve the o ground water	egulations al endanger pu operator of l er, surface v	l operators a ublic health o iability shoul vater, humar	are require or the envi d their ope n health or	d to report and ronment. The erations have the environm	d/or file accepta failed to ent. In	certain rele ance of a C adequately addition, N	st of my knowled ase notifications 141 report by the investigate and MOCD acceptan aws and/or regu	and pene NMC remed ce of a	erform cor CD mark iate conta	rective acted as "Fin mination t	tions fo al Rep hat pos	or releases ort" does not se a threat to
		1/10		•			OIL CON	SER	/ATION	DHASI	ON	
Signature:	/w	1. for	4			Approved b	. Environmental	Cassis	list	ery/	{/_	5
Printed Nar	ne: Jon E. F	ields				Approved b	y Environmental	Specia	mst.	7	7	
Title: Direct	or, Environn	nental				Approval Da	ate: 8/6/	18	Expiration	Date:		
E-mail Addı	ress: jefields	@eprod.cor	n			Conditions	of Approval:			Attache	ed 🔲	
Date:	118/18		Phor	ne: (713) 381-6	6684	SAMO	in ARR	D i	34			

* Attach Additional Sheets If Necessary

NCS1808648104



NMOCD

JUN 2 8 2018

DISTRICT III

CORRECTIVE ACTION REPORT

Property:

Lateral 2C-24 (3/9/18) Release NW 1/4, Sec 11 T24N R5W Jicarilla Apache Nation, Rio Arriba County, New Mexico

> May 21, 2018 Apex Project No. 725040112416

> > Prepared for:

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

Prepared by:

Ranee Deechilly Project Scientist

Kyle Summers, CPG

Branch Manager / Senior Geologist

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CORRECTIVE ACTION REPORT

Lateral 2C-24 (3/9/18) Release
NW 1/4, Sec 11 T24N R5W
Jicarilla Apache Nation, Rio Arriba County, New Mexico

Apex Project No. 725040112416

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral 2C-24 release site, referred to hereinafter as the "Site", is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in in the northwest (NW) ¼ of Section 11, Township 24 North, Range 5 West, in the Jicarilla Apache Nation, Rio Arriba County, New Mexico (36.332369N, 107.332138W). The surrounding area is predominately rangeland, periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas pipeline which traverses the area from approximately northwest to southeast.

On March 9, 2018, a release of natural gas was discovered at the Site and reported to Enterprise. Enterprise subsequently isolated and locked the line out of service. On April 19, 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 in service.

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

1.2 Project Objective

The primary objective of the corrective action 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) Remediation Action Levels (RALs) using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as quidance.

2.0 SITE RANKING

The Site is under the jurisdiction of the Jicarilla Apache Nation Environmental Protection Office (JANEPO) and the New Mexico EMNRD OCD. In the absence of published JANEPO regulatory guidance, Apex TITAN Inc. (Apex) references the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*. Apex utilized the general site characteristics obtained during the implementation of corrective action activities and information available from the New Mexico Office of the State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:



Rank	ing Criteria		Ranking Score				
	<50 feet	20					
Depth to Groundwater	50 to 99 feet	10	20				
	>100 feet	0					
Wellhead Protection Area • <1,000 feet from a water	Yes	20	•				
source, or; <200 feet from private domestic water source.	No	0	0				
Distance to Confess Water	<200 feet	20					
Distance to Surface Water	200 to 1,000 feet	10	20				
Body	>1,000 feet	0					
Total R	anking Score		40				

Based on Apex's evaluation of the scoring criteria, the Site would earn a Total Ranking Score of "40". This ranking is based on the following:

- No nearby water wells were identified within a mile on the OSE Water Rights Reporting System (WRRS) database. Based on the distance to an ephemeral wash and the local terrain, groundwater is estimated to be present at less than 50 feet below grade surface (bgs), resulting in a ranking score of "20" for depth to groundwater.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site. These proximities result in a wellhead protection area ranking score of "0".
- The release point is located adjacent to an ephemeral wash, which is identified as a "blue line" on the United States Geological Survey topographic map. This information supports a distance to surface water ranking score of "20".

Based on the site ranking, the New Mexico EMNRD OCD *RALs* for soils located at the Site include: 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total benzene, toluene, ethylbenzene, and total xylenes (BTEX) and 100 mg/kg for combined total petroleum hydrocarbons (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO).

3.0 CORRECTIVE ACTIONS

3.1 Soil Excavation Activities

On March 9, 2018, a release of natural gas was discovered at the Site and reported to Enterprise. Enterprise subsequently isolated and locked the line out of service. On April 19, 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 in service. During the pipeline and earthwork activities, West States Energy Contractors, Inc., provided heavy equipment and labor support, and Apex provided environmental consulting support.

On April 19, 2018, four (4) composite soil samples were collected from the excavation sidewalls (S-1 through S-4). Field screening results indicated that petroleum hydrocarbon impact remained at the floor of the excavation. The floor was further excavated and five (5) additional composite soil samples (S-5 through S-9) were collected from the excavation floor and extended sidewalls on April 23, 2018. Subsequent laboratory analytical results indicate that soils associated with



composite soil sample S-7 exhibit COC concentrations above New Mexico EMRND OCD standards.

The final excavation measured approximately 26 feet long by 13.5 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 14 feet bgs.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty sand, silty clay, and sands.

A total of approximately 220 cubic yards of petroleum hydrocarbon affected soils were transported to 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 JANEPO-approved fill material and then contoured to surrounding grade.

Figure 3 is a map that indicates the approximate sample locations in relation to the excavation extents and the location of the pipeline (Appendix A). Photographic documentation of the field activities is included in Appendix C.

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 nine (9) composite soil samples (S-1 through S-9) from the final excavation.

The 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 soil samples were analyzed for BTEX using Environmental Protection Agency (EPA) SW-846 Method #8021, TPH GRO/DRO/MRO using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0.

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

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by JANEPO and the New Mexico EMNRD OCD. In the absence of published JANEPO regulatory guidance, Apex referenced the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the New Mexico EMNRD OCD rules, specifically New Mexico Administrative Code 19.15.29 *Release Notification*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.



4.1 Soil Samples

Apex compared the BTEX and TPH concentrations or laboratory practical quantitation limits (PQLs) associated with the composite soil samples (S-1 through S-9) to the New Mexico EMNRD OCD *RALs* for sites having a total ranking score of "40".

- The laboratory analyses of the composite soil samples collected from soils remaining in place do not indicate benzene concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD *RAL* of 10 milligrams per kilogram (mg/kg).
- The laboratory analyses of the composite soil sample collected from soils remaining in place do not indicate total BTEX concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD RAL of 50 mg/kg.
- The laboratory analysis of composite soil sample S-7 collected from soils remaining in place indicates a combined TPH GRO/DRO/MRO concentration of 120 mg/kg, which is above the New Mexico EMNRD OCD RAL of 100 mg/kg. The laboratory analysis of composite soil sample S-9 collected from soils remaining in place indicates a combined TPH GRO/DRO/MRO concentration of 17 mg/kg, which is below the New Mexico EMNRD OCD RAL of 100 mg/kg. The laboratory analyses of the remaining composite soil samples collected from soils remaining in place do not indicate combined TPH GRO/DRO/MRO concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD RAL of 100 mg/kg for a Site ranking of "40".
- The laboratory analyses of the composite soil samples (S-5 through S-9) collected from soils remaining in place do not indicate chloride concentrations above the laboratory PQLs.

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

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral 2C-24 release site is located within the Enterprise pipeline ROW in the NW ¼ of Section 11, Township 24 North, Range 5 West, in the Jicarilla Apache Nation, Rio Arriba County, New Mexico. The surrounding area is predominately rangeland, periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas pipeline which traverses the area from approximately northwest to southeast.

On March 9, 2018, a release of natural gas was discovered at the Site and reported to Enterprise. Enterprise subsequently isolated and locked the line out of service. On April 19, 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 in service.

- The primary objective of the corrective actions was to reduce COC concentrations in the on-Site soils to below the New Mexico EMNRD OCD RALs using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty sand, silty clay, and sands.



- The final excavation measured approximately 26 feet long by 13.5 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 14 feet bgs.
- Prior to backfilling, nine (9) composite soil samples were collected from the excavation for laboratory analyses. Based on soil analytical results, soils associated with composite soil samples S-1 through S-6, S-8, and S-9 do not exhibit COC concentrations above the New Mexico EMNRD OCD RALs for a Site ranking of "40".
- The laboratory analysis of composite soil sample S-7 indicates a combined TPH GRO/DRO/MRO concentration of 120 mg/kg, which is above the New Mexico EMNRD OCD RAL of 100 mg/kg.
- A total of approximately 220 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation.
 The excavation was backfilled with JANEPO-approved fill material and contoured to surrounding grade.

Based on laboratory analytical results, the soils associated with composite soil sample S-7 exhibit combined TPH concentrations (120 mg/kg) above the applicable New Mexico EMNRD OCD standard (100 mg/kg). On April 25, 2018, Enterprise received regulatory approval from JANEPO to close the Site. Regulatory correspondence is provided in Appendix F.

6.0 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 or described herein. 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.

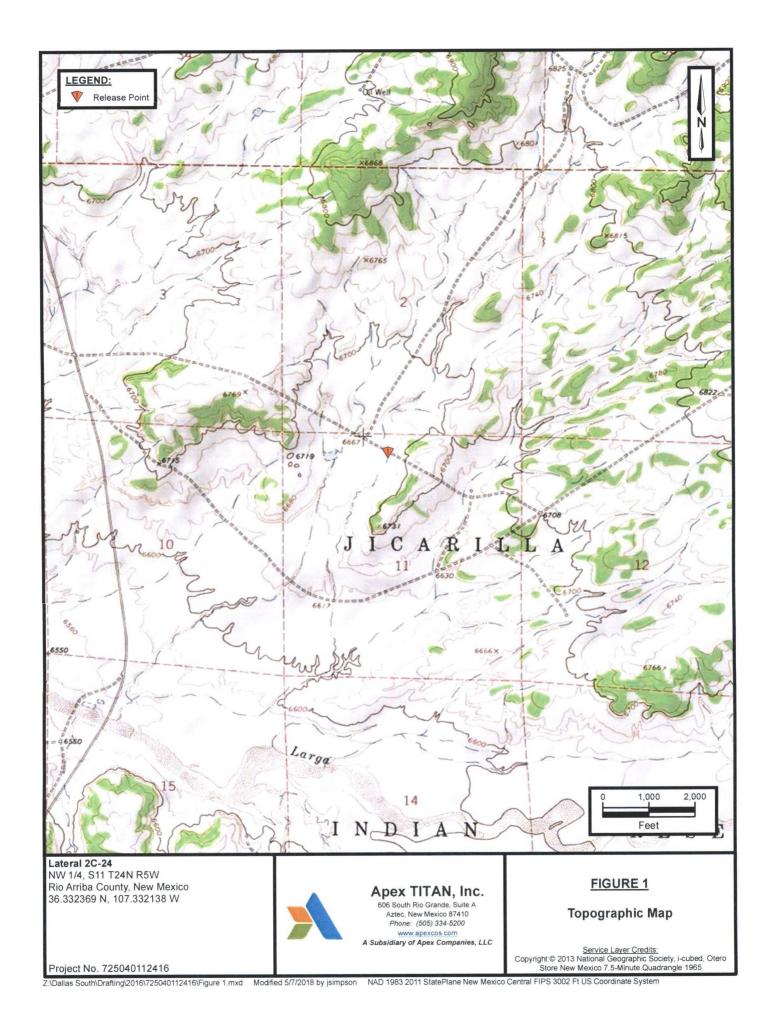
Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence 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.

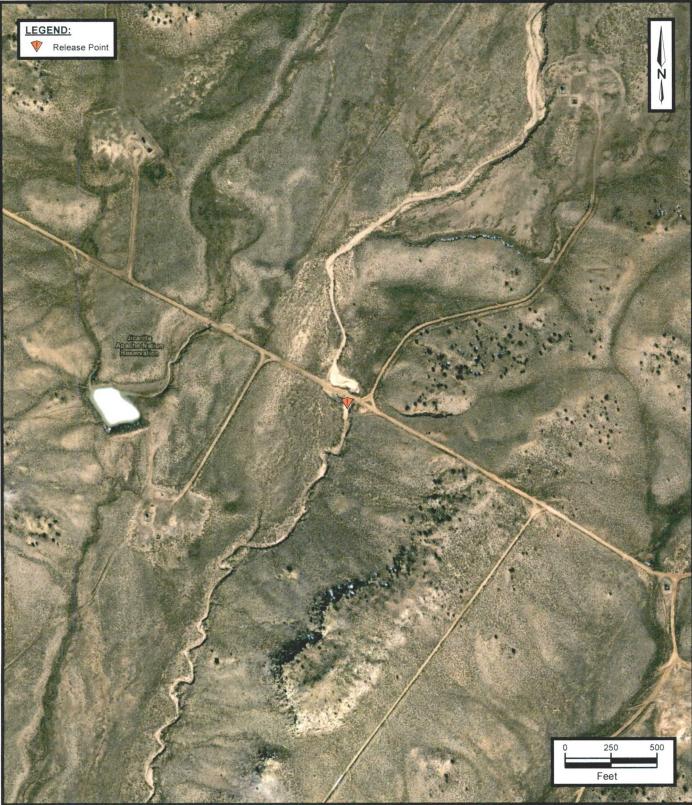
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution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





Lateral 2C-24 NW 1/4, S11 T24N R5W Rio Arriba County, New Mexico 36.332369 N, 107.332138 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

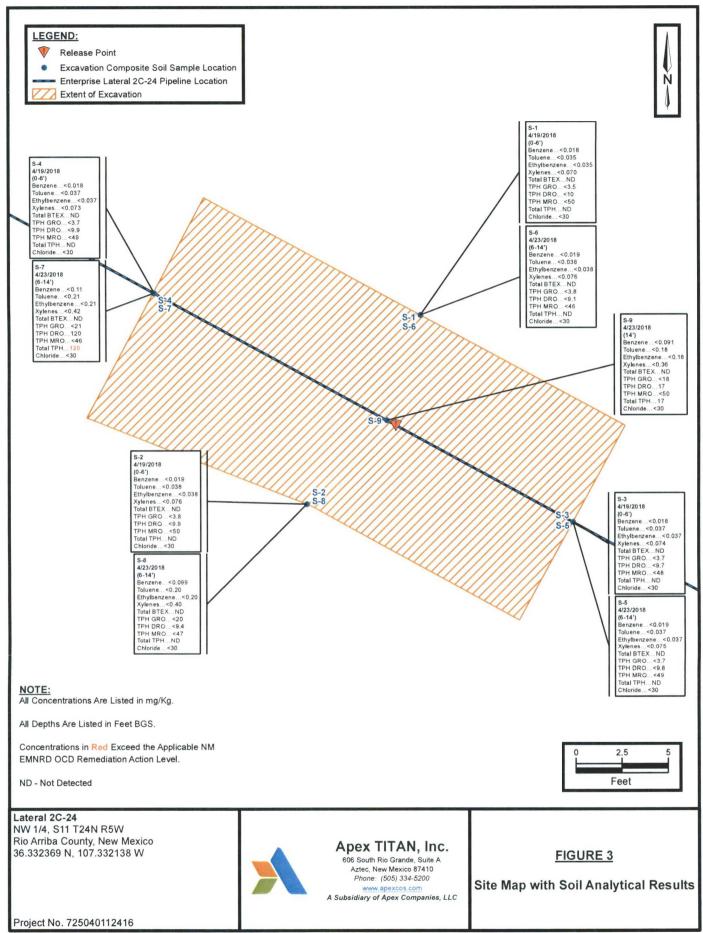
FIGURE 2

Site Vicinity Map

Service Layer Credits

Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community. Source Esri, DiglialCobbe, GeoEye, Earthstar Geographics, tES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Commu

Project No. 725040112416





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 97057-0914 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

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401	Invoice Information: PM: Richard Moore Non AFE: Pending Pay Key: CM22355
2. Originating Site: Lateral 2C-24 Pipeline	
Location of Material (Street Address, City, State or ULSTR): Section 11 T24N R5W; 36.332369, -107.332138 Source and Description of Waste: Hydrocarbon impacted soils associated with a	Apr: 1 2018
4. Source and Description of Waste: Hydrocarbon impacted soils associated with a	release from a natural gas pipeline.
Estimated Volume 50 (yd³) bbls Known Volume (to be entered by the operator at t	he end of the haul) 220 $yd^{3}/$ bbls
5. GENERATOR CERTIFICATION STATEMENT OF W	
I, Thomas Long representative or authorized agent for Enterprise Field Ser PRINT & SIGN NAME COMPANY NAM 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 waste. Operator Use Only: Waste Acceptance Frequency Monthly	action operations and are not mixed with non-
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed haza subpart D, as amended. The following documentation is attached to demonstrate the a the appropriate items)	ardous waste as defined in 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge	☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATE	EMENT FOR LANDFARMS
I, 4-23-18 representative for Enterprise Field Services, LLC authorize Envices authorize Envices ing/sign the Generator Waste Testing Certification.	irotech, Inc. to complete the required
I,	tested for chloride content and that the samples to Section 15 of 19.15.36 NMAC. The results
5. Transporter: TBD M+R, West States, HBL	
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM Address of Facility: Hilltop, NM	01-0011
Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfarm	Landfill Other
Waste Acceptance Status: APPROVED DENIEI	O (Must Be Maintained As Permanent Record)
PRINT NAME: Gray Grab free TITLE: Environme SIGNATURE: Surface Waste Management Facility Authorized Agent TELEPHONE NO.:	ntal Manager DATE: 4/23/18 505-632-0615



APPENDIX C

Photographic Documentation



Photograph 1

View of the source area, facing west.



Photograph 2

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



Photograph 3

View of the final excavation, facing southwest.





Photograph 4

View of the final excavation, facing east.





APPENDIX D

Table



TABLE 1 Lateral 2C-24 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 Remediation Action		10	NE	NE	NE	50				100	NE
						Excavation Cor	nposite Soil Sam	ples					
S-1	04.19.18	С	0 to 6	<0.018	< 0.035	<0.035	< 0.070	ND	<3.5	<10	<50	ND	<30
S-2	04.19.18	С	0 to 6	< 0.019	<0.038	<0.038	< 0.076	ND	<3.8	<9.9	<50	ND	<30
S-3	04.19.18	С	0 to 6	<0.018	< 0.037	<0.037	< 0.074	ND	<3.7	<9.7	<48	ND	<30
S-4	04.19.18	С	0 to 6	<0.018	< 0.037	<0.037	< 0.073	ND	<3.7	<9.9	<49	ND	<30
S-5	04.23.18	С	6 to 14	<0.019	< 0.037	<0.037	<0.075	ND	<3.7	<9.8	<49	ND	<30
S-6	04.23.18	С	6 to 14	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.1	<46	ND	<30
S-7	04.23.18	С	6 to 14	<0.11	<0.21	<0.21	<0.42	ND	<21	120	<46	120	<30
S-8	04.23.18	С	6 to 14	<0.099	<0.20	<0.20	<0.40	ND	<20	<9.4	<47	ND	<30
S-9	04.23.18	С	14	<0.091	<0.18	<0.18	< 0.36	ND	<18	17	<50	17	<30

Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD OCD Remediation Action Level

ND = Not Detected above the Practical Quantitation Limits

NE = Not established

mg/kg = milligram per kilogram



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

May 02, 2018

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

TEL: (903) 821-5603

FAX

RE: LATERAL 2C-24 OrderNo.: 1804A88

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/20/2018 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 23, 2018.

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

Lab Order 1804A88

Date Reported: 5/2/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-1

Project: LATERAL 2C-24

Collection Date: 4/19/2018 11:00:00 AM

Lab ID: 180

1804A88-001

Matrix: SOIL

Received Date: 4/20/2018 7:55:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	5/1/2018 1:00:48 AM	37867
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst:	TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/20/2018 10:15:29 AM	37708
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/20/2018 10:15:29 AM	37708
Surr: DNOP	85.7	70-130	%Rec	1	4/20/2018 10:15:29 AM	37708
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/20/2018 9:50:51 AM	G50729
Surr: BFB	98.3	15-316	%Rec	1	4/20/2018 9:50:51 AM	G50729
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.018	mg/Kg	1	4/20/2018 9:50:51 AM	B50729
Toluene	ND	0.035	mg/Kg	1	4/20/2018 9:50:51 AM	B50729
Ethylbenzene	ND	0.035	mg/Kg	1	4/20/2018 9:50:51 AM	B50729
Xylenes, Total	ND	0.070	mg/Kg	1	4/20/2018 9:50:51 AM	B50729
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	4/20/2018 9:50:51 AM	B50729

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 1804A88

Date Reported: 5/2/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: LATERAL 2C-24

Client Sample ID: S-2

Collection Date: 4/19/2018 11:05:00 AM

Lab ID: 1804A88-002

Matrix: SOIL

Received Date: 4/20/2018 7:55:00 AM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	5/1/2018 1:13:13 AM	37867
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	3			Analyst:	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/20/2018 10:37:17 AM	37708
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/20/2018 10:37:17 AM	37708
Surr: DNOP	92.9	70-130	%Rec	1	4/20/2018 10:37:17 AM	37708
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/20/2018 10:14:27 AM	G50729
Surr: BFB	99.7	15-316	%Rec	1	4/20/2018 10:14:27 AM	G50729
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.019	mg/Kg	1	4/20/2018 10:14:27 AM	B50729
Toluene	ND	0.038	mg/Kg	1	4/20/2018 10:14:27 AM	B50729
Ethylbenzene	ND	0.038	mg/Kg	1	4/20/2018 10:14:27 AM	B50729
Xylenes, Total	ND	0.076	mg/Kg	1	4/20/2018 10:14:27 AM	B50729
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	4/20/2018 10:14:27 AM	B50729

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 1804A88

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/2/2018

CLIENT: APEX TITAN Client Sample ID: S-3

 Project:
 LATERAL 2C-24
 Collection Date: 4/19/2018 11:10:00 AM

 Lab ID:
 1804A88-003
 Matrix: SOIL
 Received Date: 4/20/2018 7:55:00 AM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	5/1/2018 1:25:38 AM	37867
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/20/2018 10:59:16 AM	1 37708
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/20/2018 10:59:16 AM	1 37708
Surr: DNOP	91.3	70-130	%Rec	1	4/20/2018 10:59:16 AM	1 37708
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/20/2018 10:37:56 AM	d G50729
Surr: BFB	90.3	15-316	%Rec	1	4/20/2018 10:37:56 AM	d G50729
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.018	mg/Kg	1	4/20/2018 10:37:56 AM	1 B50729
Toluene	ND	0.037	mg/Kg	1	4/20/2018 10:37:56 AN	1 B50729
Ethylbenzene	ND	0.037	mg/Kg	1	4/20/2018 10:37:56 AM	1 B50729
Xylenes, Total	ND	0.074	mg/Kg	1	4/20/2018 10:37:56 AM	1 B50729
Surr: 4-Bromofluorobenzene	98.6	80-120	%Rec	1	4/20/2018 10:37:56 AM	1 B50729

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 **1804A88**Date Reported: **5/2/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-4

 Project:
 LATERAL 2C-24
 Collection Date: 4/19/2018 1:00:00 PM

 Lab ID:
 1804A88-004
 Matrix: SOIL
 Received Date: 4/20/2018 7:55:00 AM

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	5/1/2018 1:38:03 AM	37867
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/20/2018 11:21:13 AM	37708
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/20/2018 11:21:13 AM	37708
Surr: DNOP	95.2	70-130	%Rec	1	4/20/2018 11:21:13 AM	37708
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/20/2018 11:01:27 AM	G50729
Surr: BFB	87.5	15-316	%Rec	1	4/20/2018 11:01:27 AM	G50729
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.018	mg/Kg	1	4/20/2018 11:01:27 AM	B50729
Toluene	ND	0.037	mg/Kg	1	4/20/2018 11:01:27 AM	B50729
Ethylbenzene	ND	0.037	mg/Kg	1	4/20/2018 11:01:27 AM	B50729
Xylenes, Total	ND	0.073	mg/Kg	1	4/20/2018 11:01:27 AM	B50729
Surr: 4-Bromofluorobenzene	96.5	80-120	%Rec	1	4/20/2018 11:01:27 AM	B50729

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 8
- 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#: 1804A88

02-May-18

Client: APEX TITAN
Project: LATERAL 2C-24

Sample ID MB-37867 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 37867 RunNo: 50935

Prep Date: 4/30/2018 Analysis Date: 5/1/2018 SeqNo: 1653639 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID LCS-37867 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 37867 RunNo: 50935

Prep Date: 4/30/2018 Analysis Date: 5/1/2018 SeqNo: 1653640 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 95.1 90 110

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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 8

Hall Environmental Analysis Laboratory, Inc.

WO#: 1804A88

02-May-18

Client:	APEX TITAN					
Project:	LATERAL 2C-24					

Project:	LATERAL	. 2C-24									
Sample ID LCS-	-37708	SampT	ype: LC	S	Test	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCS	S	Batch	h ID: 37	708	R	RunNo: 5	0717				
Prep Date: 4/20	0/2018	Analysis D)ate: 4/	20/2018	S	SeqNo: 1	645291	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organio	cs (DRO)	48	10	50.00	0	96.1	70	130			
Surr: DNOP		4.0		5.000		80.9	70	130			
Sample ID MB-37708 SampType: MBLK					Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS		Batch	h ID: 37	708	R	RunNo: 5	0717				
Prep Date: 4/2	0/2018	Analysis D)ate: 4/	20/2018	S	SeqNo: 1	645292	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organio	cs (DRO)	ND	10								
Motor Oil Range Orga	anics (MRO)	ND	50								
Surr: DNOP		9.3		10.00		92.7	70	130			
Sample ID 1804	A88-001AMS	SampT	Гуре: М	3	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: S-1		Batch	h ID: 37	708	RunNo: 50717						
Prep Date: 4/2	0/2018	Analysis D)ate: 4/	20/2018	S	SeqNo: 1	645675	Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organio	cs (DRO)	47	9.3	46.30	2.973	94.3	55.8	125			
Surr: DNOP		3.7		4.630		79.3	70	130			
Sample ID 1804A88-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics											
Sample ID 1804	A88-001AMSD	SampT	ype: MS	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID 1804 Client ID: S-1	A88-001AMSD		Гуре: М .§ h ID: 37			tCode: E		8015M/D: Di	esel Rang	e Organics	
			h ID: 37	708	F		0717	8015M/D: Di Units: mg/		e Organics	
Client ID: S-1		Batch	h ID: 37	708 20/2018	F	RunNo: 5	0717			e Organics RPDLimit	Qual
Client ID: S-1 Prep Date: 4/2	0/2018	Batch Analysis D	h ID: 37 Date: 4 /	708 20/2018	F	RunNo: 5 SeqNo: 1	60717 645765	Units: mg/h	(g		Qual

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

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 J

Page 6 of 8

P Sample pH Not In Range

RLReporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804A88**

02-May-18

Client: APEX TITAN
Project: LATERAL 2C-24

Sample ID RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: **PBS** Batch ID: G50729 RunNo: 50729 Prep Date: Analysis Date: 4/20/2018 SeqNo: 1645977 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 840 1000 84.5 15 316

Sample ID 2.5UG GRO LCS TestCode: EPA Method 8015D: Gasoline Range SampType: LCS Client ID: LCSS Batch ID: G50729 RunNo: 50729 Prep Date: Analysis Date: 4/20/2018 SeqNo: 1645978 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 0 103 75.9 131 Surr: BFB 1000 1000 100 15 316

Sample ID 1804A88-001AMS TestCode: EPA Method 8015D: Gasoline Range SampType: MS Client ID: S-1 Batch ID: G50729 RunNo: 50729 Prep Date: Analysis Date: 4/20/2018 SeqNo: 1645979 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 21 3.5 17.58 2.145 105 77.8 128 Surr: BFB 740 703.2 105 316 15

Sample ID 1804A88-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range Client ID: S-1 Batch ID: G50729 RunNo: 50729 Prep Date: Analysis Date: 4/20/2018 SeqNo: 1645980 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 20 3.5 17.58 2.145 103 77.8 128 1.44 20 Surr: BFB 760 703.2 109 0 0 15 316

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 7 of 8

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#: **1804A88**

02-May-18

Client:

APEX TITAN

Project: LATERAL 2C-24

Sample ID RB	SampT	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch	Batch ID: B50729		F	RunNo: 50729					
Prep Date:	Analysis Date: 4/20/2018		8	SeqNo: 1646002			(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	0.97		1.000		97.3	80	120			

Sample ID 100NG BTEX LC	SampT	S SampType: LCS TestCode: EPA Method 8					8021B: Vola	tiles		
Client ID: LCSS	Batch	Batch ID: B50729 RunNo: 50729								
Prep Date:	Analysis D	Date: 4/	20/2018	S	SeqNo: 1	646003	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.7	77.3	128			
Toluene	0.98	0.050	1.000	0	98.4	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	98.1	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	101	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID 1804A88-002AMS	SampTyp	SampType: MS TestCode: EPA Method 8021B: Volatiles								
Client ID: S-2	Batch ID: B50729			F	RunNo: 50729					
Prep Date:	Analysis Dat	e: 4/	20/2018	8	SeqNo: 1	646004	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.019	0.7570	0	96.9	68.5	133			
Toluene	0.76	0.038	0.7570	0.006964	99.0	75	130			
Ethylbenzene	0.74	0.038	0.7570	0.008327	96.8	79.4	128			
Xylenes, Total	2.3	0.076	2.271	0.01226	100	77.3	131			
Surr: 4-Bromofluorobenzene	0.75		0.7570		99.7	80	120			

Sample ID 1804A88-002AM	SD SampType: MSD TestCode: EPA Method 8021B: Volatiles									
Client ID: S-2	Batch ID: B50729			R	RunNo: 50729					
Prep Date:	Analysis D	ate: 4/	20/2018	S	SeqNo: 1	646005	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.019	0.7570	0	96.1	68.5	133	0.839	20	
Toluene	0.75	0.038	0.7570	0.006964	97.6	75	130	1.45	20	
Ethylbenzene	0.74	0.038	0.7570	0.008327	96.7	79.4	128	0.133	20	
Xylenes, Total	2.3	0.076	2.271	0.01226	99.2	77.3	131	0.932	20	
Surr: 4-Bromofluorobenzene	0.80		0.7570		105	80	120	0	0	

Qualifiers:

 Value exceeds Maximum Contan 	ninant Level.
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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 8

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:	1804A88	RcptNo: 1
		× , '
Received By: Anne Thorne 4/20/2018 7:55:00 AM	ann Am	
Completed By: Anne Thorne 4/20/2018 8:17:11 AM	an In	
Reviewed By: Ino 4/20/18 CB: ENM		
Chain of Custody		
1. Is Chain of Custody complete?	Yes ✓ No 🗆	Not Present
2. How was the sample delivered?	Courier	
<u>Log In</u>	3	
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(s)?	Yes ✔ No □	
7. Are samples (except VOA and ONG) properly preserved?	Yes ✓ No □	
8. Was preservative added to bottles?	Yes ☐ No 🗹	NA
9. VOA vials have zero headspace?	Yes No No No	O VOA Vials
10. Were any sample containers received broken?		of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		ottles checked r pH: (<\online\nline
12. Are matrices correctly identified on Chain of Custody?	Yes ☑ No □	Adjusted?
13. Is it clear what analyses were requested?	Yes V No 🗆 🕻	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✓ No □	Checked by:
Special Handling (if applicable)	and the second second	
15. Was client notified of all discrepancies with this order?	Yes . No .	NA 🗹
Person Notified: Date	COLOR DE LOCATION DE LA COLOR DE LA CAMBRILLA ANGESCOLARISMA ENCLASIONE	- U - U - U - U - U - U - U - U - U - U
By Whom: Via:	eMail Phone Fax	In Person
Regarding:		SE AUX CALL A EXPANSION AND REPORT SERVICE AND REPORT OF THE SERVICE A
Client Instructions:		reconstruction of Milliothic Action and Acti
16. Additional remarks:		
CUSTODY SEALS INTACT ON SOIL JARS/at 4/20/18		
17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No S 1 1.0 Good Yes	eal Date Signed By	

				CHAIN OF CUSTODY RECORD
APEX	Hall Laboratory: Lub Address: 4901	Lineiroamente	ANALYSIS REQUESTED	Lab use only Due Date:
Office Location 606 SR's Grande Su. I A AzLec NM 87401	Albuquer que Contact: # Fize Phone: 505-30	Nm 87109 men 15-3575		Temp. of coolers / O when received (C°): 1 2 3 4 5 Page of
Chad DAponti Proj. No. Project Name	Sampler's Signature	No/Type of Containers		
p b	ks of Sample(s) true Optity	VOA A/G 11L. 250 ml Glass Jar P/O		Lab Sample ID (Lab Use Only)
5 4/9/18 1100 X S-1 5 4/9/18 1105 X S-2 5 4/9/18 1110 X S-3)	X X	1804A88-001 702 703
5 1/1918 1300 x 5-4	86	1	VK	-204
Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) Date: T Date: T Date: T	ime: Received by: (Signatime: Received by: Received b	ature) Date:	Time: NOTES: 1525 Pay Kry A OT55 Time: PM Ton Lo Time: AFE # N	Cm 22355 Day
Container VOA - 40 ml vial A/G - Amber / Or		Glass wide mouth P/O - Pl	rcoal tube SL - studge O - Oil lastic or other lexico 87410 • Office: 505-334-5	(OC Seal 200 · 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

April 25, 2018

Kyle Summers

APEX TITAN

606 S. Rio Grande Unit A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Lateral 2C-24 OrderNo.: 1804B67

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/24/2018 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1804B67

Date Reported: 4/25/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lateral 2C-24

Lab ID:

1804B67-001

Client Sample ID: S-5

Collection Date: 4/23/2018 1:20:00 PM

Matrix: SOIL Received Date: 4/24/2018 6:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	ND	30	mg/Kg	20	4/24/2018 11:44:37 AN	1 37760
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/24/2018 9:49:55 AM	37757
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/24/2018 9:49:55 AM	37757
Surr: DNOP	89.5	70-130	%Rec	1	4/24/2018 9:49:55 AM	37757
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	4/24/2018 9:43:58 AM	37744
Surr: BFB	90.6	15-316	%Rec	1	4/24/2018 9:43:58 AM	37744
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	4/24/2018 9:43:58 AM	37744
Toluene	ND	0.037	mg/Kg	1	4/24/2018 9:43:58 AM	37744
Ethylbenzene	ND	0.037	mg/Kg	1	4/24/2018 9:43:58 AM	37744
Xylenes, Total	ND	0.075	mg/Kg	1	4/24/2018 9:43:58 AM	37744
Surr: 4-Bromofluorobenzene	100	80-120	%Rec	1	4/24/2018 9:43:58 AM	37744

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

Lab Order **1804B67**

Date Reported: 4/25/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lateral 2C-24

Lab ID:

1804B67-002

Client Sample ID: S-6

Collection Date: 4/23/2018 1:30:00 PM Received Date: 4/24/2018 6:30:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch Analyst: MRA **EPA METHOD 300.0: ANIONS** 4/24/2018 11:57:01 AM 37760 ND Chloride 30 mg/Kg Analyst: TOM **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** 4/24/2018 10:13:34 AM 37757 ND 9.1 mg/Kg 1 Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) ND 46 mg/Kg 4/24/2018 10:13:34 AM 37757 Surr: DNOP %Rec 4/24/2018 10:13:34 AM 37757 89.4 70-130 Analyst: NSB **EPA METHOD 8015D: GASOLINE RANGE** 4/24/2018 10:07:17 AM 37744 Gasoline Range Organics (GRO) ND 3.8 mg/Kg Surr: BFB 84.4 15-316 %Rec 4/24/2018 10:07:17 AM 37744 Analyst: NSB **EPA METHOD 8021B: VOLATILES** 4/24/2018 10:07:17 AM 37744 Benzene ND 0.019 mg/Kg 4/24/2018 10:07:17 AM 37744 Toluene ND 0.038 mg/Kg 4/24/2018 10:07:17 AM 37744 Ethylbenzene ND 0.038 mg/Kg Xylenes, Total ND 0.076 mg/Kg 4/24/2018 10:07:17 AM 37744 Surr: 4-Bromofluorobenzene 97.3 80-120 %Rec 4/24/2018 10:07:17 AM 37744

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

Lab Order 1804B67

Date Reported: 4/25/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lateral 2C-24

Lab ID:

1804B67-003 **Matrix:** SOIL

Client Sample ID: S-7

Collection Date: 4/23/2018 1:40:00 PM Received Date: 4/24/2018 6:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/24/2018 12:09:25 PM	37760
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	120	9.2	mg/Kg	1	4/24/2018 10:37:11 AM	37757
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/24/2018 10:37:11 AM	37757
Surr: DNOP	92.5	70-130	%Rec	1	4/24/2018 10:37:11 AM	37757
EPA METHOD 8015D: GASOLINE RAM	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	21	mg/Kg	5	4/24/2018 10:30:36 AM	37744
Surr: BFB	99.5	15-316	%Rec	5	4/24/2018 10:30:36 AM	37744
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.11	mg/Kg	5	4/24/2018 10:30:36 AM	37744
Toluene	ND	0.21	mg/Kg	5	4/24/2018 10:30:36 AM	37744
Ethylbenzene	ND	0.21	mg/Kg	5	4/24/2018 10:30:36 AM	37744
Xylenes, Total	ND	0.42	mg/Kg	5	4/24/2018 10:30:36 AM	37744
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	5	4/24/2018 10:30:36 AM	37744

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

Analytical Report

Lab Order 1804B67

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 4/25/2018

CLIENT: APEX TITAN Client Sample ID: S-8

 Project:
 Lateral 2C-24
 Collection Date: 4/23/2018 1:50:00 PM

 Lab ID:
 1804B67-004
 Matrix: SOIL
 Received Date: 4/24/2018 6:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/24/2018 12:21:49 PM	37760
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/24/2018 11:01:02 AM	37757
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/24/2018 11:01:02 AM	37757
Surr: DNOP	88.9	70-130	%Rec	1	4/24/2018 11:01:02 AM	37757
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	20	mg/Kg	5	4/24/2018 10:53:55 AM	37744
Surr: BFB	89.1	15-316	%Rec	5	4/24/2018 10:53:55 AM	37744
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.099	mg/Kg	5	4/24/2018 10:53:55 AM	37744
Toluene	ND	0.20	mg/Kg	5	4/24/2018 10:53:55 AM	37744
Ethylbenzene	ND	0.20	mg/Kg	5	4/24/2018 10:53:55 AM	37744
Xylenes, Total	ND	0.40	mg/Kg	5	4/24/2018 10:53:55 AM	37744
Surr: 4-Bromofluorobenzene	97.8	80-120	%Rec	5	4/24/2018 10:53:55 AM	37744

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

Analytical Report

Lab Order 1804B67

Date Reported: 4/25/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lateral 2C-24

Lab ID: 1804B67-005

Client Sample ID: S-9

Collection Date: 4/23/2018 2:00:00 PM

Received Date: 4/24/2018 6:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	4/24/2018 12:34:14 PM	37760
EPA METHOD 8015M/D: DIESEL RANGI	ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	17	10	mg/Kg	1	4/24/2018 11:24:44 AM	37757
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/24/2018 11:24:44 AM	37757
Surr: DNOP	90.7	70-130	%Rec	1	4/24/2018 11:24:44 AM	37757
EPA METHOD 8015D: GASOLINE RANG	SE .				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	4/24/2018 11:17:23 AM	37744
Surr: BFB	87.8	15-316	%Rec	5	4/24/2018 11:17:23 AM	37744
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.091	mg/Kg	5	4/24/2018 11:17:23 AM	37744
Toluene	ND	0.18	mg/Kg	5	4/24/2018 11:17:23 AM	37744
Ethylbenzene	ND	0.18	mg/Kg	5	4/24/2018 11:17:23 AM	37744
Xylenes, Total	ND	0.36	mg/Kg	5	4/24/2018 11:17:23 AM	37744
Surr: 4-Bromofluorobenzene	97.7	80-120	%Rec	5	4/24/2018 11:17:23 AM	37744

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 5 of 10
- 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#:

1804B67

25-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C-24

Sample ID MB-37760

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 37760

PQL

1.5

RunNo: 50801

Analysis Date: 4/24/2018

Units: mg/Kg

%RPD

%RPD

Prep Date: 4/24/2018

Result

SeqNo: 1648668

HighLimit

RPDLimit

Qual

Analyte Chloride

ND 1.5

Sample ID LCS-37760 LCSS

SampType: LCS

TestCode: EPA Method 300.0: Anions

Prep Date: 4/24/2018 Batch ID: 37760

RunNo: 50801

Analysis Date: 4/24/2018

SeqNo: 1648669 %REC

Units: mg/Kg

RPDLimit Qual

Analyte Chloride

Client ID:

PQL Result

14

SPK value SPK Ref Val 15.00

94.7

0

SPK value SPK Ref Val %REC LowLimit

LowLimit

90

HighLimit

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Practical Quanitative Limit **PQL**

% 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 Page 6 of 10

P Sample pH Not In Range

Reporting Detection Limit RL

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804B67

25-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C-24

Project:	Lateral 20	J-24									
Sample ID	LCS-37757	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch	ID: 37	757	F	RunNo: 5	0794				
Prep Date:	4/24/2018	Analysis Da	te: 4	/24/2018	S	SeqNo: 1	647834	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	47	10	50.00	0	93.1	70	130			
Surr: DNOP		3.9		5.000		77.5	70	130			
Sample ID	MB-37757	SampTy	pe: MI	BLK	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch	ID: 37	757	F	RunNo: 5	0794				
Prep Date:	4/24/2018	Analysis Da	te: 4	/24/2018	S	SeqNo: 1	647835	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	ND	10								
	ge Organics (MRO)	ND	50								
Surr: DNOP		8.7		10.00		86.9	70	130			
Sample ID	1804B67-001AMS	SampTy	pe: M	S	Tes	tCode: E	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	S-5	Batch	ID: 37	757	F	RunNo: 5	0794				
Prep Date:	4/24/2018	Analysis Da	ate: 4	/24/2018	8	SeqNo: 1	648084	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	48	9.9		1.959	92.9	55.8	125			
Surr: DNOP		4.5		4.936		90.9	70	130			
Sample ID	1804B67-001AMS	D SampTy	pe: M	SD	Tes	tCode: E	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:	S-5	Batch	ID: 37	757	F	RunNo: 5	0794				
Prep Date:	4/24/2018	Analysis Da	ate: 4	/24/2018	8	SeqNo: 1	648085	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	51	10		1.959	96.5	55.8	125	5.70	20	
Surr: DNOP		4.6		5.045		90.7	70	130	0	0	
Sample ID	LCS-37745	SampTy	pe: LC	cs	Tes	tCode: E	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch	ID: 37	745	F	RunNo: 5	0794				
Prep Date:	4/23/2018	Analysis Da	ate: 4	/24/2018	8	SeqNo: 1	648086	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.1		5.000		82.3	70	130			
Sample ID	MB-37745	SampTy	pe: M	BLK	Tes	tCode: E	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:		Batch	ID: 37	745		RunNo: 5				-	
Prep Date:	4/23/2018	Analysis Da	ate: 4	/24/2018	5	SeqNo: 1	648087	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
,								3			

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 7 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804B67**

25-Apr-18

Client: APEX TITAN
Project: Lateral 2C-24

Sample ID MB-37745 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 37745 RunNo: 50794

Prep Date: 4/23/2018 Analysis Date: 4/24/2018 SeqNo: 1648087 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 9.0 10.00 89.6 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 8 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804B67**

25-Apr-18

Client: APEX TITAN
Project: Lateral 2C-24

Sample ID MB-37744	SampT	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batcl	n ID: 37	744	R	tunNo: 50	0797				
Prep Date: 4/23/2018	Analysis D	Date: 4/	24/2018	S	eqNo: 1	648227	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	880		1000		87.8	15	316			

Sample ID LCS-37744	SampT	ype: LC	S	Test	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch	ID: 37	744	R	RunNo: 5	0797				
Prep Date: 4/23/2018	Analysis D	ate: 4/	24/2018	S	SeqNo: 1	648228	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	75.9	131			
Surr: RER	980		1000		98.0	15	316			

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 9 of 10

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804B67

25-Apr-18

Qual

Client:

APEX TITAN

Project: Lateral 2C-24

Sample ID MB-37744 SampType: MBLK TestCode: EPA Method 8021B: Volatiles
Client ID: PBS Batch ID: 37744 RunNo: 50797

Prop Date: 4/32/2018 Applies Date: 4/34/2018

Prep Date: 4/23/2018 Analysis Date: 4/24/2018 SeqNo: 1648262 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result ND 0.025 Benzene Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 0.97 1.000 97.1 80 120

Sample ID LCS-37744	Sampi	ype: LC	E: LCS TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch	Batch ID: 37744 RunNo: 50797								
Prep Date: 4/23/2018	Analysis D	ate: 4/	24/2018	SeqNo: 1648263 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.8	77.3	128			
Toluene	1.0	0.050	1.000	0	102	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	102	80.7	127			
Xylenes, Total	3.2	0.10	3.000	0	106	81.6	129			
Surr: 4-Bromofluorobenzene	0.00		1 000		08.8	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 10 of 10

P Sample pH Not In Range

RL Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

Sample Log-In Check List

Client Name: APEX AZTEC	Work Order Number:	1804B67	•		RcptNo:	1 .
• •	* :		· · · · · · · · · · · · · · · · · · ·			*
Received By: Anne Thorne	4/24/2018 6:30:00 AM		a	ne A	-	
Completed By: Anne Thorne	4/24/2018 6:46:48 AM		0	n A		* : · · · · · · · · · · · · · · · · · ·
Reviewed By:	9/24/18		, a	ra pr		
		•				
Chain of Custody						
Is Chain of Custody complete?		Yes 🗹		lo 🗌	Not Present	
2. How was the sample delivered?		Courier				
			4			
Log In 3. Was an attempt made to cool the samples	2	Yes 🗸		lo 🗌	NA 🗀	
5. Was all attempt made to cool the samples		103 🖳	. 20			* **
4. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes 🗸	N	lo 🗀	NA 🗆	
5 Sample(a) in prepar container(a)?		Yes 🗹		lo 🗌		
5. Sample(s) in proper container(s)?		res 🖳				
6. Sufficient sample volume for indicated test	(s)?	Yes 🗸	N	o 🗆		
7. Are samples (except VOA and ONG) prope	erly preserved?	Yes 🗹	N	0 🗆		
8. Was preservative added to bottles?		Yes	N	0	NA 🗆	
9. VOA vials have zero headspace?		Yes	N	o 🗆	No VOA Vials ✓	
10. Were any sample containers received brok	ken?	Yes	N	lo 🗹		9
		ē.			# of preserved bottles checked	
11. Does paperwork match bottle labels?		Yes 🗸	N	o 🗆	for pH:	40laaa aadaal\
(Note discrepancies on chain of custody)	f Custodia	Yes 🗸	· N	。	(<2 or	>12 unless noted)
12. Are matrices correctly identified on Chain of 13. Is it clear what analyses were requested?	Custody?	Yes V	- 1	0 🗆		
14. Were all holding times able to be met?		Yes 🗹		0 🗆	Checked by:	
(If no, notify customer for authorization.)				100		
Special Handling (if applicable)	<u>.</u>	` \				
15. Was client notified of all discrepancies with	this order?	Yes.		lo 🗌	NA 🗸	
Person Notified:	Date	SCHOOL SELECTION CO.	***************************************			
By Whom:	Via:	eMail	Phone	Fax	In Person	
Regarding:	TO A PERSON AND THE CONTROL OF A CANADA STATE OF THE STAT					
Client Instructions:						
16. Additional remarks:						
CUSTODY SEALS ON SOIL JARS/a	at 4/24/18				,	
17. Cooler Information	energopiano model i di el disconi		vilus se ses s	of the free	·	
	Seal Intact Seal No S es	eal Date	Signe	d By	打	
11.0 Good 11	US I	an indicate control on the control of the design general				

				CHAIN OF CUSTODY RECO
	11 - 1			ANALYSIS / / / Lab use only
	l aboratory: A	Environ	mental	REQUESTED Due Date:
APEX	Laboratory: And	145) S LU	boratory	
	Address: 4901			Temp. of coolers when received (C°):
Office Location	Albuguerg	ue, NIV		Wildlife Edited (C).
1000 S. RIO Carande Swite &	Contact:	Freman		
Project Manager K. Summers	Phone:	- 345-3	975	Page
Project Manager K. Sammers	PO/SO#:	See not	45	
Sampler's Name	Sampler's Signature			
Runer Drechilly	to Robert			Temp. of coolers when received (C°): 1 2 3 4 E Page
rioj. No.	,	No/Type of	Containers	
725040112416 Lateral				7
Matrix Date Tirne O r dentifying Mar	rks of Sample(s)	VOA VOA	250 Glass Jar P/O	Lab Sample ID (Lab Use Only)
5 4/23/18 1320 X 5-	5)	XXX 1804 B67-001
5 4/23/18 1330 X 5-	6		1	702
5 4/23/18 1340 X 5- 5 4/23/18 1350 X 5.	7)	X X X 703 X X X 704 X X X 705
5 4/23/18 1350 X 5.)	X X X 704
54/23/18/1400 X S.	-9		1	XXX TUS
5 (1-7)(1 / 100 / 5	•			
	NES			
Turn around time) 50% Rush	ish SAME	- DAY	
Reliequished by (Signature) Date:	Time: Received by: (S	Signature)	Date:	Time: NOTES: DAY Took / AND
Frind enhly 14/23/18 17		Jare	4/23/18	
Relinquished by (Signature) Date: 423/18 18	Time: Received by: (S	ngnature)	Date: 04/24/0	Time: Pay key - CM 22355 500
	Time: Received by: (S	signature)	Date:	Time: Non AFE - N 35650 Jar
Relinquished by (Signature) Date:	Time: Received by: (S	ignature)	Date:	Time: SAME DAY
Matrix WW - Wastewater W - Water S Container VOA - 40 ml vial A/G - Amber / O		Liquid A - Air B		arcoal tube SL - sludge O - Oil Plastic or other



Appendix F Regulatory Correspondence From: Hobson Sandoval

To: Long, Thomas; Tecube Cordell; Jason Sandoval

Subject: Re: FW: FW: Lateral 2C-24 - Section 11 T24N R5W; 36.332369, -107.332138

Date: Wednesday, April 25, 2018 9:24:43 AM

Attachments: Rpt 1804A88 Final v1.pdf Lateral 2C-24.pdf

2C-24 site sketch draft.pdf

image001.gif

I have been to that site several times. I have pleased with the quality of work. Yes, I agree that the TPH of 120 at S-7 is a little high, but the lab values for the rest of the sites are below OCD closure standards. We can live with that. So, EPO approves your request to back fill. We will have to find a site from which to get "clean" back fill soil.

On Wednesday, April 25, 2018, 7:47:38 AM MDT, Long, Thomas <tjlong@eprod.com> wrote:

Hobson,

Please see the email below.

Tom Long

505-599-2286 (office)

505-215-4727 (Cell)

tilong@eprod.com

From: Long, Thomas

Sent: Tuesday, April 24, 2018 2:18 PM

To: 'Hobson Sandoval'; 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)'; Fields, Vanessa, EMNRD

(Vanessa.Fields@state.nm.us)

Cc: Stone, Brian

Subject: RE: FW: Lateral 2C-24 - Section 11 T24N R5W; 36.332369, -107.332138

Hobson,

Please find the attached site sketch and laboratory reports for the Lateral 2C-24 excavation. All sample results are below the site specific remediation standard of 10 ppm Benzene, 50 ppm BTEX and 100 ppm TPH except for S-7 (West Side Wall, 6-14' depth interval) sample with a result of 120 ppm TPH (DRO). Enterprise requests a variance for this elevated TPH concentration and requests to backfill the excavation. Please acknowledge this variance request.

Sincerely,

Tom Long

505-599-2286 (office)

505-215-4727 (Cell)

tilong@eprod.com

From: Hobson Sandoval [mailto:hsandoval 99@yahoo.com]

Sent: Monday, April 23, 2018 9:16 AM

To: Long, Thomas

Subject: Re: FW: Lateral 2C-24 - Section 11 T24N R5W; 36.332369, -107.332138

I will be there at 2 pm today when soil samples will be taken for west wall and bottom.

On Tuesday, April 17, 2018, 10:05:37 AM MDT, Long, Thomas < tilong@eprod.com > wrote:

Hobson,

This email is to notify you that Enterprise has scheduled the repairs and remediation for the Lateral 2C-24 release for Thursday, April 19, 2018. It was re-scheduled from late March until now due to access issues associated with

inclement weather. I will keep you informed as to when we may collect soil samples for laboratory analysis. If you have any questions, please call or email.

Sincerely,

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

From: Long, Thomas

Sent: Monday, March 26, 2018 10:07 AM

To: 'Smith, Cory, EMNRD (Cory, Smith@state.nm.us)'; 'hsandoval 99@outlook.com'; hsandoval 99@yahoo.com

Cc: Stone, Brian

Subject: FW: Lateral 2C-24 - Section 11 T24N R5W; 36.332369, -107.332138

Cory, Hobson,

This email is to notify you that Enterprise has scheduled the remediation activities at the Lateral 2C-24 release site to begin tomorrow, March 27, 2018. I will keep you informed as to when we may collect soil samples for laboratory analysis. 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: Friday, March 09, 2018 1:48 PM

To: 'hsandoval_99@outlook.com'; hsandoval_99@yahoo.com; 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)'

Cc: Stone, Brian; Moore, Richard

Subject: Lateral 2C-24 - Section 11 T24N R5W; 36.332369, -107.332138

Hobson/Cory,

This email is to notify you that Enterprise had a release of natural gas from the Lateral 2C-24 pipeline. The release is located <u>in a wash</u>. <u>No fluids</u> were observed on the ground surface. The pipeline is currently being blown down, locked out and tagged out. The release is located at Section 11 T24N R5W; 36.332369, -107.332138. I will keep you informed as to when repairs and remediation are scheduled. 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)
tilong@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 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural** Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

				Odili	a 1 0, 11111 0	1000					
	Release Notification and Corrective Action										
					OPERATO	R	\boxtimes	Initial	Report		Final Repor
Name of C	ompany E	nterprise F	ield Serv	rices, LLC	Contact T	homas Long					
Address 614 Reilly Ave, Farmington, NM 87401 Telephone No. 505-599-2286											
Facility Name C-37 Y-1 Drip Tank Facility Type Condensate Drip Tank											
Surface Owner BLM Mineral Owner BLM Serial No. NA											
				LOCAT	ION OF RE	LEASE					
Unit Letter G	Section 19	Township 27N	Range 6W		North South ine	Feet from the 1747	East M Line	/est	County Rio Arrib	ра	
	Latitude 36 590686 Longitude -107 522528 NAD83										

NATURE	OF RELEASE		
Type of Release: Condensate and Water	Volume of Release Approximately 14 Barrels of Condensate/Water		ecovered Approximately s of Condensate/Water
Source of Release: Hole in Tank	Date and Hour of Occurrence 8/14/2018 at 1:06 p.m.		Hour of Discovery at 1:06 p.m.
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? :Notification (
By Whom? Thomas Long	Date and Hour August 15, 2018	@ 1:51 p.m].
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the W		
If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* On Auguand water from the C-37 Y-1 drip tank. All released fluids remained Describe Area Affected and Cleanup Action Taken.* All released fluids. The secondary containment liner needs to be cleaned prior prior to inspection activities. A Final C-141 will be submitted after I	d in the secondary containment. uids were removed from the second to integrity inspection. Enterprise	dary contair	nment by utilizing a vacuum
I hereby certify that the information given above is true and complerules and regulations all operators are required to report and/or file which may endanger public health or the environment. The accept relieve the operator of liability should their operations have failed to ground water, surface water, human health or the environment. In operator of responsibility for compliance with any other federal, sta	e certain release notifications and pot tance of a C-141 report by the NMC o adequately investigate and remed addition, NMOCD acceptance of a	erform corre DCD marked diate contam C-141 repo	ective actions for releases d as "Final Report" does not nination that pose a threat to
Signature: m/ full	OIL CONSER		DIVISION
Printed Name: Jon E. Fields	Approved by Environmental Specia	alist:	me)
Title: Director, Field Environmental	Approval Date: 9/1/18	Expiration [Date:
E-mail Address: jefields@eprod.com	Conditions of Approval:		Attached
Date: 8-27-18 Phone: (713) 381-6684			

* Attach Additional Sheets If Necessary

#NCS 1825431333



August 27, 2018

7017 3040 0001 0429 6963 Return Receipt Requested

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

> 7017 3040 0001 0429 6970 Return Receipt Requested

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

Re: Condensate and Water Release Initial Report

C-37 Y-1 Drip Tank Rio Arriba County NMOCD
AUG 3 7 2018
DISTRICT 111

Sir or Madam:

Enterprise Field Services, LLC is submitting the initial report for the condensate and water release on the C-37 Y-1 Drip Tank that occurred on August 14, 2018.

If you have any 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

Enclosure

Director, Field Environmental

/mbp

Rodney M. Sartor

Senior Director, Environmental

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 Form C-141 Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

JUN 2 8 2018

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				vices, LLC			omas Long					
Address 61						Telephone No. 505-599-2286 Facility Type Natural Gas Gathering Pipeline						
Facility	Name La	teral 2C-39	Pipeline	9		-acility Typ	e Natural G	as Gath	ering Pip	eline		
Surface Ov	vner Priv a	ate		Mineral (Owner I	BLM			Serial N	No. N/A		
				LOCA	THE REAL PROPERTY.	OF REI	EASE					
Unit Letter G	Section 8	Township 25N	Range 3W	Feet from the 2607	North/ Line	outh	Feet from the 1648	East/ Line	West	County Rio Arrib	ра	
Latitude_36.412549Longitude107.164903_NAD83												
				NAT	URE	OF RELI	EASE					
Type of Rele				Gas; 5-7	f Release 17.5 BBLs Conder	sate		Recovered				
Source of Release Internal corrosion of the pipeline Date and Hour o 4/11/2018 at 9:0								rence		Hour of D 3 at 9:00 a		ery
Was Immed	iate Notice				1-4		Whom? : Co	urtesy No				OCD
Required			☐ Yes	□ No ⊠ N	NOI							
	By Whom? Thomas Long Date and Hour April 13, 2018 @ 7:25 a.m.											
Was a Wate	rcourse Re		☐ Yes	⊠ No		If YES, Vo	olume Impactir	ng the Wa	atercourse.			
If a Waterco												
Describe Ca	iuse of Prob	olem and Re	medial Act	tion Taken Or	April 1	1, 2018, an	Enterprise tec pressurized, le	hnician d	iscovered	a release	of natu	iral gas and
remediation					ille was	isolateu, ue	pressurized, i	ocked ou	t and tagge	ed out. Re	spairs a	and
Describe Ar	ea Affected	and Cleanu	p Action Ta	aken.* The co	ntamina	nt mass wa	s removed by	mechani	cal excava	tion. The	final e	excavation
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Printed Nam	ne: Jon E. F	ields			/	approved by	/ Environment	aı Specia	ilist:			P
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E-mail Addr			n			Conditions of	//		•	Attached	d \Box	
Date: A	119/701	P	Phon	o· (713) 381 ₋ 6	6684					Allacine	ч Ц	

* Attach Additional Sheets If Necessary

#10cs 1827 633977





CORRECTIVE ACTION REPORT

Property:

Lateral 2C-39 Pipeline Release NE 1/4, S8 T25N R3W Rio Arriba County, New Mexico

May 21, 2018 Apex Project No. 725040112430 NMOCD

JUN 2 8 2018

DISTRICT III

Prepared for:

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

Prepared by:

Ranee Deechilly Project Scientist

Kyle Summers, CPG

Branch Manager / Senior Geologist

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Арр	endix C	: Photographic Documentation
Арр	endix D	: Table
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CORRECTIVE ACTION REPORT

Lateral 2C-39 Pipeline Release NE 1/4, S8 T25N R3W Rio Arriba County, New Mexico

Apex Project No. 725040112430

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral 2C-39 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 northeast (NE) ¼ of Section 8, Township 25 North, Range 3 West, in Rio Arriba County, New Mexico (36.4128N, 107.1652W). The Site is located on private land. The surrounding area is predominately rangeland that is periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which transects the area from approximately north to south.

On April 11, 2018, Enterprise personnel discovered evidence of a release from a 20" drip line attached to the Lateral 2C-39 pipeline. Enterprise subsequently isolated and locked the line out of service. The surface expression of the release was characterized by soil discoloration at the ground surface and evidence of a pipeline liquids flow path that traveled southeast from the release point. On April 16, 2018, Enterprise initiated excavation activities to facilitate the repair of the pipeline, and to remediate potential petroleum hydrocarbon impact resulting from the release.

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

1.2 Project Objective

The primary objective of the corrective action 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) Remediation Action Levels (RALs) using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the implementation of corrective action activities and information available from the New Mexico Office of the State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table.



Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	0
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <a> <1,000 feet from a water	Yes	20	0
source, or; <200 feet from private domestic water source.	No	0	
Distance to Surface Water Body	<200 feet	20	10
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			10

Based on Apex's evaluation of the scoring criteria, the Site would earn a maximum Total Ranking Score of "30". The ranking is based on the following information:

- Three (3) points of diversion (POD) were identified within a mile of the Site on the OSE Water Right Reporting System (WRRS) database. The nearest POD with a recorded depth to water (265 feet below grade surface (bgs)) is located 0.7 miles southwest of the Site. Based on the Site's elevation and proximity relative to the POD, groundwater is anticipated to be greater than 100 feet bgs, resulting in a ranking score of "0" for depth to groundwater.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site. These proximities result in a wellhead/water source protection area ranking score of "0".
- The release point is located approximately 662 feet northeast of an unnamed ephemeral
 wash that is identified as a "blue line" on the United States Geological Survey (USGS)
 topographic map and approximately 410 feet northwest of an unnamed ephemeral wash
 that is identified as a "blue line" on the USGS topographic map. This information supports
 a distance to surface water ranking score of "10".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On April 11, 2018, Enterprise personnel discovered evidence of a release from a 20" drip line attached to the Lateral 2C-39 pipeline. Enterprise subsequently isolated and locked the line out of service. The surface expression of the release was characterized by soil discoloration at the ground surface and evidence of a pipeline liquids flow path that traveled southeast from the release point. On April 16, 2018, Enterprise initiated excavation activities to facilitate removal of the drip line, and to remediate potential petroleum hydrocarbon impact resulting from the release. During the pipeline and earthwork activities, OFT Construction Inc., provided heavy equipment and labor support, and Apex provided environmental consulting support.

On April 18, 2018, after Enterprise determined that they intended to expose the drip line, one (1) composite soil sample was collected from the east wall of the excavation to verify, prior to additional excavation, that petroleum hydrocarbon impact did not extend in that direction. Four (4) composite soil samples (CS-2 through CS-5) were also collected from the remaining walls and base of the excavation. In addition, prior to additional excavation to the east, a portion of the flow path was excavated to approximately 1.5 feet bgs and one (1) composite soil sample (FP-1) was



collected from the remediated flow path. Two (2) composite soil samples (SP-1 and SP-2) were collected from the segregated and apparently unaffected portion of the stockpiled soils. On April 20, 2018, the remaining extent of the flow path was excavated approximately 1.5 feet bgs and two (2) additional composite soil samples (FP-2 and FP-3) were collected from the flow path for laboratory analysis.

The final primary excavation measured approximately 25 feet long by 24 feet wide. The maximum depth of the excavation measured approximately 16 feet bgs. The excavated flow path measured approximately 123 feet in total length, up to 20 feet at the maximum width, and 1.5 feet bgs in depth.

The lithology encountered during the completion of corrective action activities consisted primarily of semi-consolidated silty sand and silty clay.

A total of approximately 341 cubic yards of petroleum hydrocarbon affected soils and 20 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 laboratory confirmed stockpiled soils, and then contoured to surrounding grade.

Figure 3 is a map with 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 C**.

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 guide excavation extents.

Apex's soil sampling program included the collection of five (5) composite soil samples (CS-1 through CS-5) from the excavation, three (3) composite soil samples from the flow path, and two (2) composite soil samples (SP-1 and SP-2) from stockpiled soils for laboratory analysis.

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



4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the New Mexico EMNRD OCD rules, specifically New Mexico Administrative Code 19.15.29 *Release Notification*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Soil Samples

Apex compared the BTEX and TPH concentrations or laboratory practical quantitation limits (PQLs) associated with the composite soil samples collected from the excavation, flow path, and stockpiled soils to the New Mexico EMNRD OCD *RALs* for sites having a total ranking score of "10".

- The laboratory analysis of composite soil sample FP-3 collected from soils remaining in place indicates a benzene concentration of 0.029 mg/kg, which is below the New Mexico EMNRD OCD RAL of 10 milligrams per kilogram (mg/kg). The laboratory analyses of the remaining composite soil samples collected from soils remaining in place and the reused stockpiled soils do not indicate benzene concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD RAL of 10 mg/kg.
- The laboratory analyses of composite soil samples FP-1 and FP-3 collected from soils remaining in place indicate total BTEX concentrations of 0.24 mg/kg and 0.19 mg/kg, respectively, which are below the New Mexico EMNRD OCD RAL of 50 mg/kg. The laboratory analyses of the remaining composite soil samples collected from soils remaining in place and the reused stockpiled soils do not indicate total BTEX concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD RAL of 50 mg/kg.
- The laboratory analysis of composite soil sample CS-4 collected from soils remaining in place indicates a combined TPH GRO/DRO/MRO concentration of 5.3 mg/kg, which is below the New Mexico EMNRD OCD RAL of 100 mg/kg. The laboratory analyses of the remaining composite soil samples collected from soils remaining in place and the reused stockpiled soils do not indicate combined TPH GRO/DRO/MRO concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD RAL of 1,000 mg/kg for a Site ranking of "10".
- The laboratory analyses of the composite soil samples collected from soils remaining in place and the reused stockpiled soils indicate chloride concentrations ranging from below 120 mg/kg (CS-4) to 840 mg/kg (CS-1).

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

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral 2C-39 pipeline release site is located within the Enterprise pipeline ROW in the NE $\frac{1}{4}$ of Section 8, Township 25 North, Range 3 West, in Rio Arriba County, New Mexico. The Site is located on private land. The surrounding area is predominately rangeland that is periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which transects the area from approximately north to south.



On April 11, 2018, Enterprise personnel discovered evidence of a release from a 20" drip line attached to the Lateral 2C-39 pipeline. Enterprise subsequently isolated and locked the line out of service. The surface expression of the release was characterized by soil discoloration at the ground surface and evidence of a pipeline liquids flow path that traveled southeast from the release point. On April 16, 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 corrective action was to reduce COC concentrations in the on-Site soils to below the New Mexico EMNRD OCD RALs using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty sand and silty clay.
- The final excavation measured approximately 25 feet long by 24 feet wide. The maximum depth of the excavation measured approximately 16 feet bgs. The excavated flow path measured approximately 123 feet in total length, up to 20 feet at the maximum width, and 1.5 feet bgs in depth.
- Prior to backfilling, five (5) composite soil samples were collected from the excavation, three (3) composite soil samples were collected from the flow path, and two (2) composite soil samples were collected from the apparently unaffected portion of the stockpiled soils for laboratory analyses. Based on soil analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD RALs for a Site ranking of "30".
- A total of approximately 341 cubic yards of petroleum hydrocarbon affected soils and 20 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 laboratory confirmed 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.

6.0 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

Enterprise Field Services, LLC Corrective Action Report Lateral 2C-39 Pipeline Release May 21, 2018



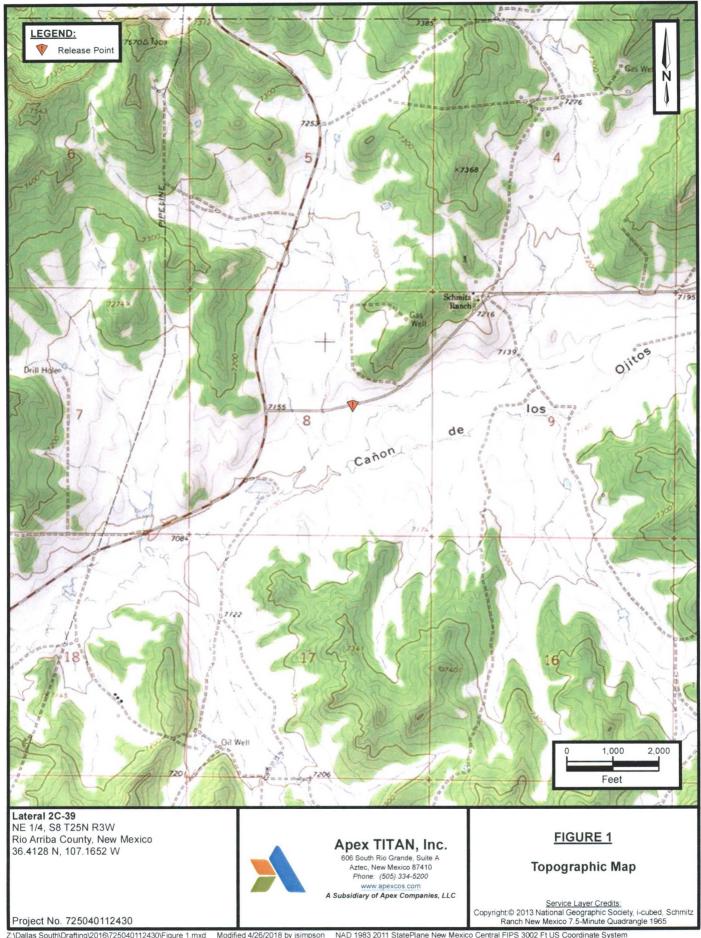
sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

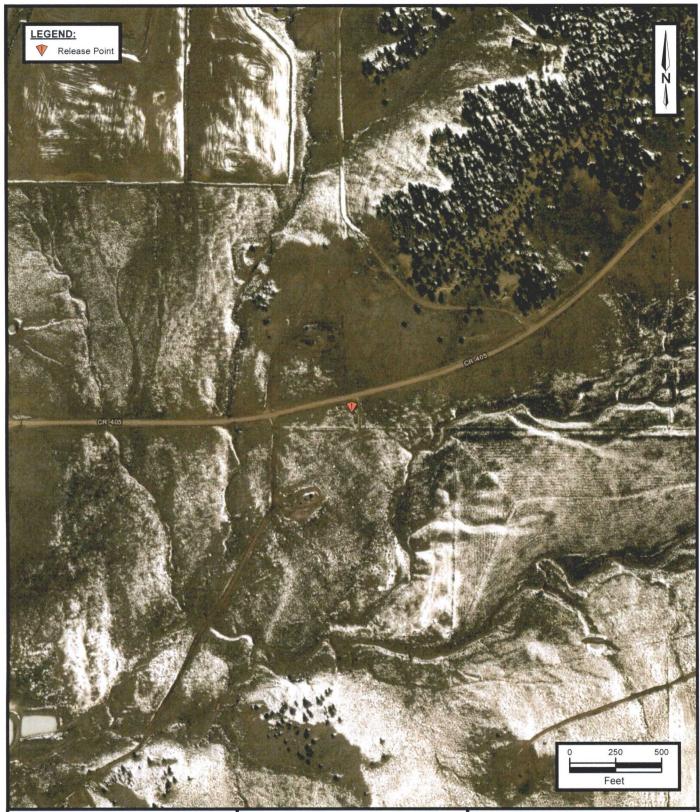
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution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





Lateral 2C-39NE 1/4, S8 T25N R3W
Rio Arriba County, New Mexico 36.4128 N, 107.1652 W



Apex TITAN, Inc. 606 South Rio Grande, Suite A Aztec, New Mexico 87410 Phone: (505) 334-5200

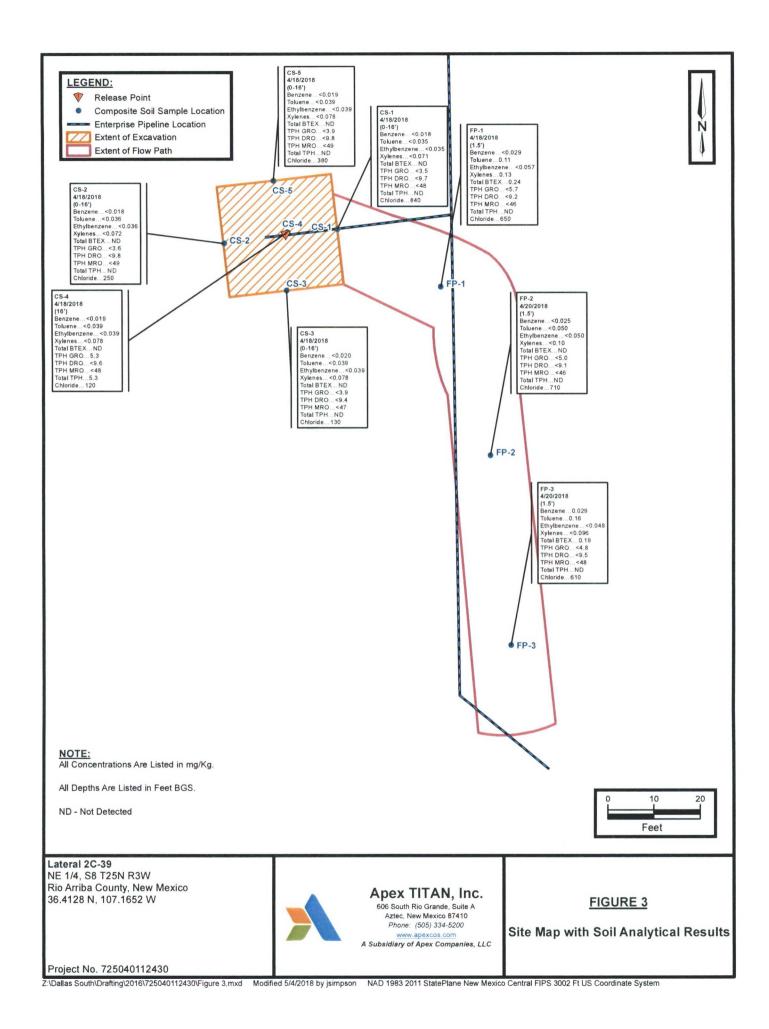
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 2

Site Vicinity Map

<u>Service Layer Credits</u>

(sri, HERE, Garmin, © OpenStreetMap contributors, Source Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Aerial Photograph February 2016





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 9 7057-0912 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

1. Generator Name and Address: Invoice Info Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401	ormation: PM: Richard Moore Non AFE: Pending Pay Key: CM22355
2. Originating Site: Lateral 2C-39 Pipeline	
3. Location of Material (Street Address, City, State or ULSTR): UL G Section 8 T25N R3W; 36.412549,-107.164903	Apr:1 2018
4. Source and Description of Waste: Hydrocarbon impacted soils associated with a release from	m a natural gas pipeline.
Estimated Volume50yd³ bbls Known Volume (to be entered by the operator at the end of the	ne haul) $341/20$ yd ³ /bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STA	
I, Thomas Long representative or authorized agent for <u>Enterprise Field Services, LLC COMPANY NAME</u> certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environme regulatory determination, the above described waste is: (Check the appropriate classification)	
□ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operate exempt waste. ○ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operate exempt waste. ○ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operate exempt. Oil field wastes generated from oil and gas exploration and production operate exempt.	
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimu characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste subpart D, as amended. The following documentation is attached to demonstrate the above-describe appropriate items)	e as defined in 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other ((Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FO	OR LANDFARMS
1, 4-11-18 representative for Enterprise Field Services, LLC authorize Envirotech, Inc Generator Signature testing/sign the Generator Waste Testing Certification.	. to complete the required
representative samples of the oil field waste have been subjected to the paint filter test and tested for chave been found to conform to the specific requirements applicable to landfarms pursuant to Section 1 of the representative samples are attached to demonstrate the above-described waste conform to the receipt. 19.15.36 NMAC.	5 of 19.15.36 NMAC. The results
5. Transporter: OFT, Stan Horn, Hook + Bull	
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 ☐ Landfill	Other
į.	Maintained As Permanent Record)
PRINT NAME: Grag Crabtree TITLE: Environ mental Man	Mager DATE: 4/12/18
SIGNATURE: TELEPHONE NO.: 505-632-061	5



APPENDIX C

Photographic Documentation



Photograph 1

View of the source area, facing southeast.



Photograph 2

View of the flow path, facing southeast.



Photograph 3

View of the flow path, facing south.





Photograph 4

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



Photograph 5

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



Photograph 6

View of the final excavation, facing northeast.





Photograph 7

View of the remediated flow path, facing west.



Photograph 8

View of the remediated flow path, facing north.





APPENDIX D

Table



TABLE 1 Lateral 2C-39 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 Remediation Action		10	NE	NE	NE	50				1,000	NE
					Comp	osite Soil Samples	Collected from S	tockpiled Soils					
SP-1	04.18.18	С	Stockpile	< 0.019	< 0.039	<0.039	<0.077	ND	<3.9	<9.7	<49	ND	350
SP-2	04.18.18	С	Stockpile	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.3	<47	ND	220
		服民建制在 通信			Co	mposite Soil Sample	es Collected from	m Flow Path				A TOTAL STATE OF THE STATE OF T	
FP-1	04.18.18	С	1.5	<0.029	0.11	< 0.057	0.13	0.24	<5.7	<9.2	<46	ND	650
FP-2	04.20.18	С	1.5	<0.025	< 0.050	< 0.050	<0.10	ND	<5.0	<9.1	<46	ND	710
FP-3	04.20.18	С	1.5	0.029	0.16	<0.048	<0.096	0.19	<4.8	<9.5	<48	ND	610
					Contract of the same	Excavation Con	nposite Soil Sam	ples					
CS-1	04.18.18	С	0 to 16	<0.018	< 0.035	<0.035	<0.071	ND	<3.5	<9.7	<48	ND	840
CS-2	04.18.18	С	0 to 16	<0.018	< 0.036	<0.036	<0.072	ND	<3.6	<9.8	<49	ND	250
CS-3	04.18.18	С	0 to 16	<0.020	< 0.039	<0.039	<0.078	ND	<3.9	<9.4	<47	ND	130
CS-4	04.18.18	С	16	<0.019	<0.039	<0.039	<0.078	ND	5.3	<9.6	<48	5.3	120
CS-5	04.18.18	С	0 to 16	< 0.019	< 0.039	<0.039	<0.078	ND	<3.9	<9.8	<49	ND	380

ND = Not Detected above the Practical Quantitation Limits

NE = Not established

mg/kg = milligram per kilogram



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

April 23, 2018

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

FAX

RE: Lateral 2C 39 OrderNo.: 1804A26

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/19/2018 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **1804A26**

Date Reported: 4/23/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: SP-1

 Project:
 Lateral 2C 39
 Collection Date: 4/18/2018 2:30:00 PM

 Lab ID:
 1804A26-001
 Matrix: MEOH (SOIL)
 Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	350	30	mg/Kg	20	4/19/2018 12:10:59 PM	37692
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	4/19/2018 10:26:31 AM	M50701
Surr: BFB	122	70-130	%Rec	1	4/19/2018 10:26:31 AM	M50701
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/19/2018 10:10:29 AM	37688
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/19/2018 10:10:29 AM	37688
Surr: DNOP	94.6	70-130	%Rec	1	4/19/2018 10:10:29 AM	37688
EPA METHOD 8260B: VOLATILES SHO	ORT LIST				Analyst	: AG
Benzene	ND	0.019	mg/Kg	1	4/19/2018 10:26:31 AM	R50701
Toluene	ND	0.039	mg/Kg	1	4/19/2018 10:26:31 AM	R50701
Ethylbenzene	ND	0.039	mg/Kg	1	4/19/2018 10:26:31 AM	R50701
Xylenes, Total	ND	0.077	mg/Kg	1	4/19/2018 10:26:31 AM	R50701
Surr: 4-Bromofluorobenzene	133	70-130	S %Rec	1	4/19/2018 10:26:31 AM	R50701
Surr: Toluene-d8	96.8	70-130	%Rec	1	4/19/2018 10:26:31 AM	R50701

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

Lab Order 1804A26

Date Reported: 4/23/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: SP-2

Project: Lateral 2C 39

Collection Date: 4/18/2018 2:35:00 PM

Lab ID: 1804A26-002

Matrix: MEOH (SOIL) Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	220	30	mg/Kg	20	4/19/2018 12:23:23 PM	37692
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	4/19/2018 10:03:21 AM	M50701
Surr: BFB	115	70-130	%Rec	1	4/19/2018 10:03:21 AM	M50701
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/19/2018 12:45:20 PM	37688
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/19/2018 12:45:20 PM	37688
Surr: DNOP	77.2	70-130	%Rec	1	4/19/2018 12:45:20 PM	37688
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst	: AG
Benzene	ND	0.019	mg/Kg	1	4/19/2018 10:03:21 AM	R50701
Toluene	ND	0.038	mg/Kg	1	4/19/2018 10:03:21 AM	R50701
Ethylbenzene	ND	0.038	mg/Kg	1	4/19/2018 10:03:21 AM	R50701
Xylenes, Total	ND	0.076	mg/Kg	1	4/19/2018 10:03:21 AM	R50701
Surr: 4-Bromofluorobenzene	125	70-130	%Rec	1	4/19/2018 10:03:21 AM	R50701
Surr: Toluene-d8	89.1	70-130	%Rec	1	4/19/2018 10:03:21 AM	R50701

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 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#: **1804A26**

23-Apr-18

Client: APEX TITAN
Project: Lateral 2C 39

Sample ID MB-37692 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 37692 RunNo: 50704

Prep Date: 4/19/2018 Analysis Date: 4/19/2018 SeqNo: 1645307 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID LCS-37692 SampType: Ics TestCode: EPA Method 300.0: Anions
Client ID: LCSS Batch ID: 37692 RunNo: 50704

Prep Date: 4/19/2018 Analysis Date: 4/19/2018 SeqNo: 1645308 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.6 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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 3 of 7

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804A26 23-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Sample ID LCS-37688	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch	ID: 376	888	RunNo: 50692								
Prep Date: 4/19/2018	Analysis Date: 4/19/2018			S	eqNo: 1	644090	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	97.7	70	130					
Surr: DNOP	4.0 5.000				80.7	70	130					

Sample ID MB-37688	SampT	ype: ME	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch	ID: 370	688	R	RunNo: 5	0692						
Prep Date: 4/19/2018	rep Date: 4/19/2018 Analysis Date: 4/19/2018				SeqNo: 1	644091	Units: mg/K	Jnits: 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	9.6		10.00		96.1	70	130					

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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 7

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804A26

23-Apr-18

Client: Project:	APEX TI Lateral 20										
Sample ID	100ng lcs	SampT	ype: LC	S4	Tes	tCode: EF	A Method	8260B: Volat	tiles Short	List	
Client ID:	BatchQC	Batch	ID: R5	0701	F	RunNo: 50	0701				
Prep Date:		Analysis D	ate: 4/	19/2018	5	SeqNo: 10	644447	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	110	80	120			
Toluene		0.99	0.050	1.000	0	99.3	80	120			
Ethylbenzene		1.0	0.050	1.000	0	101	80	120			
Xylenes, Total		3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Brom	ofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Toluene	e-d8	0.50		0.5000		100	70	130			
Sample ID	rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: Volat	tiles Short	List	
Client ID:	PBS	Batch	ID: R5	0701	F	RunNo: 50	0701				
Prep Date:		Analysis D	ate: 4/	19/2018	5	SeqNo: 1	644456	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-Brom	ofluorobenzene	0.60		0.5000		119	70	130			
Surr: Toluen	e-d8	0.50		0.5000		100	70	130			
Sample ID	1804a26-002amsd	SampT	ype: MS	5D4	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID:	SP-2	Batch	ID: R5	0701	F	RunNo: 5	0701				
Prep Date:		Analysis D	ate: 4/	19/2018	5	SeqNo: 1	644685	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.61	0.019	0.7559	0	80.6	80	120	0.317	0	
Toluene		0.70	0.038	0.7559	0.003349	91.7	80	120	0.197	0	
Ethylbenzene		0.74	0.038	0.7559	0.004346	96.8	80	120	2.63	0	
Xylenes, Total		2.2	0.076	2.268	0.02491	96.3	80	120	1.47	0	
Surr: 4-Brom	ofluorobenzene	0.42		0.3780		110	70	130	0	0	
Surr: Toluen	e-d8	0.36		0.3780		94.6	70	130	0	0	
Sample ID	1804a26-002ams	SampT	ype: MS	64	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID:	SP-2	Batch	ID: R5	0701	F	RunNo: 5	0722				
Prep Date:		Analysis D	ate: 4/	20/2018	5	SeqNo: 1	645475	Units: mg/k	(g		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.61	0.019	0.7559	0	80.3	80	120			
Toluene		0.69	0.038	0.7559	0.003349	91.5	80	120			
Ethylbenzene		0.76	0.038	0.7559	0.004346	99.4	80	120			
Xylenes, Total		2.2	0.076	2.268	0.02491	97.7	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 7

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804A26**

23-Apr-18

Client: APEX TITAN
Project: Lateral 2C 39

Sample ID 1804a26-002ams	SampType	e: MS4	Test	Code: El	PA Method	8260B: Vola	tiles Short	List		
Client ID: SP-2	Batch ID	E R50701	RunNo: 50722							
Prep Date:	Analysis Date	e: 4/20/2018	, S	eqNo: 1	645475	Units: mg/Kg				
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	0.41	0.3780		109	70	130				
Surr: Toluene-d8	0.35	0.3780		93.0	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 6 of 7

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

420

387.0

WO#: 1804A26

23-Apr-18

Client: APEX TITAN
Project: Lateral 2C 39

Lateral 20	C 37								
Sample ID 2.5ug gro lcs	SampType: L	cs	Test	Code: EPA	Method 8	8015D Mod:	Gasoline l	Range	
Client ID: LCSS	Batch ID: M	50701	R	tunNo: 5070	01				
Prep Date:	Analysis Date: 4	1/19/2018	S	eqNo: 1644	1387	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26 5.0	25.00	0	105	70	130			
Surr: BFB	480	500.0		95.8	70	130			
Sample ID rb	SampType: M	BLK	Tes	tCode: EPA	Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch ID: M	50701	F	RunNo: 5070	01				
Prep Date:	Analysis Date: 4	1/19/2018	S	SeqNo: 1644	4388	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0)							
Surr: BFB	540	500.0		109	70	130			
Sample ID 1804a26-001ams	SampType: M	IS	Tes	tCode: EPA	Method	8015D Mod:	Gasoline	Range	
Client ID: SP-1	Batch ID: M	150701	F	RunNo: 5070	01				
Prep Date:	Analysis Date: 4	1/19/2018	S	SeqNo: 1644	4681	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19 3.9	19.35	0	97.6	64.7	142			
Surr: BFB	400	387.0		103	70	130			
Sample ID 1804a26-001amsc	SampType: M	ISD	Tes	tCode: EPA	Method	8015D Mod:	Gasoline	Range	
Client ID: SP-1	Batch ID: N	150701	F	RunNo: 5070	01				
Prep Date:	Analysis Date: 4	1/19/2018	S	SeqNo: 1644	4682	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19 3.9	19.35	0	100	64.7	142	2.39	20	

Qualifiers:

Surr: BFB

- * 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

107

70

130

0

0

- 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 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 1804A26 RcptNo: 1 4/19/2018 7:15:00 AM Received By: Isaiah Ortiz 4/19/2018 7:47:07 AM Completed By: Isaiah Ortiz 04/19/18 Chain of Custody No 🗌 Not Present Yes V 1. Is Chain of Custody complete? 2. How was the sample delivered? Courier Log In No 🗌 NA 🗌 3. Was an attempt made to cool the samples? Yes 🗸 No 🗌 NA 🗌 Were all samples received at a temperature of >0° C to 6.0°C Yes V Sample(s) in proper container(s)? No 🗌 No 🗌 6 Sufficient sample volume for indicated test(s)? No 7. Are samples (except VOA and ONG) properly preserved? 8. Was preservative added to bottles? Yes 🗌 No V NA 🗌 No VOA Vials Yes No 🗌 9. VOA vials have zero headspace? Yes No V 10. Were any sample containers received broken? # of preserved bottles checked No 🗌 11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) No 🗌 12. Are matrices correctly identified on Chain of Custody? 13, Is it clear what analyses were requested? 1 No Checked by No 🗌 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 eMail Phone Fax Via: In Person Regarding: Client Instructions: Additional remarks: 17. Cooler Information Cooler No Temp C Condition Seal Intact Seal No Signed By 0.4 Good Yes

																	CHAIN OF CUSTODY RECORD
							11	1.			- 4	,		ANAL	YSIS	7/////	Lab use only
						Laboratory:	Hall							REQU	ESTE	ED / , / / / /	Due Date:
APEX						Address:										1700	1/// 24-026
						Albuq							_				Termp. of cooler's when received (C"): 0
Office Locatio		,	-	10 A		Contact:	/					1				13/1/1/	1 2 3 4 5
606 5 Pi															/	12 / / / /	Page of
Aztecjiv											5				N	2 / / / /	Page of of
Project Manag	ger	154	1177	375		PO/SO#: _		K2-1	227	>					3	24///	/ / /
Rangler's Name	Deech	illy	1		-	lampler's Sign	arure L	el						À	PH CALL	Chiberides Perespules	
Proj. No.		Proje			-				No/T	ype of 0	Contair	ners		87	De	In	/ /
725040113	430	6	La	tera	120	-39	-							/	A	4/////	1804A26
Matrix Date	Time	CoEn	G r a h	Identifyin	ng Mark	s of Sample(s)	Start	End	VOA	A L	250 al	Glass	DVO		1	///////	Lab Sample ID (Lab Use Only)
S 4/8/18	1430	×		5	50-1							1		XX	X		-001
5 4/18/18	1435	X		4	50	2						-		XX	X		- 00 3
1	,				1										-		
-																	
											1						
				-		(D= /		-							+		
		-				NYS			-		-				+		
		-					-				-				+		
							-								-		
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							,						.,				
Turn around time Relipquished by	☐ Nor Signature)			5% Rush Date;		ne: Recei	2100%		ature)	SA	ME	Date	7	Time		NOTES:	
In Robert	1		4	118/18		7//	in	Li	UA_			1/18/		173	7	2	- 1 (F80.10)
Relinquished by (Signature)			Date:	J.	ne: Receiv	ved by:	(Signa	ature)			Date 4/19		Time 0713		PM-Bill to 1	Tum Lung (EPPUD) 122355 36264 (CC Sec.)
Relinquished by (Date:	1, 4,	- Committee	ved by:	(Signa	ature)		-	Date		Time		pay key ca	122355
			٠,	Dete		no: Dani	and but	/C:	nture)			Date		Time	_	NON APP N3	36264
Relinquished by (oignature)	,		Date:	111	ne: Receiv	ved by:	(Signa	ature)			Date		nine		SAME DAY	(CC Seal
	V - Wastewa A - 40 ml via			W - Water A/G - Amb		Soil SD - So Glass 1 Liter				- Air B				coal tube astic or oth	St ner	L-sludge O-Oil	00/05

Container



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

April 20, 2018

Kyle Summers
APEX TITAN

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Lateral 2C 39 OrderNo.: 1804A29

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/19/2018 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1804A29

Date Reported: 4/20/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: FP-1

Project: Lateral 2C 39

Collection Date: 4/18/2018 1:45:00 PM

1804A29-001 Lab ID:

Matrix: MEOH (SOIL) Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL (Qual U	Jnits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	650	30		mg/Kg	20	4/19/2018 2:02:37 PM	37692
EPA METHOD 8015D MOD: GASOL	NE RANGE					Analyst:	AG
Gasoline Range Organics (GRO)	ND	5.7		mg/Kg	1	4/19/2018 12:45:24 PM	M50701
Surr: BFB	120	70-130		%Rec	1	4/19/2018 12:45:24 PM	M50701
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	TOM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/19/2018 9:48:30 AM	37688
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/19/2018 9:48:30 AM	37688
Surr: DNOP	95.6	70-130		%Rec	1	4/19/2018 9:48:30 AM	37688
EPA METHOD 8260B: VOLATILES S	HORT LIST					Analyst	AG
Benzene	ND	0.029		mg/Kg	1	4/19/2018 12:45:24 PM	R50701
Toluene	0.11	0.057		mg/Kg	1	4/19/2018 12:45:24 PM	R50701
Ethylbenzene	ND	0.057		mg/Kg	1	4/19/2018 12:45:24 PM	R50701
Xylenes, Total	0.13	0.11		mg/Kg	1	4/19/2018 12:45:24 PM	R50701
Surr: 4-Bromofluorobenzene	130	70-130	S	%Rec	1	4/19/2018 12:45:24 PM	R50701
Surr: Toluene-d8	95.7	70-130		%Rec	1	4/19/2018 12:45:24 PM	R50701

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1804A29

20-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Sample ID MB-37692

SampType: mblk

Result

TestCode: EPA Method 300.0: Anions

Client ID:

Prep Date:

PBS

Batch ID: 37692

RunNo: 50704

Units: mg/Kg

RPDLimit

Qual

Analyte

4/19/2018

Analysis Date: 4/19/2018 PQL

SegNo: 1645307 SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Chloride

ND 1.5

Sample ID LCS-37692

4/19/2018

SampType: Ics

RunNo: 50704

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

Batch ID: 37692 Analysis Date: 4/19/2018

SPK value SPK Ref Val %REC

SeqNo: 1645308

Units: mg/Kg HighLimit

110

%RPD

RPDLimit Qual

Analyte Chloride

Prep Date:

PQL

14 1.5 15.00 96.6

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 POL

% 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

P Sample pH Not In Range

RL Reporting Detection Limit Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804A29

20-Apr-18

Client: Project: APEX TITAN Lateral 2C 39

Sample ID LCS-37688

SampType: LCS

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

Client ID: LCSS

Batch ID: 37688

RunNo: 50692

Prep Date: 4/19/2018

Sample ID MB-37688

Analysis Date: 4/19/2018

Units: mg/Kg

Analyte

PQL SPK value SPK Ref Val Result 10

SeqNo: 1644090

%REC

HighLimit

130

130

%RPD **RPDLimit** Qual

Diesel Range Organics (DRO) Surr: DNOP

49 4.0 50.00 0 97.7 5.000 80.7

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

Client ID: Prep Date: 4/19/2018

PBS

SampType: MBLK Batch ID: 37688 Analysis Date: 4/19/2018

RunNo: 50692

Units: mg/Kg

Analyte Diesel Range Organics (DRO)

Result ND SPK value SPK Ref Val

SeqNo: 1644091 %REC LowLimit

HighLimit

%RPD **RPDLimit**

Qual

Motor Oil Range Organics (MRO) Surr: DNOP

ND 50 9.6

70

LowLimit

LowLimit

70

70

130

Sample ID LCS-37670

Client ID: LCSS

SampType: LCS

Batch ID: 37670

PQL

PQL

10

TestCode: EPA Method 8015M/D: Diesel Range Organics RunNo: 50693

%REC

84.7

96.1

70

Prep Date: Analyte

4/18/2018

4/18/2018

Analysis Date: 4/19/2018

10.00

5.000

SPK value SPK Ref Val

SeqNo: 1644506

Units: %Rec HighLimit

RPDLimit %RPD

Qual

Sample ID MB-37670

SampType: MBLK

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

Client ID:

Surr: DNOP

PBS

Batch ID: 37670

RunNo: 50693

130

Prep Date:

Analysis Date: 4/19/2018

SeqNo: 1644507

Units: %Rec

POL

Analyte

Result

SPK value SPK Ref Val

%REC

HighLimit LowLimit

%RPD

RPDLimit Qual

Surr: DNOP

9.6

Result

4.2

10.00

96.1

70

130

Qualifiers:

ND

Value exceeds Maximum Contaminant Level.

Not Detected at the Reporting Limit

- D Sample Diluted Due to Matrix H Holding times for preparation or analysis exceeded
- **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 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Page 3 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804A29 20-Apr-18**

Client: APEX TITAN
Project: Lateral 2C 39

Sample ID 100ng Ics	Sampl	ype: LC	S4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batc	h ID: R5	0701	F	RunNo: 5	0701						
Prep Date:	Analysis [Date: 4/	19/2018	5	SeqNo: 1	644447	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	110	80	120					
Toluene	0.99	0.050	1.000	0	99.3	80	120					
Ethylbenzene	1.0	0.050	1.000	0	101	80	120					
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120					
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130					
Surr: Toluene-d8	0.50		0.5000		100	70	130					
Sample ID rb	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List			
Client ID: PBS	Batc	h ID: R5	0701	F	RunNo: 5	0701						
Prep Date:	Analysis [Date: 4/	19/2018	\$	SeqNo: 1	644456	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	0.60		0.5000		119	70	130					
Surr: Toluene-d8	0.50		0.5000		100	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 4 of 5

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

540

WO#: **1804A29**

20-Apr-18

Client: APEX TITAN
Project: Lateral 2C 39

Sample ID 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method	8015D Mod: Gasoline Range
Client ID: LCSS	Batch ID: M50701	RunNo: 50701	
Prep Date:	Analysis Date: 4/19/2018	SeqNo: 1644387	Units: mg/Kg
Analyte	Result PQL SPK value SI	PK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 26
 5.0
 25.00
 0
 105
 70
 130

 Surr: BFB
 480
 500.0
 95.8
 70
 130

500.0

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch	ID: M5	0701	F	RunNo: 5	0701				
Prep Date:	Analysis D	ate: 4/	19/2018	S	SeqNo: 1	644388	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		-						

109

70

130

Qualifiers:

Surr: BFB

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 5



Hall Eavaronmental 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 1804A29 RoptNo: 1 Received By: Isaiah Ortiz 4/19/2018 7:15:00 AM 4/19/2018 8:16:32 AM Completed By Isaiah Ortiz 04/19/18 8KE Reviewed By Chain of Custody No . Not Present Yes V 1. Is Chain of Custody complete? 2. How was the sample delivered? Courier Log In No 🗌 NA 🗌 3. Was an attempt made to cool the samples? Yes V No I 4. Were all samples received at a temperature of >0° C to 6.0°C NA 🗌 Yes V No 🗌 5. Sample(s) in proper container(s)? Yes V No Sufficient sample volume for indicated test(s)? 7. Are samples (except VOA and ONG) properly preserved? Yes V No Yes No V NA 8. Was preservative added to bottles? Yes | 9. VOA vials have zero headspace? No VOA Vials No 10. Were any sample containers received broken? Yes # of preserved bottles checked No 🗌 11. Does paperwork match bottle labels? Yes V (<2 or >12 unless noted) (Note discrepancies on chain of custody) No L 12. Are matrices correctly identified on Chain of Custody? No 🗌 13. Is it clear what analyses were requested? Yes V 14. Were all holding times able to be met? Yes V No Checked by: (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 17. Cooler Information Cooler No Temp °C Condition | Seal Intact | Seal No | Seal Date 0.4 Good Yes

				CHAIN OF CUSTODY RECORD
	Hall Environment Laboratory: Analysis		ANALYSIS REQUESTED ONLY ON THE STATE OF THE	Lab use only Due Date:
APEX	Address: 4901 Haw	KINS NE	/ 67	Temp. of coolers
Office Location	Al agurque, No	M 87109	134 / /	when received IC"). 9.4
606 S. Ric Grande Suite A	Contact: A Free	*	13/1/	1 2 3 4 5
Aztec, NM 87410	Phone: 505-34	5-3975	Test Oral	Pageof
Project Manager K. Summers	PO/SO#:See	e never	827	/
Rance Deedrilly	Sampler's Signature		11 TE 600	
Proj. No. Project Name		Type of Containers	4 4 3	/ / /
725040112480 Lateral 3			- /7/////	// 1804A29
Matrix Date Time C G r lcentifying Mar	oks of Sample(s) Start Obepith (s) Start Obepith	A/G 11tt Glass Jar PrO		Lab Sample ID (Lab Use Only)
3 4/18/18 BUS X FP		1	X * X	-001
	No			
	DFG			
Turn around time Normal 25% Rush	50% Rush 100% Rush	SAME DAY	1	
	Time: Received by: (Signature)	Date:	m Nomeo	Tom Long Ey- CM 22355 HE N36264
Be inquished by (Signature) Date:	Time: Received by:((Signature)	Dafe: प्राप्ताप्त	Time: Pry K	«- em 22355
	Time: Received by: (Signature)	NAME AND ADDRESS OF THE OWNER, WHEN PERSON AND PARTY OF THE OWNER,	Time:	FF. N36264
Palinguished by (Cignahus)	Time: Received by: (Signature)	Date:	Time: SAME DAY	17724
Relinquished by (Signature) Date:	nine: neceived by: (Signature)	Date:	Talle.	100
Matrix WW - Wastewater W - Water S Container VOA - 40 m vial A/3 - Amber / 0		A - Air Bag C - Cha s wide mouth P/O - Pl	rcoal tube SL - sludge O - Oil lastic or other	Sealonja



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

April 24, 2018

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

FAX

RE: Lateral 2C 39 OrderNo.: 1804B35

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/21/2018 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Client Sample ID: FP-2

Lab Order 1804B35

Date Reported: 4/24/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lateral 2C 39 **Collection Date:** 4/20/2018 10:45:00 AM

Lab ID: 1804B35-001 Matrix: SOIL Received Date: 4/21/2018 9:40:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	710	30	mg/Kg	20	4/23/2018 1:09:15 PM	37741
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	k			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/23/2018 10:19:10 AM	1 37738
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/23/2018 10:19:10 AM	1 37738
Surr: DNOP	88.8	70-130	%Rec	1	4/23/2018 10:19:10 AM	1 37738
EPA METHOD 8015D: GASOLINE RANG	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/23/2018 12:39:41 PM	1 37717
Surr: BFB	90.9	15-316	%Rec	1	4/23/2018 12:39:41 PM	1 37717
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/Kg	1	4/23/2018 12:39:41 PM	1 37717
Toluene	ND	0.050	mg/Kg	1	4/23/2018 12:39:41 PM	1 37717
Ethylbenzene	ND	0.050	mg/Kg	1	4/23/2018 12:39:41 PM	1 37717
Xylenes, Total	ND	0.10	mg/Kg	1	4/23/2018 12:39:41 PM	1 37717
Surr: 4-Bromofluorobenzene	98.4	80-120	%Rec	1	4/23/2018 12:39:41 PM	1 37717

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

Lab Order 1804B35

Date Reported: 4/24/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID:

Project: Lateral 2C 39

1804B35-002

Client Sample ID: FP-3

Collection Date: 4/20/2018 11:45:00 AM

Received Date: 4/21/2018 9:40:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: MRA
Chloride	610	30	mg/Kg	20	4/23/2018 1:46:28 PM	37741
EPA METHOD 8015M/D: DIESEL RAM	NGE ORGANICS				Analys	st: TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/23/2018 10:42:54 AI	M 37738
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/23/2018 10:42:54 Al	M 37738
Surr: DNOP	87.0	70-130	%Rec	1	4/23/2018 10:42:54 Al	M 37738
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/23/2018 1:03:11 PM	37717
Surr: BFB	91.4	15-316	%Rec	1	4/23/2018 1:03:11 PM	37717
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	0.029	0.024	mg/Kg	1	4/23/2018 1:03:11 PM	37717
Toluene	0.16	0.048	mg/Kg	1	4/23/2018 1:03:11 PM	37717
Ethylbenzene	ND	0.048	mg/Kg	1	4/23/2018 1:03:11 PM	37717
Xylenes, Total	ND	0.096	mg/Kg	1	4/23/2018 1:03:11 PM	37717
Surr: 4-Bromofluorobenzene	98.9	80-120	%Rec	1	4/23/2018 1:03:11 PM	37717

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 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#:

1804B35

24-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Sample ID MB-37741

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 37741

PQL

1.5

RunNo: 50775

Prep Date: 4/23/2018 Analysis Date: 4/23/2018

SeqNo: 1647500

Units: mg/Kg

HighLimit

%RPD **RPDLimit**

Qual

Analyte Chloride

Result ND

SampType: Ics Batch ID: 37741 TestCode: EPA Method 300.0: Anions

SPK value SPK Ref Val %REC LowLimit

RunNo: 50775

Units: mg/Kg

Prep Date: 4/23/2018

Sample ID LCS-37741

LCSS

Analysis Date: 4/23/2018

SPK value SPK Ref Val

SeqNo: 1647501

RPDLimit Qual

Client ID:

PQL Result

90

LowLimit

Analyte

HighLimit

Chloride

15

15.00 1.5

0

%REC 97.1

110

%RPD

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit ND

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

Analyte detected below quantitation limits

Page 3 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804B35

24-Apr-18

Client: Project:

APEX TITAN Lateral 2C 39

Sample ID LCS-37738

SampType: LCS

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

Client ID: LCSS

Batch ID: 37738

RunNo: 50757

130

130

Prep Date: 4/23/2018

Analysis Date: 4/23/2018

SegNo: 1646530

Units: mg/Kg

Analyte Diesel Range Organics (DRO) Result PQL 45

Result

%REC SPK value SPK Ref Val LowLimit

HighLimit

RPDLimit Qual

10 50.00 89.1 70 Surr: DNOP 3.8 5.000 76.9 70

Sample ID MB-37738 Client ID: **PBS**

Analyte

Surr: DNOP

SampType: MBLK Batch ID: 37738

RunNo: 50757

Prep Date: 4/23/2018 Analysis Date: 4/23/2018

PQL

SeqNo: 1646531

Units: mg/Kg HighLimit

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

%RPD

%RPD

RPDLimit

Qual

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

ND 10 ND 50 8.4

10.00

84.3

SPK value SPK Ref Val %REC LowLimit

70

130

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded Н

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 В

E Value above quantitation range

Analyte detected below quantitation limits J

Page 4 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804B35

24-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Sample ID	MB-37717
Client ID:	DDC

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Batch ID: 37717

RunNo: 50769

Prep Date: 4/20/2018 Analysis Date: 4/23/2018

SeqNo: 1647174

Units: mg/Kg

Analyte

Result PQL ND 5.0

Gasoline Range Organics (GRO)

SPK value SPK Ref Val %REC LowLimit

%RPD

%RPD

Surr: BFB

860

1000

85.8

316

HighLimit

RPDLimit Qual

Sample ID LCS-37717

SampType: LCS Batch ID: 37717 TestCode: EPA Method 8015D: Gasoline Range RunNo: 50769

LowLimit

15

Client ID: Prep Date: 4/20/2018

Analyte

LCSS

Analysis Date: 4/23/2018

970

SeqNo: 1647175

Units: mg/Kg HighLimit

Page 5 of 6

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

Result PQL 28 5.0

25.00 1000

SPK value SPK Ref Val

0

110 97.5

%REC

75.9 15 131

316

- 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
- **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 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#: **1804B35**

24-Apr-18

Client: APEX TITAN
Project: Lateral 2C 39

Sample ID MB-37717	SampT	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 37717			R	RunNo: 50769					
Prep Date: 4/20/2018	Analysis Date: 4/23/2018			SeqNo: 1647188			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	0.95		1.000		94.8	80	120			

Sample ID LCS-37717	SampT	ype: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch	n ID: 37	717	RunNo: 50769						
Prep Date: 4/20/2018	Analysis Date: 4/23/2018 Se				SeqNo: 1647189 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	77.3	128			
Toluene	1.0	0.050	1.000	0	104	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	103	80.7	127			
Xylenes, Total	3.2	0.10	3.000	0	106	81.6	129			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.5	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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 6 of 6



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 AZTE	C	Work	Order Numbe	er: 1804B	35			RcptN	o: 1	
						ý.						
Re	ceived By:	Isaiah Orti	z	4/20/20	18 9:40:00 AI	M		IC	4			e ta
Co	impleted By:	Anne Thor	ne	4/23/20	18 7:00:45 AI	M ·	•	Don	1			
Re	viewed By:	MO		4/23	18			Cima	,,,,,			
8	7.						. 5.	. W.				
Ch	ain of Cus	stody						Υ			ŧ .	
		custody comple	ete?		· ·	Yes 5	/	No		Not Present		
2.	How was the	sample delive	ered?	3 2		Courie	ŗ					
								• .		÷		
	<u>og In</u> Was an atten	npt made to c	nal the sampl	002		Yes 💌		No		NA 🗌		
Ų.	vvas an auen	npt made to co	ooi uie sampi	esr		res le		NO		NA L		
4.	Were all sam	ples received	at a temperat	ure of >0° C I	to 6.0°C	Yes V		No		NA 🗆		
						100						
5.	Sample(s) in	proper contain	ner(s)?			Yes Y		No				
6	Sufficient can	nple volume fo	r indicated to	et/e\2		Yes 🗸	•	No	П			
		(except VOA a			ad?	Yes 🗸	_	No				
		ative added to		perly preserve	, 41	Yes [7	No	<u> </u>	NA 🗆		
0.	rias proserio					100 =	_					
9.	VOA vials hav	ve zero heads	pace?			Yes		No		No VOA Vials 🗹		
10.	Were any sar	mple containe	rs received br	oken?		Yes L		No	V	# of preserved		
	_			*			ā			bottles checked		
		ork match bott ancies on cha				Yes 🛂	4	No		for pH:	or >12 ı	unless noted)
		correctly ident				Yes 🗸	•	No		Adjusted?		
13.	ls it clear wha	at analyses we	re requested			Yes V		No				
		ing times able				Yes 🗸	7	No		Checked by:		
	(If no, notify c	customer for a	ithorization.)							-20		
Spe	cial Hand	ling (if app	licable)									
15.	Was client no	otified of all dis	screpancies w	ith this order?).	Yes		No		NA 🗹		
	Person	Notified:			Date	also letto les macos pocin	MARKAGE ROLL	,		8		
	By Who	om:	NAME OF THE OWNER		Via:	eMail		Phone _	Fax	In Person		
	Regard	ling:										
	Client I	nstructions:	24 34									
16.	Additional re	emarks:										
	CUSTO	DDY SEALS IN	NTACT ON S	OIL JARS/at 4	/23/18							
17.	Cooler Info											
	Cooler No		Condition	Seal Intact	Seaf No	Seal Date	•	Signed	Ву			
	11	0.5	Good	Yes		many any agreement and an area		na an tigg ang ng tigata, i ya ng tanta, a	was a recommend]		

·			CHAIN OF CUSTODY RECOR
	112	Environmental	ANALYSIS / / / Lab use only
3	Laboratory: Lab	Cho political and	Inequested / / / / / / / / / / /
APEX	Address: 4901 Ha	aukins NE	Temp. of coolers \mathcal{O} .
Office Location 606 S R/O	Albuquerque		Temp. of coolers O. S when received (C°):
Grande Soit A	Contact: A Free		\Q\(\right) \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
Aztec NIM 87410	Phone: 505 34		Page
Project Manager & Summers			
	Sampler's Signature		
Ched DAponti	MA		4/0/4/////
Proj. No. Project Name	mul	No/Type of Containers	
7250401124130 Leteral 8			
Matrix Date Time C G r Identifying Mar	rks of Sample(s)	VOA 1 Lt. 250 ml Glass Jar P/O	Lab Sample ID (Lab Use Only)
		,	X X X / /804B35-001
5 4/20/18 1045 x FP-3 5 4/20/18 1145 x FP-3	1 1 2	,	1 4 x x 202
2 13018 11,45 K F1-3			4
	150% Rush 20100% Rush Time: Received by (Signal	tura) Data:	Time: NOTES: 2
	50 / ShANO	2 4/20/1X	1350 PM Ton Long COC
	Received by: Signa	ture) Date:	1 1 Time: pay 5-cm 223355 Seal
	⊓me: Received by: (Signar		Time: PM Ton long COC 1350 PM Ton long COC Fine: PRY Suy - CM 22355 Seol Time: AFE # N36264 JOS
Relinquished by (Signature) Date:	Time: Received by: (Signat	ture) Date:	Time: Same day 4-23-18
Matrix WW - Wastewater W - Water S Container VOA - 40 ml vial A/G - Amber / O			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

April 20, 2018

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

FAX

RE: Lateral 2C 39 OrderNo.: 1804A27

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/19/2018 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1804A27

Date Reported: 4/20/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: CS-1

Project: Lateral 2C 39

Collection Date: 4/18/2018 11:00:00 AM

Lab ID: 1804A27-001

Matrix: MEOH (SOIL) Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	840	30	mg/Kg	20	4/19/2018 12:35:47 PM	37692
EPA METHOD 8015D MOD: GASOL	INE RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	4/19/2018 10:49:41 AM	M50701
Surr: BFB	116	70-130	%Rec	1	4/19/2018 10:49:41 AM	M50701
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/19/2018 10:54:44 AM	37688
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/19/2018 10:54:44 AM	37688
Surr: DNOP	92.9	70-130	%Rec	1	4/19/2018 10:54:44 AM	37688
EPA METHOD 8260B: VOLATILES S	SHORT LIST				Analyst	: AG
Benzene	ND	0.018	mg/Kg	1	4/19/2018 10:49:41 AM	R50701
Toluene	ND	0.035	mg/Kg	1	4/19/2018 10:49:41 AM	R50701
Ethylbenzene	ND	0.035	mg/Kg	1	4/19/2018 10:49:41 AM	R50701
Xylenes, Total	ND	0.071	mg/Kg	1	4/19/2018 10:49:41 AM	R50701
Surr: 4-Bromofluorobenzene	126	70-130	%Rec	1	4/19/2018 10:49:41 AM	R50701
Surr: Toluene-d8	91.0	70-130	%Rec	1	4/19/2018 10:49:41 AM	R50701

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

Lab Order 1804A27

Date Reported: 4/20/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: CS-2

 Project:
 Lateral 2C 39
 Collection Date: 4/18/2018 12:10:00 PM

 Lab ID:
 1804A27-002
 Matrix: MEOH (SOIL)
 Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	250	30	mg/Kg	20	4/19/2018 1:13:00 PM	37692
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	AG
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	4/19/2018 11:12:52 AM	M50701
Surr: BFB	119	70-130	%Rec	1	4/19/2018 11:12:52 AM	M50701
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/19/2018 11:16:52 AM	37688
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/19/2018 11:16:52 AM	37688
Surr: DNOP	96.8	70-130	%Rec	1	4/19/2018 11:16:52 AM	37688
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst	AG
Benzene	ND	0.018	mg/Kg	1	4/19/2018 11:12:52 AM	R50701
Toluene	ND	0.036	mg/Kg	1	4/19/2018 11:12:52 AM	R50701
Ethylbenzene	ND	0.036	mg/Kg	1	4/19/2018 11:12:52 AM	R50701
Xylenes, Total	ND	0.072	mg/Kg	1	4/19/2018 11:12:52 AM	R50701
Surr: 4-Bromofluorobenzene	129	70-130	%Rec	1	4/19/2018 11:12:52 AM	R50701
Surr: Toluene-d8	91.6	70-130	%Rec	1	4/19/2018 11:12:52 AM	R50701

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

Lab Order 1804A27

Date Reported: 4/20/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: CS-3

Project: Lateral 2C 39

Collection Date: 4/18/2018 2:50:00 PM

Lab ID: 1804A27-003

Matrix: MEOH (SOIL) Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	130	30	mg/Kg	20	4/19/2018 1:25:25 PM	37692
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst	: AG
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	4/19/2018 11:36:02 AM	M50701
Surr: BFB	117	70-130	%Rec	1	4/19/2018 11:36:02 AM	M50701
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	i			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/19/2018 11:38:58 AM	37688
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/19/2018 11:38:58 AM	37688
Surr: DNOP	93.6	70-130	%Rec	1	4/19/2018 11:38:58 AM	37688
EPA METHOD 8260B: VOLATILES SHO	ORT LIST				Analyst	: AG
Benzene	ND	0.020	mg/Kg	1	4/19/2018 11:36:02 AM	R50701
Toluene	ND	0.039	mg/Kg	1	4/19/2018 11:36:02 AM	R50701
Ethylbenzene	ND	0.039	mg/Kg	1	4/19/2018 11:36:02 AM	R50701
Xylenes, Total	ND	0.078	mg/Kg	1	4/19/2018 11:36:02 AM	R50701
Surr: 4-Bromofluorobenzene	127	70-130	%Rec	1	4/19/2018 11:36:02 AM	R50701
Surr: Toluene-d8	92.6	70-130	%Rec	1	4/19/2018 11:36:02 AM	R50701

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

Lab Order 1804A27

Client Sample ID: CS-4

Date Reported: 4/20/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lateral 2C 39 **Collection Date:** 4/18/2018 2:45:00 PM

Lab ID: 1804A27-004 Matrix: MEOH (SOIL) Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: MRA
Chloride	120	30	mg/Kg	20	4/19/2018 1:37:49 PM	37692
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: AG
Gasoline Range Organics (GRO)	5.3	3.9	mg/Kg	1	4/19/2018 11:59:08 AM	M50701
Surr: BFB	112	70-130	%Rec	1	4/19/2018 11:59:08 AM	M50701
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/19/2018 1:29:33 PM	37688
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/19/2018 1:29:33 PM	37688
Surr: DNOP	91.4	70-130	%Rec	1	4/19/2018 1:29:33 PM	37688
EPA METHOD 8260B: VOLATILES SHORT LIST					Analys	: AG
Benzene	ND	0.019	mg/Kg	1	4/19/2018 11:59:08 AM	R50701
Toluene	ND	0.039	mg/Kg	1	4/19/2018 11:59:08 AM	R50701
Ethylbenzene	ND	0.039	mg/Kg	1	4/19/2018 11:59:08 AM	R50701
Xylenes, Total	ND	0.078	mg/Kg	1	4/19/2018 11:59:08 AM	R50701
Surr: 4-Bromofluorobenzene	122	70-130	%Rec	1	4/19/2018 11:59:08 AM	R50701
Surr: Toluene-d8	92.4	70-130	%Rec	1	4/19/2018 11:59:08 AM	R50701

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

Lab Order 1804A27

Date Reported: 4/20/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: CS-5

 Project:
 Lateral 2C 39
 Collection Date: 4/18/2018 3:00:00 PM

 Lab ID:
 1804A27-005
 Matrix: MEOH (SOIL)
 Received Date: 4/19/2018 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	380	30	mg/Kg	20	4/19/2018 1:50:13 PM	37692
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	AG
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	4/19/2018 12:22:13 PM	M50701
Surr: BFB	115	70-130	%Rec	1	4/19/2018 12:22:13 PM	M50701
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst	TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/19/2018 12:23:07 PM	37688
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/19/2018 12:23:07 PM	37688
Surr: DNOP	92.9	70-130	%Rec	1	4/19/2018 12:23:07 PM	37688
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	AG
Benzene	ND	0.019	mg/Kg	1	4/19/2018 12:22:13 PM	R50701
Toluene	ND	0.039	mg/Kg	1	4/19/2018 12:22:13 PM	R50701
Ethylbenzene	ND	0.039	mg/Kg	1	4/19/2018 12:22:13 PM	R50701
Xylenes, Total	ND	0.078	mg/Kg	1	4/19/2018 12:22:13 PM	R50701
Surr: 4-Bromofluorobenzene	126	70-130	%Rec	1	4/19/2018 12:22:13 PM	R50701
Surr: Toluene-d8	91.9	70-130	%Rec	1	4/19/2018 12:22:13 PM	R50701

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 9
- 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#: **1804A27**

20-Apr-18

Client: APEX TITAN
Project: Lateral 2C 39

Sample ID MB-37692 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 37692 RunNo: 50704

Prep Date: 4/19/2018 Analysis Date: 4/19/2018 SeqNo: 1645307 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID LCS-37692 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 37692 RunNo: 50704

Prep Date: 4/19/2018 Analysis Date: 4/19/2018 SeqNo: 1645308 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.6 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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 9

P Sample pH Not In Range

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804A27**

20-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Project: Lateral 2	2C 39						
Sample ID LCS-37688	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Orga	nics				
Client ID: LCSS	Batch ID: 37688	RunNo: 50692					
Prep Date: 4/19/2018	Analysis Date: 4/19/2018	SeqNo: 1644090 Units: mg/Kg	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPD	Limit Qual				
Diesel Range Organics (DRO)	49 10 50.00	0 97.7 70 130					
Surr: DNOP	4.0 5.000	80.7 70 130					
Sample ID MB-37688	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Orga	nics				
Client ID: PBS	Batch ID: 37688	RunNo: 50692					
Prep Date: 4/19/2018	Analysis Date: 4/19/2018	SeqNo: 1644091 Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPD	Limit Qual				
Diesel Range Organics (DRO)	ND 10						
Motor Oil Range Organics (MRO)	ND 50						
Surr: DNOP	9.6 10.00	96.1 70 130					
Sample ID LCS-37670	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 37670	RunNo: 50693					
Prep Date: 4/18/2018	Analysis Date: 4/19/2018	SeqNo: 1644506 Units: %Rec					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPD	Limit Qual				
Surr: DNOP	4.2 5.000	84.7 70 130					
Sample ID MB-37670	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Orga	anics				
Client ID: PBS	Batch ID: 37670	RunNo: 50693					
Prep Date: 4/18/2018	Analysis Date: 4/19/2018	SeqNo: 1644507 Units: %Rec					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPD	Limit Qual				
Surr: DNOP	9.6 10.00	96.1 70 130					

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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 9

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1804A27

20-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Sample ID 100ng Ics	SampT	ype: LC	S4	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: BatchQC	Batch	n ID: R5	0701	F	RunNo: 50701					
Prep Date:	Analysis D	ate: 4/	19/2018	S	SeqNo: 1	644447	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	110	80	120			
Toluene	0.99	0.050	1.000	0	99.3	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.4	80	120			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			
	SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List									
Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: Volat	tiles Short	List	
Sample ID rb Client ID: PBS		ype: ME			tCode: El		8260B: Vola	tiles Short	List	
		n ID: R5	0701	F		0701	8260B: Volat		List	
Client ID: PBS	Batch	n ID: R5	0701 19/2018	F	RunNo: 5 SeqNo: 1	0701			: List RPDLimit	Qual
Client ID: PBS Prep Date:	Batch Analysis D	n ID: R5 Date: 4 /	0701 19/2018	F	RunNo: 5 SeqNo: 1	0701 644456	Units: mg/k	(g		Qual
Client ID: PBS Prep Date: Analyte	Batch Analysis D Result	n ID: R5 Date: 4/	0701 19/2018	F	RunNo: 5 SeqNo: 1	0701 644456	Units: mg/k	(g		Qual
Client ID: PBS Prep Date: Analyte Benzene	Batch Analysis D Result ND	PQL 0.025	0701 19/2018	F	RunNo: 5 SeqNo: 1	0701 644456	Units: mg/k	(g		Qual
Client ID: PBS Prep Date: Analyte Benzene Toluene Ethylbenzene	Batch Analysis D Result ND ND	PQL 0.025 0.050	0701 19/2018	F	RunNo: 5 SeqNo: 1	0701 644456	Units: mg/k	(g		Qual
Client ID: PBS Prep Date: Analyte Benzene Toluene	Batch Analysis D Result ND ND ND	PQL 0.025 0.050	0701 19/2018	F	RunNo: 5 SeqNo: 1	0701 644456	Units: mg/k	(g		Qual
Client ID: PBS Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Result ND ND ND ND ND ND	PQL 0.025 0.050	0701 19/2018 SPK value	F	RunNo: 5 SeqNo: 1 %REC	0701 644456 LowLimit	Units: mg/K HighLimit	(g		Qual

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

В Analyte detected in the associated Method Blank

Page 8 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1804A27

20-Apr-18

Client:

APEX TITAN

Project:

Lateral 2C 39

Sample ID 2.5ug gro lcs	SampT	ype: LC	S	TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch	ID: M5	0701	RunNo: 50701						
Prep Date:	rep Date: Analysis Date: 4/19/2018			SeqNo: 1644387 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	70	130			
Surr: BFB	480		500.0		95.8	70	130			

Sample ID rb	SampTy	pe: ME	LK	TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: PBS	Batch ID: M50701 RunNo: 50701									
Prep Date:	Analysis Da	ate: 4/	19/2018	S	eqNo: 1	644388	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. RER	540		500.0		109	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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 9

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

APEX AZTEC Work Order Number: 1804A27 RcptNo: 1 Client Name: 4/19/2018 7:15:00 AM Received By: Isaiah Ortiz Isaiah Ortiz 4/19/2018 7:54:40 AM IGA Completed By: SRE 04/19/18 Reviewed By: LB: ENM Chain of Custody 1. Is Chain of Custody complete? Yes V No 🗌 Not Present 2. How was the sample delivered? Courier Log In NA 🗌 3. Was an attempt made to cool the samples? Yes V No 🗌 No 🗌 NA 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No 🗌 5. Sample(s) in proper container(s)? Yes 🗹 6. Sufficient sample volume for indicated test(s)? Yes 🗸 Yes V No 🗌 7. Are samples (except VOA and ONG) properly preserved? Yes 🗌 NA 🗌 No V 8. Was preservative added to bottles? 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 for pH: Yes 🗸 11. Does paperwork match bottle labels? No 🗌 (Note discrepancies on chain of custody) 2 unless noted) No 🗌 Yes 🗸 12. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🗌 13. Is it clear what analyses were requested? Yes V No 🗌 Checked by: 14. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes 🗌 15. Was client notified of all discrepancies with this order? No NA V Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 0.4 Good Yes

				CHAIN OF CUSTODY RECORD
TO 6	Hall Env	ronmental	ANALYSIS	Lab use only
	Laboratory: Amain 515		REQUESTED / / / /	Due Date:
APEX	Address: 4901 Hay			1// 06-6255
Office Location	Albuquique, n		-1 / 4 / / /	Temp. of coolers when received (C*): 6,4
icolo Sela Grande, Suite A	Contact: A, F &		-	1 2 3 4 5
Parel, NM 87410	Phone: 505-		- 2 / /	Page of
Project Manager K.Summers				/ / FageOI
Sampler's Name	PO/SO#: Sampler's Signature	2000	⊣ <i>₹1₫ </i>	1 1 1
Range Dzechilly /	Fr Dalli		BTEX 6003 TPH 6R0/0R0/MRQ	/ / /
Proj. No. Project Name		No/Type of Containers		/ / /
725040112430 Lateral				ISOUADT
Matrix Date Time C G G I Identifying Ma	arks of Sample(s)	VOA ArG 11,1 250 ml Class		Lab Sample ID (Lab Use Only)
5 4/6/18 1100 X C	5-(1	XXX	-001
5 4/18/18 1210 X C	5-2)	Y X X	-003
e 13 \ -	5-3	1	V V V	-003
	5-4	1	V V V	-004
	5-5		X X X	-0065
2 1/4/10 53				פוןמ
	\$5			
10				
	50% Rush 00% Rush		Ay	
	Time: Received by: (Signal	ture) Date:	Time: NOTES: PIN	-Tom way
Relinguished by (Signature) Date;	Time: / Received by (Signa	ture) Date;	Time: Pay K	ey- CMa2355
	Time: Received by: (Signat	ture) Date:	8 07/5 Time:	4FE N36264
			SAMED AU	472 NOASO-1
Relinquished by (Signature) Date:	Time: Received by: (Signat	ture) Date:	Time:	COC Son
Marrix WW - Wastewater W - Water Container VOA - 40 mi vial A/G - Amber / 0	S - Soll SD - Sollid L - Liquid or Glass 1 Liter 250 ml -		Charcoal tube SL - sludge O - Oil - Plastic or other	COC Seal

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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141

Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

	Santa Fe, NM 87505											
Release Notification and Corrective Action												
					OP	ERATOR	2] Initial R	- what is		
Name of C	ompany:	Enterprise I	Field Serv	vices LLC		Contact: Thomas Long/Runell Seale						
Address: 6	14 Reilly A	lve, Farmin	gton, NM	87401		Telephone	No. 505-599	9-2286				
Facility Na	me: Valen	cia Canyoı	n #35 Pip	eline		Facility Typ	e: Natural C	Gas Gat	hering Pi	peline		
Surface Ov	vner: Forr	est Service)	Mineral O	wner:	Forrest S	ervice		API No.	NA		
				LOCA	TION	OF REL	EASE					
Unit Letter K	Section 34	Township 28N	Range 4W	Feet from the 2161	Nort Line	/South	Feet from the 1921	Ea.t/ Line	West	County Rio Arriba		
			La	titude 36.61	520	Longitud	e -107.2412	2				
					JRE	OF RELI						
Type of Rele Source of R				s Liquids			f Release: Un Hour of Occur			Recovered: None Hour of Discovery:		
Source of R	elease: inte	ernai corrosic	ori				@ 11:30 a.m			' @ 11:30 a.m.		
Was Immed	iate Notice	Given?	s 🗌 No	Not Requ ■ Not Requ Not Req N	uired					anessa Fields – NMOCD;		
By Whom?							Hour July 12,					
Was a Wate	ercourse Re	ached?	☐ Yes	⊠ No		If YES, Vo	olume Impacti	ng the W	atercourse			
If a Waterco												
#35 pipeline	. The pipeli	ne was isola	ted, depre		d out a	and tagged				ase on the Valencia Canyon t long by 10 feet wide was		
samples for completed be exhibits min limited area vehicular ac and the envi	laboratory a by the third p imal exceed of impact a cess to the ironment. A	analysis on coarty contact dances of NN nd considering site, a natural third party is	uly 12, 20 or on Aug MOCD rem ng the eco al attenuat nvestigation	17. Additional ust 21, 2017. In ediation action action ological and phytion option appears report is incl	deline dorizor levels sical dears to uded v	ation activitintal and vertes for contam damage that provide equals that this Finals.	es were reque ical extent of inant of conce would be infliual or better of al "C-141."	ested by to contaming rn. Due cted on to verall pro	the NMOCE nation was of to the inacc the local en- otection of fr	site and collected soil on July 24, 2017 and lefined. The investigation sessibility of the location, vironment by providing resh water, public health,		
rules and re which may e relieve the o ground water	and the environment. A third party investigation report is included with this Final "C-141." I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.									ective actions for releases d as "Final Report" does not nination that pose a threat to		
		/	//				OIL CO	NSER\	VATION	DIVISION		
Signature:	Jw .	· tu	4				(
Printed Nam	ne: Jon E. F	ields				Approved by	Environment	al Specia	alist:			
Title: Directo	or, Environn	nental				Approval Da	te: \$ 2 2	8K	Expiration [Date:		
E-mail Addr	ess:jefields	@eprod.com				Conditions of	of Approval:					

* Attach Additional Sheets If Necessary

Phone: (713)381-6684

NVF1724334039

6

Attached

Fields, Vanessa, EMNRD

From:

Long, Thomas <tjlong@eprod.com>

Sent:

Thursday, August 2, 2018 12:25 PM

Stone, Brian; Smith, Cory, EMNRD

To:

Fields, Vanessa, EMNRD; jjmiller@fs.fed.us

Cc: Subject:

RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152,

-107.2412

Vanessa,

We have re-hydrated twice since the June 27, 2018 Micro Blaze application. We plan on rehydrating at least one more time prior to sampling, which I anticipate sampling to be the first week of September. If you have any question, please call or email.

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

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]

Sent: Thursday, August 02, 2018 10:15 AM

To: Long, Thomas

Cc: Stone, Brian; Smith, Cory, EMNRD

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Good morning Tom,

Could you please provide a status update on the Valencia Canyon #35.

Thank you,

Vanessa Fields

From: Fields, Vanessa, EMNRD

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Thank you Tom.

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410

Email is sufficient, thanks for asking.

Thank you,

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

From: Long, Thomas <tilong@eprod.com>
Sent: Wednesday, April 4, 2018 3:00 PM

To: Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us >

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

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Vanessa,

Do you want a work plan for this microbial application or will email documentation suffice?

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

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]

Sent: Tuesday, March 13, 2018 1:14 PM

To: Long, Thomas **Cc:** Stone, Brian

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Tom,

Thank you very much for the update.

Please let me know when the work is scheduled.

Thank you,

Vanessa Fields Environmental Specialist



J.J. Miller Minerals Administrator

Forest Service

Carson National Forest, Jicarilla Ranger District

p: 505-632-2956 x77240 c: 505-320-1879 f: 505-632-3173 jjmiller@fs.fed.us

1110 Rio Vista Lane, Unit #2 Bloomfield, NM 87413

www.fs.fed.us

Caring for the land and serving people

From: Long, Thomas [mailto:tjlong@eprod.com]

Sent: Thursday, March 08, 2018 9:44 AM To: Miller, Jon J -FS < jjmiller@fs.fed.us>

Cc: Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us) < Vanessa.Fields@state.nm.us>; Stone, Brian

<bmstone@eprod.com>; Clelland, Sarah <SDCLELLAND@eprod.com>

Subject: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

IJ,

Enterprise needs to apply a microbial solution to enhance bio-remediation at the Valencia Canyon #35 6-29-17 release site. Does the Forestry Service has any objections to using a microbial solution such as Micro-Blaze on Forestry Service lands? My second question pertains to access for applying this solution. The site is located in a very difficult area to access. Please use the above provided GPS location for reference. Can Enterprise use the existing Right-of-Way to transport materials as close to the release site as possible? The existing ROW ends at approximately 36.616803, - 107.238325, where it drops off a cliff. Materials will have to be hand carried from that point. This existing ROW has vegetation growing on it and Enterprise will make every effort not to damage or disturb the vegetation during these activities. May Enterprise utilize this existing ROW to transport materials?

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





Environmental Site Investigation

Property:

Valencia Canyon Unit #35 SW 1/4, S34 T28N R4W Rio Arriba County, New Mexico

November 14, 2017 Apex Project No. 725040112306

Prepared for:

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

Prepared by:

11

Ranee Deechilly Project Scientist

Kyle Summers, CPG Branch Manager / Senior Geologist

ummin

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Environmental Site Investigation

Valencia Canyon Unit #35 SW 1/4, S34 T28N R4W Rio Arriba County, New Mexico

Apex Project No. 725040112306

1.0 INTRODUCTION

1.1 Site Description & Background

The Valencia Canyon Unit #35 release site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in the southwest (SW) ¼ of Section 34, Township 28 North, Range 4 West, in Rio Arriba County, New Mexico (36.61520N, 107.24122W), referred to hereinafter as the "Site". The release Site is in a remote area (inaccessible by vehicular traffic) on land managed by the United States Forest Service (USFS). The area surrounding the Site is pinon and juniper forest with intermittent oil and gas production and gathering facilities, including the Valencia Canyon Unit #35 pipeline which traverses the area from approximately northeast to southwest.

On June 29, 2017, a surface release was identified by Enterprise personnel on the Valencia Canyon Unit #35 pipeline. Enterprise immediately isolated and locked the line out of service. The line was temporarily repaired by cleaning and clamping the pipe. Due to access limitations related to rain and road conditions, permanent pipeline repairs and site investigation activities were delayed until a later date. During August 2017, Enterprise completed permanent pipeline repairs and the pipeline was placed back into service.

A Topographic Map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A. Photographic documentation is provided In Appendix B.

1.2 Project Objective

The primary objective of the environmental site investigation (ESI) was to evaluate and delineate the constituent of concern (COC) concentrations in soil at the site with respect to the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) Remediation Action Levels (RALs) using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics and information available from the New Mexico Office of the State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table



Ra	nking Criteria		Ranking Score
	<50 feet	20	
Depth to Groundwater	50 to 99 feet	10	0
	>100 feet	0	
Wellhead Protection Area • <1,000 feet	Yes	20	
from a water source, or; <200 feet from private domestic water source.	No	0	0
Distance to Cumfore	<200 feet	20	
Distance to Surface	200 to 1,000 feet	10	10
Water Body	>1,000 feet	0	
Total	Ranking Score		10

Based on Apex's evaluation of the scoring criteria, the Site would have a Total Ranking Score of "10". This ranking is based on the following:

- One (1) spring (SP 03622), located 0.5 miles from the Site is the only point of diversion (POD) identified on the OSE Water Rights Reporting System (WRRS) database. There are several other springs within a one (1) mile radius of the Site, as identified on the topographic map. Based on the difference in elevation between the nearby springs and the Site, the depth to groundwater at the Site is anticipated to be greater than 100 feet below grade surface (bgs), resulting in a ranking score of "0" for depth to groundwater.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site. These proximities result in a wellhead protection area ranking score of "0".
- The release point is located approximately 630 feet north of Valencia Canyon wash which is identified as a "blue line" on the United States Geological Survey topographic map. This information supports a distance to surface water ranking score of "10".

3.0 ENVIRONMENTAL SITE INVESTIGATION

On July 12, 2017, Apex performed initial site investigation activities and collected a total of two (2) shallow composite soil samples (S-1 and S-2) near the point of release (0 to 0.5 feet bgs). Subsequent laboratory analytical results indicate that soils associated with samples S-1 and S-2 exhibited petroleum hydrocarbon impact above New Mexico EMNRD OCD RALs.

On August 21, 2017, Apex performed delineation activities at the Site utilizing a hand auger. Eight (8) soil borings (HA-1 through HA-8) were advanced topographically up-gradient, down-gradient, and cross gradient from the point of release. Thick brush, exposed and shallow sandstone, and plant roots were limiting factors in soil boring location selections. Depths of the soil borings ranged from one (1) to five (5) feet bgs. The lithology encountered during the completion of site investigation activities consisted primarily of silty sand and weathered sandstone. Soil boring logs are provided in **Appendix C**.

Figure 3 is a Site Map with Soil Analytical Results that identifies the approximate soil boring/sample locations in relation to the pipeline and point of release (Appendix A).



3.1 Soil Sampling Program

Apex screened head-space samples of the shallow composite soil samples and soil boring soil samples with a photoionization detector (PID) fitted with a 10.6 eV lamp.

Apex's soil sampling program included the collection of two (2) shallow composite soil samples and 11 discrete soil boring samples for laboratory analyses. A field headspace analysis was conducted on each available soil sample interval using a PID. PID readings ranged from 2.4 parts per million (ppm) to 1,784 ppm (HA-4). One (1) to two (2) discrete soil samples were collected from each soil boring for laboratory analysis. These samples were collected from the depth interval exhibiting the highest concentration of volatile organic compounds (VOCs) based on PID evidence and/or from the bottom of the soil boring.

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

3.2 Soil Laboratory Analytical Methods

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

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

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 the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the New Mexico EMNRD OCD rules, specifically New Mexico Administrative Code 19.15.29 *Release Notification*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Soil Samples

Apex compared the BTEX and TPH concentrations or practical quantitation limits (PQLs) associated with the shallow composite soil samples (S-1 and S-2) and soil boring soil samples (HA-1 through HA-8) to the New Mexico EMNRD OCD *RALs* for sites having a total ranking score of "10".

Shallow Composite Soil Samples

 The shallow composite soil samples (S-1 and S-2) collected near the point of release exhibited benzene concentrations of 1.1 mg/kg and 3.4 mg/kg, which are below the New Mexico EMNRD OCD RAL of 10 milligrams per kilogram (mg/kg).



- The shallow composite soil samples (S-1 and S-2) collected near the point of release exhibited total BTEX concentrations of 77 mg/kg and 221 mg/kg, which exceed the New Mexico EMNRD OCD RAL of 50 mg/kg.
- The shallow composite soil samples (S-1 and S-2) collected near the point of release exhibited combined TPH GRO/DRO/MRO concentrations of 3,600 mg/kg and 3,700 mg/kg, which exceed the New Mexico EMNRD OCD RAL of 1,000 mg/kg.

Hand Auger Soil Boring Samples

- The soil samples collected from the soil borings exhibited benzene concentrations ranging from below the PQLs to 2.4 mg/kg (HA-6 @ 3'), which are below the New Mexico EMNRD OCD *RAL* of 10 milligrams per kilogram (mg/kg).
- Soil sample HA-6 (3') exhibited a total BTEX concentration of 64 mg/kg, which
 exceeds the New Mexico EMNRD OCD RAL of 50 mg/kg. The remaining soil boring
 soil samples did not exhibit total BTEX concentrations above the PQLs, which are below
 the New Mexico EMNRD OCD RAL of 50 mg/kg.
- The soil samples collected from the soil borings exhibited combined TPH GRO/DRO/MRO concentrations ranging from below the PQLs to 922 mg/kg (HA-6 3'), which are below the New Mexico EMNRD OCD RAL of 1,000 mg/kg for a Site ranking of 10.

Soil sample laboratory analytical results are provided in **Table 1** in **Appendix D**, and are included on **Figure 3** (**Appendix A**).

5.0 FINDINGS AND RECOMMENDATIONS

The Valencia Canyon Unit #35 release Site is located within the Enterprise pipeline ROW in the SW ¼ of Section 34, Township 28 North, Range 4 West, in Rio Arriba County, New Mexico. The release Site is in a remote area (that cannot be accessed by vehicular traffic) on land managed by the USFS. The area surrounding the Site is pinon and juniper forest with intermittent oil and gas production and gathering facilities, including the Valencia Canyon Unit #35 pipeline which traverses the area from approximately northeast to southwest.

On June 29, 2017, a surface release was identified by Enterprise personnel on the Valencia Canyon Unit #35 pipeline. Enterprise immediately isolated and locked the line out of service. The line was temporarily repaired by cleaning and clamping the pipe. Due to access limitations related to rain and road conditions, permanent pipeline repairs and site investigation activities were delayed until a later date. During August 2017, Enterprise completed permanent pipeline repairs and the pipeline was placed back into service.

- The primary objective of the ESI was to evaluate and delineate the COC concentrations in soils at the site.
- The lithology encountered during the completion of site investigation activities consisted primarily of silty sand and weathered sandstone.



- A total of two (2) shallow composite soil samples and 11 discrete soil boring samples were submitted for laboratory analyses.
- The shallow composite soil samples (S-1 and S-2) collected from soils remaining in place exhibited total BTEX concentrations of 77 mg/kg and 221 mg/kg which exceed the New Mexico EMNRD OCD RAL of 50 mg/kg.
- The shallow composite soil samples (S-1 and S-2) collected from soils remaining in place exhibit combined TPH GRO/DRO/MRO concentrations of 3,600 mg/kg and 3,700 mg/kg, which exceed the New Mexico EMNRD OCD RAL of 1,000 mg/kg.
- The soil sample collected from soil boring HA-6 (3') exhibits a total BTEX concentration of 64 mg/kg, which exceeds the New Mexico EMNRD OCD RAL of 50 mg/kg.

No benzene exceedances were identified in the Site soils. BTEX and combined TPH concentrations that exceed the New Mexico EMNRD OCD RALs are present in the immediate vicinity of the release point. Based on available information, the RAL exceedance zone is estimated to be approximately 10 feet wide and 15 feet in length. Weathered sandstone is present at approximately three (3) feet bgs near the point of release and should limit further vertical migration of COCs.

Due to the inaccessibility of the location and limited area of impact, Enterprise proposes to allow natural attenuation of the hydrocarbon-affected soils at this location. Alternatively, Enterprise could attempt a limited application of a microbial solution at the release point to potentially accelerate biodegradation.

In this circumstance, considering the ecological and physical damage that would be inflicted on the local environment by providing vehicular access to the Site, a natural attenuation option appears to provide equal or better overall protection of fresh water, public health, and the environment.

6.0 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 or described herein. 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.

Enterprise Field Services, LLC Environmental Site Investigation Valencia Canyon Unit #35 November 14, 2017

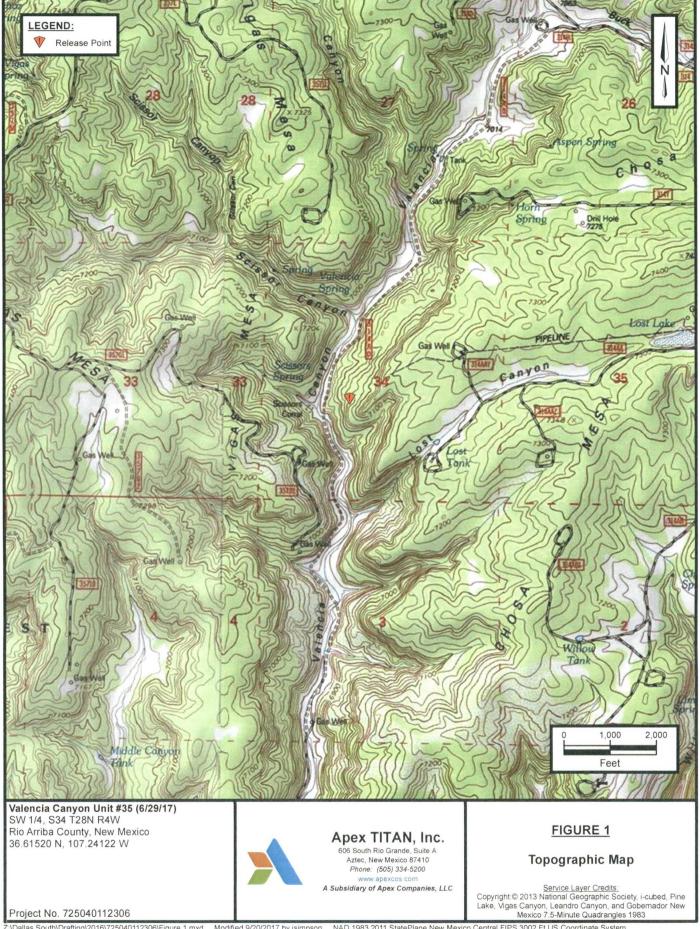


This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution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

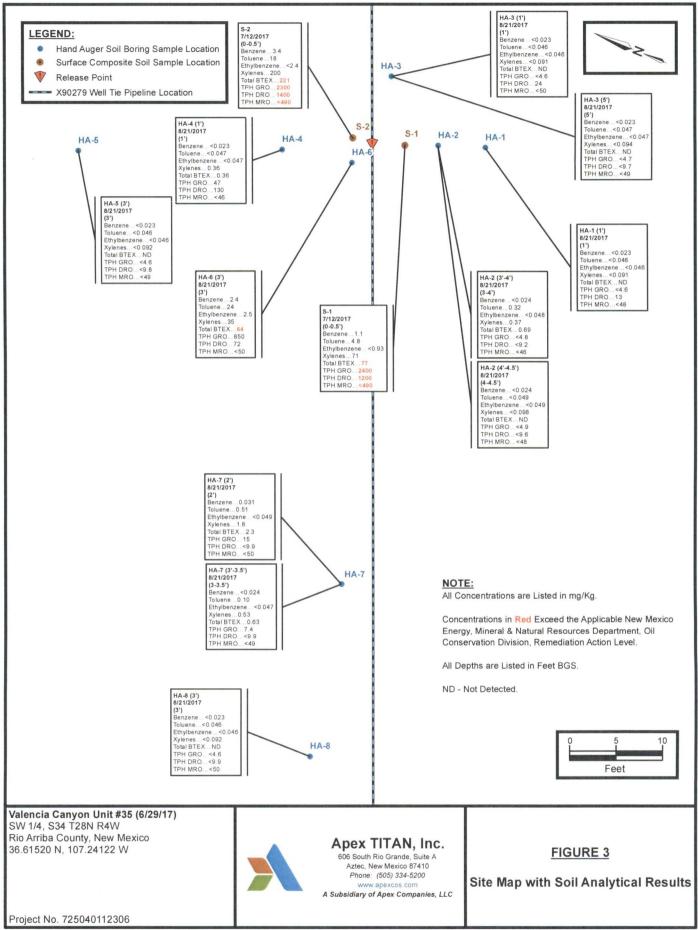


APPENDIX A

Figures









APPENDIX B

Photographic Documentation



Photograph 1

View of the release point, facing northwest.



Photograph 2

View of the Site, facing east.



Photograph 3

View of the repaired pipeline and release area, facing northwest.





Photograph 4

View of eastern extent of the release area, facing north.



Photograph 5

View of the northern extent of the release area, facing northwest.





APPENDIX C
Soil Boring Logs

Valencia Canyon Unit #35 (6/29/17) Soil Boring/Monitoring Well Apex TITAN, Inc. SW 1/4, S34 T28N R4W 606 South Rio Grande, Suite A Aztec, New Mexico 87410 Rio Arriba County, New Mexico HA-1 Phone: (505) 334-5200 36.61520 N, 107.24122 W www.apexcos.com A Subsidiary of Apex Companies, LLC Project No. 725040112306 Ground Surface Elevation: Date Sampled: 8/21/2017 Borehole Diameter: N/A Top of Casing Elevation: Drilled by: N/A N/A Casing Diameter: N/A Driller: N/A North Coordinate: N/A Well Materials: N/A Logged by: West Coordinate: R. Deechilly N/A Surface Completion: N/A Bench Mark Elevation: Sampler: R. Deechilly N/A Hand Auger Boring Method: Project Manager: K. Summers Groundwater Depth Observed During Drilling: Groundwater Elevation Depth (Feet BGS) PID Value (ppm) Recovery (%) Sample Interval Boring/Well Completion Geologic Description (Graphic Depiction) SILTY SAND, Dark Yellowish Brown, Fine, Dry to Slightly Moist, No Hydrocarbon Odor 100 26 0-1 Weathered Sandstone @ 1 Foot BGS Refusal @ 1 Foot BGS

Date Sampled: Drilled by: Driller:

Logged by:

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

8/21/2017

R. Deechilly

N/A

N/A

Valencia Canyon Unit #35 (6/29/17)

SW 1/4, S34 T28N R4W Rio Arriba County, New Mexico 36.61520 N, 107.24122 W

Project No. 725040112306

N/A

N/A

Ground Surface Elevation: N/A

Top of Casing Elevation:

North Coordinate:

West Coordinate:

Soil Boring/Monitoring Well
HA-2

	A DESCRIPTION OF THE PARTY OF T	30.75
Borehole Diameter:	N/A	
Casing Diameter:	N/A	
Nell Materials:	N/A	
Surface Completion:	N/A	
Boring Method:	Hand Auger	

Sample Project	r: Manager	R. De	echilly mmers			Benc	h Mark Elevation: N/A Boring Method: N/A Hand Auger
Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Boring/Well Completion Description (Graphic Depiction)
0							SILTY SAND, Dark Yellowish Brown, Fine, Dry to Slightly Moist,
1—			100	2.4			Slight Hydrocarbon Odor
2—			100	27			
			100	3.8			
3—	X	3-4	100	360			Hydrocarbon Odor
4	\times	4-4.5	100	6.2		итит	SILTY CLAY, Dark Yellowish Brown, Fine, Slightly Moist, Hydrocarbon Odor Weathered Sandstone @ 4.5 Feet BGS 4.5' Refusal @ 4.5 Feet BGS
5—————————————————————————————————————							Refusal @ 4.5 Feet BGS

Valencia Canyon Unit #35 (6/29/17) Soil Boring/Monitoring Well Apex TITAN, Inc. SW 1/4, S34 T28N R4W 606 South Rio Grande, Suite A Rio Arriba County, New Mexico HA-3 Aztec, New Mexico 87410 Phone: (505) 334-5200 36.61520 N, 107.24122 W www.apexcos.com A Subsidiary of Apex Companies, LLC Project No. 725040112306 Date Sampled: 8/21/2017 Ground Surface Elevation: N/A Borehole Diameter: Drilled by: N/A Top of Casing Elevation: Casing Diameter: N/A North Coordinate: Driller: N/A N/A Well Materials: N/A West Coordinate: Logged by: R. Deechilly N/A Surface Completion: N/A Sampler: R. Deechilly Bench Mark Elevation: N/A Boring Method: Hand Auger K. Summers Project Manager: Groundwater Depth Observed During Drilling: Groundwater Elevation Depth (Feet BGS) PID Value (ppm) Recovery (%) Geologic Symbol Sample Interval Geologic Boring/Well Completion (Graphic Depiction) Description SILTY SAND, Dark Yellowish Brown, Fine, Dry to Slightly Moist, Slight Hydrocarbon Odor @ 1 Foot BGS to No Hydrocarbon Odor @ 1 Foot to 5 Feet BGS 1-2 100 91 100 64 100 22 100 32 4-5 100 7.9 Weathered Sandstone @ 5 Feet BGS Refusal @ 5 Feet BGS

606 South Rio Aztec, New Phone: (6/ www.api A Subsidiary of Ap	TAN, Inc. Grande, Suite A Mexico 87410 75) 334-5200 excos.com pex Companies, LLC	Valencia Canyon Unit # SW 1/4, S34 T28N Rio Arriba County, Ne 36.61520 N, 107.24 Project No. 7250401	R4W w Mexico 122 W	Soil Boring/Monitoring Well HA-4			
Date Sampled: 8/21/2017 Drilled by: N/A Driller: N/A Logged by: R. Deechilly Sampler: R. Deechilly Project Manager: K. Summers		Ground Surface Elevation: N/F Top of Casing Elevation: N/F North Coordinate: N/F West Coordinate: N/F Bench Mark Elevation: N/F Groundwater Depth Observed D	Casing Di Well Mate Surface C	erials: N/A Completion: N/A			
Depth (Feet BGS) Sample Interval Sample ID Recovery (%)	PID Value (ppm) Groundwater Elevation	Geologic Symbol Des	eologic cription	Boring/Well Completion (Graphic Depiction)			
0-1 100 1 3 - 1 100 1 - 1	1784	Weathered Sandstone @ 1 Foot. Refusal @ 1 Foot BGS		-1'			

Apex TITAN, Inc. 606 South Rio Grande, Suite A Aztec, New Mexico 87410 Phone: (505) 334-5200

Valencia Canyon Unit #35 (6/29/17) SW 1/4, S34 T28N R4W Rio Arriba County, New Mexico 36.61520 N, 107.24122 W

Soil Boring/Monitoring Well

HA-5

	1	A Subs	www.ag	pex Compa	anies, LLC		Project No. 725	5040112306			7 ()
Date Sa Drilled I	ampled: by:	8/21/2 N/A	2017			_ Top c	nd Surface Elevation: of Casing Elevation:	N/A N/A	BoreholeCasing Di	ameter:	N/A N/A
Driller: Logged	by:	N/A R. De	echilly			West	Coordinate: Coordinate:	N/A N/A	 Well Mate Surface C 	erials: completion:	N/A
Sample Project	r: Manager	R. De	echilly			_	h Mark Elevation: ndwater Depth Observ	N/A ved During Drilling:	Boring Me	ethod:	Hand Auger
Depth (Feet BGS)	Sample Interval	Sample	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic		Geologic Description		Boi (i	ring/Well Completion Graphic Depiction)
0											
1			100	19			SILTY SAND, Dark Yellow	ish Brown, Fine, Dry, No Hyd	drocarbon Odor		
2—			100	14.5							
3—	X	2-3	100	31							
			100	22			Weathered Sandstone @ 3	3.5 Feet BGS			-3.5'
1							Refusal @ 3.5 Feet BGS				-5.5
4											
5—											
=											
6											
=											
7—	2										
. =											
"=											
1											
9											
=											
10-											
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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							SW 1/4, S34 T2 Rio Arriba County, 36.61520 N, 107 Project No. 7250	28N R4W New Mexico 7.24122 W 40112306	HA-6			
Date Sampled: Drilled by: Driller: Logged by: Sampler: Project Manage		A STATE OF THE RESIDENCE OF THE PARTY OF THE				Ground Surface Elevation: N/A Top of Casing Elevation: N/A North Coordinate: N/A West Coordinate: N/A Bench Mark Elevation: N/A Groundwater Depth Observed During Drilling:			Borehole Diameter: N/A Casing Diameter: N/A Well Materials: N/A Surface Completion: N/A Boring Method: N/A Hand Auger			
Depth (Feet BGS)	Sample Interval	Sample	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	I	Geologic Description		Boring/W (Graphi	ell Completion c Depiction)	
0			100	1174			SILTY SAND, Dark Yellowish Moist, Hydrocarbon Odor	n Brown, Fine, Dry to Slightly				
2—	-		100	1267								
3—	X	2-3	100	1368			Weathered Sandstone @ 3 F Refusal @ 3 Feet BGS	Feet BGS			-3'	
4—												
5—												
6—												
7—												
8												
9—-												
10-												

Apex TITAN, Inc.

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

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Valencia Canyon Unit #35 (6/29/17) SW 1/4, S34 T28N R4W

Rio Arriba County, New Mexico 36.61520 N, 107.24122 W

Project No. 725040112306

Soil Boring/Monitoring Well

HA-7

Drilled by: N/A Driller: N/A Logged by: R. Deechilly Sampler: R. Deechilly Project Manager: K. Summers			Top of North West Bence	Top of Casing Elevation:			Borehole Diameter: N/A Casing Diameter: N/A Well Materials: N/A Surface Completion: N/A Boring Method: Hand Auger				
Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	,	Geologic Description		Bori (G	ng/Well Completion Graphic Depiction)
0			100	468			SILTY SAND, Dark Yellowi Odor	ish Brown, Fine, Dry, Hydrocart	oon		
2—	X	1-2	100	1279							
3—			100	1174							
1	\times	3-3.5	100	946			Weathered Sandstone @ 3 Refusal @ 3.5 Feet BGS	3.5 Feet BGS			-3.5'
5—											
6——											
9——————————————————————————————————————											
9——											
10											

Valencia Canyon Unit #35 (6/29/17) Soil Boring/Monitoring Well Apex TITAN, Inc. SW 1/4, S34 T28N R4W 606 South Rio Grande, Suite A Aztec, New Mexico 87410 Rio Arriba County, New Mexico **HA-8** 36.61520 N, 107.24122 W Phone: (505) 334-5200 www.apexcos.com A Subsidiary of Apex Companies, LLC Project No. 725040112306 Date Sampled: 8/21/2017 Ground Surface Elevation: Borehole Diameter: N/A Drilled by: Top of Casing Elevation: N/A N/A Casing Diameter: N/A North Coordinate: Driller: N/A N/A Well Materials: N/A Logged by: West Coordinate: N/A R. Deechilly Surface Completion: N/A Bench Mark Elevation: Sampler: R. Deechilly N/A Boring Method: Hand Auger Project Manager: K. Summers Groundwater Depth Observed During Drilling: Groundwater Elevation PID Value (ppm) Depth (Feet BGS) Recovery (%) Sample Interval Sample Boring/Well Completion Geologic \Box Description (Graphic Depiction) SILTY SAND, Dark Yellowish Brown, Fine, Dry to Slightly Moist, No Hydrocarbon Odor 100 3.7 100 2.3 9.2 2-3 100 100 Weathered Sandstone @ 3.2 Feet BGS Refusal @ 3.2 Feet BGS



APPENDIX D

Table



TABLE 1 Valencia Canyon Unit #35 (6/29/17) 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)
		Natural Resources , Remediation Action	ACCUSATE AND PROCESSION OF A CONTRACTOR OF	10	NE	NE	NE	50	1,000		
					Shallov	Soil Samples					
S-1	7.12.17	С	0 to 0.5	1.1	4.8	<0.93	71	77	2,400	1,200	<490
S-2	7.12.17	С	0 to 0.5	3.4	18	<2.4	200	221	2,300	1,400	<490
		N. Children	FIGURE STATE	THE RESERVE	Hand Aug	ger Soil Samples					
HA-1 (1')	8.21.17	G	1	<0.023	<0.046	<0.046	<0.091	ND	<4.6	13	<48
HA-2 (3'-4')	8.21.17	G	3 to 4	<0.024	0.32	<0.048	0.37	0.69	<4.8	<9.2	<46
HA-2 (4'-4.5')	8.21.17	G	4 to 4.5	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.6	<48
HA-3 (1')	8.21.17	G	1	<0.023	<0.046	<0.046	<0.091	ND	<4.6	24	<50
HA-3 (5')	8.21.17	G	5	<0.023	<0.047	<0.047	<0.094	ND	<4.7	<9.7	<49
HA-4 (1')	8.21.17	G	1	<0.023	<0.047	< 0.047	0.36	0.36	47	130	<46
HA-5 (3')	8.21.17	G	3	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.8	<49
HA-6 (3')	8.21.17	G	3	2.4	24	2.5	35	64	850	72	<50
HA-7 (2')	8.21.17	G	2	0.031	0.51	<0.049	1.8	2.3	15	<9.9	<50
HA-7 (3'-3.5')	8.21.17	G	3 to 3.5	<0.024	0.10	<0.047	0.53	0.63	7.4	<9.9	<49
HA-8 (3')	8.21.17	G	3	< 0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.9	<50

Note: Concentrations in **bold** and yellow exceed the applicable New Mexico EMNRD OCD Remediation Action Level

ND = Not Detected above the Practical Quantitation Limits

NE = Not Established

mg/kg = milligram per kilogram



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

August 25, 2017

Kyle Summers
APEX TITAN
606 S. Rio Grande Suite A

Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Valencia Canyon Unit #35 OrderNo.: 1708D04

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 11 sample(s) on 8/23/2017 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-1 (1')

Project:

Valencia Canyon Unit #35

Collection Date: 8/21/2017 12:35:00 PM

Lab ID:

1708D04-001

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6			Analyst	TOM
Diesel Range Organics (DRO)	13	9.6	mg/Kg	1	8/24/2017 6:39:00 PM	33518
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/24/2017 6:39:00 PM	33518
Surr: DNOP	103	70-130	%Rec	1	8/24/2017 6:39:00 PM	33518
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/24/2017 1:13:16 PM	33513
Surr: BFB	89.9	54-150	%Rec	1	8/24/2017 1:13:16 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	8/24/2017 1:13:16 PM	33513
Toluene	ND	0.046	mg/Kg	1	8/24/2017 1:13:16 PM	33513
Ethylbenzene	ND	0.046	mg/Kg	1	8/24/2017 1:13:16 PM	33513
Xylenes, Total	ND	0.091	mg/Kg	1	8/24/2017 1:13:16 PM	33513
Surr: 4-Bromofluorobenzene	101	66.6-132	%Rec	1	8/24/2017 1:13:16 PM	33513

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
- P Sample pH Not In Range
- RL Reporting Detection Limit
- $\begin{array}{cc} \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is out of } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \text{ of } 19 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Nample container temperature is } & Page 2 \\ \text{Namp$

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-2 (3'-4')

Project:

Valencia Canyon Unit #35

Collection Date: 8/21/2017 12:25:00 PM

Lab ID:

1708D04-002

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	8/24/2017 7:54:05 PM	33518
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/24/2017 7:54:05 PM	33518
Surr: DNOP	112	70-130	%Rec	1	8/24/2017 7:54:05 PM	33518
EPA METHOD 8015D: GASOLINE RAN	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/24/2017 4:46:04 PM	33513
Surr: BFB	91.3	54-150	%Rec	1	8/24/2017 4:46:04 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	8/24/2017 4:46:04 PM	33513
Toluene	0.32	0.048	mg/Kg	1	8/24/2017 4:46:04 PM	33513
Ethylbenzene	ND	0.048	mg/Kg	1	8/24/2017 4:46:04 PM	33513
Xylenes, Total	0.37	0.096	mg/Kg	1	8/24/2017 4:46:04 PM	33513
Surr: 4-Bromofluorobenzene	104	66.6-132	%Rec	1	8/24/2017 4:46:04 PM	33513

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

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-2 (4'-4.5')

Project: Valencia Canyon Unit #35

Collection Date: 8/21/2017 12:30:00 PM

Lab ID: 170

1708D04-003

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	8/24/2017 8:19:13 PM	33518
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/24/2017 8:19:13 PM	33518
Surr: DNOP	114	70-130	%Rec	1	8/24/2017 8:19:13 PM	33518
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/24/2017 5:09:36 PM	33513
Surr: BFB	91.7	54-150	%Rec	1	8/24/2017 5:09:36 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	8/24/2017 5:09:36 PM	33513
Toluene	ND	0.049	mg/Kg	1	8/24/2017 5:09:36 PM	33513
Ethylbenzene	ND	0.049	mg/Kg	1	8/24/2017 5:09:36 PM	33513
Xylenes, Total	ND	0.098	mg/Kg	1	8/24/2017 5:09:36 PM	33513
Surr: 4-Bromofluorobenzene	103	66.6-132	%Rec	1	8/24/2017 5:09:36 PM	33513

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

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-3 (1')

Project: Valencia Canyon Unit #35

Collection Date: 8/21/2017 11:45:00 AM

Lab ID: 1708D04-004

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					t: TOM
Diesel Range Organics (DRO)	24	10	mg/Kg	1	8/24/2017 8:44:10 PM	33518
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/24/2017 8:44:10 PM	33518
Surr: DNOP	102	70-130	%Rec	1	8/24/2017 8:44:10 PM	33518
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/24/2017 5:33:14 PM	33513
Surr: BFB	88.0	54-150	%Rec	1	8/24/2017 5:33:14 PM	33513
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	8/24/2017 5:33:14 PM	33513
Toluene	ND	0.046	mg/Kg	1	8/24/2017 5:33:14 PM	33513
Ethylbenzene	ND	0.046	mg/Kg	1	8/24/2017 5:33:14 PM	33513
Xylenes, Total	ND	0.091	mg/Kg	1	8/24/2017 5:33:14 PM	33513
Surr: 4-Bromofluorobenzene	100	66.6-132	%Rec	1	8/24/2017 5:33:14 PM	33513

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

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-3 (5')

Project:

Valencia Canyon Unit #35

Collection Date: 8/21/2017 12:00:00 PM

Lab ID:

1708D04-005

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/24/2017 9:09:12 PM	33518
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/24/2017 9:09:12 PM	33518
Surr: DNOP	103	70-130	%Rec	1	8/24/2017 9:09:12 PM	33518
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/24/2017 5:56:58 PM	33513
Surr: BFB	91.0	54-150	%Rec	1	8/24/2017 5:56:58 PM	33513
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	8/24/2017 5:56:58 PM	33513
Toluene	ND	0.047	mg/Kg	1	8/24/2017 5:56:58 PM	33513
Ethylbenzene	ND	0.047	mg/Kg	1	8/24/2017 5:56:58 PM	33513
Xylenes, Total	ND	0.094	mg/Kg	1	8/24/2017 5:56:58 PM	33513
Surr: 4-Bromofluorobenzene	103	66.6-132	%Rec	1	8/24/2017 5:56:58 PM	33513

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

Lab Order 1708D04

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/25/2017

CLIENT: APEX TITAN

Client Sample ID: HA-4 (1')

Project:

Valencia Canyon Unit #35

Collection Date: 8/21/2017 12:40:00 PM

Lab ID:

1708D04-006

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	130	9.2	mg/Kg	1	8/24/2017 9:34:01 PM	33518
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/24/2017 9:34:01 PM	33518
Surr: DNOP	105	70-130	%Rec	1	8/24/2017 9:34:01 PM	33518
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	47	4.7	mg/Kg	1	8/24/2017 6:20:36 PM	33513
Surr: BFB	578	54-150	S %Rec	1	8/24/2017 6:20:36 PM	33513
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.023	mg/Kg	1	8/24/2017 6:20:36 PM	33513
Toluene	ND	0.047	mg/Kg	1	8/24/2017 6:20:36 PM	33513
Ethylbenzene	ND	0.047	mg/Kg	1	8/24/2017 6:20:36 PM	33513
Xylenes, Total	0.36	0.093	mg/Kg	1	8/24/2017 6:20:36 PM	33513
Surr: 4-Bromofluorobenzene	132	66.6-132	%Rec	1	8/24/2017 6:20:36 PM	33513

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

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-5 (3')

Project:

Valencia Canyon Unit #35

Collection Date: 8/21/2017 12:50:00 PM

Lab ID:

1708D04-007

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	3			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	8/24/2017 9:59:01 PM	33518
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/24/2017 9:59:01 PM	33518
Surr: DNOP	95.6	70-130	%Rec	1	8/24/2017 9:59:01 PM	33518
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/24/2017 7:07:51 PM	33513
Surr: BFB	90.7	54-150	%Rec	1	8/24/2017 7:07:51 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	8/24/2017 7:07:51 PM	33513
Toluene	ND	0.046	mg/Kg	1	8/24/2017 7:07:51 PM	33513
Ethylbenzene	ND	0.046	mg/Kg	1	8/24/2017 7:07:51 PM	33513
Xylenes, Total	ND	0.092	mg/Kg	1	8/24/2017 7:07:51 PM	33513
Surr: 4-Bromofluorobenzene	102	66.6-132	%Rec	1	8/24/2017 7:07:51 PM	33513

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

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-6 (3')

Project:

Valencia Canyon Unit #35

Collection Date: 8/21/2017 1:50:00 PM

Lab ID:

1708D04-008

Matrix: SOIL

Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	том
Diesel Range Organics (DRO)	72	10	mg/Kg	1	8/24/2017 10:23:54 PM	33518
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/24/2017 10:23:54 PM	33518
Surr: DNOP	102	70-130	%Rec	1	8/24/2017 10:23:54 PM	33518
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	850	92	mg/Kg	20	8/24/2017 11:38:29 AM	33513
Surr: BFB	137	54-150	%Rec	20	8/24/2017 11:38:29 AM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	2.4	0.46	mg/Kg	20	8/24/2017 11:38:29 AM	33513
Toluene	24	0.92	mg/Kg	20	8/24/2017 11:38:29 AM	33513
Ethylbenzene	2.5	0.92	mg/Kg	20	8/24/2017 11:38:29 AM	33513
Xylenes, Total	35	1.8	mg/Kg	20	8/24/2017 11:38:29 AM	33513
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	20	8/24/2017 11:38:29 AM	33513

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

Analytical Report Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-7 (2')

Project: Valencia Canyon Unit #35

Collection Date: 8/21/2017 1:20:00 PM

Lab ID: 1708D04-009

Matrix: SOIL Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANIC	S			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/24/2017 10:48:54 PM	33518
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/24/2017 10:48:54 PM	33518
Surr: DNOP	107	70-130	%Rec	1	8/24/2017 10:48:54 PM	33518
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	NSB
Gasoline Range Organics (GRO)	15	4.9	mg/Kg	1	8/24/2017 7:31:23 PM	33513
Surr: BFB	119	54-150	%Rec	1	8/24/2017 7:31:23 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	0.031	0.025	mg/Kg	1	8/24/2017 7:31:23 PM	33513
Toluene	0.51	0.049	mg/Kg	1	8/24/2017 7:31:23 PM	33513
Ethylbenzene	ND	0.049	mg/Kg	1	8/24/2017 7:31:23 PM	33513
Xylenes, Total	1.8	0.099	mg/Kg	1	8/24/2017 7:31:23 PM	33513
Surr: 4-Bromofluorobenzene	106	66.6-132	%Rec	1	8/24/2017 7:31:23 PM	33513

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

Analytical Report Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Valencia Canyon Unit #35

Lab ID: 1708D04-010

Client Sample ID: HA-7 (3'-3.5')

Collection Date: 8/21/2017 1:25:00 PM Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN			Analyst	TOM		
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/24/2017 11:13:42 PM	33518
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/24/2017 11:13:42 PM	33518
Surr: DNOP	104	70-130	%Rec	1	8/24/2017 11:13:42 PM	33518
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	7.4	4.7	mg/Kg	1	8/24/2017 7:54:55 PM	33513
Surr: BFB	103	54-150	%Rec	1	8/24/2017 7:54:55 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	8/24/2017 7:54:55 PM	33513
Toluene	0.10	0.047	mg/Kg	1	8/24/2017 7:54:55 PM	33513
Ethylbenzene	ND	0.047	mg/Kg	1	8/24/2017 7:54:55 PM	33513
Xylenes, Total	0.53	0.095	mg/Kg	1	8/24/2017 7:54:55 PM	33513
Surr: 4-Bromofluorobenzene	105	66.6-132	%Rec	1	8/24/2017 7:54:55 PM	33513

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

Lab Order 1708D04

Date Reported: 8/25/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: HA-8 (3')

Project: Valencia Canyon Unit #35

Collection Date: 8/21/2017 1:30:00 PM

Lab ID: 1708D04-011

Matrix: SOIL Received Date: 8/23/2017 7:15:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	6			Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/24/2017 11:38:38 PM	33518
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/24/2017 11:38:38 PM	33518
Surr: DNOP	110	70-130	%Rec	1	8/24/2017 11:38:38 PM	33518
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/24/2017 8:18:27 PM	33513
Surr: BFB	89.1	54-150	%Rec	1	8/24/2017 8:18:27 PM	33513
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	8/24/2017 8:18:27 PM	33513
Toluene	ND	0.046	mg/Kg	1	8/24/2017 8:18:27 PM	33513
Ethylbenzene	ND	0.046	mg/Kg	1	8/24/2017 8:18:27 PM	33513
Xylenes, Total	ND	0.092	mg/Kg	1	8/24/2017 8:18:27 PM	33513
Surr: 4-Bromofluorobenzene	102	66.6-132	%Rec	1	8/24/2017 8:18:27 PM	33513

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
- 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#: 1708D04

25-Aug-17

Cl	ient:
-	

APEX TITAN

Project:	Valencia (Canyon Un	it #35								
Sample ID I	_CS-33533	SampTy	pe: LC	S	Test	Code: El	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: I	LCSS	Batch	ID: 33	533	R	unNo: 4	5181				
Prep Date:	8/24/2017	Analysis Da	ate: 8/	24/2017	S	eqNo: 1	430495	Units: %Red	c		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.6		5.000		93.0	70	130			
Sample ID I	MB-33533	SampTy	/pe: ME	BLK	Test	Code: E	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch	ID: 33	533	R	tunNo: 4	5181				
Prep Date:	8/24/2017	Analysis Da	ate: 8/	24/2017	S	SeqNo: 1	430496	Units: %Red	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.9		10.00		99.1	70	130			
Sample ID	1708D04-001AMS	SampTy	/pe: M \$	3	Tes	tCode: E	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	HA-1 (1')	Batch	ID: 33	518	R	RunNo: 4	5181				
Prep Date:	8/23/2017	Analysis Da	ate: 8/	24/2017	S	SeqNo: 1	431709	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	rganics (DRO)	50	9.7	48.59	12.61	77.8	55.8	122			
Surr: DNOP		4.7		4.859		97.4	70	130			
Sample ID	1708D04-001AMSI	D SampTy	/pe: MS	SD	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	HA-1 (1')	Batch	ID: 33	518		RunNo: 4					
Prep Date:	8/23/2017	Analysis Da	ate: 8/	24/2017	S	SeqNo: 1	431710	Units: mg/K	(g		
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
I Range O Surr: DNOP	rganics (DRO)	46 4.6	9.7	48.40 4.840	12.61	69.4 95.5	55.8 70	122 130	8.74	20 0	
Sull. DNOP		4.0		4.040							
Sample ID	LCS-33518	SampTy	/pe: LC	S		tCode: E		8015M/D: Di	esel Rang	e Organics	
Client ID:	1000										
		Batch	ID: 33	518	F	RunNo: 4	15181				
Prep Date:		Batch Analysis Da				RunNo: 4 SeqNo: 1		Units: mg/F	(g		
Analyte	8/23/2017	Analysis Da	ate: 8/	124/2017 SPK value	SPK Ref Val	SeqNo: 1	431722 LowLimit	HighLimit	(g %RPD	RPDLimit	Qual
Analyte Diesel Range O	8/23/2017	Analysis Da Result	ate: 8/	SPK value 50.00	S	%REC 99.0	LowLimit 73.2	HighLimit		RPDLimit	Qual
Analyte	8/23/2017	Analysis Da	ate: 8/	124/2017 SPK value	SPK Ref Val	SeqNo: 1	431722 LowLimit	HighLimit		RPDLimit	Qual
Analyte Diesel Range O	8/23/2017 rganics (DRO)	Analysis Da Result 50 4.4 SampTy	PQL 10 ype: ME	SPK value 50.00 5.000	SPK Ref Val 0	%REC 99.0 88.8 tCode: E	LowLimit 73.2 70	HighLimit	%RPD		Qual
Analyte Diesel Range O Surr: DNOP	8/23/2017 rganics (DRO)	Analysis Da Result 50 4.4 SampTy Batch	PQL 10 ype: ME	SPK value 50.00 5.000 BLK 518	SPK Ref Val 0	%REC 99.0 88.8 tCode: E RunNo: 4	LowLimit 73.2 70 PA Method	HighLimit 114 130 8015M/D: Di	%RPD		Qual
Analyte Diesel Range O Surr: DNOP	8/23/2017 rganics (DRO) MB-33518 PBS	Analysis Da Result 50 4.4 SampTy	PQL 10 ype: ME	SPK value 50.00 5.000 BLK 518	SPK Ref Val 0	%REC 99.0 88.8 tCode: E	LowLimit 73.2 70 PA Method	HighLimit 114 130	%RPD		Qual
Analyte Diesel Range O Surr: DNOP Sample ID Client ID: Prep Date: Analyte	8/23/2017 rganics (DRO) MB-33518 PBS 8/23/2017	Result 50 4.4 SampTy Batch Analysis Da	PQL 10 ype: MB ID: 33 ate: 8/	SPK value 50.00 5.000 BLK 518 224/2017	SPK Ref Val 0	%REC 99.0 88.8 tCode: E RunNo: 4	LowLimit 73.2 70 PA Method 15181 431723	HighLimit 114 130 8015M/D: Di	%RPD		Qual
Analyte Diesel Range O Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range O	8/23/2017 rganics (DRO) MB-33518 PBS 8/23/2017	Result 50 4.4 SampTy Batch Analysis Da	PQL 10 10 10: 33 ate: 8/	SPK value 50.00 5.000 BLK 518 224/2017	SPK Ref Val 0 Tes	%REC 99.0 88.8 tCode: E RunNo: 4	LowLimit 73.2 70 PA Method 15181 431723	HighLimit 114 130 8015M/D: Di	%RPD esel Rang	e Organics	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

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

Analyte detected below quantitation limits

Sample pH Not In Range

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

Page 13 of 19

Hall Environmental Analysis Laboratory, Inc.

WO#:

1708D04

25-Aug-17

Client:

APEX TITAN

Project:

Valencia Canyon Unit #35

Sample ID MB-33518

SampType: MBLK

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

Client ID:

PBS

Batch ID: 33518

RunNo: 45181

Prep Date: 8/23/2017 Analysis Date: 8/24/2017

SeqNo: 1431723

Units: mg/Kg

Analyte

Result

SPK value SPK Ref Val %REC PQL

LowLimit

%RPD **RPDLimit** Qual

70

130

Surr: DNOP

HighLimit

99.9 10 10.00

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Н

Not Detected at the Reporting Limit

Practical Quanitative Limit **PQL**

% 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

Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 14 of 19

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708D04

25-Aug-17

Client:

APEX TITAN

Project:	Valencia	Canyon U	nit #35								
Sample ID	MB-33513	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID:	PBS	Batch	ID: 33	513	F	RunNo: 4	5186				
Prep Date:	8/23/2017	Analysis D	ate: 8/	24/2017	S	SeqNo: 1	431549	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	ND	5.0								
Surr: BFB		900		1000		89.5	54	150			
Sample ID	LCS-33513	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	LCSS	Batch	ID: 33	513	F	RunNo: 4	5186				
Prep Date:	8/23/2017	Analysis D	ate: 8/	24/2017	5	SeqNo: 1	431550	Units: mg/F	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	23	5.0	25.00	0	90.8	76.4	125			
Surr: BFB		970		1000		97.0	54	150			
Sample ID	1708D04-002AMS	SampT	ype: MS	3	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	HA-2 (3'-4')	Batch	ID: 33	513	F	RunNo: 4	5186				
Prep Date:	8/23/2017	Analysis D	ate: 8/	24/2017	5	SeqNo: 1	431558	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	34	4.8	23.97	2.658	129	77.8	128			S
Surr: BFB		1000		958.8		104	54	150			
Sample ID	1708D04-002AMS	D SampT	ype: MS	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	е	
Client ID:	HA-2 (3'-4')	Batch	ID: 33	513	F	RunNo: 4	5186				
Prep Date:	8/23/2017	Analysis D	ate: 8/	24/2017	5	SeqNo: 1	431559	Units: mg/h	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	30	4.9	24.32	2.658	112	77.8	128	11.3	20	
Surr: BFB		1000		972.8		102	54	150	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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1708D04

25-Aug-17

Client: APEX TITAN

Project: Valencia Canyon Unit #35

Sample ID MB-33513	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batch	ID: 33	513	R	RunNo: 4	5186				
Prep Date: 8/23/2017	Analysis D	ate: 8/	24/2017	S	SeqNo: 1	431581	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		100	66.6	132			

Sample ID LCS-33513	SampType: L	cs	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch ID: 3	3513	F	RunNo: 4	5186				
Prep Date: 8/23/2017	Analysis Date:	3/24/2017	8	SeqNo: 14	431582	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90 0.02	1.000	0	90.4	80	120			
Toluene	0.91 0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.93 0.050	1.000	0	93.0	80	120			
Xylenes, Total	2.8 0.10	3.000	0	94.1	80	120			
Surr: 4-Bromofluorobenzene	1.0	1.000		103	66.6	132			

Sample ID 1708D04-001AM	S SampT	ype: MS	3	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: HA-1 (1')	Batch	n ID: 33	513	F	RunNo: 4	5186				
Prep Date: 8/23/2017	Analysis D	Date: 8/	24/2017	8	SeqNo: 1	431589	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9407	0	95.6	80.9	132			
Toluene	0.91	0.047	0.9407	0.01224	95.0	79.8	136			
Ethylbenzene	0.92	0.047	0.9407	0	98.2	79.4	140			
Xylenes, Total	2.8	0.094	2.822	0	101	78.5	142			
Surr: 4-Bromofluorobenzene	0.98		0.9407		104	66.6	132			

Sample ID 1708D04-001AMS	D SampTyp	e: MSI	D	Test	Code: El	PA Method	8021B: Volat	iles		
Client ID: HA-1 (1')	Batch II	D: 335	13	R	unNo: 4	5186				
Prep Date: 8/23/2017	Analysis Date	e: 8/2	4/2017	S	eqNo: 1	431590	Units: mg/K	g		
Analyte	Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9452	0	93.2	80.9	132	2.06	20	
Toluene	0.90	0.047	0.9452	0.01224	93.7	79.8	136	0.880	20	
Ethylbenzene	0.92	0.047	0.9452	0	97.4	79.4	140	0.314	20	
Xylenes, Total	2.8	0.095	2.836	0	98.8	78.5	142	1.41	20	
Surr: 4-Bromofluorobenzene	0.99		0.9452		104	66.6	132	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

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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

				A CONTRACTOR OF THE PARTY OF TH		
Client Name:	APEX AZTEC	Work Order Number	r: 1708D04		RcptNo: 1	
Received By:	Anne Thorne	8/23/2017 7:15:00 AN	1	anne Ham	_	
Completed By:	Anne Thorne	8/23/2017 9:50:58 AN	1	aone Ham		
Reviewed By:	SRC 08/2			Clare Stan		
novicined by.	•					
Chain of Cus	stodv					
2 22 31	als intact on sample bottle	es?	Yes 🗸	No 🗆	Not Present	
	Custody complete?		Yes 🗸	No 🗆	Not Present	
	e sample delivered?					
3. How was th	e sample delivered?		Courier			
Log In						
4. Was an att	empt made to cool the sa	imples?	Yes 🗹	No 🗌	NA 🗆	
5. Were all sa	mples received at a temp	erature of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗌	
6 0 14			v	No.		
O. Sample(s)	in proper container(s)?		Yes 🗸	No 🗀		
7. Sufficient sa	ample volume for indicate	ed test(s)?	Yes 🗸	No 🗌		
	s (except VOA and ONG)		Yes 🗸	No 🗌		
	vative added to bottles?		Yes	No 🗹	NA 🗌	
10. VOA vials h	nave zero headspace?		Yes	No 🗌	No VOA Vials	
11. Were any s	sample containers receive	ed broken?	Yes	No 🗹	# of preserved	
			-		bottles checked	
	work match bottle labels? epancies on chain of cust		Yes 🗸	No □	for pH: (<2 or >12	unless noted
	s correctly identified on C	• •	Yes 🗸	No 🗆	Adjusted?	. amood notou
	hat analyses were reques		Yes 🗸	No 🗆		
4.0	lding times able to be me		Yes 🗹	No 🗌	Checked by:	
(If no, notify	customer for authorization	on.)				
Special Hand	dling (if applicable)					
16. Was client i	notified of all discrepancie	es with this order?	Yes	No 🗆	NA 🗹	
Perso	n Notified:	Date		tem annutation en		
By W	hom:	Via:	eMail	Phone Fax	In Person	
Regar	rding:	innaini igiri, du, miliya daga ku day baga 1941-1994 daga daga daga 1600 daga daga 1890 daga 1890 daga 1890 da	AND	STATEMENTAL AND STATEMENT AND AND STATEMENT ST	ST-as an Exhabit AA file Calcius at Lan 80 100 000 AB -LA -LA SEE A. A SEE A. A SEE	
Client	Instructions:	1. A. A. B. G. Leeken, Sell Colores and a co	handinah sa-Jadesh baba tari da 60 Mila da sasati babba	nadi natara di Strain di Andrewska natari na Silanda (nadi na	ace and the state and the contract of the trace and the state and the state of the	
17. Additional i	remarks:					
18. Cooler Infe	ormation					
Cooler N		on Seal Intact Seal No	Seal Date	Signed By		
1	1.3 Good	Yes	,			
		a <u></u>				
Page 1 o	of I					

Container

WW - Wastewater

VOA - 40 ml vial

S - Soil

A/G - Amber / Or Glass 1 Liter

SD - Solid

L Liquid

A - Air Bag

250 ml - Glass wide mouth

C - Charcoal tube

P/O - Plastic or other

O - Oil

SL - sludge

CHAIN OF CUSTODY RECORD ANALYSIS Lab use only Hall Environmental Analysis Due Date: REQUESTED Laboratory: Laboratury Address: 4901 Hawkins NE Temp. of coolers 1, 3 Albuquerque, NM 87109 Contact: 555 345 355 A. Freeman when received (C°) Office Location AZteCINM LOGO S. RIO Grande, suite A 8021 BIEX Aztec, NM 87410 Phone: 505-345-3975 PO/SO#: See Notes Sampler's Signature Sampler's Name Rance Deechilly Project Name Proj. No. No/Type of Containers Valencia Cancon Uni+#35 See NUTES AVG 1 Lt 250 ml Glass Jar PrO Matrix Date Lab Sample ID (Lab Use Only) 708204-011 8/21/17 $\times \times$ 1330 Mormal ☐ 50% Rush ☐ 25% Rush ☐ 100% Rush Turn around time Recoved by: (Signature) Date: Time: 7 2 45 NOTES: Time: Belinquished by (Signature) Date: 8/22/17 Relinguished by (Signature) Bill to Tom Long Received by: (Signature) Time: 1246 Reinquished by (Signature) Received by: (Signature) Date NON ATE N31251 MWato 15715 Relinquished by (Signature) Received by: (Signature) C - Charcoal tube W - Water S - Soil SD - Solid A - Air Bag SL - sludge Matrix WW - Wastewater L - Liquid

Container

VOA - 40 ml vial

A/G - Amber / Or Glass 1 Liter

250 ml - Glass wide mouth

P/O - Plastic or other



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

July 19, 2017

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

FAX

RE: Valencia Canyon Unit 35

OrderNo.: 1707629

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/13/2017 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1707629

Date Reported: 7/19/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-1

Project:

Valencia Canyon Unit 35

Collection Date: 7/12/2017 11:30:00 AM

1707629-001 Lab ID:

Matrix: SOIL

Received Date: 7/13/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	6				Analyst	том
Diesel Range Organics (DRO)	1200	99		mg/Kg	10	7/18/2017 10:19:03 PM	32805
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/18/2017 10:19:03 PM	32805
Surr: DNOP	0	70-130	S	%Rec	10	7/18/2017 10:19:03 PM	32805
EPA METHOD 8015D: GASOLINE RANG	GE					Analyst	NSB
Gasoline Range Organics (GRO)	2400	93		mg/Kg	20	7/19/2017 3:06:06 AM	32814
Surr: BFB	484	54-150	S	%Rec	20	7/19/2017 3:06:06 AM	32814
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	1.1	0.46		mg/Kg	20	7/19/2017 3:06:06 AM	32814
Toluene	4.8	0.93		mg/Kg	20	7/19/2017 3:06:06 AM	32814
Ethylbenzene	ND	0.93		mg/Kg	20	7/19/2017 3:06:06 AM	32814
Xylenes, Total	71	1.9		mg/Kg	20	7/19/2017 3:06:06 AM	32814
Surr: 4-Bromofluorobenzene	135	66.6-132	S	%Rec	20	7/19/2017 3:06:06 AM	32814

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
- Analyte detected below quantitation limits Page 1 of 5 J

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

Lab Order 1707629

Date Reported: 7/19/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S-2

Project: Vale

Valencia Canyon Unit 35

Collection Date: 7/12/2017 11:35:00 AM

Lab ID: 17

1707629-002

Matrix: SOIL

Received Date: 7/13/2017 7:10:00 AM

Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	6				Analyst	TOM
Diesel Range Organics (DRO)	1400	98		mg/Kg	10	7/18/2017 10:47:41 PM	32805
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/18/2017 10:47:41 PM	32805
Surr: DNOP	0	70-130	S	%Rec	10	7/18/2017 10:47:41 PM	32805
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst	NSB
Gasoline Range Organics (GRO)	2300	240		mg/Kg	50	7/19/2017 3:29:42 AM	32814
Surr: BFB	180	54-150	S	%Rec	50	7/19/2017 3:29:42 AM	32814
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	3.4	1.2		mg/Kg	50	7/19/2017 3:29:42 AM	32814
Toluene	18	2.4		mg/Kg	50	7/19/2017 3:29:42 AM	32814
Ethylbenzene	ND	2.4		mg/Kg	50	7/19/2017 3:29:42 AM	32814
Xylenes, Total	200	4.8		mg/Kg	50	7/19/2017 3:29:42 AM	32814
Surr: 4-Bromofluorobenzene	125	66.6-132		%Rec	50	7/19/2017 3:29:42 AM	32814

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 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#: 1707629 19-Jul-17

Client: APEX TITAN

Project: Valencia Canvon Unit 35

Project: Valencia	a Canyon Unit 35		
Sample ID MB-32805	SampType: MBLK	TestCode: EPA Method 8015M	/D: Diesel Range Organics
Client ID: PBS	Batch ID: 32805	RunNo: 44252	
Prep Date: 7/14/2017	Analysis Date: 7/17/2017	SeqNo: 1397598 Units:	mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Highl	Limit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10		
Motor Oil Range Organics (MRO) Surr: DNOP	ND 50 9.6 10.00	96.3 70	130
WASHINGTON TO STATE OF THE PARTY OF THE PART			
Sample ID LCS-32805	SampType: LCS	TestCode: EPA Method 8015M	/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 32805	RunNo: 44252	
Prep Date: 7/14/2017	Analysis Date: 7/17/2017	SeqNo: 1397654 Units:	mg/Kg
Analyte		SPK Ref Val %REC LowLimit High	
Diesel Range Organics (DRO)	50 10 50.00	0 99.7 73.2	114
Surr: DNOP	5.0 5.000	100 70	130
Sample ID LCS-32810	SampType: LCS	TestCode: EPA Method 8015M	/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 32810	RunNo: 44252	
Prep Date: 7/14/2017	Analysis Date: 7/17/2017	SeqNo: 1397734 Units:	%Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Highl	Limit %RPD RPDLimit Qual
Surr: DNOP	4.5 5.000	90.1 70	130
Sample ID MB-32810	SampType: MBLK	TestCode: EPA Method 8015M	/D: Diesel Range Organics
Client ID: PBS	Batch ID: 32810	RunNo: 44252	
Prep Date: 7/14/2017	Analysis Date: 7/17/2017	SeqNo: 1397735 Units:	%Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit High	Limit %RPD RPDLimit Qual
Surr: DNOP	9.3 10.00	93.0 70	130
Sample ID LCS-32836	SampType: LCS	TestCode: EPA Method 8015M	/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 32836	RunNo: 44282	
Prep Date: 7/17/2017	Analysis Date: 7/18/2017	SeqNo: 1399678 Units:	%Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit High	Limit %RPD RPDLimit Qual
Surr: DNOP	4.4 5.000	88.8 70	130
Sample ID MB-32836	SampType: MBLK	TestCode: EPA Method 8015M	/D: Diesel Range Organics
Client ID: PBS	Batch ID: 32836	RunNo: 44282	
Prep Date: 7/17/2017	Analysis Date: 7/18/2017	SeqNo: 1399679 Units:	%Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit High	Limit %RPD RPDLimit Qual
Surr: DNOP	8.4 10.00	84.4 70	130

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

PQL 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

P Sample pH Not In Range

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

Page 3 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

1707629

19-Jul-17

Client:

APEX TITAN

Project:	Valenci	a Canyon Unit 35			
Sample ID	MB-32828	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Rang	e
Client ID:	PBS	Batch ID: 32828	RunNo: 44294		
Prep Date:	7/17/2017	Analysis Date: 7/18/2017	SeqNo: 1399599	Units: %Rec	
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB		960 100	95.8 54	150	
Sample ID	LCS-32828	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Rang	e
Client ID:	LCSS	Batch ID: 32828	RunNo: 44294		
Prep Date:	7/17/2017	Analysis Date: 7/18/2017	SeqNo: 1399600	Units: %Rec	
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB		1100 100	105 54	150	
Sample ID	LCSD-32828	SampType: LCSD	TestCode: EPA Method	8015D: Gasoline Rang	e
Client ID:	LCSS02	Batch ID: 32828	RunNo: 44294		
Prep Date:	7/17/2017	Analysis Date: 7/18/2017	SeqNo: 1399601	Units: %Rec	
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB		1000		0	0
Sample ID	MB-32814	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Rang	е
Client ID:	PBS	Batch ID: 32814	RunNo: 44294		
Prep Date:	7/14/2017	Analysis Date: 7/18/2017	SeqNo: 1399613	Units: mg/Kg	
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Gasoline Rang	ge Organics (GRO)	ND 5.0 980 100	98.2 54	150	
Sample ID	LCS-32814	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Rang	е
Client ID:	LCSS	Batch ID: 32814	RunNo: 44294		
Prep Date:	7/14/2017	Analysis Date: 7/18/2017	SeqNo: 1399614	Units: mg/Kg	
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
	ge Organics (GRO)	24 5.0 25.0		125	
Surr: BFB		1100 100	0 107 54	150	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н 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

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#:

1707629

19-Jul-17

Client:

APEX TITAN

Project:

Valencia Canyon Unit 35

Sample ID	MB-32828
-----------	----------

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

66.6

Client ID: **PBS** Batch ID: 32828

RunNo: 44294

Prep Date: 7/17/2017 Analysis Date: 7/18/2017

SeqNo: 1399633

Units: %Rec

Analyte

Result PQL %REC LowLimit

RPDLimit Qual

Surr: 4-Bromofluorobenzene

1.1

SPK value SPK Ref Val 1.000

108 66.6 HighLimit %RPD 132

%RPD

%RPD

Sample ID LCS-32828

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

Client ID: **LCSS** Batch ID: 32828

RunNo: 44294

Units: %Rec

Prep Date: 7/17/2017

Analysis Date: 7/18/2017

SeqNo: 1399634

Analyte

Prep Date:

Analyte

Client ID:

Prep Date:

Result 1.1

SPK value SPK Ref Val 1.000

%REC LowLimit 111

HighLimit 132 **RPDLimit**

Qual

Surr: 4-Bromofluorobenzene

Result

TestCode: EPA Method 8021B: Volatiles

Sample ID LCSD-32828 Client ID:

LCSS02 7/17/2017 SampType: LCSD Batch ID: 32828

Analysis Date: 7/18/2017

Analysis Date: 7/18/2017

PQL

RunNo: 44294 SeqNo: 1399635

Units: %Rec

HighLimit

RPDLimit Qual

Surr: 4-Bromofluorobenzene

SampType: MBLK

1.000

SPK value SPK Ref Val

SPK value SPK Ref Val

SPK value SPK Ref Val

1.000

1.000

1.000

1.000

3.000

1.000

LowLimit

TestCode: EPA Method 8021B: Volatiles

Sample ID MB-32814

PBS

7/14/2017

Batch ID: 32814

Result

RunNo: 44294

%REC

SeqNo: 1399647

%REC

Units: mg/Kg

Analyte Benzene Toluene Ethylbenzene

ND 0.025 ND 0.050 ND 0.050

ND Xylenes, Total 0.10 1.1

LowLimit

HighLimit %RPD **RPDLimit**

Qual

Qual

Surr: 4-Bromofluorobenzene

0

0

0

113

132

Sample ID LCS-32814

SampType: LCS

Batch ID: 32814

RunNo: 44294

TestCode: EPA Method 8021B: Volatiles

LowLimit

80

80

80

80

66.6

Client ID: LCSS Prep Date: Analyte

7/14/2017

Analysis Date: 7/18/2017

PQL

0.025

0.050

0.050

0.10

Result

0.97

0.96

0.98

2.9

1.1

SeqNo: 1399648

%REC

97.5

96.2

97.6

98.2

113

Units: mg/Kg

120

120

120

120

132

HighLimit %RPD **RPDLimit**

Benzene Toluene Ethylbenzene

Xylenes, Total Surr: 4-Bromofluorobenzene

Qualifiers: Value exceeds Maximum Contaminant Level.

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

% Recovery outside of range due to dilution or matrix

Not Detected at the Reporting Limit ND Practical Quanitative Limit

В Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits

Page 5 of 5

p Sample pH Not In Range

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 Number:	1707629	.,,,,,	RcptNo:	1
Received By: Completed By: Reviewed By:	Anne Thorne Erin Melendrez ENM/ M	7/13/2017 7:10:00 AM 7/13/2017 12:03:31 PN - 7/14/17	1	an Im		
Chain of Cus	tody				_	
1. Custody sea	als intact on sample bottles?		Yes	No 🗆	Not Present 🗹	
2. Is Chain of C	Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the	e sample delivered?		Courier			
Log In						
4. Was an atte	empt made to cool the sample	s?	Yes 🗸	No 🗌	NA 🗆	
5. Were all sai	mples received at a temperato	ure of >0° C to 6.0°C	Yes 🗸	No 🗆	NA 🗆	
6. Sample(s) i	n proper container(s)?		Yes 🗸	No 🗌		
7. Sufficient sa	ample volume for indicated tes	st(s)?	Yes 🗸	No 🗆		
8. Are samples	s (except VOA and ONG) prop	perly preserved?	Yes 🗸	No 🗌		
9. Was presen	vative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
10.VOA vials h	ave zero headspace?		Yes 🗌	No 🗆	No VOA Vials	
11. Were any s	ample containers received bro	oken?	Yes	No 🗹	# of preserved	
The second secon	work match bottle labels? epancies on chain of custody)		Yes 🗹	No 🗆	bottles checked for pH:	or >12 unless noted)
13. Are matrice:	s correctly identified on Chain	of Custody?	Yes 🗹	No 🗌	Adjusted?	
14, Is it clear wi	nat analyses were requested?		Yes 🗸	No 🔲		
	ding times able to be met? customer for authorization.)		Yes 🗹	No 🗌	Checked by:	
Special Hand	lling (if applicable)					
16. Was client r	notified of all discrepancies wi	th this order?	Yes 🗌	No 🗆	NA 🗹	
Perso	n Notified:	Date:		Disellulario della Milandecca di dalla della del		**1
By W	hom:	Via:	eMail	Phone Fax	In Person	
Regar	rding:	a markaturindan etiecu arandikarin an etiek alialarin da "rhek endikki isi dan etiebeki ilikatu. Neb	AND A SERVICE AND			i
Client	Instructions:	i atti fina a Manifest vill mine van dine et all Malia sellari anti-article stitu a beste ditte attende antiber	oma iskulimetualinskuskolimba		A. Marie (n. Marie (n. M. A. Angelle an Arthur and Marie (n. Marie and an Arthur Arthu	İ
17. Additional	emarks:					J
18. Cooler Info Cooler N	lo Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By		

																CHAIN OF CUSTODY RECORD
ADEV					Hall Environmental Laboratory: Analysis Laboratory						000			ALYSIS QUESTED		Lab use only Due Date: 3.5-(F-1.0= 2
APEX	Address: 4901 Hawkins NE									7		Temp. of coolers				
Office Location Aztec, NM					Albuqueque, NM 87109									17	III	when received (C"):
606 S. R.O	(orand	20	mit	A	Contact:	A. Fr	eem	an						a a	1 2 3 4 5	
					Phone: 565-345-3975									12	/////	Page 1 of
Project Manag	er K	Sum	me	rs	PO/SO #:	See	2 No	res						AN W		/ / /
Sampler's Name					Sampler's Signa				, ,	1,					III	
Rance Deech	rilly	CD	Apo	4	Rundul	lly	0	Un	10	4_	_			SUSI BITAL SUS TONESTONES	111.	/ / /
Proj. Na.		Proje						NoT	ype of C	Contain	ners			200	[() (
72504011230	þ	_	Val		ingon Uni-					_				17//	' / / /	/ /
Matrix Date	Time	COED	or ab	Identifying Mar	ks of Sample(s)	Start	End	VOA	A'G	250 ml	Glass	P,0			III	Lab Sample ID (Lab Use Only)
3 7/12/17	1130	X		5-1		011	6"				1		X	×		-001
5 7/12/12	1135	X		5-2		5"	6"				1		X	X		-002
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Turn around time	Nor		Q 2	5% Rush		100%										
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Relinquished by (S				Date: T	ime: Regelv						Date		Ti	ime: 7/0	Bill to T	ion long (EPROD)
Relinquished by (8	Signature)		_	and the second s	îme: Receiv		(Signa	ture)		_	Date	Million Police		ime:	Non AFE	N 31251
Relinquished by (S	Signature)			Date: T	ime: Receiv	ed by:	(Signa	ture)		+	Date	P:	Ti	ime:		
	- Wastewa			W · Water S A/G · Amber / Or	- Soil SD - Soil Glass 1 Liter		- Liquio	J A	- Air Ba	ag outh		- Char		ube SL-sludge rother	0-01	

Fields, Vanessa, EMNRD

From:

Long, Thomas <tjlong@eprod.com>

Sent:

Monday, June 18, 2018 3:38 PM

To:

Fields, Vanessa, EMNRD

Cc:

Stone, Brian

Subject:

RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152,

-107.2412

Vanessa,

We are reviewing the Job Plan this Friday and plan on applying the Micro Blaze next Wednesday (6-27-18).

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

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]

Sent: Monday, June 18, 2018 3:36 PM

To: Long, Thomas **Cc:** Stone, Brian

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Good afternoon Tom,

Could you please provide a status update on the Valencia Canyon #035?

Thank you,

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

From: Fields, Vanessa, EMNRD

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 119

Cell: (505) 419-0463

vanessa.fields@state.nm.us

From: Long, Thomas [mailto:tjlong@eprod.com]

Sent: Tuesday, March 13, 2018 12:17 PM

To: Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us >

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

Subject: FW: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Vanessa,

We have to conduct an archaeological survey before we can mobilize equipment along the ROW. It will take some time to execute the survey. I will keep you informed of the progress. If you have any questions, please call or email.

Sincerely,

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

From: Miller, Jon J -FS [mailto:jjmiller@fs.fed.us]

Sent: Tuesday, March 13, 2018 7:48 AM

To: Long, Thomas **Cc:** Miller, Rachel M -FS

Subject: RE: Valencia Canyon #35 6-29-17 Pipeline Release; Section 34 T28N R4W; 36.6152, -107.2412

Thomas,

There is no problem with the use of Micro-Blaze on the release site.

The section of cross-country pipeline that you identified does not have an archeology survey, therefore motor vehicle use is not authorized. Enterprise would need to have a Forest Service permitted archeologist conduct a survey on the cross-county portion of the pipeline corridor, and then any motor vehicle use would be dependent on the survey results.

If you have any questions please feel free to contact me. Thanks. J.J.

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.

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

* Attach Additional Sheets If Necessary

State of New Mexico **Energy Minerals and Natural** Resources

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

				Jan	laic	, INIVIOI	000				-			
		F	Releas	e Notifica	tion	and C	orrective	Action	on					
					OP	ERATO I	₹] Initial I	Report	\boxtimes	Final Report		
Name of C						Contact Thomas Long								
Address 61			Telephone No. 505-599-2286 Facility Type Natural Gas Gathering Pipeline											
Facility	Name La		-acility Typ	e natural Gas	s Gatn	ering Pi	peline							
Surface Ov	vner Priv a	wner I	BLM			Serial	No. N/A							
					ASSESSMENT OF THE PARTY OF THE	OF REI								
Unit Letter D	Section 3	Township 25N	Range 3W	the	North/ Line	outh	Feet from the	Eat/Wes Line		County Rio Arri	ba			
				1318			540							
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Type of Rel	ease Natura	al Gas and N	latural Gas	s Liquids			f Release 1.889 I 5 Barrels of ate	MFC	Volume	Recovered	d None)		
Source of R	elease Sus	pected interr	nal corrosi	on of the pipelin	ne		Hour of Occurre at 2:00 p.m.	ence		Hour of I		ery		
Was Immed	iate Notice		_			5/4/2018 at 2:00 p.m. 5/4/2018 at 2:00 p.m. If YES, To Whom? : Courtesy Notification Cory Smith - NMOCD								
Required			☐ Yes	☐ No 🛛 No	ot									
rtoquilou										11	NM	000		
By Whom?	Thomas Lor	ng				Date and	Hour May 4, 20	18 @ 5	:43 p.m.	n.	612			
Was a Wate	ercourse Re		☐ Yes	⊠ No		If YES, Vo	olume Impacting	the Wa	atercourse	STA	CT	2018		
		npacted, Des										11		
							nterprise technic epressurized, loc				of natur	al gas and		
Describe Area Affected and Cleanup Action Taken.* An area or approximately six (6) feet long by six (6) feet wide was impacted by the released fluids. Repairs and remediation were completed on July 5, 2018. The contaminant mass was removed by mechanical excavation. The final excavation dimensions measured 40 feet long by 12 feet wide by 14 feet deep. Approximately 350 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. A third party corrective action report is included with this "Final" C-141.								excavation. rocarbon						
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.								or releases ort" does not se a threat to						
Signature: M. tull						OIL CONSERVATION DIVISION								
Printed Name: Jon E. Fields						Approved by Environmental Specialist:								
Title: Directo	Ones 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				A	Approval Da	ate: 10/2/1	8 1	Expiration	Date:				
E-mail Addr	ess: jefields	@eprod.con	n		(Conditions	of Approval:			Attache	ed 🗍			
Date: 8	-9-18		Phon	e: (713) 381-66	84						_			

#WCS 1814339445



CORRECTIVE ACTION REPORT

Property:

Lateral 2C-40 Pipeline Release NW 1/4, S3 T25N R3W Rio Arriba County, New Mexico

July 24, 2018 Apex Project No. 725040112482

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

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CORRECTIVE ACTION REPORT

Lateral 2C-40 Pipeline Release NW 1/4, S3 T25N R3W Rio Arriba County, New Mexico

Apex Project No. 725040112482

1.0 INTRODUCTION

1.1 Site Description & Background

The Lateral 2C-40 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 northwest (NW) ¼ of Section 3, Township 25 North, Range 3 West, in Rio Arriba County, New Mexico (36.43218N, 107.13956W). The Site is located on private land. The surrounding area is predominately rangeland that is periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which transects the area from approximately west to east.

On May 4, 2018, a release of natural gas was identified on the Lateral 2C-40 pipeline, and the pipeline was temporarily taken out of service pending repairs. On June 26, 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.

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

1.2 Project Objective

The primary objective of the corrective action 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) Remediation Action Levels (RALs) using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the implementation of corrective action activities and information available from the New Mexico Office of the State Engineer (OSE) to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table.



Rank		Ranking Score			
	<50 feet	20			
Depth to Groundwater	50 to 99 feet	10	20		
	>100 feet	0			
Wellhead Protection Area • <1,000 feet from a water	Yes	20			
source, or; <200 feet from private domestic water source.	No	0	0		
Distance to Curfose Water	<200 feet	20			
Distance to Surface Water Body	200 to 1,000 feet	10	20		
Body	>1,000 feet	0			
Total R		40			

Based on Apex's evaluation of the scoring criteria, the Site would earn a maximum Total Ranking Score of "40". The ranking is based on the following information:

- No water wells were identified within a mile of the Site on the OSE Water Rights Reporting System (WRSS) database. However, based on the proximity to an unnamed ephemeral wash depth to groundwater at the Site is anticipated to potentially be less than 50 feet below grade surface (bgs). This information supports a ranking score of "20" for depth to groundwater.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site. These proximities result in a wellhead/water source protection area ranking score of "0".
- The release point is located approximately 89 feet northwest of an unnamed ephemeral
 wash that is identified as a "blue line" on the United States Geological Survey (USGS)
 topographic map. This information supports a distance to surface water ranking score of
 "20".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On May 4, 2018, a release of natural gas was identified on the Lateral 2C-40 pipeline and the pipeline was temporarily taken out of service pending repairs. On June 26, 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 and earthwork activities, OFT Construction Inc., provided heavy equipment and labor support, and Apex provided environmental consulting support.

The final remediation excavation measured approximately 40 feet long by 12 feet wide. The maximum depth of the excavation measured approximately 14 feet bgs.

The lithology encountered during the completion of corrective action activities consisted primarily of semi-consolidated silty sand and silty clay.

A total of approximately 350 cubic yards of petroleum hydrocarbon affected soils 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 contoured to surrounding grade.

Figure 3 is a map with 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 C**.

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 guide excavation extents.

On June 26, 2018, two (2) composite soil samples (S-1 and S-2) were collected from the end walls of the pipe chase, prior to the extension of the planned extension of the excavation to accommodate a longer section of new pipe. On July 5, 2018, three (3) composite soil samples (S-3 through S-5) were collected from the remaining sidewalls and the base of the final excavation for laboratory analysis.

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

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the New Mexico EMNRD OCD rules, specifically New Mexico Administrative Code 19.15.29 *Release Notification*. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Soil Samples

Apex compared the BTEX and TPH concentrations or laboratory practical quantitation limits (PQLs) associated with the final composite soil samples (S-1 through S-5) to the New Mexico EMNRD OCD *RALs* for sites having a total ranking score of "40".

 The laboratory analysis of composite soil sample S-2 collected from soils remaining in place indicate benzene concentration 0.019 milligrams per kilogram (mg/kg), which is below the New Mexico EMNRD OCD RAL of mg/kg. The laboratory analyses of the



remaining composite soil samples collected from soils remaining in place indicate benzene concentrations below the laboratory PQLs, which are below the New Mexico EMNRD OCD *RAL* of 10 mg/kg.

- The laboratory analyses of the composite soil samples collected from soils remaining in place indicate total BTEX concentrations ranging from below the laboratory PQLs to 0.66 mg/kg (S-2), which are below the New Mexico EMNRD OCD RAL of 50 mg/kg.
- The laboratory analysis of composite soil sample S-4 collected from soils remaining in place indicates a combined TPH GRO/DRO/MRO concentration of 3.7 mg/kg, which is below the New Mexico EMNRD OCD RAL of 100 mg/kg. The laboratory analyses of the remaining composite soil samples collected from soils remaining in place do not indicate combined TPH GRO/DRO/MRO concentrations above the laboratory PQLs, which are below the New Mexico EMNRD OCD RAL of 100 mg/kg for a Site ranking of "40".
- The laboratory analyses of the composite soil samples collected from soils remaining in place do not indicate chloride concentrations above the laboratory PQLs.

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

5.0 FINDINGS AND RECOMMENDATIONS

The Lateral 2C-40 pipeline release site is located within the Enterprise pipeline ROW in the NW ¼ of Section 3, Township 25 North, Range 3 West, in Rio Arriba County, New Mexico. The Site is located on private land. The surrounding area is predominately rangeland that is periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline which transects the area from approximately west to east.

On May 4, 2018, a release of natural gas occurred on the Lateral 2C-40 pipeline. On June 26, 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 corrective action was to reduce COC concentrations in the on-Site soils to below the New Mexico EMNRD OCD RALs using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty sand and silty clay.
- The final primary excavation measured approximately 40 feet long by 12 feet wide. The maximum depth of the excavation measured approximately 14 feet bgs.
- Prior to backfilling, five (5) composite soil samples were collected from the excavation.
 Based on soil analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD RALs for a Site ranking of "40".
- A total of approximately 350 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation.
 The excavation was backfilled with imported fill and contoured to surrounding grade.

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



6.0 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.

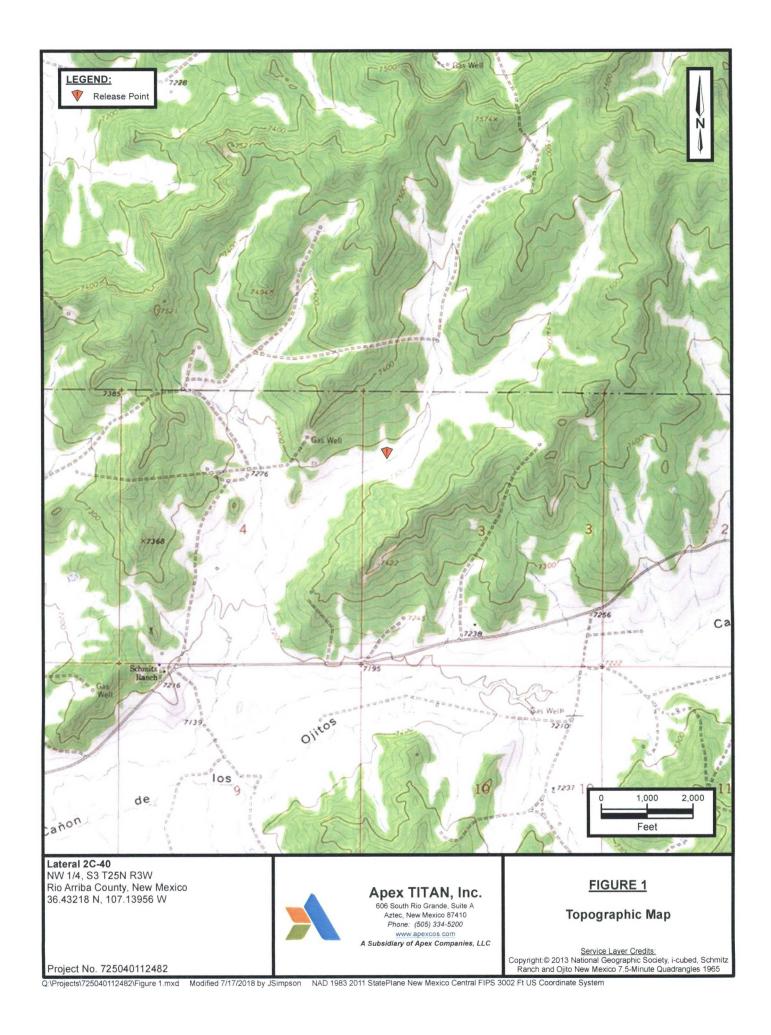
Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence 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.

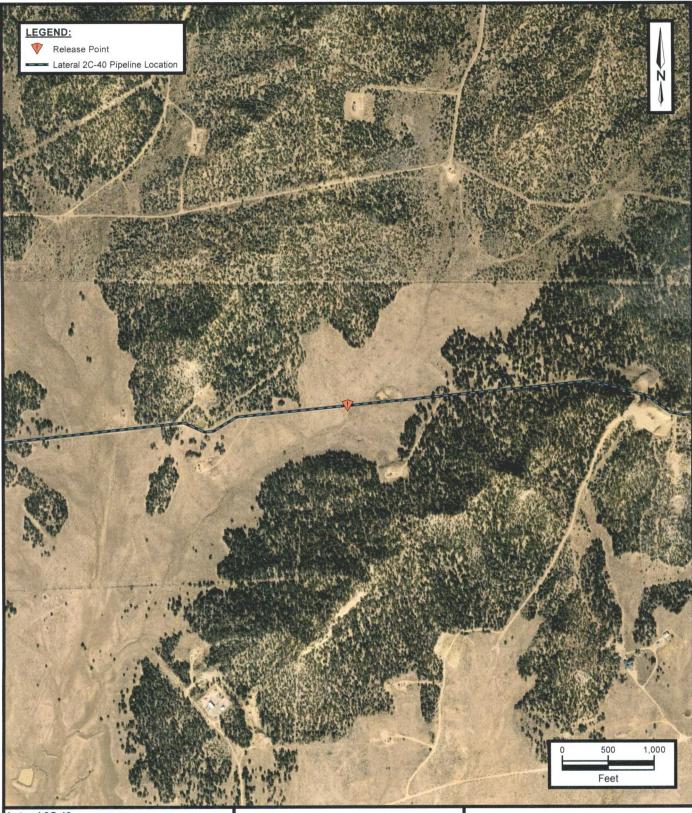
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution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





Lateral 2C-40 NW 1/4, S3 T25N R3W Rio Arriba County, New Mexico 36.43218 N, 107.13956 W



Apex TITAN, Inc.

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

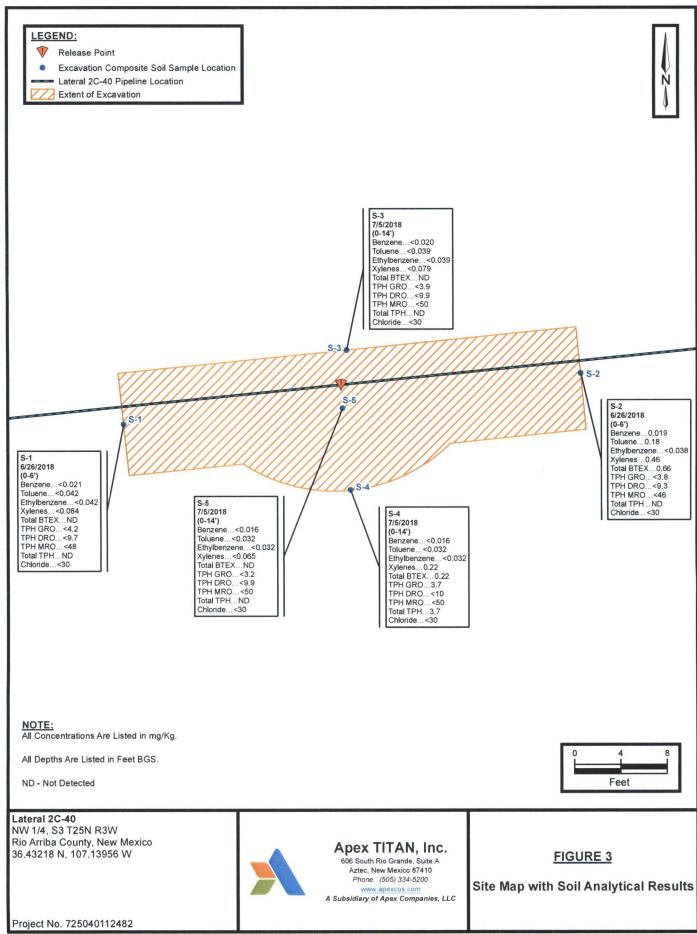
A Subsidiary of Apex Companies, LLC

FIGURE 2

Site Vicinity Map

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

Project No. 725040112482





APPENDIX B

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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

97057-0928

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

 Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 	
2 Outrinotine Sites	voice Informations DMs Drusses Disco
	voice Information: PM: Dwayne Dixon
Lateral 2C-40 Pipeline	Non AFE: N36672
	Pay Key: CM22355
3. Location of Material (Street Address, City, State or ULSTR):	T / - 1 0 - 1 -
UL D Section 3 T25N R3W;36.432175 -107.139562	June/July 2018
4. Source and Description of Waste:	
Source: Overtopping of a storage tank.	
Description: Hydrocarbon/Condensate impacted soil associated with the remediati	on of a natural gas pipeline leak.
Estimated Volume _50 (yd³) bbls Known Volume (to be entered by the operator	r at the end of the haul) 350 (yd³/bbls
5. GENERATOR CERTIFICATION STATEMEN	T OF WASTE STATUS
Home L.	
I, Thomas Long, representative or authorized agent for Enterprise Produc	cts 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 class	ssification)
PROPA Formation of Salahamata and Salahamatica and Salaha	
RCRA Exempt: Oil field wastes generated from oil and gas exploration at exempt waste. Operator Use Only: Waste Acceptance Frequency Management	and production operations and are not mixed with non-
exempt waste. Operator Use Only: Waste Acceptance Frequency Mo	minty Weekly Fer Loud
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not	t exceed the minimum standards for waste hazardous by
characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or lis	ted hazardous waste as defined in 40 CFR, part 261,
subpart D, as amended. The following documentation is attached to demonstra	ate the above-described waste is non-hazardous. (Check
the appropriate items)	
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Know	wledge
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION	STATEMENT FOR LANDEARMS
GENERATOR 17.13.30.13 WASTE TESTING CERTIFICATION	STATEMENT FOR EARDIANDS
Mary Lane	
I, Thomas Long 6-27-18, representative for Enterprise Products Operatin	g authorizes Envirotech, Inc to complete
Generator Signature	
the required testing/sign the Generator Waste Testing Certification.	
I,	oc 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 pro-	ursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described wast	te conform to the requirements of Section 15 of
19.15.36 NMAC.	
5. Transporter: OFT or subcontractors, Ynca, Rosen baum, 5	Weg zeg
OCD Permitted Surface Waste Management Facility	
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * P	ermit #: NM 01-0011
Address of Facility: Hilltop, NM	erant w. tvivi or-oom
Method of Treatment and/or Disposal:	
Evaporation Injection Treating Plant Lands	farm
C Draporation C injusticit C Treating Faint 22 Dates	
Waste Acceptance Status:	
⋈ APPROVED	DENIED (Must Be Maintained As Permanent Record)
1 111	1/1/ //27/16
PRINT NAME: Grea Crantice TITLE: Envir	onmental Manager DATE: 6/27/18
SIGNATURE.	
Surface Waste Management Facility Authorized Agent	<u>505-632-0615</u>



APPENDIX C

Photographic Documentation



Photograph 1

View of excavation activities, facing northeast.



Photograph 2

View of excavation activities, facing east.



Photograph 3

View of excavation activities, facing west.





SITE PHOTOGRAPHS

Lateral 2C-40 (2018) Pipeline Release

Photograph 4

View of the final excavation, facing east.





APPENDIX D

Table



TABLE 1 Lateral 2C-40 Pipeline Release SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	The second second	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)
	lew Mexico Energy, Mineral & Natural Resources Department, Conservation Division, Remediation Action Level				NE	NE	NE	50				100	NE
						Excavation Con	nposite Soil San	nples					
S-1	6.26.18	С	0 to 6	<0.021	< 0.042	<0.042	< 0.084	ND	<4.2	<9.7	<48	ND	<30
S-2	6.26.18	С	0 to 6	0.019	0.18	<0.038	0.46	0.66	<3.8	<9.3	<46	ND	<30
S-3	7.5.18	С	0 to 14	< 0.020	< 0.039	< 0.039	< 0.079	ND	<3.9	<9.9	<50	ND	<30
S-4	7.5.18	С	0 to 14	< 0.016	< 0.032	<0.032	0.22	0.22	3.7	<10	<50	3.7	<30
S-5	7.5.18	С	0 to 14	< 0.016	< 0.032	<0.032	< 0.065	ND	<3.2	<9.9	<50	ND	<30

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram



Appendix E

Laboratory Analytical Reports & 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

July 01, 2018

Kyle Summers
APEX TITAN
606 S. Rio Grande Unit A

Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Lateral 2C-40 OrderNo.: 1806F84

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/27/2018 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 1806F84

Date Reported: 7/1/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: S-1

 Project:
 Lateral 2C-40
 Collection Date: 6/26/2018 9:00:00 AM

 Lab ID:
 1806F84-001
 Matrix: MEOH (SOIL)
 Received Date: 6/27/2018 7:55:00 AM

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	30	mg/Kg	20	6/28/2018 10:01:39 AM	38925
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/28/2018 1:15:34 PM	38927
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/28/2018 1:15:34 PM	38927
Surr: DNOP	100	70-130	%Rec	1	6/28/2018 1:15:34 PM	38927
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	6/27/2018 11:03:59 AM	G52273
Surr: BFB	80.5	15-316	%Rec	1	6/27/2018 11:03:59 AM	G52273
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.021	mg/Kg	1	6/27/2018 11:03:59 AM	B52273
Toluene	ND	0.042	mg/Kg	1	6/27/2018 11:03:59 AM	B52273
Ethylbenzene	ND	0.042	mg/Kg	1	6/27/2018 11:03:59 AM	B52273
Xylenes, Total	ND	0.084	mg/Kg	1	6/27/2018 11:03:59 AM	B52273
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/27/2018 11:03:59 AM	B52273

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

Lab Order **1806F84**Date Reported: **7/1/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: S-2

 Project:
 Lateral 2C-40
 Collection Date: 6/26/2018 9:05:00 AM

 Lab ID:
 1806F84-002
 Matrix: MEOH (SOIL)
 Received Date: 6/27/2018 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	ND	30		mg/Kg	20	6/28/2018 10:14:04 AM	38925
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/28/2018 1:40:23 PM	38927
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/28/2018 1:40:23 PM	38927
Surr: DNOP	94.8	70-130		%Rec	1	6/28/2018 1:40:23 PM	38927
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/27/2018 11:27:28 AM	G52273
Surr: BFB	85.7	15-316		%Rec	1	6/27/2018 11:27:28 AM	G52273
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	0.019	0.019		mg/Kg	1	6/27/2018 11:27:28 AM	B52273
Toluene	0.18	0.038		mg/Kg	1	6/27/2018 11:27:28 AM	B52273
Ethylbenzene	ND	0.038		mg/Kg	1	6/27/2018 11:27:28 AM	B52273
Xylenes, Total	0.46	0.075		mg/Kg	1	6/27/2018 11:27:28 AM	B52273
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/27/2018 11:27:28 AM	B52273

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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 2 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#: 1806F84

01-Jul-18

Client:

APEX TITAN

Project:

Lateral 2C-40

Sample ID MB-38925

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 38925

PQL

1.5

RunNo: 52323

Prep Date: 6/27/2018 Analysis Date: 6/28/2018

SeqNo: 1716132

Units: mg/Kg

%RPD **RPDLimit**

Qual

Analyte Chloride

ND

Result

LCSS

6/27/2018

SampType: LCS

TestCode: EPA Method 300.0: Anions

HighLimit

%RPD

Sample ID LCS-38925

SPK value SPK Ref Val %REC LowLimit

RunNo: 52323

Units: mg/Kg

Prep Date:

Client ID:

Analysis Date: 6/28/2018

SeqNo: 1716133

HighLimit

RPDLimit Qual

Analyte

PQL

Batch ID: 38925

SPK value SPK Ref Val %REC 15.00

1.5

110

Chloride

Result 15

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Practical Quanitative Limit **PQL**

% 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 6

P Sample pH Not In Range

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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1806F84

01-Jul-18

Client:

APEX TITAN

Project:

Lateral 2C-40

Sample ID LCS-38927	SampTyp	e: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch I	D: 389	927	RunNo: 52310							
Prep Date: 6/27/2018	Analysis Dat	te: 6/2	28/2018	S	eqNo: 1	714475	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	49	10	50.00	0	97.8	70	130				
Surr: DNOP	4.1		5.000		81.2	70	130				

Sample ID MB-38927						TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	ID: 389	927	R	RunNo: 5	2310						
Prep Date: 6/27/2018	Analysis Date: 6/28/2018			SeqNo: 1714476			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	9.0		10.00		89.7	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 4 of 6

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1806F84

01-Jul-18

Client:

APEX TITAN

Project:

Lateral 2C-40

Sample ID RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

PBS

Batch ID: G52273

RunNo: 52273

Units: mg/Kg

Prep Date:

Analysis Date: 6/27/2018

SeqNo: 1713631

%RPD

%RPD

Analyte

Result 830

1000

PQL ND

SPK value SPK Ref Val %REC

LowLimit

HighLimit

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

5.0

83.5

316

Sample ID 2.5UG GRO LCS

SampType: LCS Batch ID: **G52273**

RunNo: 52273

TestCode: EPA Method 8015D: Gasoline Range

15

Prep Date:

LCSS Client ID:

Analysis Date: 6/27/2018

SeqNo: 1713632

Units: mg/Kg HighLimit

Analyte

Result

PQL SPK value SPK Ref Val

%REC LowLimit

RPDLimit Qual

Page 5 of 6

75.9 15

316

131

Gasoline Range Organics (GRO) 27 5.0 25.00 0 106 Surr: BFB 990 1000 98.6

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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1806F84

01-Jul-18

Client: Project:

APEX TITAN Lateral 2C-40

Sample ID RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles RunNo: 52273 Client ID: **PBS** Batch ID: **B52273** Prep Date: Analysis Date: 6/27/2018 SeqNo: 1713652 Units: mg/Kg **RPDLimit** %RPD SPK value SPK Ref Val %REC LowLimit Analyte Result PQL HighLimit Qual Benzene ND 0.025 ND 0.050 Toluene Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 Surr: 4-Bromofluorobenzene 1.0 1.000 99.9 80 120

Sample ID 100NG BTEX LC	S Sampl	Type: LC	S	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batcl	h ID: B5	2273	F	RunNo: 5	2273					
Prep Date:	Analysis [Date: 6/	27/2018	5	SeqNo: 1	713653	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.95	0.025	1.000	0	94.6	77.3	128				
Toluene	0.97	0.050	1.000	0	97.1	79.2	125				
Ethylbenzene	0.97	0.050	1.000	0	96.8	80.7	127				
Xylenes, Total	2.9	0.10	3.000	0	98.2	81.6	129				
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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 6 of 6

P Sample pH Not In Range

RL Reporting Detection Limit



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

Sample Log-In Check List

Clie	nt Name:	APEX AZI	rec	Work Order No	umber: 180	6F84		Rep(N	o: 1
Rece	eived By:	Anne The	ome	6/27/2018 7:55:0	00 AM		an I	Y	
Com	pleted By	Isaiah Or	tiz	6/27/2018 8:14:4	44 AM		IGH	_	
Revi	ewed By:	Mu 6	(427/18 /18						
	in of Cus		,						
		custody comp	plete?		Yes	·	No	Not Present	
2 H	low was the	sample deli	vered?		Cou	irier			
Log	a in								
-		npt made to	cool the samples	?	Yes	Y	No 🗌	NA 🗆	
4. W	ere all sam	ples receive:	d at a temperatur	a of >0° C to 6.0°C	Yes	✓	No	NA L	
5. s	ample(s) in	proper conta	a ner(s)?		Yes	Y	Na 🗌		
6. Su	ufficient san	nple volume	for indicated test(s)?	Yes	~	Nα		
7. An	e samples	(except VOA	and ONG) prope	rly preserved?	Yes	V	No 🗌		
8. W	as preserva	ative added to	o bottles?		Yes		No 🗸	NA	
9. vo	DA vials hav	ve zero head	Ispace?		Yes		No 🗆	No VOA Vials	
10.W	ere any sa	mple contain	ers received brok	en?	Yes		No 🗸	# of preserved	
							p	bottles checked	10
		ork match bo ancies on ch	ottle labels? nain of custody)		Yes	V	No	for pH (<2	or >12 unless noted)
			ntified on Chain o	f Custody?	Yes	V	No 🗌	Adjusted?	1/27
			vere requested?	,	Yes	~	No 🗌		61
14. W	ere all hold	ing times abl	le to be met? authorization)		Yes	V	No 🗌	Checked by:	
							_		
		ling (if ap			4.5				
15. W	ias client n	otified of all d	discrepancies with	this order?	Yes		No L	NA 🗹	
		Natified			ate:				
	By Wh			Vi	a el	fail	Phone Fa	x In Person	
	Regard								
16. 4	Client I	nstructions.	J						
17. <u>c</u>	Cooler Info		Condition S	Beal Intact Seal No	al emir	Vole	l Signed B	ı	
	1	14	Good Ye		o Seal [Jale	Signed By		

CHAIN OF CUSTODY RECORD Lab use only ANALYSIS Hall Envisenmental Due Date: REQUESTED Laboratory: (al) APEX Address: 4901 Hawkins NE Temp. of coolers 1.4 Office Location 606 S R. a Albuquerque rem 87109 Contact: A Freeman when received (C"). Grande Suit A 2 3 Artec NM 87410 Phone: 505 - 345 - 3975 Project Manager K Summer's PO/SO#: Sampler's Name Sampler's Signature a DADONT Prci. No. Project Name No/Type of Containers Ceteral 735040112482 Start Depth End Depth Identifying Marks of Sample(s) Lab Sample ID (Lab Use Only) 126/18 900 X 5-1 1806F84 -001 5-2 YXX -002 Turn around time ☐ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush NOTES: Pay Key # Cm 22355

Pm Tomlong ()

APE# N36622

Nev+ Day 628-18 Date: Received, by: (Signature) Relinquished by (Signature) Charto 624/18 1534 Date: Received by: (Signature) Date: Time: Relinquished by (Signature) Time: Received by: (Signature) Relinquished by (Signature) Date: Date: Time: Received by: (Signature) Date: Relinquished by (Signature) Date: Time: C - Charcoal tube WW - Wastewater W - Water S - Soil SD - Solid L - Liquid A - Air Bag Matrix A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

Container

VOA - 40 ml vial



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

OrderNo.: 1807211

July 09, 2018

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

FAX

RE: Lateral 2C 40

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/6/2018 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

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1807211

Date Reported: 7/9/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: S-3

 Project:
 Lateral 2C 40
 Collection Date: 7/5/2018 9:00:00 AM

 Lab ID:
 1807211-001
 Matrix: SOIL
 Received Date: 7/6/2018 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	JRR
Chloride	ND	30	mg/Kg	20	7/6/2018 10:31:50 AM	39073
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	AG
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	7/6/2018 10:08:23 AM	A52504
Surr: BFB	109	70-130	%Rec	1	7/6/2018 10:08:23 AM	A52504
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/6/2018 10:35:47 AM	39068
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/6/2018 10:35:47 AM	39068
Surr: DNOP	105	70-130	%Rec	1	7/6/2018 10:35:47 AM	39068
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	AG
Benzene	ND	0.020	mg/Kg	1	7/6/2018 10:08:23 AM	B52504
Toluene	ND	0.039	mg/Kg	1	7/6/2018 10:08:23 AM	B52504
Ethylbenzene	ND	0.039	mg/Kg	1	7/6/2018 10:08:23 AM	B52504
Xylenes, Total	ND	0.079	mg/Kg	1	7/6/2018 10:08:23 AM	B52504
Surr: 4-Bromofluorobenzene	123	70-130	%Rec	1	7/6/2018 10:08:23 AM	B52504
Surr: Toluene-d8	96.0	70-130	%Rec	1	7/6/2018 10:08:23 AM	B52504

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

Lab Order 1807211

Date Reported: 7/9/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: S-4

 Project:
 Lateral 2C 40
 Collection Date: 7/5/2018 9:05:00 AM

 Lab ID:
 1807211-002
 Matrix: SOIL
 Received Date: 7/6/2018 7:00:00 AM

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	30	mg/Kg	20	7/6/2018 10:44:14 AM	39073
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	AG
Gasoline Range Organics (GRO)	3.7	3.2	mg/Kg	1	7/6/2018 10:31:28 AM	A52504
Surr: BFB	109	70-130	%Rec	1	7/6/2018 10:31:28 AM	A52504
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/6/2018 11:00:16 AM	39068
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/6/2018 11:00:16 AM	39068
Surr: DNOP	107	70-130	%Rec	1	7/6/2018 11:00:16 AM	39068
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	AG
Benzene	ND	0.016	mg/Kg	1	7/6/2018 10:31:28 AM	B52504
Toluene	ND	0.032	mg/Kg	1	7/6/2018 10:31:28 AM	B52504
Ethylbenzene	ND	0.032	mg/Kg	1	7/6/2018 10:31:28 AM	B52504
Xylenes, Total	0.22	0.064	mg/Kg	1	7/6/2018 10:31:28 AM	B52504
Surr: 4-Bromofluorobenzene	124	70-130	%Rec	1	7/6/2018 10:31:28 AM	B52504
Surr: Toluene-d8	95.6	70-130	%Rec	1	7/6/2018 10:31:28 AM	B52504

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

Lab Order 1807211

Date Reported: 7/9/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: S-5

Collection Date: 7/5/2018 9:10:00 AM Project: Lateral 2C 40 1807211-003 Received Date: 7/6/2018 7:00:00 AM Lab ID: Matrix: SOIL

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	JRR
Chloride	ND	30	mg/Kg	20	7/6/2018 10:56:38 AM	39073
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	AG
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	7/6/2018 10:54:36 AM	A52504
Surr: BFB	109	70-130	%Rec	1	7/6/2018 10:54:36 AM	A52504
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/6/2018 11:24:40 AM	39068
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/6/2018 11:24:40 AM	39068
Surr: DNOP	110	70-130	%Rec	1	7/6/2018 11:24:40 AM	39068
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	AG
Benzene	ND	0.016	mg/Kg	1	7/6/2018 10:54:36 AM	B52504
Toluene	ND	0.032	mg/Kg	1	7/6/2018 10:54:36 AM	B52504
Ethylbenzene	ND	0.032	mg/Kg	1	7/6/2018 10:54:36 AM	B52504
Xylenes, Total	ND	0.065	mg/Kg	1	7/6/2018 10:54:36 AM	B52504
Surr: 4-Bromofluorobenzene	123	70-130	%Rec	1	7/6/2018 10:54:36 AM	B52504
Surr: Toluene-d8	95.4	70-130	%Rec	1	7/6/2018 10:54:36 AM	B52504

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
- Holding times for preparation or analysis exceeded Н
- 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 9 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.

1807211 WO#:

09-Jul-18

Client:

APEX TITAN

Project:

Lateral 2C 40

Sample ID MB-39073

SampType: mblk

TestCode: EPA Method 300.0: Anions

PBS Client ID:

Batch ID: 39073

PQL

RunNo: 52505

Prep Date: 7/6/2018

Prep Date: 7/6/2018

Analysis Date: 7/6/2018

SeqNo: 1723075 Units: mg/Kg

Analyte

HighLimit

%RPD **RPDLimit**

Qual

Chloride

ND 1.5

Result

Sample ID LCS-39073 LCSS

SampType: Ics Batch ID: 39073 TestCode: EPA Method 300.0: Anions

RunNo: 52505

Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit

SeqNo: 1723076

Analyte

Client ID:

Analysis Date: 7/6/2018

SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit

Qual

PQL

Chloride

%RPD

14 1.5 15.00 0 95.8 110

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

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Sample container temperature is out of limit as specified

E Value above quantitation range

Analyte detected below quantitation limits J

Page 4 of 9

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1807211

09-Jul-18

Client: Project:	APEX TI Lateral 20										
Sample ID	MB-39058	SampTyp	e: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch II	D: 39	058	F	RunNo: 5	2498				
Prep Date:	7/5/2018	Analysis Dat	e: 7/	/6/2018	S	SeqNo: 1	721687	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.9		10.00		99.1	70	130			
Sample ID	MB-39068	SampTyp	e: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch II	D: 39	068	F	RunNo: 5	2498				
Prep Date:	7/6/2018	Analysis Dat	e: 7/	/6/2018	5	SeqNo: 1	721693	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	ND	10								
	ge Organics (MRO)	ND	50								
Surr: DNOP		10		10.00		104	70	130			
Sample ID	LCS-39068	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	LCSS	Batch II	D: 39	068	F	RunNo: 5	2498				
Prep Date:	7/6/2018	Analysis Dat	e: 7/	/6/2018	8	SeqNo: 1	721767	Units: mg/k	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	Organics (DRO)	52	10	50.00	0	104	70	130			
Surr: DNOP		4.8		5.000		95.2	70	130			
Sample ID	1807211-003AMS	SampTyp	e: MS	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	S-5	Batch II	D: 39	068	F	RunNo: 5	2498				
Prep Date:	7/6/2018	Analysis Dat	e: 7/	/6/2018	8	SeqNo: 1	722609	Units: mg/k	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	Organics (DRO)	59	10	50.00	5.078	107	62	120			
Surr: DNOP		5.0		5.000		101	70	130			
Sample ID	1807211-003AMSE	SampTyp	e: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	S-5	Batch II	D: 39	068	F	RunNo: 5	2498				
Prep Date:	7/6/2018	Analysis Dat	e: 7/	/6/2018	5	SeqNo: 1	722610	Units: mg/k	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0	Organics (DRO)	56	9.8	48.97	5.078	104	62	120	4.91	20	
Surr: DNOP		4.9		4.897		99.9	70	130	0	0	
Sample ID	LCS-39058	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch II	D: 39	058	F	RunNo: 5	2498				
Prep Date:	7/5/2018	Analysis Dat	e: 7/	/6/2018	8	SeqNo: 1	722611	Units: %Re	С		

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 9

P Sample pH Not In Range RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

Page 6 of 9

1807211

09-Jul-18

Client: APEX TITAN
Project: Lateral 2C 40

Sample ID LCS-39058 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 39058 RunNo: 52498

Prep Date: 7/5/2018 Analysis Date: 7/6/2018 SeqNo: 1722611 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.7 5.000 94.7 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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1807211

09-Jul-18

Client: APEX TITAN
Project: Lateral 2C 40

Project:	Lateral 20	40									
Sample ID	100ng btex lcs	SampTy	pe: LC	S4	Test	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID:	BatchQC	Batch	ID: B5	2504	R	RunNo: 5	2504				
Prep Date:		Analysis Da	ate: 7/	6/2018	S	SeqNo: 1	721925	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.99	0.025	1.000	0	99.1	80	120			
Toluene		1.0	0.050	1.000	0	104	80	120			
Ethylbenzene		1.0	0.050	1.000	0	103	80	120			
Xylenes, Total		2.9	0.10	3.000	0	98.3	80	120			
Surr: 4-Brom	nofluorobenzene	0.48		0.5000		97.0	70	130			
Surr: Toluen	e-d8	0.49		0.5000		98.3	70	130			
Sample ID	rb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID:	PBS	Batch	ID: B5	2504	F	RunNo: 5	2504				
Prep Date:		Analysis Da	ate: 7/	6/2018	S	SeqNo: 1	721929	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								
Kylenes, Total		ND	0.10								
Surr: 4-Bron	nofluorobenzene	0.55		0.5000		109	70	130			
Surr: Toluen	e-d8	0.49		0.5000		97.9	70	130			
Sample ID	1807211-002AMS	SampT	ype: MS	64	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID:	S-4	Batch	ID: B 5	2504	F	RunNo: 5	2504				
Prep Date:		Analysis D	ate: 7/	6/2018	S	SeqNo: 1	722623	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.62	0.016	0.6406	0.01188	94.4	80	120			
Toluene		0.64	0.032	0.6406	0.007066	98.4	80	120			
Ethylbenzene		0.67	0.032	0.6406	0.01714	103	82	121			
Xylenes, Total		2.0	0.064	1.922	0.2165	95.3	80.2	120			
Surr: 4-Bron	nofluorobenzene	0.34		0.3203		107	70	130			
Surr: Toluer	ne-d8	0.30		0.3203		95.0	70	130			
Sample ID	1807211-002AMSE	SampT	ype: MS	SD4	Tes	tCode: E	PA Method	8260B: Vola	tiles Short	List	
Client ID:	S-4	Batch	ID: B5	2504	F	RunNo: 5	2504				
Prep Date:		Analysis D	ate: 7/	6/2018	5	SeqNo: 1	722624	Units: mg/F	(g		
		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte			0.016	0.6406	0.01188	90.1	80	120	4.54	20	
Benzene		0.59									
		0.59 0.61	0.032	0.6406	0.007066	94.5	80	120	3.98	20	
Benzene					0.007066 0.01714	94.5 97.4 97.4	80 82 80.2	120 121 120	3.98 5.12 1.96	20 20 20	

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 7 of 9

P Sample pH Not In Range

RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1807211

09-Jul-18

Client: Project:

APEX TITAN Lateral 2C 40

Sample ID 1807211-002AMSD SampType: MSD4 TestCode: EPA Method 8260B: Volatiles Short List

Client ID: S-4

Batch ID: **B52504**

RunNo: **52504**

Prep Date: Analysis Date: 7/6/2018 SeqNo: 1722624 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.37		0.3203		116	70	130	0	0	
Surr: Toluene-d8	0.30		0.3203		93.9	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 8 of 9

Hall Environmental Analysis Laboratory, Inc.

SampType: MSD

WO#: **1807211**

09-Jul-18

Client: APEX TITAN
Project: Lateral 2C 40

Sample ID rh	SamnT	vne. ME	N K	Tes	Code: FI	PA Method	8015D Mod:	Gasoline	Range	
Surr: BFB	450		500.0		90.0	70	130			
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	70	130			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Prep Date:	Analysis D	ate: 7/	6/2018	S	eqNo: 1	721919	Units: mg/K	(g		
Client ID: LCSS Batch ID: A52504 RunNo: 52504										
Sample ID 2.5ug gro Ics	S	TestCode: EPA Method 8015D Mod: Gasoline Range								

Sample ID rb	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch	ID: A5	2504	R	RunNo: 5	2504				
Prep Date:	Analysis D	ate: 7/	6/2018	S	SeqNo: 1	721920	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		97.4	70	130			

Sample ID 1807211	001ams	SampType	e: MS		Test	Code: El	PA Method	8015D Mod:	Gasoline l	Range	
Client ID: S-3		Batch ID	: A52	2504	R	tunNo: 5	2504				
Prep Date:	Α	nalysis Date	: 7/6	6/2018	S	eqNo: 1	722618	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(GRO)	22	3.9	19.69	1.929	104	64.7	142			
Surr: BFB		390		393.7		98.6	70	130			

The state of the s										
Client ID: S-3	Batch	ID: A5	2504	F	RunNo: 5	2504				
Prep Date:	Analysis D	ate: 7/	6/2018	S	SeqNo: 1	722619	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	3.9	19.69	1.929	102	64.7	142	2.52	20	
Surr: BFB	400		393.7		101	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Sample ID 1807211-001amsd

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 9

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

TestCode: EPA Method 8015D Mod: Gasoline Range



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:	1807	211			Rcptl	No: 1	
Received By:	Anne Thorne	Ð	7/6/2018 7:00	:00 AM			am	Am	_		
Completed By:	Anne Thorne	9	7/6/2018 7:19	:55 AM			1	An			
Reviewed By:	IO		7/4/12				Care	Man			
Labeledb	4: A.	-07/06/18									
Chain of Cus											
1. Is Chain of C	ustody complete	e?			Yes	V	No		Not Present		
2. How was the	sample delivere	ed?			Cour	<u>ier</u>					
Log In											
3. Was an attern	pt made to coo	of the samples?			Yes	~	No		NA [
						_			_	_	
4. Were all samp	oles received at	a temperature o	f >0° C to 6.0°	,C	Yes	V	No		NA L		
5. Sample(s) in	proper containe	er(s)?			Yes	V	No				
6. Sufficient sam	nle volume for	indicated teet(e)	,		Yes	V	No				
7. Are samples (✓	No				
8. Was preserva			p. 000, 100,		Yes		No	V	NA 🗆]	
9. VOA vials hav	e zero headspa	ace?			Yes		No		No VOA Vials		
10. Were any san	nple containers	received broken	?		Yes		No	~	# of preserved		
44.5		1.1.1.0					Ala.		bottles checked		
Does paperwo(Note discrepa	ancies on chain				Yes	Y	No		for pH:	2 or >12 unless note	d)
12. Are matrices of			ustody?		Yes	✓	No		Adjusted?		
13, Is it clear what	t analyses were	requested?			Yes	Y	No				
14. Were all holding	-				Yes	V	No		Checked by:		
(If no, notify c	ustomer for auti	norization.)							`		
Special Handl	ing (if appli	cable)									
15. Was client no	tified of all disc	repancies with th	nis order?		Yes		No		NA ₩		
Person	Notified:	AND THE RESERVE OF THE PARTY OF	ACCOMPANIANT.	Date	TV0.1.44.0	WASHING ROOMS TO	O THE LANGE	La Field and Hall State of the Land			
By Who	om:	Charles a Tagorinia and	***************************************	Via:] eMa	ail 🔲	Phone _	Fax	In Person		
Regard	ing:	AND MANAGEMENT OF THE PARTY OF				DIMED COMPA					
Client Is	nstructions:			2 - 2 - 2							
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The state of the s	1.3 G	Good Yes				l	1664				

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Artec NM 87410	Phone: 505				,	(0)		/ / /	Page of
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Sampler's Name	Sampler's Signature				8	100	/////		
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Matrix WW - Wastewater W - Water Container VOA - 40 ml vlal A/G - Amber /		L - Liquid A	- Air Bag wide mouth		coal tube	SL - sludg		U	****

Container

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 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-141 Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

NMOCD

AUG Z / ZUIO

Release Notification and Corrective Action

					OF	PERATOR	3		Initial F	Report C Final Report				
Name of C	ompany E	nterprise F	ield Serv	vices, LLC		Contact Thomas Long								
Address 61	14 Reilly A	ve, Farmir	gton, NI	VI 87401		Telephone	No. 505-599	-2286						
Facility Na	me Latera	I K-61				Facility Type Natural Gas Gathering Pipeline								
Surface Ov	wner Priv	ate		Mineral C)wner	BLM			Serial I	No. N/A				
				LOCA	TION	OF REL	EASE							
Unit Letter A	Section 14	Township 27N	Range 6W		THE RESERVE TO SHARE THE PARTY OF THE PARTY	rth South Feet from East West County e Line Rio Arriba								
		La	atitude <u>36</u>			of RELI	29920 NAD8:	3						
Type of Rela	aasa: Natur	al Gas and N	latural Ga		UKL		f Release Unk	nown	Volume F	Recovered None				
		spected Inter				Date and	Hour of Occur at 1:30 p.m.	rence	Date and	Hour of Discovery 8 at 1:30 p.m.				
Was Immed Required	iate Notice		☐ Yes	□ No ⊠ N	ot					Vanessa Fields – NMOCD				
By Whom?							Hour August 1							
Was a Wate	ercourse Re		☐ Yes	⊠ No		If YES, Vo	olume Impactir	ng the Wa	tercourse					
Describe Ca on the Later Describe Ar	ause of Prol ral K-61 pip rea Affected	eline. The pi and Cleanup	medial Act peline was Action T	tion Taken.* O s isolated, dep aken.* Repairs	ressuri	ized, locked emediation a	out and tagged are in progress	d out. . Enterpri	se detern	d a release of natural gas				
							rface soil. The ith the "Final" (ant mass	will be removed by				
rules and re which may e relieve the o ground water	egulations a endanger poperator of l er, surface v	Il operators a ublic health o iability should vater, human	re require r the envir d their ope health or	d to report and ronment. The erations have father the environment.	l/or file accept ailed to ent. In	certain releatance of a Coadequately addition, NM	ase notification 141 report by investigate an	ns and per the NMOC and remedia ance of a C	form corr CD marke ate contar	nd that pursuant to NMOCD ective actions for releases d as "Final Report" does not mination that pose a threat to ort does not relieve the				
Signature:	(m)	& fu				OIL CO	VSERV.	ATION	DIVISION					
Printed Nan	ne: Jon E. F	ields			Approved by	y Environment	al Special	ist:						
Title: Direct	or, Field En	vironmental				Approval Date: 15/24/18 Expiration Date:								
E-mail Addr	ess: jefields	s@eprod.con	า			Conditions of Approval:				Attached				
Date: 8	121/18	,	Phon	e: (713) 381-6	684									

* Attach Additional Sheets If Necessary

MF1829738401

District |
1625 N. French Dr., Hobbs, NM 88240
District ||
811 S. First St., Artesia, NM 88210
District |||
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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

			celeas	e Notifica	atio	n and C	orrective	ACTI	оп				
					OF	PERATOR	3	Г	Initial	Report	\bowtie	Final Repo	
Name of C	ompany:	Enterprise I	ield Serv	vices LLC		Contact: T	homas Long	-					
		Ave, Farmin	gton, NM	87401		Telephone No. 505-599-2286							
Facility Na	me: Lindr	ith B#9				Facility Type: Natural Gas Gathering Pipeline							
Surface Ov	vner: Priv	ate		Mineral C	Owner	ner: Private Serial Number: N/A							
						OF REL							
Unit Letter N	Section 27	Township 24N	Range 3W	Feet from the 545	Nort Line			East Vest Line		County Rio Arri	ba		
Latitude 36.27562 Longitude -107.147367													
				0 1400 00200 0		OF RELE							
		ral Gas and C		e		Gas; 3-5 BE	telease: 3.83 MG BLs Condensat	0		Recovered			
		rd Party Line	Strike	~		6/14/2016 @			6/14/201	d Hour of [16 @ 2:00	p.m.		
Was Immed	iate Notice		s 🗌 No	⊠ Not		If YES, To W	hom? Courtesy	/ Notific	cation – V	anessa Fie	elds, NA	MOCD	
Required													
By Whom?						Date and Time June 30, 2016 @ 8:46 a.m.							
Was a Watercourse Reached? ☐ Yes ☑ No													
If a Waterco	urse was In	npacted, Des	cribe Fully	y.*									
with a bulldo	zer. No inj	uries or fire o	occurred fr	om the line str	ike. N	latural gas a	n June 14, 2016 nd condensate v emediation wen	vas rel	eased to t	he ground	surface		
approximate	ly 50 feet lo to a New M	ong by 15 fee	t wide by	6 feet deep. A	Approx	imately 76 cu	red by mechanic ubic yards of hyd lity. A third par	drocart	on impac	ted soil we	re exca	vated and	
rules and reg which may e relieve the o ground wate	I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.												
Signature:	-/W	E. Ful	/	-			OIL CON	SERI	/ATION	DIVISION	NO		
Printed Nam	e: Jon E. F	ields				Approved by	Environmental	Specia	alist:		_		
Title: Directo	r, Field Env	vironmental				Approval Da	te: 1011012	256	Expiration	Date:			
E-mail Addre	ess:jefields(@eprod.com			Conditions of Approval:								
Date: S Attach Addit	126/761	-		e: (713)381-66	84	10.70							

NVF1621527651



ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS HOLDINGS LLC

ENTERPRISE PRODUCTS OPERATING LLC

NVF 1621527651

August 26, 2016

ENMRD Oil Conservation Division Aztec District III Office Attn: Vanessa Fields 1000 Rio Brazos Road Aztec, NM 87410

Return Receipt Requested 70145 0640 0005 6971 8456

RE: Lindrith B#9

Rio Arriba County

Dear Mr. Smith:

Attached is a final Release Notification and Corrective Action Report (C-141) and the backup data as prepared by our consultant, Apex TITAN Inc. Should you have questions or need additional information, please contact our area environmental representative, Thomas Long at 505-599-2286 or me directly at 713-381-6595.

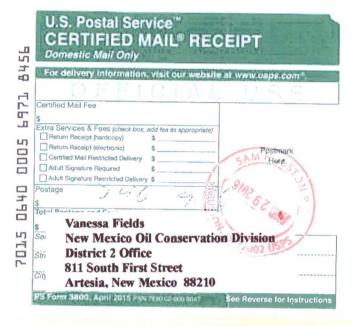
Yours truly,

Shiver J. Nolan

Sr. Compliance Administrator

/sjn enclosures

NMOCD
OCT 02 2018
DISTRICT III



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON I	DELIVERY
 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailplece, or on the front if space permits. Article Addressed to: Vanessa Fields New Mexico Oil Conservation Division District 2 Office 811 South First Street Artesia, New Mexico 88210 	A. Signature If Received by (Plinted Name) D. Is delivery address different from If YES, enter delivery address in	Addressee C. Date of Delivery Online 1? Yes Delow: No
9590 9401 0007 5148 9455 78 2. Article Number (Transfer from service label) 70/5/6/40 1005 697/8/456	3. Service Type Adult Signature Adult Signature Restricted Delivery Certified Mail® Certified Mail Restricted Delivery Collect on Delivery Insured Mail Insured Mail Restricted Delivery (over \$500)	Priority Mail Express® Registered Mail™ Registered Mail™ Registered Mail Restricted Delivery Return Receipt for Merchandise Signature Confirmation™ Restricted Delivery
PS Form 3811, April 2015 PSN 7530-02-000-9053		Domestic Return Receipt



CORRECTIVE ACTION REPORT

Property:

Lindrith B#9 Pipeline Release SW 1/4, S27 T24N R3W Rio Arriba County, New Mexico

July 29, 2016 Apex Project No. 725040112173

Prepared for:

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

CT 0 2 2018

DISTRICT III

Prepared by:

Chad D'Aponti Project Scientist

Kyle Summers, CPG

Branch Manager/Senior Project

Manager

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CORRECTIVE ACTION REPORT

Lindrith B#9 Pipeline Release SW 1/4, S27 T24N R3W Rio Arriba County, New Mexico

Apex Project No. 725040112173

1.0 INTRODUCTION

1.1 Site Description & Background

The Lindrith B#9 pipeline release Site is located within the Enterprise Field Services, LLC (Enterprise) pipeline right-of-way (ROW) in the southwest (SW) ¼ of Section 27, Township 24 North, Range 3 West, in Rio Arriba County, New Mexico (36.27562N, 107.147367W), referred to hereinafter as the "Site" or "subject Site". The Site is located on private land. The Site is surrounded by native vegetation rangeland periodically interrupted by oil and gas gathering facilities, including the Enterprise natural gas well tie which traverses the area from east to west.

On June 14, 2016, a surface release was identified on the Lindrith B#9 pipeline. The release was caused by a line strike resulting from a third party excavation. Beginning on June 27, 2016, Enterprise initiated excavation activities to facilitate the repair of the pipeline and to remediate potential hydrocarbon impact. The pipeline was repaired by replacing 40 feet of pipe.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 Project Objective

The primary objective of the corrective action was to reduce the concentration of constituents of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) Remediation Action Levels (RALs) using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as quidance.

2.0 SITE RANKING

In accordance with the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*, Apex TITAN, Inc. (Apex) utilized the general site characteristics obtained during the completion of corrective action activities to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:



Rankin	g Criteria		Ranking Score				
	<50 feet	20					
Depth to Groundwater	50 to 99 feet	10	10				
	>100 feet	0					
Wellhead Protection Area • <a> <a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a><a>	Yes	20	0				
source, or; <200 feet from private domestic water source.	No	0	<u> </u>				
	<200 feet	20					
Distance to Surface Water Body	200 to 1,000 feet	10	10				
	>1,000 feet	0					
Total Rar	Total Ranking Score						

Based on Apex's evaluation of the scoring criteria, the Site would have a Total Ranking Score of 20. This ranking is based on the following:

- Based on information from the Office of the State Engineer (OSE) website, the nearest water wells are located over a mile northwest of the Site. The two closest wells have depths to water of 182 feet below grade surface (bgs) and 200 feet bgs. However, based on the Site's proximity to the Medio Canyon arroyo/wash, the depth to groundwater at the Site may be between 50 feet and 100 feet bgs, resulting in a ranking of "10" for depth to groundwater.
- No water source wells (municipal/community wells) were identified within 1,000 feet of the Site. No private domestic water sources were identified within 200 feet of the Site. These proximities result in a wellhead protection area ranking of "0".
- The release point is located approximately 235 feet west of an unnamed ephemeral wash that is identified as a "blue line" on the United States Geological Society topographic map. This information supports a distance to surface water ranking of "10".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On June 14, 2016, a surface release was identified on the Lindrith B#9 pipeline. The release was caused by a line strike resulting from a third party excavation. Beginning on June 27, 2016, Enterprise initiated excavation activities to facilitate the repair of the pipeline and to remediate potential hydrocarbon impact. The pipeline was repaired by replacing 40 feet of pipe. During the corrective action activities, TRC Construction, Inc. (TRC) provided heavy equipment and labor support, and Chad D'Aponti, an Apex environmental professional, provided environmental support.

Subsequent to the initial excavation to expose the pipeline, one (1) composite stockpile soil sample (SP-1) was collected for laboratory analysis to determine the potential to reuse a portion of the soils as backfill material. Excavation activities were completed on June 28, 2016. Eight (8) composite soil samples were collected from the sidewalls and base of the main excavation and three (3) composite samples were collected from the flow path for laboratory analysis.



The main excavation measured approximately 50 feet long by 15 feet wide. The maximum depth of the excavation was approximately six (6) feet bgs. The flow path measured approximately 96 feet long by 5 feet wide and ranged from six (6) feet (at the excavation) to six (6) inches (at the path termination) in depth.

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

A total of approximately 76 cubic yards of hydrocarbon affected soils were transported to the TNT Landfarm for disposal/remediation. The executed C-138 form is provided in Appendix B. The excavation was backfilled with clean imported fill and laboratory—confirmed spoils, and then contoured to surrounding grade.

Figure 3 is a site map that indicates the approximate location of the excavated area in relation to the pipeline (Appendix A). Photographic documentation of the field activities is included in Appendix C.

3.2 Soil Sampling Program

Apex screened head-space samples of the impacted soils with a photoionization detector (PID) fitted with a 10.6 eV lamp to estimate excavation limits.

Apex's soil sampling program included the collection of eight (8) composite soil samples (S-1 through S-8) from the sidewalls and base of the excavation, three (3) composite flow path samples (FP-1 through FP-3) and one (1) composite stockpile soil sample for laboratory analysis (SP-1).

Figure 3 depicts the excavated area and shows the final confirmation sample locations in relation to the final excavation dimensions (Appendix A).

The confirmation soil samples were collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied label, and placed on ice in a cooler, which was secured with a custody seal. The samples and completed chain-of-custody form were relinquished to Hall Environmental Laboratory of Albuquerque, New Mexico for analysis.

3.3 Laboratory Analytical Methods

The confirmation soil samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) using EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-of-custody form and laboratory data sheets are provided in Appendix E.

4.0 DATA EVALUATION

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases, the New Mexico EMNRD OCD utilizes the *Guidelines* for Remediation of Leaks, Spills and Releases as guidance, in addition to the OCD rules, specifically NMAC 19.15.29 Release Notification. These guidance documents establish



investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Confirmation Soil Samples

Apex compared the BTEX and TPH concentrations or practical quantitation limits (PQLs) associated with the confirmation soil samples (S-1 through S-8) collected from the excavated area, flow path samples (FP-1 through FP-3) and the stockpile soil sample (SP-1) to the OCD *RALs* for sites having a total ranking score of "20".

- The laboratory analyses of the confirmation samples from soils remaining in place and the reused spoils did not exhibit benzene concentrations above the PQLs, which are below the OCD RAL of 10 milligrams per kilogram (mg/kg).
- The laboratory analyses of the confirmation samples from soils remaining in place and the reused spoils did not indicate total BTEX concentrations above the PQLs, which are below the OCD RAL of 50 mg/kg.
- The laboratory analyses of the confirmation samples from soils remaining in place and the reused spoils indicate combined TPH GRO/DRO concentrations ranging from below PQLs to 110 mg/kg (S-3). The TPH concentration for confirmation sample S-3 slightly exceeds the OCD RAL of 100 mg/kg for a Site ranking of "20". However, the New Mexico OCD (NMOCD) has allowed Enterprise to leave the soil associated with this sample in place due to the absence a BTEX or GRO component and the low magnitude of the exceedance. NMOCD correspondence is provided in Appendix F.

Confirmation sample laboratory analytical results are provided in Table 1 in Appendix D.

5.0 FINDINGS AND RECOMMENDATIONS

The Lindrith B#9 pipeline release Site is located within the Enterprise pipeline ROW in the SW ¼ of Section 27, Township 24 North, Range 3 West, in Rio Arriba County, New Mexico (36.27562N, 107.147367W). The Site is located on private land. The Site is surrounded by native vegetation rangeland periodically interrupted by oil and gas gathering facilities, including the Enterprise natural gas well tie which traverses the area from east to west.

On June 14, 2016, a surface release was identified on the Lindrith B#9 pipeline. The release was caused by a line strike resulting from a third party excavation. Beginning on June 27, 2016, Enterprise initiated excavation activities to facilitate the repair of the pipeline and to remediate potential hydrocarbon impact. The pipeline was repaired by replacing 40 feet of pipe.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD RALs using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.
- The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty sand.
- The main excavation measured approximately 50 feet long by 15 feet wide. The maximum depth of the excavation was approximately 6 feet bgs. The flow path measured



approximately 96 feet long by 5 feet wide and ranged from six (6) feet (at the excavation) to six (6) inches (at the path termination) in depth.

- Prior to backfilling, eight (8) excavation soil samples, one (1) stockpile soil sample and three (3) composite flow path samples were collected for laboratory analyses. Based on analytical results, the TPH concentration for confirmation sample S-3 exceeds the OCD RAL of 100 mg/kg for a Site ranking of "20". However, the NMOCD has allowed Enterprise to leave the soil associated with this sample in place due to the absence a BTEX or GRO component and the low magnitude of the exceedance.
- A total of approximately 76 cubic yards of hydrocarbon affected soils were transported to the TNT Landfarm for disposal/remediation. The excavation was backfilled with clean imported fill and laboratory-confirmed spoils, and then contoured to the approximate surrounding grade.

Based on the laboratory analytical results and NMOCD input, no additional investigation or corrective action appears warranted at this time.

6.0 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 or described herein. 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.

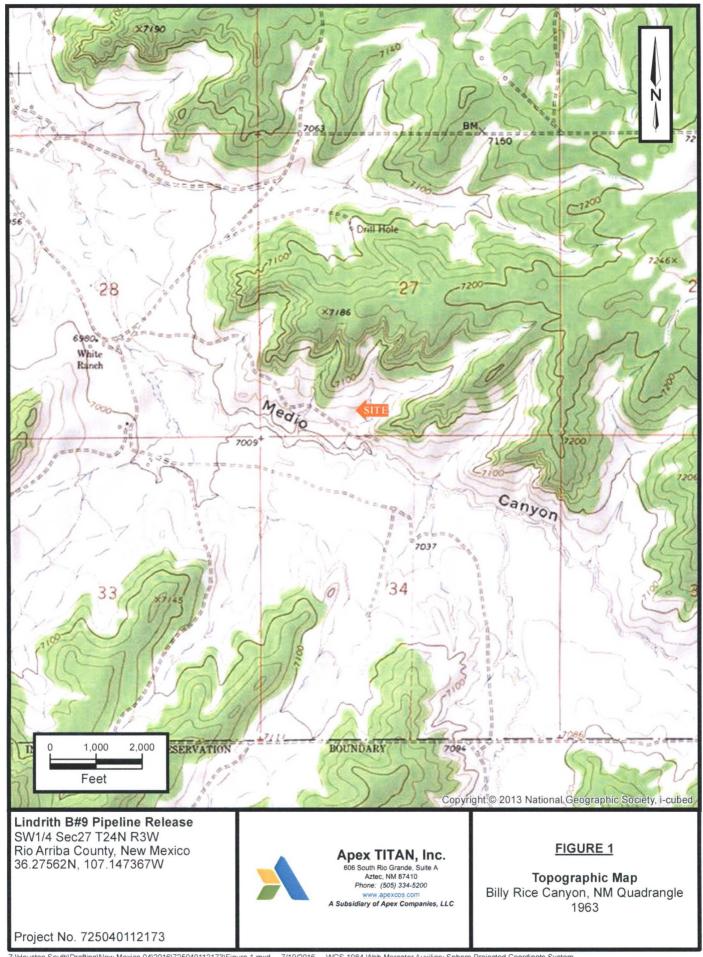
Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence 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.

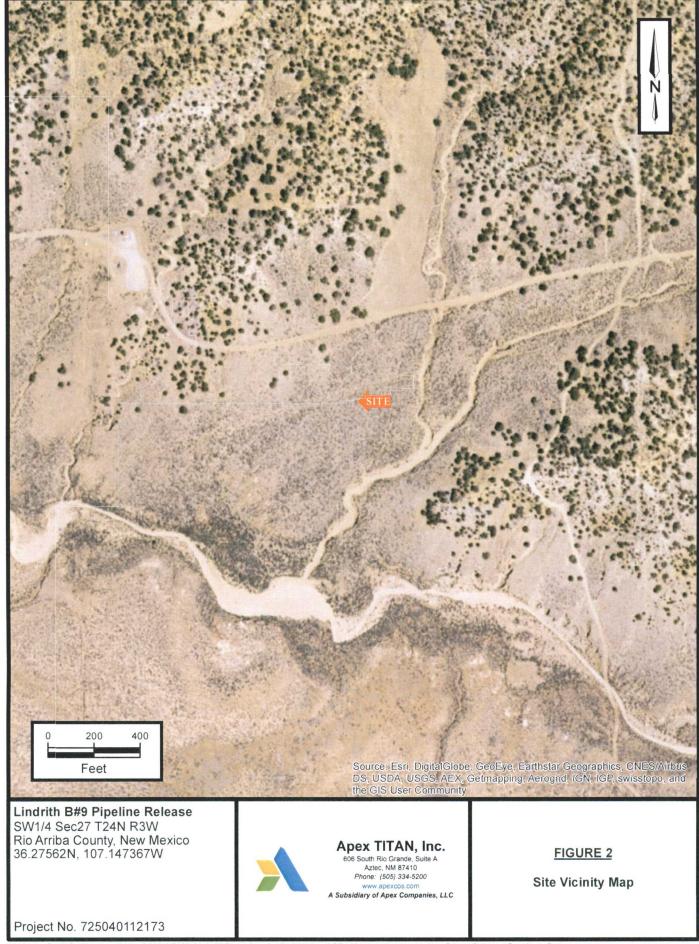
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution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

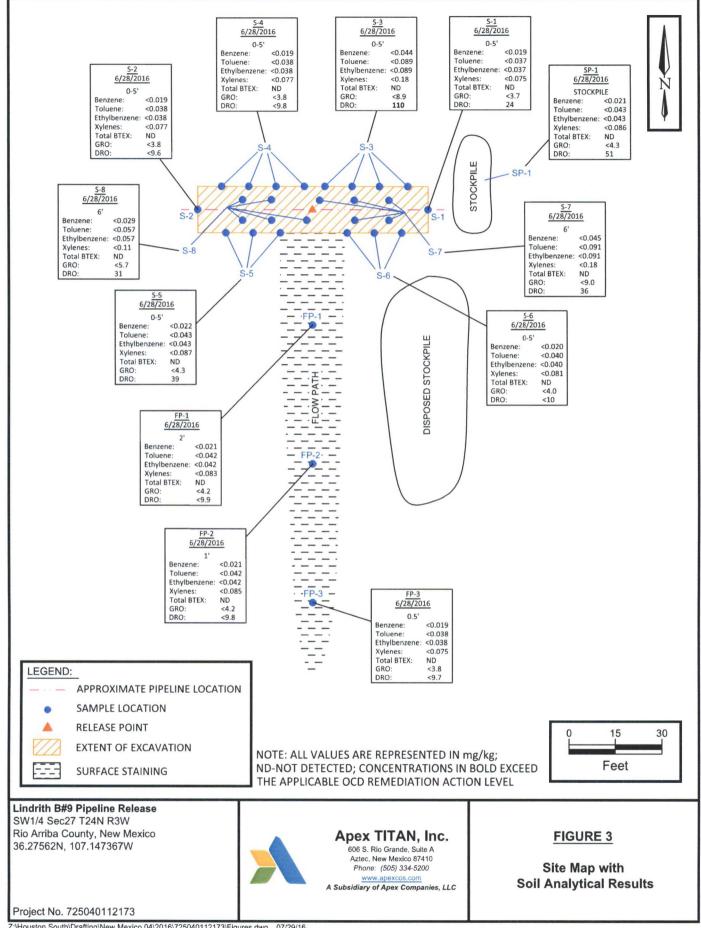


APPENDIX A

Figures









APPENDIX B

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

SIGNATURE:

Surface Waste Management Facility Authorized Agent

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.

1220 B. St. Handis Dr., Dama 10, 1444 07505
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: Lindrith B#9
3. Location of Material (Street Address, City, State or ULSTR): Section 27 T24N R 3W; 36.27562, -107.147367
4. Source and Description of Waste:
Source: Natural Gas Pipeline Release
Description: Hydrocarbon impacted soils associated with remediation activities for a natural gas pipeline release. Estimated Volume50 vd³ bbls Known Volume (to be entered by the operator at the end of the haul)76 vd³ bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, representative or authorized agent for Enterprise Field Services, LLC 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 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, 6-27-16, representative for Enterprise Field Services, LLC authorize TNT, Inc. Inc. to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.
I, Crass, representative for TNT, Inc. do hereby certify that
Representative/Agent Signature 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.
5. Transporter: Various approved trucking
OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: TNT Evap Pond/Landfarm, NM01-0008 Address of Facility: 70 CR 405, Lindrith NM
Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Landfarm Landfill Other
Waste Acceptance Status: DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: O TITLE: (VES. DATE: 6-29-16

TELEPHONE NO .:



APPENDIX C Photographic Documentation



Photograph 1

View of the final excavation, facing southwest



Photograph 2

View of final excavation and stock pile, facing east.



Photograph 3

View of the final flow path excavation, facing north.



Page 1 of 2



SITE PHOTOGRAPHS

Lindrith B #9 (2016) Pipeline Release

Photograph 4

View of the final excavation, facing west.





APPENDIX D Table



TABLE 1 Lindrith B #9 Pipeline Release SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	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)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
				Stockpile	Soil Samples				
SP-1	6.28.16	Stockpile	<0.021	<0.043	<0.043	<0.086	ND	<4.3	51
				Excavation Co	onfirmation Samples				
S-1	6.28.16	0-5	<0.019	<0.037	<0.037	<0.075	ND	<3.7	24
S-2	6.28.16	0-5	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.6
S-3	6.28.16	0-5	<0.044	<0.089	<0.089	<0.18	ND	<8.9	110
S-4	6.28.16	0-5	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.8
S-5	6.28.16	0-5	<0.022	<0.043	<0.043	<0.087	ND	<4.3	39
S-6	6.28.16	0-5	<0.020	<0.040	<0.040	<0.081	ND	<4.0	<10
S-7	6.28.16	6	<0.045	<0.091	<0.091	<0.18	ND	<9.0	36
S-8	6.28.16	6	<0.029	<0.057	<0.057	<0.11	ND	<5.7	31
FP-1	6.28.16	2	<0.021	<0.042	<0.042	<0.083	ND	<4.2	<9.9
FP-2	6.28.16	1	<0.021	<0.042	<0.042	<0.085	ND	<4.2	<9.8
FP-3	6.28.16	0.5	<0.019	<0.038	<0.038	< 0.075	ND	<3.8	<9.7

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

ND = Not Detected above the Laboratory Reporting Limits

NE = Not established



Appendix E:

Laboratory Analytical Reports & 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

June 30, 2016

Kyle Summers APEX TITAN 606 S. Rio Grande Unit A

Aztec, NM 87410 TEL: (903) 821-5603

FAX

RE: Lindrith B 9

OrderNo.: 1606F81

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/29/2016 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606F81

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: SP1

 Project:
 Lindrith B 9
 Collection Date: 6/28/2016 11:40:00 AM

 Lab ID:
 1606F81-001
 Matrix: MEOH (SOIL)
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGI	ORGANICS	,			Analyst	TOM
Diesel Range Organics (DRO)	51	10	mg/Kg	1	6/29/2016 11:02:33 AM	26141
Surr: DNOP	86.7	70-130	%Rec	1	6/29/2016 11:02:33 AM	26141
EPA METHOD 8015D: GASOLINE RANG	BE .				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	6/29/2016 9:47:29 AM	A35308
Surr: BFB	86.0	80-120	%Rec	1	6/29/2016 9:47:29 AM	A35308
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.021	mg/Kg	1	6/29/2016 9:47:29 AM	B35308
Toluene	ND	0.043	mg/Kg	1	6/29/2016 9:47:29 AM	B35308
Ethylbenzene	ND	0.043	mg/Kg	1	6/29/2016 9:47:29 AM	B35308
Xylenes, Total	ND	0.086	mg/Kg	1	6/29/2016 9:47:29 AM	B35308
Surr: 4-Bromofluorobenzene	99.8	80-120	%Rec	1	6/29/2016 9:47:29 AM	B35308

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
- R RPD outside accepted recovery limits
- 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 4
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

APEX TITAN

Client:

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606F81

30-Jun-16

Project:	Lindrith F										
Sample ID	LCS-26141	SampTyp	oe: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	Organics	
Client ID:	LCSS	Batch I	D: 26	141	F	RunNo: 3	5297				
Prep Date:	6/29/2016	Analysis Dat	te: 6/	/29/2016	5	SeqNo: 1	091683	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	organics (DRO)	42	10		0	83.1	62.6	124			
Surr: DNOP		4.5		5.000		89.3	70	130			
Sample ID	MB-26141	SampTy	oe: MI	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	PBS	Batch I	D: 26	141	F	RunNo: 3	5297				
Prep Date:	6/29/2016	Analysis Da	te: 6	/29/2016	5	SeqNo: 1	091684	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	ND	10								
Surr: DNOP		9.3		10.00		93.5	70	130			
Sample ID	1606F81-001AMS	SampTy	pe: MS	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	SP1	Batch I	D: 26	5141	F	RunNo: 3	5299				
Prep Date:	6/29/2016	Analysis Da	te: 6	/29/2016	5	SeqNo: 1	091935	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	94	10		51.19	85.3	33.9	141			
Surr: DNOP		4.7		5.005		93.9	70	130			
Sample ID	1606F81-001AMSI	SampTy	pe: M	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID:	SP1	Batch I	D: 26	5141	F	RunNo: 3	5299				
Prep Date:	6/29/2016	Analysis Da	te: 6	/29/2016	5	SeqNo: 1	091936	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Organics (DRO)	89	9.7		51.19	78.0	33.9	141	5.47	20	
Surr: DNOP		4.6		4.836		95.9	70	130	0	0	
Sample ID	LCS-26125	SampTy	pe: LC	cs	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	D: 26	6125	F	RunNo: 3	5299				
Prep Date:	6/28/2016	Analysis Da	te: 6	/29/2016	5	SeqNo: 1	092068	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.7		5.000		93.3	70	130			
Sample ID	MB-26125	SampTy	pe: M	BLK	Tes	stCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 26	6125	F	RunNo: 3	5299				
Prep Date:	6/28/2016	Analysis Da	te: 6	/29/2016	5	SeqNo: 1	092069	Units: %Re	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.2		10.00		82.5	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

R RPD outside accepted recovery limits

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

pelow quantitation limits Page 2 of 4

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606F81

30-Jun-16

Client: Project: APEX TITAN

Lindrith B 9

Sample ID	1606F81-001AMS
011 110	004

SampType: MS

TestCode: EPA Method 8015D: Gasoline Range

59.3

80

Client ID:

Batch ID: A35308

RunNo: 35308

Prep Date:

Analysis Date: 6/29/2016

SeqNo: 1091995

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result PQL 25 4.3

SPK value SPK Ref Val %REC LowLimit 117

HighLimit

143

120

%RPD **RPDLimit** Qual

Qual

Surr: BFB

800 SampType: MSD

93.7

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Sample ID 1606F81-001AMSD SP1

Batch ID: A35308

RunNo: 35308

Prep Date:

Analysis Date: 6/29/2016

21.46

858.4

SeqNo: 1091996

Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 24 4.3 21.46 0 113 59.3 143 3.44 20 0 Surr: BFB 780 858.4 91.4 80 120 0

Sample ID 5ML RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

SeqNo: 1092185

Client ID: PBS

Batch ID: A35308

RunNo: 35308

Units: mg/Kg

Prep Date: Analyte

Analysis Date: 6/29/2016 Result PQL

Result

29

940

SPK value SPK Ref Val %REC LowLimit

0

HighLimit

RPDLimit

Gasoline Range Organics (GRO) Surr: BFB

LCSS

ND 5.0 930

1000

SPK value SPK Ref Val

92.6

120

80

%RPD

Qual

Sample ID 2.5UG GRO LCS Client ID:

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

RunNo: 35308

LowLimit

Prep Date: Analyte

Batch ID: A35308 Analysis Date: 6/29/2016

SeqNo: 1092186 %REC

Units: mg/Kg HighLimit

%RPD **RPDLimit** Qual

Page 3 of 4

Gasoline Range Organics (GRO) Surr: BFB

PQL 5.0

25.00 1000

115 94.2 80 80

120 120

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R % 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
- RI Reporting Detection Limit

P

Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606F81

30-Jun-16

Client: APEX TITAN
Project: Lindrith B 9

Sample ID 5ML RB	SampT	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B35308			R	RunNo: 35308						
Prep Date:	Analysis Date: 6/29/2016			S	SeqNo: 1	092199	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	1.1		1.000		106	80	120				

Sample ID 100NG BTEX LC	S Sampl	Гуре: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batcl	h ID: B3	5308	RunNo: 35308						
Prep Date:	D Date: Analysis Date: 6/29/2016				SeqNo: 1	092200	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	105	75.3	123			
Toluene	1.0	0.050	1.000	0	100	80	124			
Ethylbenzene	0.98	0.050	1.000	0	97.8	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	96.9	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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

R RPD outside accepted recovery limits

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 4

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: A	PEX AZTEC	Work Order Number:	1606F	81			RcptNo:	1
Received by/date:	A/ Lindsay Mangin	Oce /29/16 6/29/2016 7:45:00 AM			Janely H.	Hago		
Completed By:	Lindsay Mangin	6/29/2016 7:59:08 AM			June 4	Hayo		
Reviewed By:	0	06/29/16						
Chain of Custo	dy A	0 4/21/16						
1. Custody seals	intact on sample bottles?		Yes		No	1	Not Present	
2. Is Chain of Cus	stody complete?		Yes		No	[!	Not Present	
3. How was the sa	ample delivered?		Cour	ier				
Log In								
4. Was an attem	pt made to cool the samples	?	Yes		No	["]	NA []	
5. Were all samp	les received at a temperatur	e of >0° C to 6.0°C	Yes		No		NA !	
6. Sample(s) in p	proper container(s)?		Yes		No]		
7. Sufficient same	ple volume for indicated test	(s)?	Yes	4	No			
8. Are samples (e	except VOA and ONG) prope	erly preserved?	Yes		No	Γ;		
9. Was preservat	tive added to bottles?		Yes		No	*	NA []	
10.VOA vials have	e zero headspace?		Yes		No	[.	No VOA Vials	
11. Were any sam	nple containers received bro	ken?	Yes	ز_ا	No		# of preserved	
	ork match bottle labels?		Yes	4	No	·;	bottles checked for pH:	r >12 unless noted)
	correctly identified on Chain	of Custody?	Yes	*	No	[.]	Adjusted?	,
	analyses were requested?		Yes		No	[]		
	ng times able to be met? ustomer for authorization.)		Yes		No	[Checked by:	
Special Handli	ng (if applicable)							
16. Was client not	ified of all discrepancies with	this order?	Yes	[]	No	[]	NA 🙀	
Person N	Notified:	Date:			data garije je medici i turn sa			
By Whor	m:	Via:	eM	ail [] lie	Phone [Fax	In Person	
Regardin	ng:	en e					adiain, ili iliya qiriidda arimtaa ayummaana il aqaabiid diliyla ilisaiy	
Client In:	structions:		***************************************					
17. Additional rem	narks:							
18. <u>Cooler Inform</u> Cooler No	Temp °C Condition	Seal Intact Seal No	Seal D	ate	Signed E	Зу	-	

										(CHAIN OF	CUSTODY RECORD
APEX Office Location Project Manager & Sampler's Name Chad DApo	. Sv.		Laboratory Address: Contact: Phone: PO/SO #: Sampler's Sign	A. A. A.	N	l.m			ANALYSIS REQUESTED			Lab use only Due Date: Temp. of coolers when received (C"). 1 2 3 4 5 Page 1 of 7
Orni No	Project	t Name			No/Ty	rpe of C	ontainers		27			
725040112173	Lind	ith 15°	9						83		7	
Matrix Dale Time	Doff p	r Identifying Ma	arks of Sample(s)	Start Depth End Depth	VOA	A'G 1.1.	250 ml Glass Jer	P.'O	_/		Lat	Sample ID (Lab Use Only)
5 628-16 11:40			PI				1) 1		Ilda	F81-001
Turn around time	iormal	⊒ 25% Rush	⊒ 50% Rush \$	₫ 100% Rush	500	× 20	4					
Relinquished by (Signatur Relinquished by (Signatur Relinquished by (Signatur Relinquished by (Signatur	re)	Qate:	Time: Recei	ved by: (Signa ved by: (Signa ved by: (Signa ved by: (Signa ved by: (Signa	fure) fure) ture)		Date Date	416	Time: NOTES: 1545 Time: 377 Time: AFE Time:	1 Tem # A257:	long 89	Grand Jan
Matrix WW - Waster Container VOA - 40 ml			S - Soil SD - So Or Glass 1 Liter	olid L - Liquid 250 ml -					oal tube SL - sludge stic 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

June 30, 2016

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

TEL: (903) 821-5603

FAX

RE: Lindrith B 9 OrderNo.: 1606F86

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/29/2016 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S1

Project: Lindrith B 9

Collection Date: 6/28/2016 10:45:00 AM

Lab ID: 1606F86-001

Matrix: SOIL

Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	i			Analys	t: TOM
Diesel Range Organics (DRO)	24	9.7	mg/Kg	1	6/29/2016 10:05:09 AN	1 26141
Surr: DNOP	100	70-130	%Rec	1	6/29/2016 10:05:09 AM	1 26141
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	6/29/2016 9:42:36 AM	A35307
Surr: BFB	97.9	80-120	%Rec	1	6/29/2016 9:42:36 AM	A35307
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	6/29/2016 9:42:36 AM	B35307
Toluene	ND	0.037	mg/Kg	1	6/29/2016 9:42:36 AM	B35307
Ethylbenzene	ND	0.037	mg/Kg	1	6/29/2016 9:42:36 AM	B35307
Xylenes, Total	ND	0.075	mg/Kg	1	6/29/2016 9:42:36 AM	B35307
Surr: 4-Bromofluorobenzene	94.7	80-120	%Rec	1	6/29/2016 9:42:36 AM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

1606F86-002

Client Sample ID: S2

Project: Lindrith B 9

Lab ID:

Collection Date: 6/28/2016 10:50:00 AM Received Date: 6/29/2016 7:45:00 AM

Analyses Result **PQL Qual Units DF** Date Analyzed Batch **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM 6/29/2016 10:26:51 AM 26141 Diesel Range Organics (DRO) ND 9.6 mg/Kg Surr: DNOP 92.4 70-130 %Rec 1 6/29/2016 10:26:51 AM 26141 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 3.8 mg/Kg 6/29/2016 10:06:04 AM A35307 Surr: BFB 6/29/2016 10:06:04 AM A35307 98.0 80-120 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: NSB 6/29/2016 10:06:04 AM B35307 ND 0.019 Benzene mg/Kg Toluene ND 0.038 6/29/2016 10:06:04 AM B35307 mg/Kg Ethylbenzene ND 0.038 mg/Kg 6/29/2016 10:06:04 AM B35307 Xylenes, Total ND 0.077 mg/Kg 6/29/2016 10:06:04 AM B35307 Surr: 4-Bromofluorobenzene 94.7 80-120 %Rec 6/29/2016 10:06:04 AM B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lindrith B 9

Lab ID: 1606F86-003

Client Sample ID: S3

Collection Date: 6/28/2016 10:55:00 AM

Matrix: SOIL Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	110	10	mg/Kg	1	6/29/2016 10:48:25 AM	26141
Surr: DNOP	96.3	70-130	%Rec	1	6/29/2016 10:48:25 AM	26141
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	8.9	mg/Kg	2	6/29/2016 10:29:28 AM	A35307
Surr: BFB	99.7	80-120	%Rec	2	6/29/2016 10:29:28 AM	A35307
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.044	mg/Kg	2	6/29/2016 10:29:28 AM	B35307
Toluene	ND	0.089	mg/Kg	2	6/29/2016 10:29:28 AM	B35307
Ethylbenzene	ND	0.089	mg/Kg	2	6/29/2016 10:29:28 AM	B35307
Xylenes, Total	ND	0.18	mg/Kg	2	6/29/2016 10:29:28 AM	B35307
Surr: 4-Bromofluorobenzene	94.8	80-120	%Rec	2	6/29/2016 10:29:28 AM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project: Lindrith B 9

Lab ID: 1606F86-004 Client Sample ID: S4

Collection Date: 6/28/2016 11:00:00 AM

Received Date: 6/29/2016 7:45:00 AM Matrix: SOIL

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/29/2016 11:10:09 AM	1 26141
Surr: DNOP	92.2	70-130	%Rec	1	6/29/2016 11:10:09 AM	1 26141
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	6/29/2016 10:53:01 AM	A35307
Surr: BFB	99.4	80-120	%Rec	1	6/29/2016 10:53:01 AM	A35307
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	6/29/2016 10:53:01 AM	M B35307
Toluene	ND	0.038	mg/Kg	1	6/29/2016 10:53:01 AM	B35307
Ethylbenzene	ND	0.038	mg/Kg	1	6/29/2016 10:53:01 AM	B35307
Xylenes, Total	ND	0.077	mg/Kg	1	6/29/2016 10:53:01 AM	B35307
Surr: 4-Bromofluorobenzene	94.7	80-120	%Rec	1	6/29/2016 10:53:01 AM	M B35307

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
- R RPD outside accepted recovery limits
- % 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 16 J
- Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Client Sample ID: S5

Project: Lindrith B 9
Lab ID: 1606F86-005

Collection Date: 6/28/2016 11:05:00 AM Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS)			Analyst	TOM
Diesel Range Organics (DRO)	39	10	mg/Kg	1	6/29/2016 11:31:53 AM	26141
Surr: DNOP	87.2	70-130	%Rec	1	6/29/2016 11:31:53 AM	26141
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	6/29/2016 11:16:34 AM	A35307
Surr: BFB	99.2	80-120	%Rec	1	6/29/2016 11:16:34 AM	A35307
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.022	mg/Kg	1	6/29/2016 11:16:34 AM	B35307
Toluene	ND	0.043	mg/Kg	1	6/29/2016 11:16:34 AM	B35307
Ethylbenzene	ND	0.043	mg/Kg	1	6/29/2016 11:16:34 AM	B35307
Xylenes, Total	ND	0.087	mg/Kg	1	6/29/2016 11:16:34 AM	B35307
Surr: 4-Bromofluorobenzene	93.8	80-120	%Rec	1	6/29/2016 11:16:34 AM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID:

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Project: Lindrith B 9

1606F86-006

Client Sample ID: S6

Collection Date: 6/28/2016 11:10:00 AM

Matrix: SOIL Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	6			Analys	t: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/29/2016 11:53:38 AN	1 26141
Surr: DNOP	95.2	70-130	%Rec	1	6/29/2016 11:53:38 AN	26141
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	6/29/2016 11:40:07 AN	1 A35307
Surr: BFB	98.6	80-120	%Rec	1	6/29/2016 11:40:07 AN	1 A35307
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.020	mg/Kg	1	6/29/2016 11:40:07 AM	1 B35307
Toluene	ND	0.040	mg/Kg	1	6/29/2016 11:40:07 AN	1 B35307
Ethylbenzene	ND	0.040	mg/Kg	1	6/29/2016 11:40:07 AM	B35307
Xylenes, Total	ND	0.081	mg/Kg	1	6/29/2016 11:40:07 AN	B35307
Surr: 4-Bromofluorobenzene	94.2	80-120	%Rec	1	6/29/2016 11:40:07 AM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID:

Project: Lindrith B 9

1606F86-007

Client Sample ID: S7

Collection Date: 6/28/2016 11:15:00 AM

Matrix: SOIL

Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	1			Analys	: TOM
Diesel Range Organics (DRO)	36	9.7	mg/Kg	1	6/29/2016 12:15:16 PM	1 26141
Surr: DNOP	96.1	70-130	%Rec	1	6/29/2016 12:15:16 PM	1 26141
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	: NSB
Gasoline Range Organics (GRO)	ND	9.0	mg/Kg	2	6/29/2016 12:03:42 PM	1 A35307
Surr: BFB	101	80-120	%Rec	2	6/29/2016 12:03:42 PM	1 A35307
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	0.045	mg/Kg	2	6/29/2016 12:03:42 PM	1 B35307
Toluene	ND	0.091	mg/Kg	2	6/29/2016 12:03:42 PM	B35307
Ethylbenzene	ND	0.091	mg/Kg	2	6/29/2016 12:03:42 PM	1 B35307
Xylenes, Total	ND	0.18	mg/Kg	2	6/29/2016 12:03:42 PM	1 B35307
Surr: 4-Bromofluorobenzene	95.8	80-120	%Rec	2	6/29/2016 12:03:42 PM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

1606F86-008

Client Sample ID: S8

Project: Lindrith B 9

Lab ID:

Collection Date: 6/28/2016 11:20:00 AM Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analyst	: TOM
Diesel Range Organics (DRO)	31	10	mg/Kg	1	6/29/2016 12:37:01 PM	26141
Surr: DNOP	96.7	70-130	%Rec	1	6/29/2016 12:37:01 PM	26141
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.7	mg/Kg	1	6/29/2016 12:27:12 PM	A35307
Surr: BFB	103	80-120	%Rec	1	6/29/2016 12:27:12 PM	A35307
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.029	mg/Kg	1	6/29/2016 12:27:12 PM	B35307
Toluene	ND	0.057	mg/Kg	1	6/29/2016 12:27:12 PM	B35307
Ethylbenzene	ND	0.057	mg/Kg	1	6/29/2016 12:27:12 PM	B35307
Xylenes, Total	ND	0.11	mg/Kg	1	6/29/2016 12:27:12 PM	B35307
Surr: 4-Bromofluorobenzene	94.6	80-120	%Rec	1	6/29/2016 12:27:12 PM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Lab ID:

Project: Lindrith B 9

1606F86-009

Client Sample ID: FP-1

Collection Date: 6/28/2016 11:25:00 AM

Matrix: SOIL

Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	6/29/2016 12:58:48 PM	1 26141
Surr: DNOP	89.1	70-130	%Rec	1	6/29/2016 12:58:48 PM	1 26141
EPA METHOD 8015D: GASOLINE RAN	IGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	6/29/2016 12:50:43 PM	A35307
Surr: BFB	103	80-120	%Rec	1	6/29/2016 12:50:43 PM	A35307
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.021	mg/Kg	1	6/29/2016 12:50:43 PM	И В35307
Toluene	ND	0.042	mg/Kg	1	6/29/2016 12:50:43 PM	И В35307
Ethylbenzene	ND	0.042	mg/Kg	1	6/29/2016 12:50:43 PM	M B35307
Xylenes, Total	ND	0.083	mg/Kg	1	6/29/2016 12:50:43 PM	M B35307
Surr: 4-Bromofluorobenzene	95.4	80-120	%Rec	1	6/29/2016 12:50:43 PM	И В35307

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
- R RPD outside accepted recovery limits
- % 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 16J
- P Sample pH Not In Range
- Reporting Detection Limit RL
- Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN Client Sample ID: FP-2

 Project:
 Lindrith B 9
 Collection Date: 6/28/2016 11:30:00 AM

 Lab ID:
 1606F86-010
 Matrix: SOIL
 Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS	i			Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/29/2016 1:20:35 PM	26141
Surr: DNOP	95.1	70-130	%Rec	1	6/29/2016 1:20:35 PM	26141
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	6/29/2016 1:14:11 PM	A35307
Surr: BFB	99.6	80-120	%Rec	1	6/29/2016 1:14:11 PM	A35307
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.021	mg/Kg	1	6/29/2016 1:14:11 PM	B35307
Toluene	ND	0.042	mg/Kg	1	6/29/2016 1:14:11 PM	B35307
Ethylbenzene	ND	0.042	mg/Kg	1	6/29/2016 1:14:11 PM	B35307
Xylenes, Total	ND	0.085	mg/Kg	1	6/29/2016 1:14:11 PM	B35307
Surr: 4-Bromofluorobenzene	95.6	80-120	%Rec	1	6/29/2016 1:14:11 PM	B35307

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
- R RPD outside accepted recovery limits
- 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 16
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1606F86

Date Reported: 6/30/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN

Project:

Lab ID:

Lindrith B 9

1606F86-011

Client Sample ID: FP-3

Collection Date: 6/28/2016 11:35:00 AM Received Date: 6/29/2016 7:45:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS	3			Analys	t: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/29/2016 1:42:21 PM	26141
Surr: DNOP	92.2	70-130	%Rec	1	6/29/2016 1:42:21 PM	26141
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	6/29/2016 10:36:11 AM	A35308
Surr: BFB	86.5	80-120	%Rec	1	6/29/2016 10:36:11 AM	A35308
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.019	mg/Kg	1	6/29/2016 10:36:11 AM	И В35308
Toluene	ND	0.038	mg/Kg	1	6/29/2016 10:36:11 AM	И B35308
Ethylbenzene	ND	0.038	mg/Kg	1	6/29/2016 10:36:11 AM	И В35308
Xylenes, Total	ND	0.075	mg/Kg	1	6/29/2016 10:36:11 AM	И B35308
Surr: 4-Bromofluorobenzene	101	80-120	%Rec	1	6/29/2016 10:36:11 AM	A B35308

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
- R RPD outside accepted recovery limits
- % 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 11 of 16 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#: **1606F86**

30-Jun-16

Client:	APEX TITAN
Project:	Lindrith B 9

Project: Lindrith	1 B 9		
Sample ID LCS-26141	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: LCSS	Batch ID: 26141	RunNo: 35297	
Prep Date: 6/29/2016	Analysis Date: 6/29/2016	SeqNo: 1091683 Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	al
Diesel Range Organics (DRO)	42 10 50.00	0 83.1 62.6 124	
Surr: DNOP	4.5 5.000	89.3 70 130	
Sample ID MB-26141	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: PBS	Batch ID: 26141	RunNo: 35297	
Prep Date: 6/29/2016	Analysis Date: 6/29/2016	SeqNo: 1091684 Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	al
Diesel Range Organics (DRO)	ND 10		
Surr: DNOP	9.3 10.00	93.5 70 130	
Sample ID LCS-26125	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: LCSS	Batch ID: 26125	RunNo: 35299	
Prep Date: 6/28/2016	Analysis Date: 6/29/2016	SeqNo: 1092068 Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	al
Surr: DNOP	4.7 5.000	93.3 70 130	
Sample ID MB-26125	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics	
Client ID: PBS	Batch ID: 26125	RunNo: 35299	
Prep Date: 6/28/2016	Analysis Date: 6/29/2016	SeqNo: 1092069 Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua	al
Surr: DNOP	8.2 10.00	82.5 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
- R RPD outside accepted recovery limits
- 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 16

- 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#:

1606F86

30-Jun-16

Client: **Project:**

APEX TITAN Lindrith B 9

Sample ID 5ML RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Prep Date:

Surr: BFB

PBS

Batch ID: A35308

RunNo: 35308

Analysis Date: 6/29/2016

SeqNo: 1092185

Units: mg/Kg

Analyte Gasoline Range Organics (GRO) Result PQL ND 5.0

SPK value SPK Ref Val %REC LowLimit HighLimit %RPD

80

930

29

940

1000

25.00

1000

1000

92.6

120

RPDLimit Qual

Sample ID 2.5UG GRO LCS

Batch ID: A35308

SampType: LCS

RunNo: 35308

TestCode: EPA Method 8015D: Gasoline Range

Client ID: Prep Date:

Analyte

LCSS

Analysis Date: 6/29/2016

Units: mg/Kg

%RPD

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

Result PQL SPK value SPK Ref Val

5.0

SeqNo: 1092186 %REC

115

942

LowLimit

80

80

HighLimit

Sample ID 5ML RB

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

120

120

Client ID: PBS

Batch ID: A35307

RunNo: 35307

Prep Date: Analyte

Analysis Date: 6/29/2016 Result PQL

SeqNo: 1092204

0

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg

120

Qual

Gasoline Range Organics (GRO) Surr: BFB

ND 1000 5.0

80

HighLimit %RPD

RPDLimit

Sample ID 2.5UG GRO LCS

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

LCSS

Batch ID: A35307

RunNo: 35307

99.6

Prep Date: Analyte

Analysis Date: 6/29/2016

SeqNo: 1092205

Units: mg/Kg

120

120

Gasoline Range Organics (GRO)

Result 24 1100 PQL 25.00 5.0 1000

%REC SPK value SPK Ref Val

0

LowLimit 80

HighLimit

%RPD **RPDLimit** Qual

Surr: BFB

TestCode: EPA Method 8015D: Gasoline Range

95.6

108

80

Sample ID 1606F86-001AMS

SampType: MS

RunNo: 35307

Prep Date:

Client ID: S1

Batch ID: A35307 Analysis Date:

6/29/2016

Analyte Gasoline Range Organics (GRO) Result 21 840

Result

PQL SPK value SPK Ref Val 3.7 18.74

749.6

SPK value SPK Ref Val

SeqNo: 1092206 %REC

59.3

LowLimit

Units: mg/Kg

%RPD

Qual

Surr: BFB

Batch ID: A35307

Analysis Date: 6/29/2016

PQL

113

HighLimit 143

120

RPDLimit

Sample ID 1606F86-001AMSD

SampType: MSD

TestCode: EPA Method 8015D: Gasoline Range RunNo: 35307

%REC

SeqNo: 1092207

111

Units: mg/Kg

HighLimit

%RPD

RPDLimit Qual

Analyte

H

ND

Client ID:

Prep Date:

Qualifiers: Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

В Analyte detected in the associated Method Blank

LowLimit

E Value above quantitation range

J Analyte detected below quantitation limits

Page 13 of 16

Not Detected at the Reporting Limit R RPD outside accepted recovery limits

P Sample pH Not In Range RL Reporting Detection Limit

% Recovery outside of range due to dilution or matrix

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1606F86

30-Jun-16

Client:

APEX TITAN

Project:

Lindrith B 9

Sample ID 1606F86-001AMSI) SampTy	pe: MS	D	Test	TestCode: EPA Method 8015D: Gasoline Range					
Client ID: S1	Batch	ID: A3	5307	RunNo: 35307						
Prep Date:	Analysis Da	ate: 6/2	29/2016	S	SeqNo: 1	092207	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	3.7	18.74	0	116	59.3	143	4.31	20	
Surr: BFB	850		749.6		114	80	120	0	0	

Sample ID MB-26117	SampType: MBLK	Test	Code: EPA Method	de: EPA Method 8015D: Gasoline Range			
Client ID: PBS	Batch ID: 26117	Ru	unNo: 35307				
Prep Date: 6/28/2016	Analysis Date: 6/29/20	16 Se	eqNo: 1092208	Units: %Rec			
Analyte	Result PQL SPK	value SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990	1000	99.3 80	120			

Sample ID LC	CS-26117	SampTy	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LC	css	Batch	ID: 26	117	F	lunNo: 3	5307				
Prep Date: 6	6/28/2016	Analysis Da	ate: 6/	29/2016	S	eqNo: 1	092209	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1100		1000		111	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

R RPD outside accepted recovery limits

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 16

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.

0.98

2.9

1.0

0.050

0.10

1.000

3.000

1.000

WO#:

1606F86

30-Jun-16

Client:	APEX TITAN
Project:	Lindrith B 9

Troject.										
Sample ID 5ML RB	SampT	уре: МЕ	BLK	Test	TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: B35308			R	tunNo: 3	5308				
Prep Date:	Analysis D	ate: 6/	29/2016	S	eqNo: 1	092199	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	1.1		1.000		106	80	120			
Sample ID 100NG BTEX LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batch	n ID: B3	5308	F	RunNo: 3	5308				
Prep Date:	Analysis D	ate: 6/	29/2016	S	SeqNo: 1	092200	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	105	75.3	123			
Toluene	1.0	0.050	1.000	0	100	80	124			

Sample ID 5ML RB	SampT	SampType: MBLK TestCode: EPA Method 8						iles		
Client ID: PBS	Batch	n ID: B3	5307	R	RunNo: 3	5307				
Prep Date:	Analysis D	oate: 6/	29/2016	S	SeqNo: 1	092234	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	0.96		1.000		96.2	80	120			

0

0

97.8

96.9

103

82.8

83.9

80

121

122

120

Sample ID 100NG BTEX LCS	SampT	Type: LCS TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch	ch ID: B35307 RunNo: 35307								
Prep Date:	Analysis D	ate: 6/	29/2016	S	SeqNo: 1	092235	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.3	75.3	123			
Toluene	0.95	0.050	1.000	0	95.1	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.6	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Qualifiers:

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

* 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

R RPD outside accepted recovery limits

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 15 of 16

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#:

1606F86

30-Jun-16

Client: Project: APEX TITAN Lindrith B 9

Sample ID 1606F86-002AMS	SampT	уре: МS	3	Tes	tCode: El	tiles							
Client ID: S2	Batch	Batch ID: B35307 RunNo: 3					35307						
Prep Date:	Analysis D	Date: 6/	29/2016	S	SeqNo: 1	092236	Units: mg/K	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	0.78	0.019	0.7698	0	102	71.5	122						
Toluene	0.80	0.038	0.7698	0.01048	102	71.2	123						
Ethylbenzene	0.82	0.038	0.7698	0	106	75.2	130						
Xylenes, Total	2.4	0.077	2.309	0	104	72.4	131						
Surr: 4-Bromofluorobenzene	0.79		0.7698		102	80	120						

Sample ID 1606F86-002AMS	SD SampType: MSD TestCode: EPA Method 8021B: Volatiles									
Client ID: S2	Batch	ID: B3	5307	R	RunNo: 3	5307				
Prep Date:	Analysis Da	ate: 6/	29/2016	S	SeqNo: 1					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.019	0.7698	0	94.0	71.5	122	7.75	20	
Toluene	0.72	0.038	0.7698	0.01048	92.4	71.2	123	10.0	20	
Ethylbenzene	0.76	0.038	0.7698	0	98.3	75.2	130	7.79	20	
Xylenes, Total	2.2	0.077	2.309	0	96.9	72.4	131	7.43	20	
Surr: 4-Bromofluorobenzene	0.77		0.7698		99.8	80	120	0	0	

Sample ID MB-26117	SampType: M	BLK	Test	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch ID: 26	117	R	lunNo: 3	5307				
Prep Date: 6/28/2016	Analysis Date: 6	/29/2016	S	SeqNo: 1	092238	Units: %Red	:		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95	1.000		95.0	80	120			

Sample ID LCS-26117	SampType: I	LCS	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch ID: 2	26117	R	RunNo: 3	5307				
Prep Date: 6/28/2016	Analysis Date:	6/29/2016	S	SeqNo: 1	092239	Units: %Red	С		
Analyte	Result PQI	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0 40 0 1	0.00	4 000		07.0	00	100			

Surr: 4-Bromofluorobenzene 0.98 1.000 97.9 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

R RPD outside accepted recovery limits

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 16

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:	1606F86	3		RcptNo:	1 ,
Received by/dat	te:	06/29/1	6					
Logged By:	Anne Thorn	е	6/29/2016 7:45:00 AM		anne.	Am		
Completed By:	Anne Thorn	е	6/29/2016		am	Am		
Reviewed By:	as		6/29/16					
Chain of Cus	stody							
1. Custody sea	als intact on sar	mple bottles?		Yes	No		Not Present 🗹	
2. Is Chain of	Custody comple	ete?		Yes 🗸	No		Not Present	
3. How was th	e sample delive	ered?		Courier				
Log In								
4. Was an att	empt made to o	ool the samples?	•	Yes V	No		NA 🗆	
5. Were all sa	mples received	at a temperature	of >0° C to 6.0°C	Yes 🗹	No		NA 🗆	
6. Sample(s)	in proper contai	ner(s)?		Yes 🛂	₽ No			
7. Sufficient sa	ample volume fo	or indicated test(3)?	Yes 🗸	. No			
8. Are sample	s (except VOA	and ONG) prope	ty preserved?	Yes 🗸	No			
9. Was preser	vative added to	bottles?		Yes	No	Y	NA 🗆	
10.VOA vials h	nave zero heads	space?		Yes	No		No VOA Vials	
11. Were any	sample containe	ers received broke	en?	Yes	No	~	# of area aread	
				_	_		# of preserved bottles checked	
	rwork match bot epancies on cha			Yes 🗸	No No		for pH:	or >12 unless noted)
		tified on Chain of	Custody?	Yes 🗸	No		Adjusted?	
14. Is it clear w				Yes 🗸	. No			
	lding times able			Yes 🗸	. No		Checked by:	
(If no, notify	y customer for a	uthorization.)				l		
Special Han	dling (if app	licable)						
16. Was client	notified of all dis	screpancies with	this order?	Yes _	No		NA 🗹	
Perso	on Notified:		Date					
By W	/hom:		Via:	eMail	Phone	Fax	_ In Person	
Rega	ording:	CONTRACT NOT CONTRACT OF THE CO	and the second s	add the track of the co	A shee \$1.6.			
Clien	t Instructions:						N	
17. Additional	remarks:							
18. Cooler Int	formation							
Cooler	No Temp °C	-		Seal Date	Signed	Ву		
1	1.0	Good Ye	s					

				CHAIN OF CUSTODY RECORD
Ched PAponti	Laboratory: Hall Address: ABQ Contact: A Free Phone: PO/SO#: Sampler's Signature	N.M cman	ANALYSIS REQUESTED	Lab use only Due Date: Temp. of coolers when received (C°): 1 2 3 4 5 Page 1 of 2
	,	No/Type of Containers	12/2/	/ /
735040112173 LiMith 13 # 9 Matrix Date Time	Start Start Depth Popph	VOA A/G 1LL. 250 ml Glass Jar		Lab Sample ID (Lab Use Only)
5 48/14 10:45 51		1		1606 F86 -col
1 10:50 52	-			-702
10:55 33				-43
Cil			1) (
		1		-04
11:05 35		1		-05
11:10 36				706
1115 87				-DOT -CU8
1 11:30 58			3 1	200
Turn around time	50% Rush	Same Day		
Relinquished by (Signature) Date: 15	ime: Received by: (Signa	aturje) Date:	Time: NOTES: 1545	1000
Relinquished by (Signature) Date: T	Time: Received by: (Signa	ntuken Date:	Time: B, 11 100	The state of
	ime: Received by: (Signa	ature) Date:	1545 Time: Time: AFE # A35 79	CAN /
Relinquished by (Signature) Date: T	Time: Received by: (Signa	ture) Date:	Time: HFE H35 19	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Matrix WW - Wastewater W - Water S Container VOA - 40 ml vial A/G - Amber / Or	S - Soll SD - Solid L - Liquid Glass 1 Liter 250 ml -		rcoal tube SL - sludge O - Oil lastic or other	

					,												С	HAIN	OF C	CUSTODY RECC	RD
APEX Office Location Project Manage Sampler's Name	ger K	. So		nus	Laboratory: Address: Contact: Phone: PO/SO #: Sampler's Sign	A.	3 a E1	N	l.m	,			ANALYSIS REQUESTED	S/oB						Lab use only Due Date: Temp. of coolers when received (C°): 1 2 3 4 Page Of Of	5
Proj No	•	Proje	ct Na	ame R#G	;			No/Ty	pe of C	Contain	ers	**	TEVE !	/ /	//	/ /					
725040113 Matrix Date	Time	COED	G r a b		rks of Sample(s)	Start	End	VOA	A/G	250 ml	Glass	D/0	18/2		//		//		Lab Sa	ample ID (Lab Use Only)	
5 9/28/10	1125	P		FPI							ţ		111					1	40	6F86-0	9
5	11:30			FA																-010	
5	18:35			FP-	3						1		1 /			ļ				-01	
															_		_				
								-							_	-					
															-	-					-
														-	-	+					-
				1										++	-	-					\dashv
												_			-						\dashv
Turn around time	☐ Nort	mal	12	25% Rush 🗆) 50% Rush 🐧	1 100%	Rush	Sam	eva												
Relinquished by (Signature) Signature)		£4	Pate: 15	Time: Receiv	ind by:	(Signa (Signa	ture)		,	Date Date Date	ZGHR.	Time: NOT 1545 Time: B	ES: B;//	To.	n	long	98		Sont Cont	
Relinquished by (Time: Receiv	-											s /	-/			
	/ - Wastewat A - 40 ml via			W - Water S A/G - Amber / Or	S - Soil SD - So r Glass 1 Liter		Liquio 250 ml -	d A Glass v	- Air Ba vide mo	ag outh			rcoal tube SL - sl astic or other	ludge	0 -	OII					



Appendix F:

NMOCD Correspondence

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]

Sent: Tuesday, July 05, 2016 11:57 AM To: Long, Thomas; Smith, Cory, EMNRD

Subject: RE: Lindrith B-9 - UL N Section 27 Township 24 North Range 3 West; 36.27562, -107.147367

Tom,

Based on the analytical results of ND BTEX and ND GRO on sample ID S3, the NMOCD grants approval to backfill the Lindrith B-9.

Please let me know if you have any questions.

Thank you,

Vanessa Fields Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 119

Cell: (505) 419-0463

vanessa.fields@state.nm.us<mailto:vanessa.fields@state.nm.us>

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

Responsible Party: Enterprise Field Services, LLC

State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

OGRID: 151618

Contact Nam	ne: Thomas	Long			Contact Telephone: 505-599-2286							
Contact ema	il:tjlong@e _l	prod.com			Incident #	Incident # (assigned by OCD) N/A						
Contact mail 87401	ing address:	614 Reilly Ave,	Farmington, Ñi	VI	MYF	F1831839315						
			Location	of R	elease So	ource						
Latitude 36.4	85104		Longi	tude <u>-1</u>	07.886305		NAD 83 in decimal degrees to 5 decimal place					
Site Name Tr	unk 2C				Site Type N	latural Gas Ga	thering Pipeline					
Date Release	Discovered:	10/19/2018			Serial # (if a	pplicable) NM 00°	15563					
Unit Letter	Section	Township	ty	NMOCD								
K	15	26N	Range 10W		San Ju		MOV 02 2018					
Crude Oi		l(s) Released (Select a					olumes provided below)					
Produced		Volume Release				Volume Recove						
			tion of dissolved ch	hloride	in the	Yes No	Commence of the control of the contr					
⊠ Condensa	ate		ed (bbls): Estimate	ed 5-7 b	parrels.	Volume Recove	ered (bbls): None					
Natural C	as	Volume Release	ed (Mcf): Unknow	n at th	is time.	Volume Recov	ered (Mcf): None					
Other (de	escribe)	Volume/Weight		Volume/Weigh	t Recovered (provide units)							
pipeline. The stained by a	e pipeline wa condensate/ standard (10	as isolated, depres water mix. Enterp ppm Benzene, 50	surized, locked out rise has determine	t and ta	igged out. Ar elease is red	n area of approximation	gas and condensate on Trunk 2C mately 30 feet wide by 15 long was diated to the third tier NMOCD e). A third party closure report will be					

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) do	oes the responsible party consider	this a major release?	
☐ Yes ⊠ No				
		whom? To whom? When and homas on 9/17/2018 at 7:47 a.m.		ie, email, etc)? Courtesy
	1	Initial Response		
The responsible	party must undertake the following act	tions immediately unless they could create	a safety hazard that would	result in injury
The source of the rele	ease has been stopped.			
The impacted area ha	is been secured to protect huma	an health and the environment.		
Released materials ha	ave been contained via the use	of berms or dikes, absorbent pads	, or other containmen	t devices.
All free liquids and re	ecoverable materials have been	removed and managed appropria	tely.	
has begun, please attach	a narrative of actions to date.	commence remediation immediat If remedial efforts have been sur a) NMAC), please attach all infor	ccessfully completed	or if the release occurred
regulations all operators are public health or the environ failed to adequately investig	required to report and/or file certal ment. The acceptance of a C-141 rate and remediate contamination the	omplete to the best of my knowledge as in release notifications and perform of report by the OCD does not relieve the hat pose a threat to groundwater, surface operator of responsibility for compared to the operator of t	orrective actions for rele e operator of liability shace water, human health	eases which may endanger sould their operations have nor the environment. In
Printed Name: Jon E. I	Fields	Title: Director, Field Env	ironmental	
Signature:	tul	Date: /0/29//8		
email: jefields@epro	d.com	Telephone: 713-381-6684		
OCD Only Received by:	sse Fields	Date:	115018	