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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

NMOCD
JAN 16 2019
DISTRICT III

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **151618**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email: **tjlong@eprod.com**	Incident # *(assigned by OCD)*: **NCS1812053469/3R-1066**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

3RP-1066

pCS 1812057508

Location of Release Source

Latitude **36.6977342** Longitude **-107.8574196** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Baca Gas Com A#1A CH**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **3/31/2018 at 5:09 p.m.**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
F	**26**	**29N**	**10W**	**San Juan**

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **5-7 BBLs**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **13.10 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On March 31, 2018, a third party reported a release of natural gas and natural gas liquids on the Baca Gas Com A#1A CH well tie. Enterprise confirmed the release and isolated, depressurized, locked out and tagged out the pipeline. The soil contaminant mass was removed by mechanical excavation in April 2018. The final excavation dimensions measured approximately 50 feet long by 23 feet wide by 10.5 feet deep. Approximately 358 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. A groundwater investigation was completed in August 2018. No contaminants exceeding New Mexico Water Quality Control Commission standards were identified. A third party investigation report is included with this final "C-141."

109

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Jon E. Fields Title: Director, Field Environmental

Signature: Jon E. Fields Date: 11-7-18

email: jefields@eprod.com Telephone: (713) 381-6684

OCD Only

Received by: OCD Date: 1/16/19

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

Closure Approved by: Date: 1/24/19

Printed Name: Cory Title: Environmental Spec.

CORRECTIVE ACTION REPORT

Property:

Baca Gas Com A #1A CH
NW 1/4, S28 T26N R10W
San Juan County, New Mexico

July 24, 2018
Apex Project No. 725040112424

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

TABLE OF CONTENTS

LIST OF APPENDICES

APEX

CORRECTIVE ACTION REPORT

Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico

Apex Project No. 725040112424

1.0 INTRODUCTION

1.1 Site Description & Background

The Baca Gas Com A #1A CH 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 26, Township 29 North, Range 10 West, in San Juan County, New Mexico (36.6977342N,107.8574196W). The Site is located on private land. The surrounding properties are private acreages, periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline ROW which transects the area from approximately north to south.

On March 31, 2018, a release of natural gas was discovered at the Site. 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. On April 6, 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 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	**20**
	50 to 99 feet	10	
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water source, or; <200 feet from private domestic water source.	Yes	20	**0**
	No	0	
Distance to Surface Water Body	<200 feet	20	**10**
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			**30**

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:

- Ten (10) water wells were identified within a mile of the Site on the OSE Water Right Reporting System (WRRS) database. Subsurface water was encountered during excavation activities at approximately 10.5 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 522 feet south of a potential wetland area and approximately 1,541 feet southwest of the San Juan River. This information supports a distance to surface water ranking score of "10".

3.0 RESPONSE ACTIONS

3.1 Soil Excavation Activities

On March 31, 2018, a release of natural gas was discovered at the Site. 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. On April 6, 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, Foutz & Bursum Construction CO Inc, provided heavy equipment and labor support, and Apex provided environmental consulting support.

On April 6, 2018, two (2) composite soil samples (S-1 and S-2) were collected from the sidewalls at the ends of the pipe chase. On April 11, 2018, six (6) composite soil samples (S-3 through S-8) were collected from the remaining sidewalls and base of the excavation for laboratory analysis. Subsequent laboratory analytical results indicated that soils associated with composite soil samples S-3 and S-8 exhibited COC concentrations above New Mexico EMRND OCD RALs. The east sidewall and base in the southern portion of the excavation were further excavated, and two (2) composite soil samples (S-9 and S-10) were collected for laboratory analysis on April 13, 2018. Subsurface water was encountered in the southern portion of the excavation and one (1) water sample (W-1) was collected for laboratory analysis. Subsequent laboratory analytical results indicate that water associated with water sample W-1 exhibits benzene concentrations

above the New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standards (GQSs). Over the next three (3) days, while the excavation remained open, water was removed from the excavation utilizing a vacuum truck and disposed of at a New Mexico EMNRD OCD approved facility. The excavation remained opened until April 19, 2018.

A representative from the New Mexico EMNRD OCD was on-Site during the final sampling event conducted on April 13, 2018.

The final excavation measured approximately 50 feet long by 23 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 10.5 feet bgs.

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

A total of approximately 358 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**. A total of approximately 16 barrels (bbls) of potentially impacted groundwater were transported to Basin Disposal, Inc. near Aztec, NM for disposal. 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. **Figure 4** is a map with the water sample location. (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

3.2 Soil and Water 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 ten (10) composite soil samples (S-1 through S-10) from the excavation for laboratory analysis.

A water sample (W-1) was collected from the open excavation and was submitted for laboratory analysis to evaluate the potential for groundwater impact at the Site.

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 Soil and Water 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.

The water sample was analyzed for volatile organic compounds (VOCs) using EPA Method #8260.

Laboratory analytical results are summarized in **Table 1** and **Table 2**, included in **Appendix D**. Due to the extensive list of VOC analytes, **Table 2** includes only results for analytes that exceeded the laboratory practical quantitation limit (PQL). 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 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 PQLs associated with the composite soil samples (S-1, S-2, S-4 through S-7, S-9, and S-10) to the New Mexico EMNRD OCD *RALs* for sites having a total ranking score of "30". Soils associated with composite soil samples S-3 and S-8 were removed by excavation and transported to Envirotech landfarm for disposal/remediation and are not included in the following discussion.

- 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 composite soil samples S-1, S-2, and S-10 collected from soils remaining in place indicate total BTEX concentrations ranging from 0.12 mg/kg (S-2) to 1.4 mg/kg (S-10), which are below the New Mexico EMNRD OCD RAL of 50 mg/kg. The laboratory analyses of the remaining composite 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-10 collected from soils remaining in place indicates a combined TPH GRO/DRO/MRO concentration of 14 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 "30".

- The laboratory analyses of the composite soil samples collected from soils remaining in place indicate chloride concentrations ranging from below the laboratory PQLs to 480 mg/kg (S-1).

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

4.2 Water Sample

Apex compared constituent concentrations or laboratory PQLs associated with the subsurface water sample collected from the open excavation to the New Mexico WQCC *GQSs*.

- **The water sample exhibited a benzene concentration of 27 micrograms per liter (µg/L), which exceeds New Mexico WQCC *GQS* of 10 µg/L.**
- The water sample exhibited a toluene concentration of 10 µg/L, which is below the New Mexico WQCC *GQS* of 750 µg/L.
- The water sample exhibited an ethylbenzene concentration of 8.2 µg/L, which is below the New Mexico WQCC *GQS* of 750 µg/L.
- The water sample exhibited a total xylenes concentration of 100 µg/L, which is below the New Mexico WQCC *GQS* of 620 µg/L.
- The water sample exhibited a 1,2,4 trimethlybenzene and 1,3,5 trimethlybenzne concentration of 17 µg/L and 7.8 µg/L, respectively, which are not quantified under the New Mexico WQCC *GQSs*.

The results of the water sample analyses are summarized in **Table 2** of **Appendix D**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix E**.

5.0 FINDINGS AND RECOMMENDATIONS

The Baca Gas Com A #1A CH release site is located within the Enterprise pipeline ROW in the NW ¼ of Section 26, Township 29 North, Range 10 West, in San Juan County, New Mexico. The Site is located on private land. The surrounding properties are private acreages, periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline ROW which transects the area from approximately north to south.

On March 31, 2018, a release of natural gas was discovered at the Site. 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. On April 6, 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 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 of unconsolidated silty sand, silty clay, clay, and sand.
- The final excavation measured approximately 50 feet long by 23 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 10.5 feet bgs.
- Prior to backfilling, ten (10) composite samples soil samples were collected from the excavation 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".

- One (1) water sample was collected from the open excavation for laboratory analysis. Based on analytical results, the water sample exhibited COC concentrations above the New Mexico WQCC *GQSs*.

- A total of approximately 358 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. A total of approximately 16 bbls of potentially impacted groundwater were transported to Basin Disposal, Inc. near Aztec, NM for disposal. The excavation was backfilled with imported fill and contoured to surrounding grade.

Based on field observations and laboratory analytical results, no additional corrective action with respect to soil impact appears warranted at this time. However, further groundwater evaluation is warranted.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

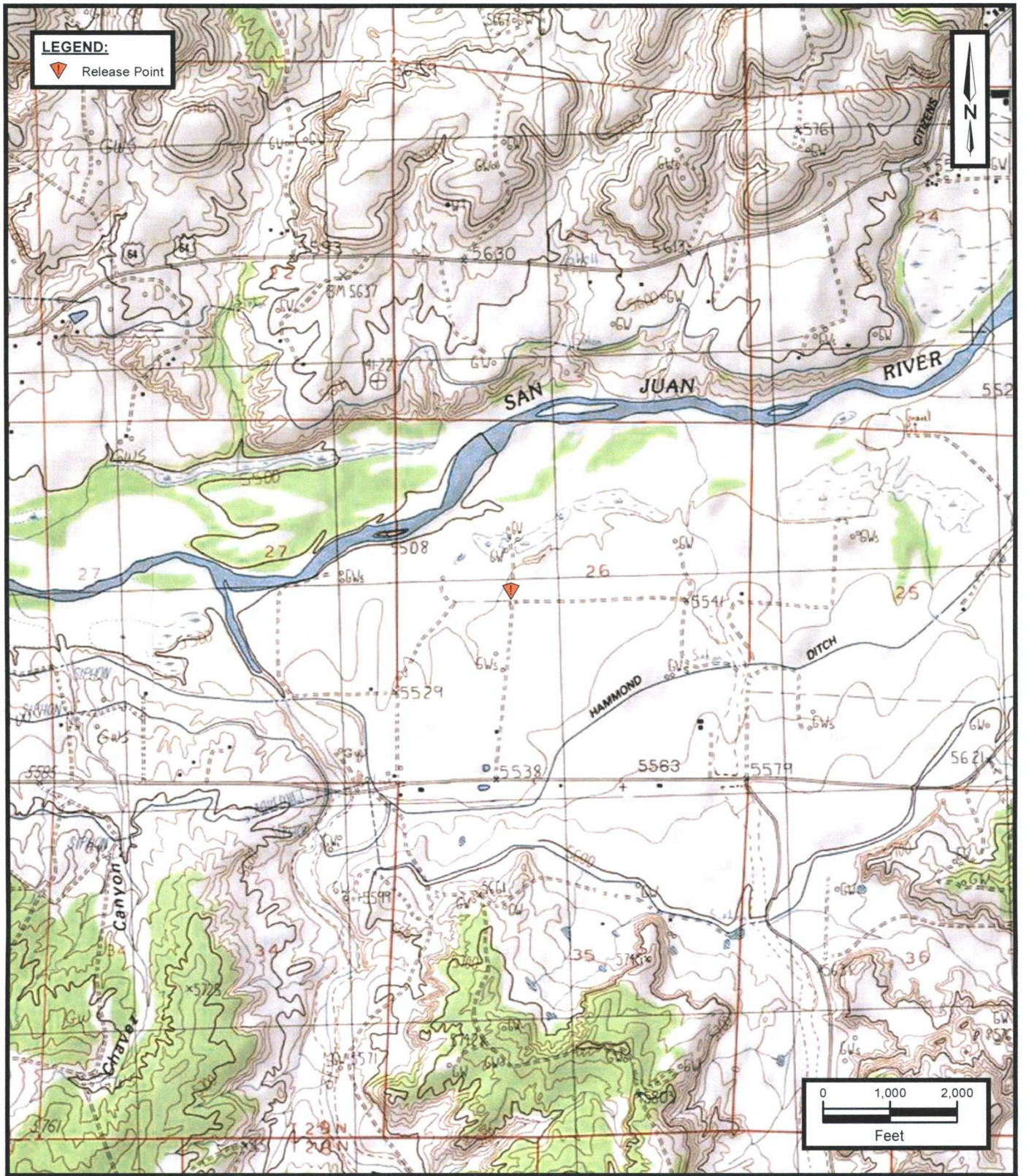
Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work 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



Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

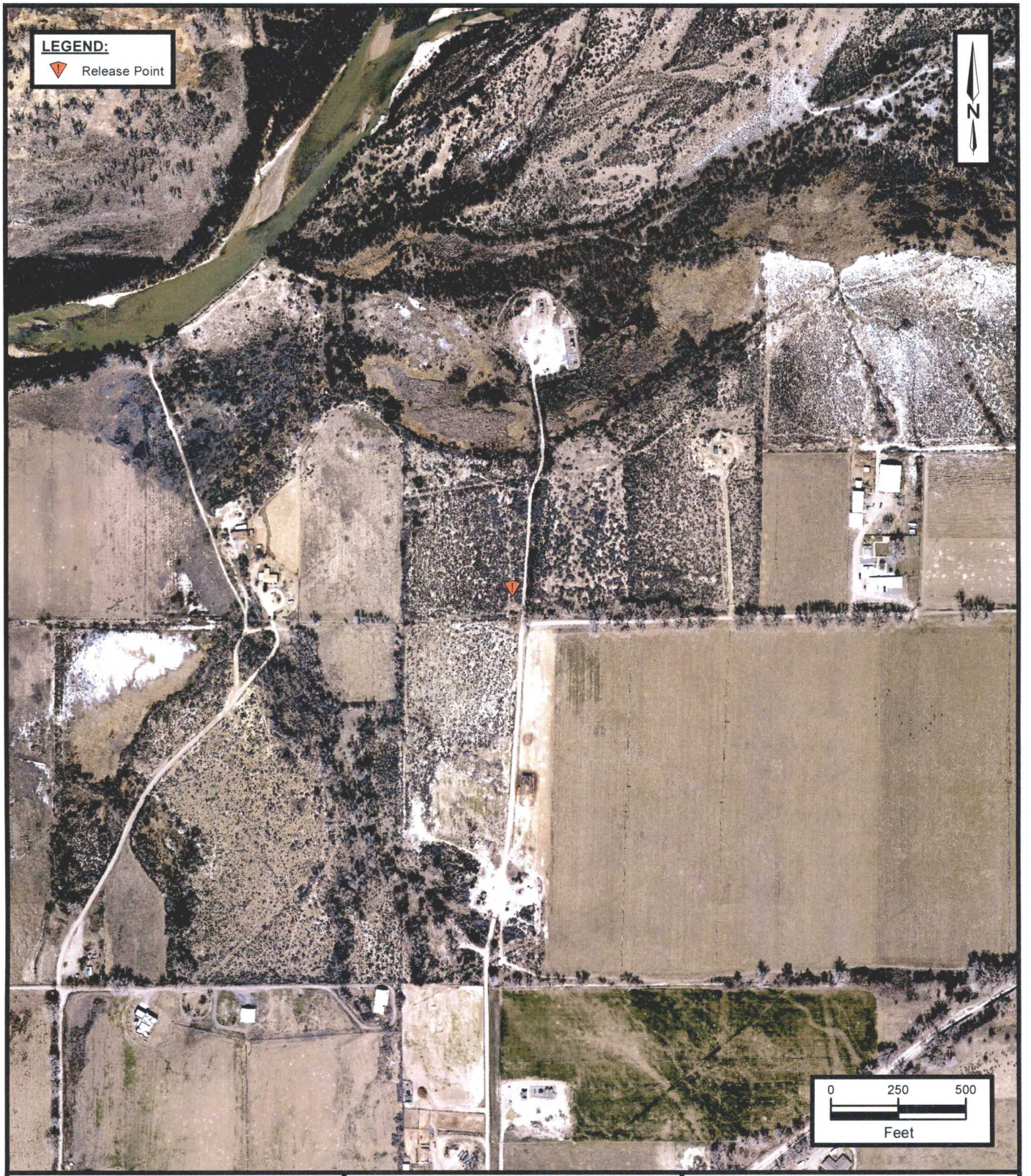
Project No. 725040112424

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 1

Topographic Map

Z:\Dallas South\Drafting\2016\725040112424\Figure 1.mxd Modified 4/26/2018 by jsimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Apex TITAN, Inc.
606 South Rio Grande, Suite A
Aztec, New Mexico 87410
Phone: (505) 334-5200
www.apexcos.com
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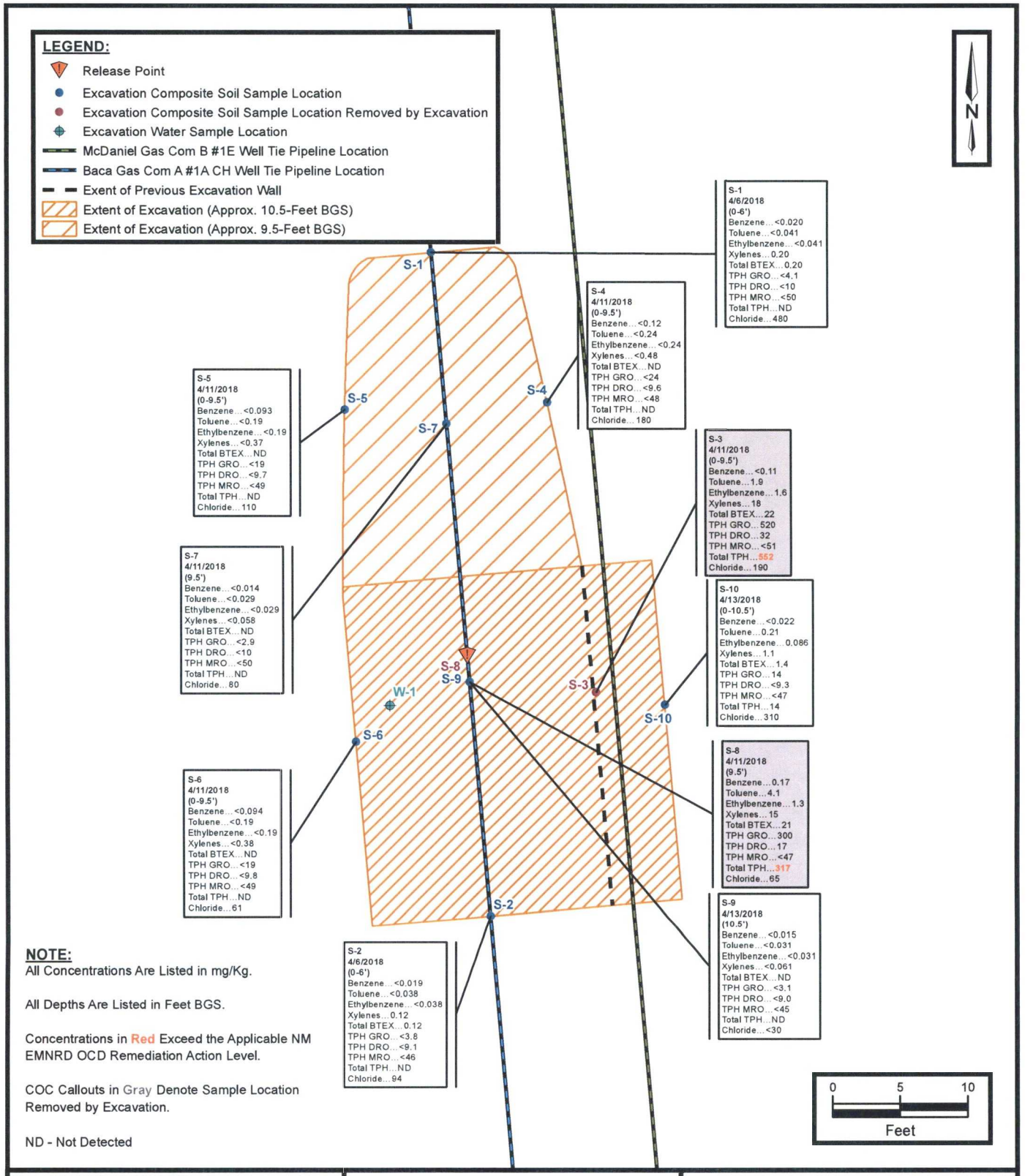
FIGURE 2

Site Vicinity Map

Service Layer Credits:
Esri, HERE, Garmin, © OpenStreetMap contributors, Aerial Photograph 2017

Z:\Dallas South\Drafting\2016\725040112424\Figure 2.mxd Modified 4/26/2018 by jsimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



NOTE:
All Concentrations Are Listed in mg/Kg.

All Depths Are Listed in Feet BGS.

Concentrations in Red Exceed the Applicable NM EMNRD OCD Remediation Action Level.

COC Callouts in Gray Denote Sample Location Removed by Excavation.

ND - Not Detected

Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

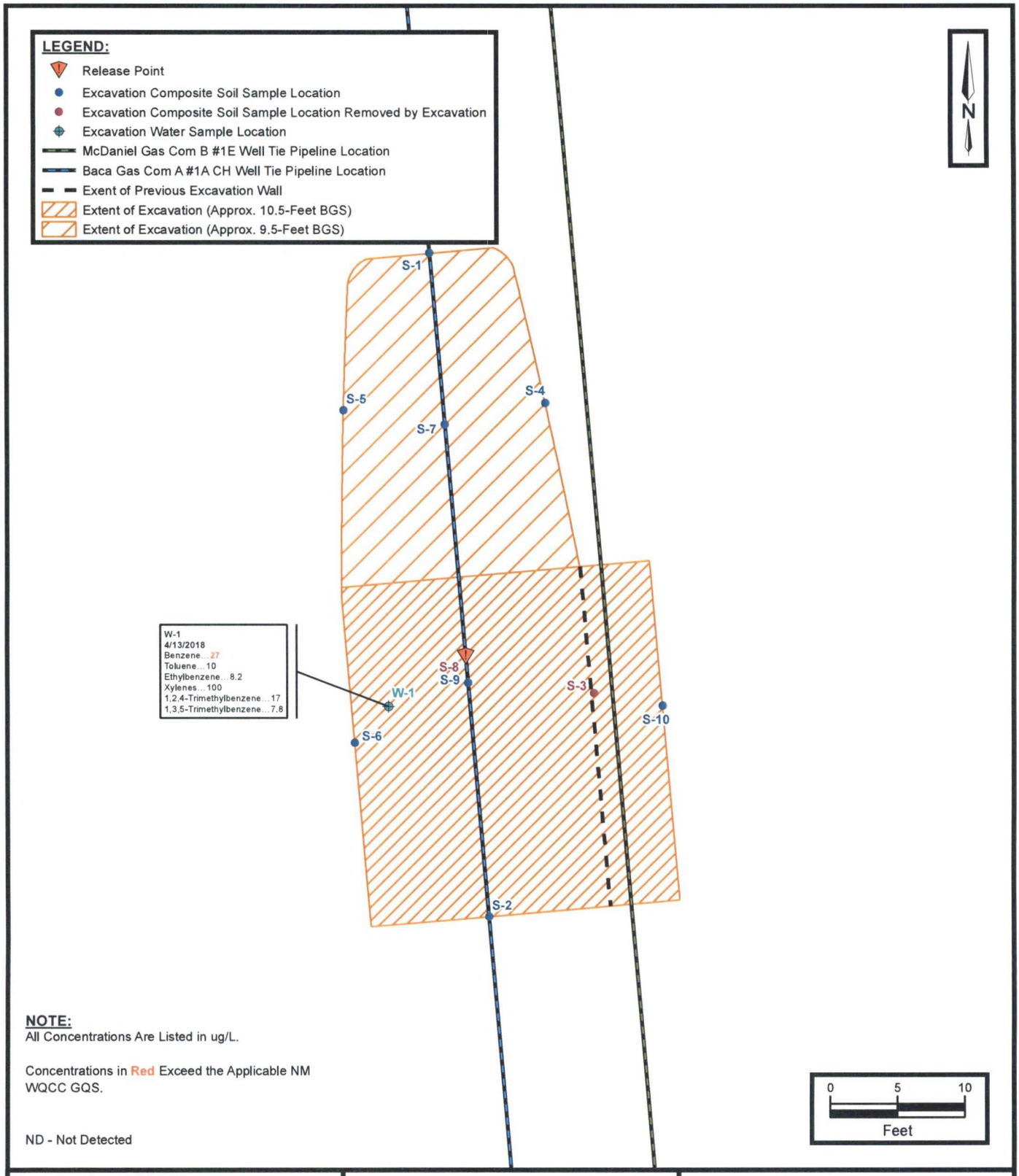
Project No. 725040112424

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 3

Site Map with Soil Analytical Results

Z:\Dallas South\Drafting\2016\725040112424\Figure 3.mxd Modified 5/2/2018 by jsimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



NOTE:
All Concentrations Are Listed in ug/L.

Concentrations in Red Exceed the Applicable NM WQCC GQS.

ND - Not Detected

Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Apex TITAN, Inc.
606 South Rio Grande, Suite A
Aztec, New Mexico 87410
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FIGURE 4

Site Map with Water Analytical Results

Z:\Dallas South\Drafting\2016\725040112424\Figure 4.mxd Modified 4/26/2018 by jsimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System

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 97257-0907

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

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: ME Eddleman**
Non AFE: N36112
Pay Key: CM22355

2. Originating Site:
Baca GC A#1A CH Pipeline

3. Location of Material (Street Address, City, State or ULSTR):
UL Section 26 T29N 10W; 36.6977,-107.8574 April 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 the end of the haul) 358 (yd³) bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long (Thom Long) representative or authorized agent for Enterprise Field Services, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

PRINT & SIGN NAME — COMPANY NAME

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load*

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

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, (Thom Long) 4-6-18, representative for Enterprise Field Services, LLC authorize Envirotech, Inc. to complete the required testing/sign the Generator Waste Testing Certification.

Generator Signature

I, [signature], representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: TBD Sweaza, Deherrera, 3D Services, Yucca

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

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Environmental Manager DATE: 4/10/18

SIGNATURE: [signature] TELEPHONE NO.: 505-632-0615

*Surface Waste Management Facility Authorized Agent

APPENDIX C

Photographic Documentation

Photograph 1 View of the source area and in-process excavation activities, facing southeast.	
Photograph 2 View of the in-process excavation activities, facing south.	
Photograph 3 View of the in-process excavation activities, facing southeast.	

Photograph 4 View of the in-process excavation activities, facing northwest.	
Photograph 5 View of the final excavation, facing northwest.	
Photograph 6 View of the final excavation, facing northeast.	

APPENDIX D

Tables

TABLE 1
Baca Gas Com A #1A CH
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level				**10**	**NE**	**NE**	**NE**	**50**				**100**	**NE**
Excavation Composite Soil Samples Removed by Excavation													
S-3	04.11.18	C	0 to 9.5	<0.11	1.9	1.6	18	22	520	32	<51	**552**	190
S-8	04.11.18	C	9.5	0.17	4.1	1.3	15	21	300	17	<47	**317**	65
Excavation Composite Soil Samples													
S-1	04.06.18	C	0 to 6	<0.020	<0.041	<0.041	0.20	0.20	<4.1	<10	<50	ND	480
S-2	04.06.18	C	0 to 6	<0.019	<0.038	<0.038	0.12	0.12	<3.8	<9.1	<46	ND	94
S-4	04.11.18	C	0 to 9.5	<0.12	<0.24	<0.24	<0.48	ND	<24	<9.6	<48	ND	180
S-5	04.11.18	C	0 to 9.5	<0.093	<0.19	<0.19	<0.37	ND	<19	<9.7	<49	ND	110
S-6	04.11.18	C	0 to 9.5	<0.094	<0.19	<0.19	<0.38	ND	<19	<9.8	<49	ND	61
S-7	04.11.18	C	9.5	<0.014	<0.029	<0.029	<0.058	ND	<2.9	<10	<50	ND	80
S-9	04.13.18	C	10.5	<0.015	<0.031	<0.031	<0.061	ND	<3.1	<9.0	<45	ND	<30
S-10	04.13.18	C	0 to 10.5	<0.022	0.21	0.086	1.1	1.4	14	<9.3	<47	14	310

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

TABLE 2
Baca Gas Com A #1A CH
WATER ANALYTICAL SUMMARY- Volatile Organic Compounds

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		**10**	**750**	**750**	**620**	**NE**	**NE**
Excavation Water Samples							
W-1	04.13.18	**27**	10	8.2	100	17	7.8

Note: Concentrations in **bold** and yellow exceed the applicable NM WQCC GQS

Note: 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene are not priority pollutants under the federal Clean Water Act (CWA) or the NM WQCC.

µg/L = micrograms per liter

NE = Not Established

APEX

Appendix E

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 10, 2018

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

RE: Baca GC A 1A CH OrderNo.: 1804393

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/7/2018 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-1
Project: Baca GC A 1A CH
Collection Date: 4/6/2018 1:30:00 PM
Lab ID: 1804393-001
Matrix: MEOH (SOIL)
Received Date: 4/7/2018 11:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	480	30		mg/Kg	20	4/9/2018 12:25:41 PM	37490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/9/2018 9:54:35 AM	37481
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/9/2018 9:54:35 AM	37481
Surr: DNOP	101	70-130		%Rec	1	4/9/2018 9:54:35 AM	37481
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	4/9/2018 9:49:02 AM	37472
Surr: BFB	110	15-316		%Rec	1	4/9/2018 9:49:02 AM	37472
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	4/9/2018 9:49:02 AM	37472
Toluene	ND	0.041		mg/Kg	1	4/9/2018 9:49:02 AM	37472
Ethylbenzene	ND	0.041		mg/Kg	1	4/9/2018 9:49:02 AM	37472
Xylenes, Total	0.20	0.082		mg/Kg	1	4/9/2018 9:49:02 AM	37472
Surr: 4-Bromofluorobenzene	90.6	80-120		%Rec	1	4/9/2018 9:49:02 AM	37472

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-2
Project: Baca GC A 1A CH
Collection Date: 4/6/2018 1:40:00 PM
Lab ID: 1804393-002
Matrix: MEOH (SOIL)
Received Date: 4/7/2018 11:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	94	30		mg/Kg	20	4/9/2018 12:38:06 PM	37490
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/9/2018 10:16:47 AM	37481
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/9/2018 10:16:47 AM	37481
Surr: DNOP	96.0	70-130		%Rec	1	4/9/2018 10:16:47 AM	37481
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	4/9/2018 10:12:35 AM	37472
Surr: BFB	101	15-316		%Rec	1	4/9/2018 10:12:35 AM	37472
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	4/9/2018 10:12:35 AM	37472
Toluene	ND	0.038		mg/Kg	1	4/9/2018 10:12:35 AM	37472
Ethylbenzene	ND	0.038		mg/Kg	1	4/9/2018 10:12:35 AM	37472
Xylenes, Total	0.12	0.076		mg/Kg	1	4/9/2018 10:12:35 AM	37472
Surr: 4-Bromofluorobenzene	90.0	80-120		%Rec	1	4/9/2018 10:12:35 AM	37472

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804393**

10-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID	**MB-37490**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37490**	RunNo:	**50408**					
Prep Date:	**4/9/2018**	Analysis Date:	**4/9/2018**	SeqNo:	**1634764**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37490**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37490**	RunNo:	**50408**					
Prep Date:	**4/9/2018**	Analysis Date:	**4/9/2018**	SeqNo:	**1634765**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804393**

10-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **MB-37481**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37481**	RunNo: **50391**
Prep Date: **4/9/2018**	Analysis Date: **4/9/2018**	SeqNo: **1633386** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.2	70	130			

Sample ID **LCS-37481**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37481**	RunNo: **50391**
Prep Date: **4/9/2018**	Analysis Date: **4/9/2018**	SeqNo: **1633402** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	91.0	70	130			
Surr: DNOP	4.4		5.000		88.1	70	130			

Sample ID **MB-37471**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37471**	RunNo: **50391**
Prep Date: **4/6/2018**	Analysis Date: **4/9/2018**	SeqNo: **1633657** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		98.9	70	130			

Sample ID **LCS-37471**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37471**	RunNo: **50391**
Prep Date: **4/6/2018**	Analysis Date: **4/9/2018**	SeqNo: **1633785** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.2	70	130			

Sample ID **1804393-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1**	Batch ID: **37481**	RunNo: **50391**
Prep Date: **4/9/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634132** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	49.07	1.997	93.9	55.8	125			
Surr: DNOP	4.7		4.907		95.9	70	130			

Sample ID **1804393-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1**	Batch ID: **37481**	RunNo: **50391**
Prep Date: **4/9/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634133** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
I Range Organics (DRO)	47	9.6	47.89	1.997	93.5	55.8	125	2.67	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804393**

10-Apr-18

Client: APEX TITAN

Project: Baca GC A 1A CH

Sample ID **1804393-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1**	Batch ID: **37481**	RunNo: **50391**
Prep Date: **4/9/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634133** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		4.789		94.4	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804393**

10-Apr-18

Client: APEX TITAN

Project: Baca GC A 1A CH

Sample ID **MB-37472**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **37472**	RunNo: **50404**
Prep Date: **4/6/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634431** 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	890		1000		88.7	15	316			

Sample ID **LCS-37472**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **37472**	RunNo: **50404**
Prep Date: **4/6/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634432** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	75.9	131			
Surr: BFB	1100		1000		106	15	316			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804393**

10-Apr-18

Client: APEX TITAN

Project: Baca GC A 1A CH

Sample ID **MB-37472**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **37472**	RunNo: **50404**
Prep Date: **4/6/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634466** 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	0.86		1.000		85.9	80	120			

Sample ID **LCS-37472**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **37472**	RunNo: **50404**
Prep Date: **4/6/2018**	Analysis Date: **4/9/2018**	SeqNo: **1634467** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.3	77.3	128			
Toluene	0.93	0.050	1.000	0	92.8	79.2	125			
Ethylbenzene	0.91	0.050	1.000	0	91.2	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	93.0	81.6	129			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.6	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1804393 | RcptNo: 1

Received By: Andy Freeman 4/7/2018 11:40:00 AM

Completed By: Isaiah Ortiz 4/9/2018 7:27:09 AM

Reviewed By: JM 4/9/18

LB: ENM

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	# of preserved bottles checked for pH:
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	(<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? ENM 4/9/18
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by:

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding _____

Client Instructions _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

CHAIN OF CUSTODY RECORD

APEX

Office Location
606 S. Rio Grande, Suite A
Aztec, NM 87410

Project Manager K. Summers

Laboratory: Hall Environmental / Analysis Laboratory
Address: 4901 Hawkins NE
Albuquerque, NM 87109
Contact: A. Freeman
Phone: 505-345-3975
PO/SO #: See notes

Sampler's Name: Ranee Deechilly
Sampler's Signature:

Proj. No: 725C40124.24
Project Name: Baca GC AFE 1A CH

Lab use only
Due Date:
Temp. of coolers when received (C°): 3.4°C
1 2 3 4 5
Page 1 of 1

ANALYSIS REQUESTED: BTEX 8021, TPH 8015D/DRO/MRO, Chlorides

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lit	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	4/6/18	1330	X		S-1						1		1804393-001
S	4/6/18	1340	X		S-2						1		-002

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush SAME DAY

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/6/18	1524		4/6/18	1520
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/6/18	1900		4/7/18	1140
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
PM - Tom Long
Pay Key - CM 22355
Non AFE - N36112

SAME DAY

COC Seal on Jars

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
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

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

April 13, 2018

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

RE: Baca GC A 1A CH OrderNo.: 1804630

Dear Kyle Summers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Workorder Sample Summary

WO#: **1804630**

13-Apr-18

CLIENT: APEX TITAN
Project: Baca GC A 1A CH

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1804630-001	S-3		4/11/2018 9:30:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-001	S-3		4/11/2018 9:30:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-002	S-4		4/11/2018 9:40:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-002	S-4		4/11/2018 9:40:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-003	S-5		4/11/2018 9:50:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-003	S-5		4/11/2018 9:50:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-004	S-6		4/11/2018 10:00:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-004	S-6		4/11/2018 10:00:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-005	S-7		4/11/2018 10:10:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-005	S-7		4/11/2018 10:10:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-006	S-8		4/11/2018 10:20:00 AM	4/12/2018 8:15:00 AM	Soil
1804630-006	S-8		4/11/2018 10:20:00 AM	4/12/2018 8:15:00 AM	Soil

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-3
Project: Baca GC A 1A CH
Collection Date: 4/11/2018 9:30:00 AM
Lab ID: 1804630-001
Matrix: SOIL
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	190	30		mg/Kg	20	4/12/2018 12:18:15 PM	37569
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	520	21		mg/Kg	5	4/12/2018 10:17:01 AM	M50506
Surr: BFB	94.5	70-130		%Rec	5	4/12/2018 10:17:01 AM	M50506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	32	10		mg/Kg	1	4/12/2018 2:27:41 PM	37568
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	4/12/2018 2:27:41 PM	37568
Surr: DNOP	95.7	70-130		%Rec	1	4/12/2018 2:27:41 PM	37568
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.11		mg/Kg	5	4/12/2018 10:17:01 AM	S50506
Toluene	1.9	0.21		mg/Kg	5	4/12/2018 10:17:01 AM	S50506
Ethylbenzene	1.6	0.21		mg/Kg	5	4/12/2018 10:17:01 AM	S50506
Xylenes, Total	18	0.43		mg/Kg	5	4/12/2018 10:17:01 AM	S50506
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	5	4/12/2018 10:17:01 AM	S50506
Surr: Toluene-d8	98.3	70-130		%Rec	5	4/12/2018 10:17:01 AM	S50506

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-4
Project: Baca GC A 1A CH
Collection Date: 4/11/2018 9:40:00 AM
Lab ID: 1804630-002
Matrix: SOIL
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	180	30		mg/Kg	20	4/12/2018 12:30:40 PM	37569
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	4/12/2018 10:40:06 AM	M50506
Surr: BFB	108	70-130		%Rec	5	4/12/2018 10:40:06 AM	M50506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/12/2018 2:49:50 PM	37568
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/12/2018 2:49:50 PM	37568
Surr: DNOP	98.7	70-130		%Rec	1	4/12/2018 2:49:50 PM	37568
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.12		mg/Kg	5	4/12/2018 10:40:06 AM	S50506
Toluene	ND	0.24		mg/Kg	5	4/12/2018 10:40:06 AM	S50506
Ethylbenzene	ND	0.24		mg/Kg	5	4/12/2018 10:40:06 AM	S50506
Xylenes, Total	ND	0.48		mg/Kg	5	4/12/2018 10:40:06 AM	S50506
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	5	4/12/2018 10:40:06 AM	S50506
Surr: Toluene-d8	90.1	70-130		%Rec	5	4/12/2018 10:40:06 AM	S50506

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-5
Project: Baca GC A 1A CH
Collection Date: 4/11/2018 9:50:00 AM
Lab ID: 1804630-003
Matrix: SOIL
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	110	30		mg/Kg	20	4/12/2018 12:43:04 PM	37569
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	4/12/2018 11:03:09 AM	M50506
Surr: BFB	110	70-130		%Rec	5	4/12/2018 11:03:09 AM	M50506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/12/2018 3:11:46 PM	37568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/12/2018 3:11:46 PM	37568
Surr: DNOP	97.4	70-130		%Rec	1	4/12/2018 3:11:46 PM	37568
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.093		mg/Kg	5	4/12/2018 11:03:09 AM	S50506
Toluene	ND	0.19		mg/Kg	5	4/12/2018 11:03:09 AM	S50506
Ethylbenzene	ND	0.19		mg/Kg	5	4/12/2018 11:03:09 AM	S50506
Xylenes, Total	ND	0.37		mg/Kg	5	4/12/2018 11:03:09 AM	S50506
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	5	4/12/2018 11:03:09 AM	S50506
Surr: Toluene-d8	97.1	70-130		%Rec	5	4/12/2018 11:03:09 AM	S50506

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-6
Project: Baca GC A 1A CH
Collection Date: 4/11/2018 10:00:00 AM
Lab ID: 1804630-004
Matrix: SOIL
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	61	30		mg/Kg	20	4/12/2018 12:55:29 PM	37569
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	4/12/2018 11:26:11 AM	M50506
Surr: BFB	104	70-130		%Rec	5	4/12/2018 11:26:11 AM	M50506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/12/2018 2:28:27 PM	37568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/12/2018 2:28:27 PM	37568
Surr: DNOP	88.8	70-130		%Rec	1	4/12/2018 2:28:27 PM	37568
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.094		mg/Kg	5	4/12/2018 11:26:11 AM	S50506
Toluene	ND	0.19		mg/Kg	5	4/12/2018 11:26:11 AM	S50506
Ethylbenzene	ND	0.19		mg/Kg	5	4/12/2018 11:26:11 AM	S50506
Xylenes, Total	ND	0.38		mg/Kg	5	4/12/2018 11:26:11 AM	S50506
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	5	4/12/2018 11:26:11 AM	S50506
Surr: Toluene-d8	97.5	70-130		%Rec	5	4/12/2018 11:26:11 AM	S50506

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-7
Project: Baca GC A 1A CH
Collection Date: 4/11/2018 10:10:00 AM
Lab ID: 1804630-005
Matrix: SOIL
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	80	30		mg/Kg	20	4/12/2018 1:07:54 PM	37569
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	4/12/2018 11:49:18 AM	M50506
Surr: BFB	115	70-130		%Rec	1	4/12/2018 11:49:18 AM	M50506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/12/2018 2:53:02 PM	37568
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/12/2018 2:53:02 PM	37568
Surr: DNOP	89.3	70-130		%Rec	1	4/12/2018 2:53:02 PM	37568
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.014		mg/Kg	1	4/12/2018 11:49:18 AM	S50506
Toluene	ND	0.029		mg/Kg	1	4/12/2018 11:49:18 AM	S50506
Ethylbenzene	ND	0.029		mg/Kg	1	4/12/2018 11:49:18 AM	S50506
Xylenes, Total	ND	0.058		mg/Kg	1	4/12/2018 11:49:18 AM	S50506
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	4/12/2018 11:49:18 AM	S50506
Surr: Toluene-d8	87.9	70-130		%Rec	1	4/12/2018 11:49:18 AM	S50506

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-8
Project: Baca GC A 1A CH
Collection Date: 4/11/2018 10:20:00 AM
Lab ID: 1804630-006
Matrix: SOIL
Received Date: 4/12/2018 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **MRA**
Chloride	65	30		mg/Kg	20	4/12/2018 1:20:19 PM	37569
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: **AG**
Gasoline Range Organics (GRO)	300	15		mg/Kg	5	4/12/2018 12:12:23 PM	M50506
Surr: BFB	90.1	70-130		%Rec	5	4/12/2018 12:12:23 PM	M50506
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **TOM**
Diesel Range Organics (DRO)	17	9.4		mg/Kg	1	4/12/2018 3:17:46 PM	37568
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/12/2018 3:17:46 PM	37568
Surr: DNOP	90.0	70-130		%Rec	1	4/12/2018 3:17:46 PM	37568
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: **AG**
Benzene	0.17	0.077		mg/Kg	5	4/12/2018 12:12:23 PM	S50506
Toluene	4.1	0.15		mg/Kg	5	4/12/2018 12:12:23 PM	S50506
Ethylbenzene	1.3	0.15		mg/Kg	5	4/12/2018 12:12:23 PM	S50506
Xylenes, Total	15	0.31		mg/Kg	5	4/12/2018 12:12:23 PM	S50506
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	5	4/12/2018 12:12:23 PM	S50506
Surr: Toluene-d8	94.5	70-130		%Rec	5	4/12/2018 12:12:23 PM	S50506

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804630**

13-Apr-18

Client: APEX TITAN

Project: Baca GC A 1A CH

Sample ID	**MB-37569**	SampType: **mblk**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **37569**			RunNo: **50515**					
Prep Date:	**4/12/2018**	Analysis Date: **4/12/2018**			SeqNo: **1638842**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37569**	SampType: **lcs**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **37569**			RunNo: **50515**					
Prep Date:	**4/12/2018**	Analysis Date: **4/12/2018**			SeqNo: **1638843**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804630**

13-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **LCS-37536**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37536**	RunNo: **50494**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637376** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.5	70	130			

Sample ID **MB-37536**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37536**	RunNo: **50494**
Prep Date: **4/11/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637377** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		94.1	70	130			

Sample ID **LCS-37568**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **37568**	RunNo: **50494**
Prep Date: **4/12/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637385** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.2	70	130			
Surr: DNOP	4.2		5.000		85.0	70	130			

Sample ID **MB-37568**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **37568**	RunNo: **50494**
Prep Date: **4/12/2018**	Analysis Date: **4/12/2018**	SeqNo: **1637386** 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	9.3		10.00		93.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804630**

13-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **100ng lcs**	SampType: **LCS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **S50506**	RunNo: **50506**
Prep Date:	Analysis Date: **4/12/2018**	SeqNo: **1637632** 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	113	80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	112	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.8	70	130			
Surr: Toluene-d8	0.50		0.5000		99.9	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **S50506**	RunNo: **50506**
Prep Date:	Analysis Date: **4/12/2018**	SeqNo: **1637639** 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	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.47		0.5000		94.8	70	130			

Sample ID **1804630-003ams**	SampType: **MS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-5**	Batch ID: **S50506**	RunNo: **50506**
Prep Date:	Analysis Date: **4/12/2018**	SeqNo: **1638834** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.2	0.093	3.701	0	112	80	120			
Toluene	4.0	0.19	3.701	0.03227	106	80	120			
Ethylbenzene	4.2	0.19	3.701	0.02487	112	80	120			
Xylenes, Total	12	0.37	11.10	0.2217	110	80	120			
Surr: 4-Bromofluorobenzene	1.7		1.851		93.7	70	130			
Surr: Toluene-d8	1.9		1.851		101	70	130			

Sample ID **1804630-003amsd**	SampType: **MSD4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-5**	Batch ID: **S50506**	RunNo: **50506**
Prep Date:	Analysis Date: **4/12/2018**	SeqNo: **1638835** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.2	0.093	3.701	0	114	80	120	1.39	0	
Toluene	3.8	0.19	3.701	0.03227	102	80	120	4.27	0	
Ethylbenzene	3.9	0.19	3.701	0.02487	105	80	120	6.24	0	
Xylenes, Total	11	0.37	11.10	0.2217	101	80	120	8.26	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804630**

13-Apr-18

Client: APEX TITAN

Project: Baca GC A 1A CH

Sample ID **1804630-003amsd**	SampType: **MSD4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-5**	Batch ID: **S50506**	RunNo: **50506**
Prep Date:	Analysis Date: **4/12/2018**	SeqNo: **1638835** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.6		1.851		86.7	70	130	0	0	
Surr: Toluene-d8	1.8		1.851		94.8	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804630**

13-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **2.5ug gro lcs**	SampType: **LCS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **LCSS**	Batch ID: **M50506**			RunNo: **50506**					
Prep Date:	Analysis Date: **4/12/2018**			SeqNo: **1637614**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	70	130			
Surr: BFB	500		500.0		100	70	130			

Sample ID **rb**	SampType: **MBLK**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **PBS**	Batch ID: **M50506**			RunNo: **50506**					
Prep Date:	Analysis Date: **4/12/2018**			SeqNo: **1637615**		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	510		500.0		102	70	130			

Sample ID **1804630-002ams**	SampType: **MS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **S-4**	Batch ID: **M50506**			RunNo: **50506**					
Prep Date:	Analysis Date: **4/12/2018**			SeqNo: **1638822**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	24	120.0	0	112	64.7	142			
Surr: BFB	2300		2399		97.3	70	130			

Sample ID **1804630-002amsd**	SampType: **MSD**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **S-4**	Batch ID: **M50506**			RunNo: **50506**					
Prep Date:	Analysis Date: **4/12/2018**			SeqNo: **1638823**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	24	120.0	0	104	64.7	142	6.75	20	
Surr: BFB	2300		2399		95.8	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1804630 | RcptNo: 1

Received By: Anne Thorne 4/12/2018 8:15:00 AM

Completed By: Anne Thorne 4/12/2018 8:54:52 AM

Reviewed By: JNO 4/12/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° 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 VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks: Custody Seals intact on Sail Jars / AA 04/12/18

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	1.3	Good	Yes			

CHAIN OF CUSTODY RECORD

APEX

Office Location: 606 S Rio Grande, Suite A, Aztec, NM 87410

Project Manager: K. Summers

Laboratory: Hall Environmental Analysis Laboratory

Address: 4901 Hawkins NE, Albuquerque, NM 87109

Contact: Ai Freeman

Phone: 505-345-3975

PO/SO #: See notes

Sampler's Name: Ranee Deechilly

Sampler's Signature: [signature]

Proj. No.: 725046112424

Project Name: Baca GC A #1A CH

Lab use only
Due Date: 2.3-4F-1.0=
Temp. of coolers when received (C°): 1.3

1	2	3	4	5

Page 1 of 1

ANALYSIS REQUESTED: BTEX 8021 / TPH 418.0/DRO/MRO 8015 / Chlorides

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
S	4/11/18	930	X		S-3						1		180#4630-001
S	4/11/18	940	X		S-4						1		002
S	4/11/18	950	X		S-5						1		003
S	4/11/18	1000	X		S-6						1		004
S	4/11/18	1010	X		S-7						1		005
S	4/11/18	1020	X		S-8						1		006

04/12/18 AT

NPS

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush SAME DAY

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	4/11/18	1355	[signature]	4/11/18	1355
[signature]	4/11/18	1826	[signature]	04/12/18	0815

NOTES:
PM - Tom Long
Pay Key - CM 22355
Non AFE - N36112
SAME DAY
COC Seal on Jars

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
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

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

April 17, 2018

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

RE: Baca GC A 1A CH OrderNo.: 1804745

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/14/2018 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-9
Project: Baca GC A 1A CH
Collection Date: 4/13/2018 10:30:00 AM
Lab ID: 1804745-001
Matrix: MEOH (SOIL)
Received Date: 4/14/2018 11:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/16/2018 10:46:06 AM	37613
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	4/16/2018 11:51:55 AM	37595
Surr: BFB	113	70-130		%Rec	1	4/16/2018 11:51:55 AM	37595
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	4/16/2018 10:02:57 AM	37610
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/16/2018 10:02:57 AM	37610
Surr: DNOP	83.4	70-130		%Rec	1	4/16/2018 10:02:57 AM	37610
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.015		mg/Kg	1	4/16/2018 11:51:55 AM	37595
Toluene	ND	0.031		mg/Kg	1	4/16/2018 11:51:55 AM	37595
Ethylbenzene	ND	0.031		mg/Kg	1	4/16/2018 11:51:55 AM	37595
Xylenes, Total	ND	0.061		mg/Kg	1	4/16/2018 11:51:55 AM	37595
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	4/16/2018 11:51:55 AM	37595
Surr: Toluene-d8	88.8	70-130		%Rec	1	4/16/2018 11:51:55 AM	37595

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: S-10
Project: Baca GC A 1A CH
Collection Date: 4/13/2018 10:40:00 AM
Lab ID: 1804745-002
Matrix: MEOH (SOIL)
Received Date: 4/14/2018 11:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	310	30		mg/Kg	20	4/16/2018 10:58:31 AM	37613
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	14	4.5		mg/Kg	1	4/16/2018 12:14:59 PM	37595
Surr: BFB	105	70-130		%Rec	1	4/16/2018 12:14:59 PM	37595
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/16/2018 10:25:01 AM	37610
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/16/2018 10:25:01 AM	37610
Surr: DNOP	80.6	70-130		%Rec	1	4/16/2018 10:25:01 AM	37610
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.022		mg/Kg	1	4/16/2018 12:14:59 PM	37595
Toluene	0.21	0.045		mg/Kg	1	4/16/2018 12:14:59 PM	37595
Ethylbenzene	0.086	0.045		mg/Kg	1	4/16/2018 12:14:59 PM	37595
Xylenes, Total	1.1	0.089		mg/Kg	1	4/16/2018 12:14:59 PM	37595
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	4/16/2018 12:14:59 PM	37595
Surr: Toluene-d8	86.3	70-130		%Rec	1	4/16/2018 12:14:59 PM	37595

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804745**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID	**MB-37613**	SampType: **mblk**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **37613**			RunNo: **50586**					
Prep Date:	**4/16/2018**	Analysis Date: **4/16/2018**			SeqNo: **1641514**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37613**	SampType: **lcs**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **37613**			RunNo: **50586**					
Prep Date:	**4/16/2018**	Analysis Date: **4/16/2018**			SeqNo: **1641515**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804745**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **LCS-37610**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **37610**			RunNo: **50584**					
Prep Date: **4/16/2018**	Analysis Date: **4/16/2018**			SeqNo: **1640700**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.0	70	130			
Surr: DNOP	3.6		5.000		71.7	70	130			

Sample ID **MB-37610**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **37610**			RunNo: **50584**					
Prep Date: **4/16/2018**	Analysis Date: **4/16/2018**			SeqNo: **1640701**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		85.4	70	130			

Sample ID **1804745-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **S-9**	Batch ID: **37610**			RunNo: **50584**					
Prep Date: **4/16/2018**	Analysis Date: **4/16/2018**			SeqNo: **1640863**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.4	46.82	0	91.0	55.8	125			
Surr: DNOP	4.2		4.682		89.8	70	130			

Sample ID **1804745-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **S-9**	Batch ID: **37610**			RunNo: **50584**					
Prep Date: **4/16/2018**	Analysis Date: **4/16/2018**			SeqNo: **1640864**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.8	48.97	0	92.9	55.8	125	6.52	20	
Surr: DNOP	4.4		4.897		90.8	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804745**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **lcs-37595**	SampType: **LCS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **37595**	RunNo: **50589**
Prep Date: **4/13/2018**	Analysis Date: **4/16/2018**	SeqNo: **1640790** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.4	80	120			
Toluene	0.92	0.050	1.000	0	91.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.3	70	130			
Surr: Toluene-d8	0.46		0.5000		91.9	70	130			

Sample ID **mb-37595**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **37595**	RunNo: **50589**
Prep Date: **4/13/2018**	Analysis Date: **4/16/2018**	SeqNo: **1640791** 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	0.57		0.5000		113	70	130			
Surr: Toluene-d8	0.44		0.5000		88.5	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804745**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **lcs-37595**	SampType: **LCS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **LCSS**	Batch ID: **37595**			RunNo: **50589**					
Prep Date: **4/13/2018**	Analysis Date: **4/16/2018**			SeqNo: **1640768**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.8	70	130			
Surr: BFB	500		500.0		100	70	130			

Sample ID **mb-37595**	SampType: **MBLK**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **PBS**	Batch ID: **37595**			RunNo: **50589**					
Prep Date: **4/13/2018**	Analysis Date: **4/16/2018**			SeqNo: **1640769**		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	560		500.0		112	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1804745 | RcptNo: 1

Received By: Ashley Gallegos 4/14/2018 11:30:00 AM AG

Completed By: Ashley Gallegos 4/14/2018 12:17:50 PM AG

Reviewed By: JMO 4/14/18 Labeled by: A-041161112

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks: custody seals intact on soil jars | A-041161A

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

CHAIN OF CUSTODY RECORD

APEX

Office Location 1006 S Rio Grande, Suite A, Aztec, NM 87410

Project Manager K Summers

Laboratory: Hall Environmental Analysis Laboratory

Address: 4901 Hawkins NE, Albuquerque, NM 87109

Contact: A. Freeman

Phone: 505-345-3975

PO/SO #: See notes

Sampler's Name: Ranee Deechilly

Sampler's Signature: Ranee Deechilly

Proj. No.: 725040112424

Project Name: Baca GC A #1A CH

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 L	250 ml	Glass Jar	P/O	BTEX 8021	TPH 8015D/DRO/MRO 8015	Chlorides	Lab Sample ID (Lab Use Only)
S	4/13/18	1030	X		S-9						1		X	X	X	1804745-001
S	4/13/18	1040	X		S-10						1		X	X	X	-002

NTS

Lab use only
Due Date:
1.4+0.3(CF)
Temp. of coolers when received (C°): 1.7
1 2 3 4 5
Page 1 of 1

Turn around time ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush SAME DAY

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Ranee Deechilly	4/13/18	1449	Chant Dalt	4/13/18	1449
Mista Wade	4/13/18	1900		04/14/18	1130

NOTES:
PM - Tom Long
Pay Key - CM22355
Non AFE - N36112
SAME DAY
COC Seal on Jars

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 17, 2018

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

RE: Baca GC A 1A CH OrderNo.: 1804744

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/14/2018 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: W-1
Project: Baca GC A 1A CH
Collection Date: 4/13/2018 11:30:00 AM
Lab ID: 1804744-001
Matrix: AQUEOUS
Received Date: 4/14/2018 11:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	27	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Toluene	10	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Ethylbenzene	8.2	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2,4-Trimethylbenzene	17	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,3,5-Trimethylbenzene	7.8	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2-Dichloroethane (EDC)	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2-Dibromoethane (EDB)	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Naphthalene	ND	4.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1-Methylnaphthalene	ND	8.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
2-Methylnaphthalene	ND	8.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Acetone	ND	20	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Bromobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Bromodichloromethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Bromoform	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Bromomethane	ND	6.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
2-Butanone	ND	20	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Carbon disulfide	ND	20	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Carbon Tetrachloride	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Chlorobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Chloroethane	ND	4.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Chloroform	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Chloromethane	ND	6.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
2-Chlorotoluene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
4-Chlorotoluene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
cis-1,2-DCE	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
cis-1,3-Dichloropropene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2-Dibromo-3-chloropropane	ND	4.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Dibromochloromethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Dibromomethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2-Dichlorobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,3-Dichlorobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,4-Dichlorobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Dichlorodifluoromethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,1-Dichloroethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,1-Dichloroethene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2-Dichloropropane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,3-Dichloropropane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
2,2-Dichloropropane	ND	4.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Project: Baca GC A 1A CH
Lab ID: 1804744-001
Matrix: AQUEOUS
Client Sample ID: W-1
Collection Date: 4/13/2018 11:30:00 AM
Received Date: 4/14/2018 11:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Hexachlorobutadiene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
2-Hexanone	ND	20	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Isopropylbenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
4-Isopropyltoluene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
4-Methyl-2-pentanone	ND	20	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Methylene Chloride	ND	6.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
n-Butylbenzene	ND	6.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
n-Propylbenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
sec-Butylbenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Styrene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
tert-Butylbenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,1,1,2-Tetrachloroethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,1,2,2-Tetrachloroethane	ND	4.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Tetrachloroethene (PCE)	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
trans-1,2-DCE	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
trans-1,3-Dichloropropene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2,3-Trichlorobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2,4-Trichlorobenzene	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,1,1-Trichloroethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,1,2-Trichloroethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Trichloroethene (TCE)	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Trichlorofluoromethane	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
1,2,3-Trichloropropane	ND	4.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Vinyl chloride	ND	2.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Xylenes, Total	100	3.0	D	µg/L	2	4/16/2018 11:11:51 AM	A50591
Surr: 1,2-Dichloroethane-d4	100	70-130	D	%Rec	2	4/16/2018 11:11:51 AM	A50591
Surr: 4-Bromofluorobenzene	105	70-130	D	%Rec	2	4/16/2018 11:11:51 AM	A50591
Surr: Dibromofluoromethane	100	70-130	D	%Rec	2	4/16/2018 11:11:51 AM	A50591
Surr: Toluene-d8	93.5	70-130	D	%Rec	2	4/16/2018 11:11:51 AM	A50591

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804744**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A50591**	RunNo: **50591**
Prep Date:	Analysis Date: **4/16/2018**	SeqNo: **1640774** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804744**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A50591** RunNo: **50591**
Prep Date: Analysis Date: **4/16/2018** SeqNo: **1640774** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.4		10.00		93.7	70	130			

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A50591** RunNo: **50591**
Prep Date: Analysis Date: **4/16/2018** SeqNo: **1640776** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130			
Toluene	18	1.0	20.00	0	91.6	70	130			
Chlorobenzene	19	1.0	20.00	0	94.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1804744**

17-Apr-18

Client: APEX TITAN
Project: Baca GC A 1A CH

Sample ID **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A50591** RunNo: **50591**
Prep Date: Analysis Date: **4/16/2018** SeqNo: **1640776** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	99.2	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	87.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.9	70	130			
Surr: Toluene-d8	9.2		10.00		92.2	70	130			

Sample ID **1804744-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **W-1** Batch ID: **A50591** RunNo: **50591**
Prep Date: Analysis Date: **4/16/2018** SeqNo: **1640780** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	70	2.0	40.00	27.40	106	60.5	137			D
Toluene	48	2.0	40.00	10.47	94.5	70	130			D
Chlorobenzene	39	2.0	40.00	0	96.6	70	130			D
1,1-Dichloroethene	39	2.0	40.00	0	97.9	70	130			D
Trichloroethene (TCE)	35	2.0	40.00	0	88.5	70	130			D
Surr: 1,2-Dichloroethane-d4	20		20.00		98.1	70	130			D
Surr: 4-Bromofluorobenzene	22		20.00		108	70	130			D
Surr: Dibromofluoromethane	20		20.00		98.7	70	130			D
Surr: Toluene-d8	19		20.00		93.6	70	130			D

Sample ID **1804744-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **W-1** Batch ID: **A50591** RunNo: **50591**
Prep Date: Analysis Date: **4/16/2018** SeqNo: **1640781** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	67	2.0	40.00	27.40	99.8	60.5	137	3.76	20	D
Toluene	46	2.0	40.00	10.47	89.2	70	130	4.46	20	D
Chlorobenzene	38	2.0	40.00	0	94.0	70	130	2.81	20	D
1,1-Dichloroethene	37	2.0	40.00	0	92.5	70	130	5.73	20	D
Trichloroethene (TCE)	35	2.0	40.00	0	86.4	70	130	2.34	20	D
Surr: 1,2-Dichloroethane-d4	19		20.00		97.4	70	130	0	0	D
Surr: 4-Bromofluorobenzene	21		20.00		107	70	130	0	0	D
Surr: Dibromofluoromethane	20		20.00		97.5	70	130	0	0	D
Surr: Toluene-d8	19		20.00		93.0	70	130	0	0	D

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1804744 | RcptNo: 1

Received By: Ashley Gallegos 4/14/2018 11:30:00 AM

Completed By: Ashley Gallegos 4/14/2018 12:14:08 PM

Reviewed By: JMO 4/14/18 Labeled by: AT 04/16/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks: Custody Seals intact on VOA vials/ AT 04/16/18

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

CHAIN OF CUSTODY RECORD

APEX

Office Location
606 S. Rio Grande, Suite A
Aztec, NM 87410

Project Manager K. Summers

Laboratory: Hall Environmental / Analysis Laboratory
Address: 4901 Hawkins NE
Albuquerque, NM 87109
Contact: A. Freeman
Phone: 505-345-3975
PO/SO #: see notes

Sampler's Name: Ranee Deechilly
Sampler's Signature: [signature]

Proj. No.: 725040112424
Project Name: Baca GC A#1A CH

ANALYSIS REQUESTED: 8260 VOCs

Lab use only
Due Date:
1.4 / 0.3 (CF)
Temp. of coolers when received (C°): 1.7
1 | 2 | 3 | 4 | 5
Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
W	4/13/18	1130			W-1			3					1804744-001

NFS

Turn around time ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush SAME DAY

Relinquished by (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	4/13/18	1449	[signature]	4/13/18	1449
[signature]	4/13/18	1900	[signature]	04/14/18	1130
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
PM - Tom Long
Pay Key - CM 22355
Non AFE - N 36112
SAME DAY

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other _____

ENVIRONMENTAL SITE INVESTIGATION / CLOSURE REPORT

Property:

Baca Gas Com A #1A CH
NW 1/4, S28 T26N R10W
San Juan County, New Mexico

October 12, 2018
Apex Project No. 725040112424

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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ENVIRONMENTAL SITE INVESTIGATION / CLOSURE REPORT

Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico

Apex Project No. 725040112424

1.0 INTRODUCTION

1.1 Site Description & Background

The Baca Gas Com A #1A CH 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 26, Township 29 North, Range 10 West, in San Juan County, New Mexico (36.6977342N,107.8574196W). The Site is located on private land. The surrounding properties are private acreages, periodically interrupted by oil and gas production and gathering facilities, including the Enterprise natural gas gathering pipeline ROW which transects the area from approximately north to south.

On March 31, 2018, a release of natural gas was discovered at the Site. During April 2018, corrective action activities were implemented to repair the pipeline and to remediate petroleum hydrocarbon impact resulting from the release. During removal of petroleum hydrocarbon-affected soils, subsurface water was encountered at the base of the excavation. A water sample collected from the open excavation exhibited a benzene concentration above the applicable New Mexico Water Quality Control Commission (WQCC) Groundwater Quality Standard (GQS). Following soil remediation at the Site, the New Mexico Energy, Minerals and Natural Resources (EMNRD) Oil Conservation Division (OCD) requested a groundwater investigation to determine if groundwater is, in fact, adversely affected. Details of the corrective action pertaining to petroleum hydrocarbon-affected soils and the excavation water sample are provided in the *Corrective Action Report – Baca Gas Com A#1A CH* (Apex TITAN, INC. (Apex)) dated July 24,2018.

The Site location is depicted on **Figure 1** of **Appendix A** which was reproduced from a portion of a United States Geological Survey (USGS) 7.5-minute series topographic map. A **Site Vicinity Map**, created from an aerial photograph, is provided as **Figure 2**, a **Site Map** that depicts the soil boring/well locations is included as **Figure 3** (**Appendix A)** and a groundwater gradient map is included as **Figure 4 (Appendix A).**

1.2 Project Objectives

The primary objectives of the environmental site investigation (ESI) was to evaluate the magnitude and extent of dissolved phase constituents of concern (COCs), if present, in the initial groundwater bearing unit at the Site.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address activities related to condensate releases (which were applicable at the time of this release and corrective action), the New Mexico EMNRD OCD utilized the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the New Mexico EMNRD OCD rules in place at that time, specifically New Mexico Administrative Code (NMAC) 19.15.29 *Release Notification*. These guidance documents established investigation and abatement action requirements for sites

subject to reporting and/or corrective action. Additionally, the New Mexico EMNRD OCD utilizes the New Mexico WQCC GQSs (NMAC 20.6.2) to evaluate baseline groundwater conditions.

In accordance with the NMAC 20.6.2 *Groundwater and Surface Water Protection*, closure criteria for groundwater at the Site include:

- 10 micrograms per liter (µg/L) for benzene,
- 750 µg/L for ethylbenzene,
- 750 µg/L for toluene, and
- 620 µg/L for total xylenes.

Soil remediation and closure activities are detailed in the *Corrective Action Report – Baca Gas Com A#1A CH* (Apex) dated July 24,2018.

3.0 SITE INVESTIGATION

3.1 Soil Boring and Temporary Sample Well Installations

During August 2018, a hand auger was utilized to advance a total of five (5) soil borings (TSW-1 through TSW-5) in the immediate vicinity of the release to a maximum total depth of approximately 12 feet below grade surface (bgs) (approximately two (2) feet into the shallow aquifer).

The New Mexico ENMRD OCD did not require additional analytical soil samples as part of the ESI (the soil borings were located within the footprint of the backfilled soil remediation excavation). During completion of each soil boring a trained Apex professional documented the subsurface lithology and constructed a continuous profile of the soil column from the ground surface to the boring terminus. Soil samples from each boring location were visually inspected and classified in the field. Soil samples were observed to document soil lithology, color, moisture content, and visual and olfactory evidence of potential petroleum hydrocarbon impact. A field headspace analysis was conducted on each available soil sample interval by placing the portion of the sample designated for field screening into a plastic Ziploc® bag. The plastic bag was sealed, and the sample allowed to volatilize. The air above the sample, the headspace, was then evaluated using a photoionization detector (PID) capable of detecting volatile organic compounds (VOCs). The PID was calibrated using an isobutylene standard prior to use in the field. Detailed lithologic descriptions and field screening results are presented on the soil boring/temporary sampling well logs which are provided in **Appendix B**.

Subsequent to advancement, the five (5) soil borings were completed as temporary sampling wells. The temporary sampling wells were completed using the following methodology:

- Installation of five (5) feet of one (1) inch inside diameter, 0.010-inch machine slotted poly vinyl chloride (PVC) well screen with a threaded bottom cap;
- Installation of one (1) inch inside diameter, threaded flush joint PVC riser pipe to the ground surface;
- Addition of pre-sieved 10/20 grade annular silica sand pack from the bottom of the soil boring to approximately one (1) foot above the top of the well screen;

The temporary sampling wells were developed by surging and removing groundwater with a disposable bailer until the fluid appeared relatively free of fine-grained sediment.

4.0 GROUNDWATER SAMPLING

4.1 Groundwater Sampling Program

On August 14, 2018, Apex collected groundwater samples for laboratory analysis from the five (5) temporary sampling wells.

Prior to sample collection, Apex gauged the depth to fluids in each of the designated sampling wells using an interface probe capable of detecting non-aqueous phase liquid (NAPL). NAPL was not detected at the temporary sampling well locations.

The temporary sampling wells were purged until effectively dry, utilizing a disposable bailer. Subsequent to the completion of the purging process and the recovery of groundwater to static or near static levels, groundwater samples were collected from each sampling well utilizing the disposable bailer.

The groundwater 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.

Subsequent to the collection of groundwater samples, each of the temporary sampling wells were plugged utilizing hydrated bentonite.

4.2 Groundwater Laboratory Analytical Program

Groundwater samples were analyzed for VOCs utilizing Environmental Protection Agency (EPA) SW-846 Method 8260. Groundwater sample containers were pre-preserved with mercuric chloride ($HgCl_2$).

A summary of the analytes, sample type, and EPA-approved methods is presented in the following table:

Analytes	Sample Type	No. of Samples	EPA Method
VOCs	Groundwater	5	SW-846 8260

Groundwater analytical results are summarized in **Table 1** (**Appendix C**). Due to the extensive list of VOC analytes, **Table 1** includes only results for analytes that exceeded the laboratory practical quantitation limit (PQL).

4.3 Groundwater Flow Direction

Each of the temporary sampling wells was surveyed for relative top-of-casing (TOC) elevations utilizing a self-leveling laser level (grade level). The groundwater flow direction at the Site is primarily to the northwest, with an apparent gradient across the Site of approximately 0.015 feet per foot (ft/ft).

Groundwater measurements collected during the sampling event are presented with relative TOC elevations in **Table 2 (Appendix C).**

4.4 Groundwater Data Evaluation

Apex compared constituent concentrations or laboratory PQLs associated with the groundwater samples collected from the Site temporary sampling wells (TSW-1 through TSW-5) to the New Mexico WQCC *GQSs*.

- The groundwater samples collected from temporary sampling wells TSW-1 and TSW-2 exhibited benzene concentrations of 1.2 µg/L and 1.0 µg/L, respectively, which are below the New Mexico WQCC *GQS* of 10 µg/L. The groundwater samples collected from the remaining temporary sampling wells did not exhibit benzene concentrations above the laboratory PQLs, which are below the New Mexico *WQCC GQS* of 10 µg/L.

- The groundwater samples collected from the temporary sampling wells did not exhibit toluene concentrations above the laboratory PQLs, which are below the New Mexico WQCC *GQS* of 750 µg/L.

- The groundwater sample collected from temporary sampling well TSW-2 exhibited a ethylbenzene concentration of 8.4 µg/L, which is below the New Mexico WQCC *GQS* of 750 µg/L. The groundwater samples collected from the remaining temporary sampling wells did not exhibit ethylbenzene concentrations above the laboratory PQLs, which are below the New Mexico WQCC *GQS* of 750 µg/L.

- The groundwater samples collected from temporary sampling wells TSW-1, TSW-2, and TSW-5 exhibited total xylenes concentrations ranging from 2.5 µg/L (TSW-1) to 120 µg/L (TSW-2), which are below the New Mexico WQCC *GQS* of 620 µg/L. The groundwater samples collected from the remaining temporary sampling wells did not exhibit total xylene concentrations above the laboratory PQLs, which are below the New Mexico WQCC *GQS* of 620 µg/L.

- The groundwater sample collected from temporary sampling wells TSW-2 exhibited 1,2,4 trimethlybenzene, 1,3,5 trimethlybenzene, Isopropylbenzene, and n-Propylbenzene concentrations of 18 µg/L, 12 µg/L, 1.9 µg/L, and 1.1 µg/L respectively, which are not quantified under the New Mexico WQCC *GQSs*. The groundwater samples collected from the remaining temporary sampling wells did not exhibit 1,2,4 trimethlybenzene, 1,3,5 trimethlybenzene, Isopropylbenzene, and n-Propylbenzene concentrations above the laboratory PQLs.

No data qualifier flags were associated with the groundwater analytical results. The results of the water sample analyses are summarized in **Table 1** of **Appendix C**. The executed chain-of-custody forms and laboratory data sheets are provided in **Appendix D**.

5.0 FINDINGS AND RECOMMENDATIONS

During August 2018, Apex performed an ESI at the Site. As part of the investigation activities, five (5) soil borings were advanced utilizing a hand auger and completed as temporary sampling wells (TSW-1 through TSW-5). The primary objectives of the ESI was to evaluate the magnitude and extent of dissolved phase COCs, if present, in the initial groundwater bearing unit at the Site.

- The groundwater samples collected from the temporary sampling wells did not exhibit VOC constituent concentrations above the applicable New Mexico WQCC GQSs.

- Based on field measurements, the groundwater flow direction at the Site is primarily to the northwest, with an approximate gradient of 0.015 ft/ft across the Site.

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

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

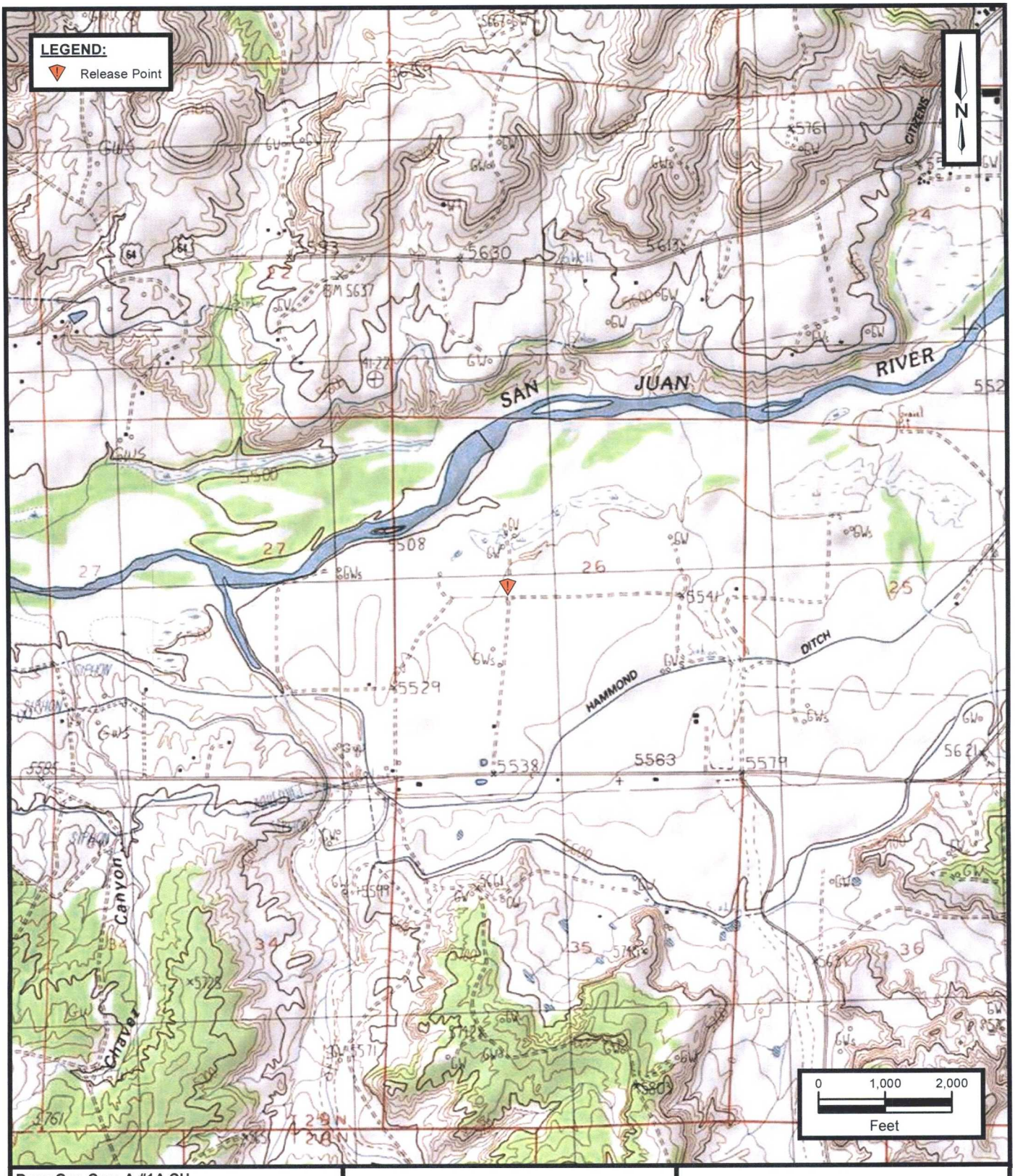
Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work 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



Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

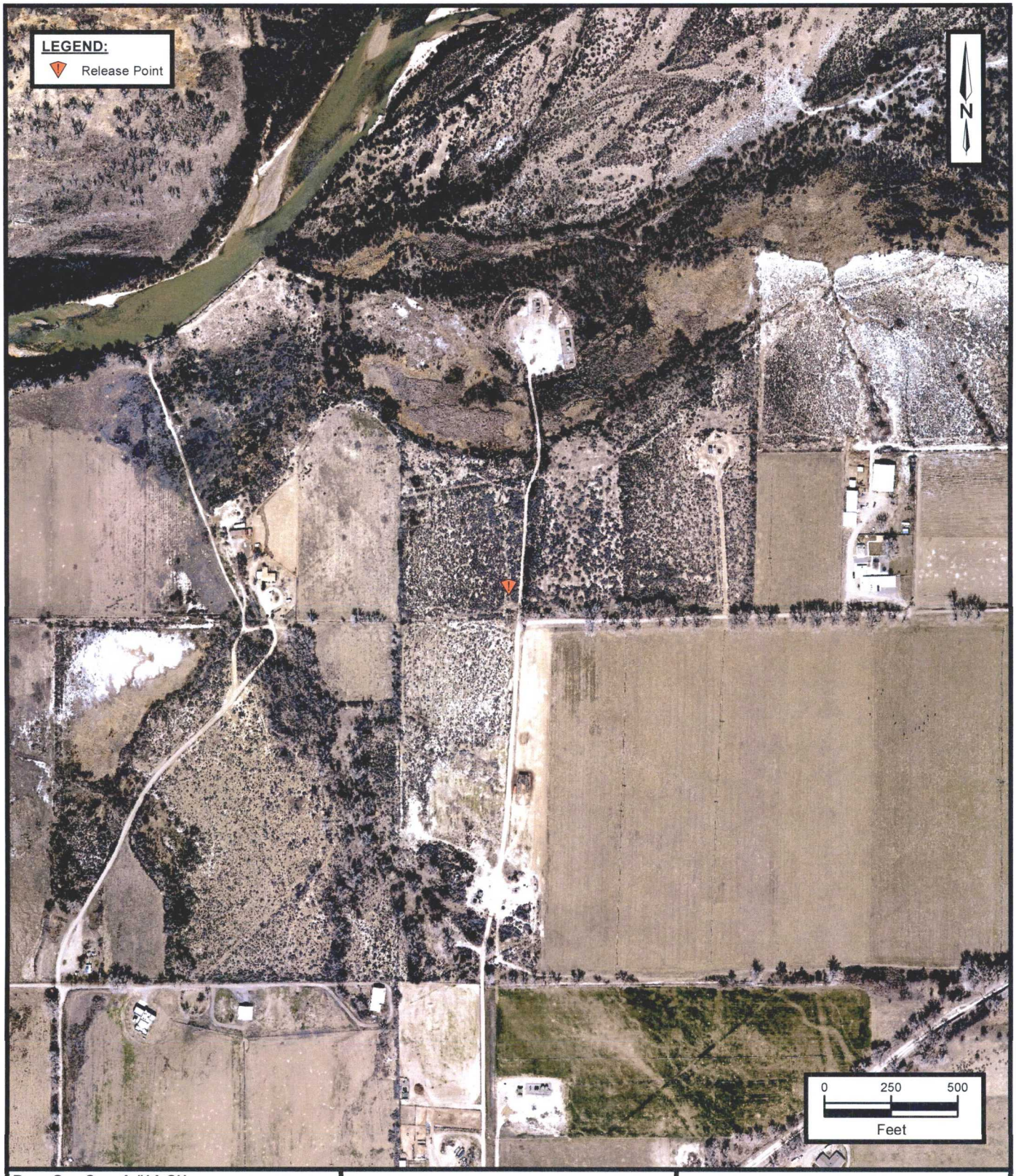
Project No. 725040112424

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 1

Topographic Map

Z:\Dallas South\Drafting\2016\725040112424\Figure 1.mxd Modified 4/26/2018 by jsimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
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36.6977342 N, 107.8574196 W

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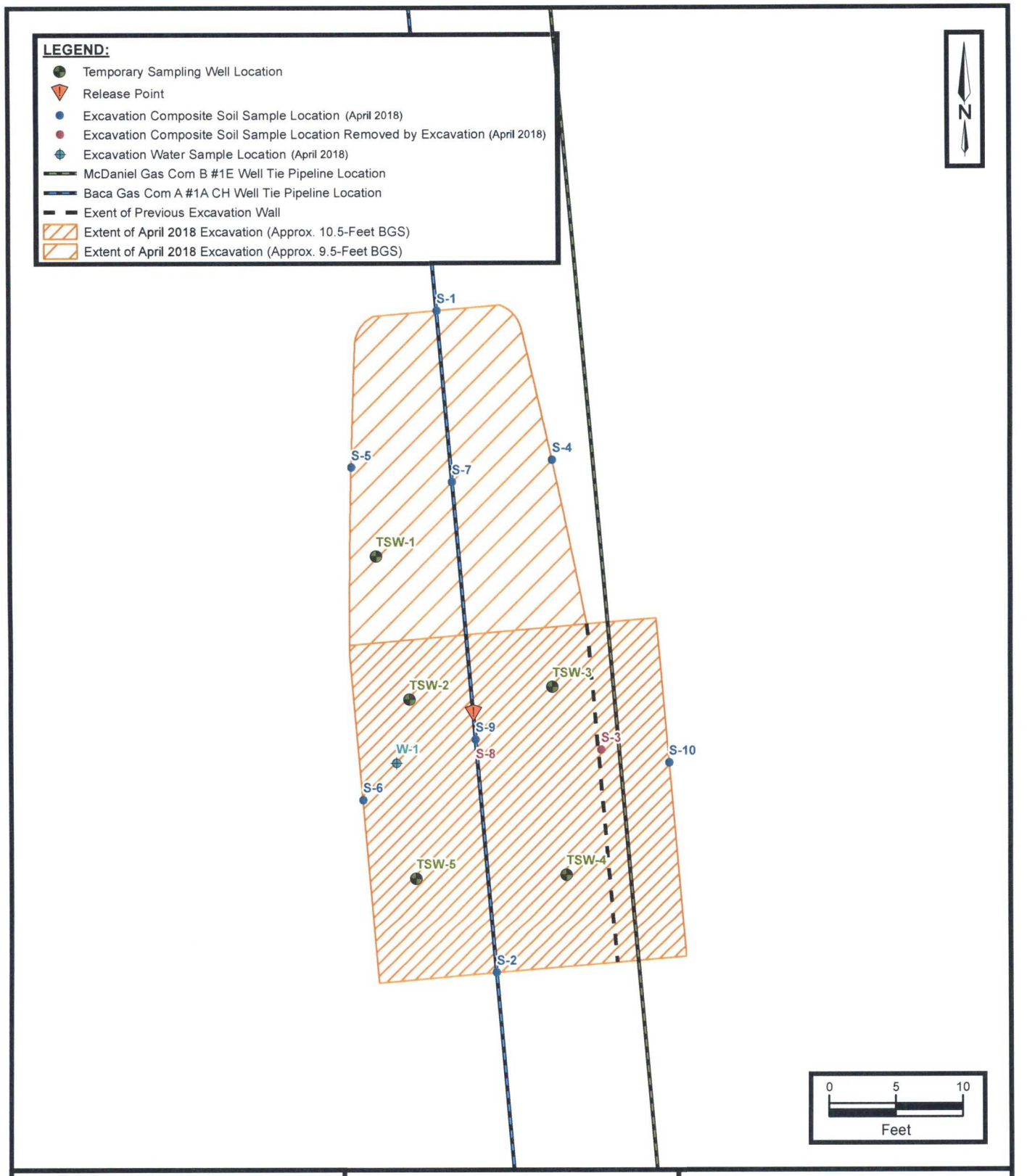
FIGURE 2

Site Vicinity Map

Service Layer Credits:
Esri, HERE, Garmin, © OpenStreetMap contributors, Aerial Photograph 2017

Z:\Dallas South\Drafting\2016\725040112424\Figure 2.mxd Modified 4/26/2018 by jsimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

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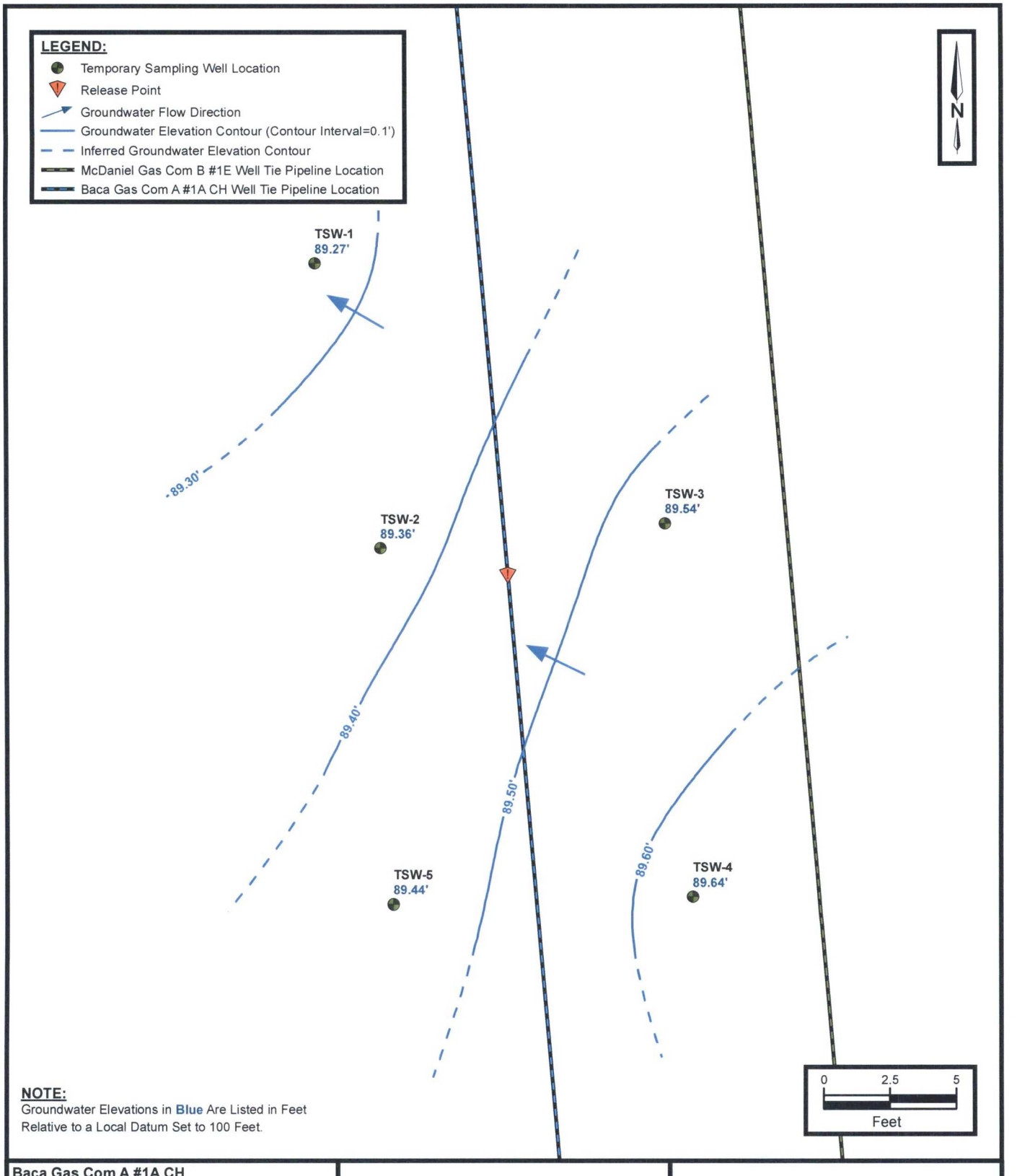
FIGURE 3

Site Map

Q:\Projects\725040112424\Figure 3.mxd Modified 8/30/2018 by JSimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

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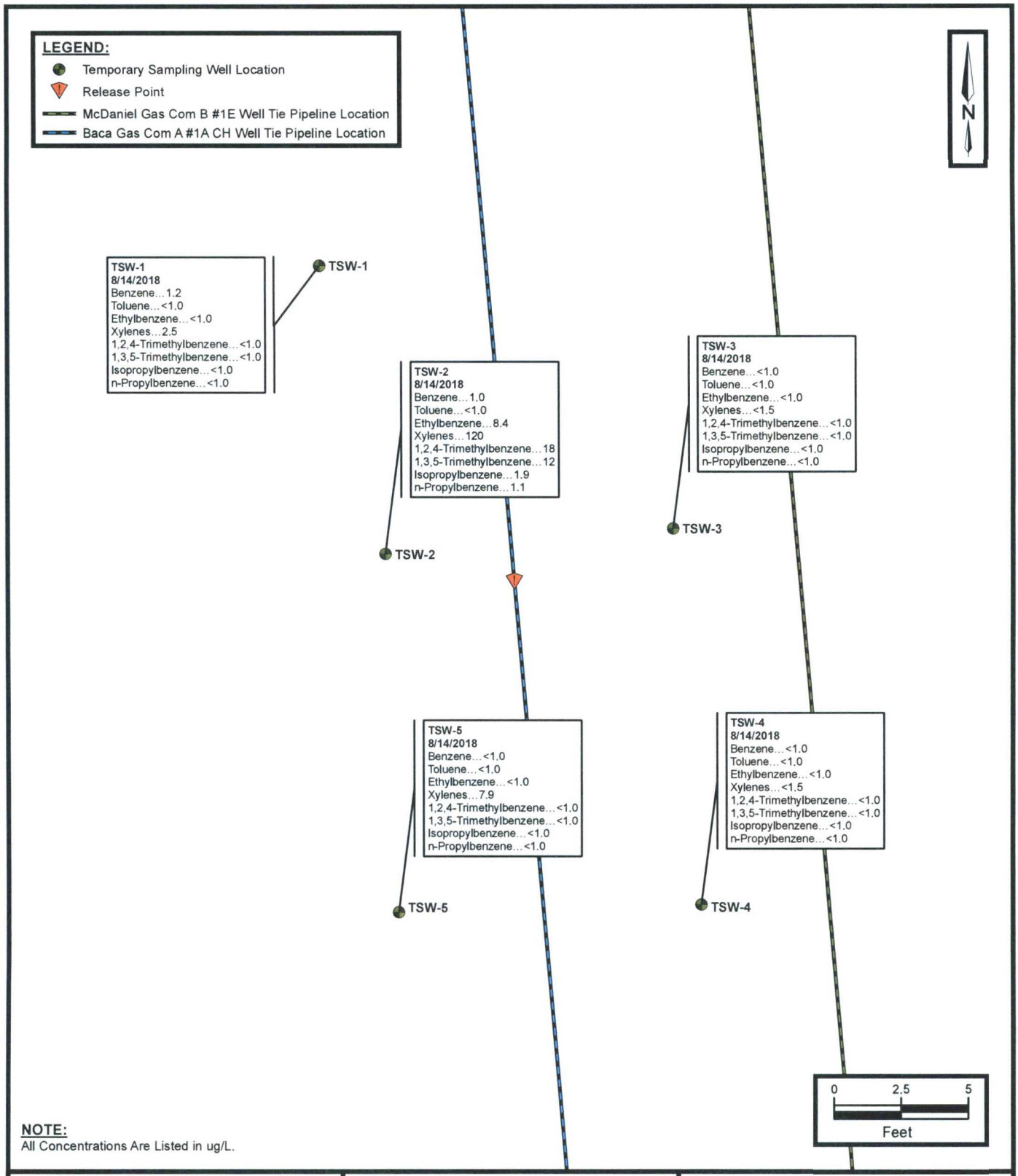
FIGURE 4

Groundwater Gradient Map
August 2018

Q:\Projects\725040112424\Figure 4.mxd Modified 9/5/2018 by JC Simpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System



NOTE:
All Concentrations Are Listed in ug/L.

Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Apex TITAN, Inc.
606 South Rio Grande, Suite A
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FIGURE 5

Groundwater Analytical Results
August 2018

Q:\Projects\725040112424\Figure 5.mxd Modified 8/31/2018 by JSimpson NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US Coordinate System

APPENDIX B

Soil Boring/Temporary Sampling Well Logs

Apex TITAN, Inc.
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Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Soil Boring/Monitoring Well

TSW-1

Date Sampled:	8/6/2018	Ground Surface Elevation:	N/A	Borehole Diameter:	2"
Drilled by:	N/A	Top of Casing Elevation:	N/A	Casing Diameter:	1"
Driller:	N/A	North Coordinate:	N/A	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	N/A	Surface Completion:	Temp/Plugged
Sampler:	N/A	Bench Mark Elevation:	N/A	Boring Method:	Hand Auger
Project Manager:	K. Summers	Groundwater Depth Observed During Drilling:	▽		

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0				-			BACKFILL, Silty Sand	Hydrated Bentonite Backfill
2.5				-				
5				-				
7.5				-				
10			100%	1.5	8/6/2018 ▽		SILTY CLAY Transitiong to Sand, Dark Yellowish Brown, Moist, No Odor	
				0.9			SAND, Dark Yellowish Brown, Wet, No Odor	
				0.0			SANDY SILTY CLAY, Dark Yellowish Brown, Wet, No Odor	-12'
12.5							Bottom of Boring at 12 Feet BGS	
15								
17.5								
20								
22.5								
25								

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Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Soil Boring/Monitoring Well

TSW-2

Date Sampled:	8/6/2018
Drilled by:	N/A
Driller:	N/A
Logged by:	R. Deechilly
Sampler:	N/A
Project Manager:	K. Summers

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:	2"
Casing Diameter:	1"
Well Materials:	0.010" SCH40 PVC
Surface Completion:	Temp/Plugged
Boring Method:	Hand Auger

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0				-			BACKFILL, Silty Sand	Hydrated Bentonite Backfill
2.5				-				
5				-				
7.5				-				
10				-				
				-				
				-				
				0.8	8/6/2018 ▽			
			100%	0.2			SILTY SAND, Dark Yellowish Brown, Fine to Medium Grained, Wet, No Odor	
				0.1			SAND, Dark Yellowish Brown, Fine to Medium Grained, Wet to Saturated at 12 Feet BGS, No Odor	-12'
12.5							Bottom of Boring at 12 Feet BGS	
15								
17.5								
20								
22.5								
25								

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Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Soil Boring/Monitoring Well

TSW-3

Date Sampled:	8/6/2018	Ground Surface Elevation:	N/A	Borehole Diameter:	2"
Drilled by:	N/A	Top of Casing Elevation:	N/A	Casing Diameter:	1"
Driller:	N/A	North Coordinate:	N/A	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	N/A	Surface Completion:	Temp/Plugged
Sampler:	N/A	Bench Mark Elevation:	N/A	Boring Method:	Hand Auger
Project Manager:	K. Summers	Groundwater Depth Observed During Drilling:	▽		

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0								
2.5				-			BACKFILL, Silty Sand	Hydrated Bentonite Backfill
5				-				
7.5				-				
10				-				
				-				
				-				
				-				
				-				
				0.3	8/6/2018 ▽			
			100%	0.0			SILTY SAND, Dark Yellowish Brown, Wet to Saturated, No Odor	
				0.0			SANDY SILTY CLAY, Dark Yellowish Brown, Transitioning to Silty Clay, Wet to Saturated, No Odor	-12'
12.5							Bottom of Boring at 12 Feet BGS	
15								
17.5								
20								
22.5								
25								

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

Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Soil Boring/Monitoring Well

TSW-4

Date Sampled:	8/6/2018	Ground Surface Elevation:	N/A	Borehole Diameter:	2"
Drilled by:	N/A	Top of Casing Elevation:	N/A	Casing Diameter:	1"
Driller:	N/A	North Coordinate:	N/A	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	N/A	Surface Completion:	Temp/Plugged
Sampler:	N/A	Bench Mark Elevation:	N/A	Boring Method:	Hand Auger
Project Manager:	K. Summers	Groundwater Depth Observed During Drilling:	▽		

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0				-			BACKFILL, Silty Sand	Hydrated Bentonite Backfill
2.5				-				
5				-				
7.5				-				
10				-				
				-				
				-				
				-				
				2.7	8/6/2018 ▽			
			100%	28			SILTY SAND, Dark Yellowish Brown, Wet, No Odor	
				3.2			SANDY SILTY CLAY, Dark Yellowish Brown, Wet to Saturated at 12 Feet BGS, No Odor	-12'
12.5							Bottom of Boring at 12 Feet BGS	
15								
17.5								
20								
22.5								
25								

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Baca Gas Com A #1A CH
NW 1/4, S26 T29N R10W
San Juan County, New Mexico
36.6977342 N, 107.8574196 W

Project No. 725040112424

Soil Boring/Monitoring Well

TSW-5

Date Sampled:	8/6/2018	Ground Surface Elevation:	N/A	Borehole Diameter:	2"
Drilled by:	N/A	Top of Casing Elevation:	N/A	Casing Diameter:	1"
Driller:	N/A	North Coordinate:	N/A	Well Materials:	0.010" SCH40 PVC
Logged by:	R. Deechilly	West Coordinate:	N/A	Surface Completion:	Temp/Plugged
Sampler:	N/A	Bench Mark Elevation:	N/A	Boring Method:	Hand Auger
Project Manager:	K. Summers	Groundwater Depth Observed During Drilling:	▽		

Depth (Feet BGS)	Sample Interval	Sample ID	Recovery (%)	PID Value (ppm)	Groundwater Elevation	Geologic Symbol	Geologic Description	Boring/Well Completion (Graphic Depiction)
0				-			BACKFILL, Silty Sand	Hydrated Bentonite Backfill
2.5				-				
5				-				
7.5				-				
10				0.4	8/6/2018 ▽			
				0.0			SILTY SAND, Dark Yellowish Brown, Wet, No Odor	
			100%	0.0			SANDY SILTY CLAY, Dark Yellowish Brown, Wet to Saturated at 12 Feet BGS, No Odor	-12'
12.5							Bottom of Boring at 12 Feet BGS	
15								
17.5								
20								
22.5								
25								

APPENDIX C

Tables

TABLE 1
Baca Gas Com A #1A CH
WATER ANALYTICAL SUMMARY- Volatile Organic Compounds

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Isopropylbenzene (µg/L)	n-Propylbenzene (µg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		**10**	**750**	**750**	**620**	**NE**	**NE**	**NE**	**NE**
Excavation Water Sample									
W-1	04.13.18	**27**	10	8.2	100	17	7.8	<2.0	<2.0
Temporary Monitoring Wells Installed by Apex									
TSW-1	8.14.18	1.2	<1.0	<1.0	2.5	<1.0	<1.0	<1.0	<1.0
TSW-2	8.14.18	1.0	<1.0	8.4	120	18	12	1.9	1.1
TSW-3	8.14.18	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<1.0
TSW-4	8.14.18	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<1.0
TSW-5	8.14.18	<1.0	<1.0	<1.0	7.9	<1.0	<1.0	<1.0	<1.0

Note: Concentrations in **bold** and yellow exceed the applicable NM WQCC GQS

Note: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Isopropylbenzene, and n-Propylbenzene are not priority pollutants under the federal Clean Water Act (CWA) or the NM WQCC.

µg/L = micrograms per liter

NA = Not Analyzed

NE = Not Established

TABLE 2
Baca Gas Com A #1A Pipeline Release
GROUNDWATER ELEVATIONS

Well I.D.	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Product Thickness (feet)	Relative TOC Elevations (feet)	Relative Groundwater Elevation (feet)
TSW-1	8.14.18	ND	10.82	ND	100.09	89.27
TSW-2	8.14.18	ND	10.85	ND	100.21	89.36
TSW-3	8.14.18	ND	10.76	ND	100.295	89.54
TSW-4	8.14.18	ND	10.65	ND	100.285	89.64
TSW-5*	8.14.18	ND	10.56	ND	100.00	89.44

* = TSW-5 top of casing was set as an arbitrary datum (100.00')

BTOC - below top of casing

TOC - top of casing

ND - Not Detected

APPENDIX D

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 23, 2018

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

RE: Baca Gas Com A 1A OrderNo.: 1808974

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/15/2018 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued August 17, 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-1
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:00:00 AM
Lab ID: 1808974-001
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	1.2	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Toluene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Ethylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Naphthalene	ND	2.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1-Methylnaphthalene	ND	4.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
2-Methylnaphthalene	ND	4.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Acetone	ND	10		µg/L	1	8/21/2018 8:33:31 PM	W53606
Bromobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Bromodichloromethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Bromoform	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Bromomethane	ND	3.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
2-Butanone	ND	10		µg/L	1	8/21/2018 8:33:31 PM	W53606
Carbon disulfide	ND	10		µg/L	1	8/21/2018 8:33:31 PM	W53606
Carbon Tetrachloride	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Chlorobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Chloroethane	ND	2.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Chloroform	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Chloromethane	ND	3.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
2-Chlorotoluene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
4-Chlorotoluene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
cis-1,2-DCE	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Dibromochloromethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Dibromomethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,1-Dichloroethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,1-Dichloroethene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2-Dichloropropane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,3-Dichloropropane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
2,2-Dichloropropane	ND	2.0		µg/L	1	8/21/2018 8:33:31 PM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Project: Baca Gas Com A 1A
Lab ID: 1808974-001
Matrix: AQUEOUS
Client Sample ID: TSW-1
Collection Date: 8/14/2018 9:00:00 AM
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Hexachlorobutadiene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
2-Hexanone	ND	10		µg/L	1	8/21/2018 8:33:31 PM	W53606
Isopropylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
4-Isopropyltoluene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
4-Methyl-2-pentanone	ND	10		µg/L	1	8/21/2018 8:33:31 PM	W53606
Methylene Chloride	ND	3.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
n-Butylbenzene	ND	3.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
n-Propylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
sec-Butylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Styrene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
tert-Butylbenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
trans-1,2-DCE	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Trichlorofluoromethane	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Vinyl chloride	ND	1.0		µg/L	1	8/21/2018 8:33:31 PM	W53606
Xylenes, Total	2.5	1.5		µg/L	1	8/21/2018 8:33:31 PM	W53606
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	8/21/2018 8:33:31 PM	W53606
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	8/21/2018 8:33:31 PM	W53606
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/21/2018 8:33:31 PM	W53606
Surr: Toluene-d8	99.2	70-130		%Rec	1	8/21/2018 8:33:31 PM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-2
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:10:00 AM
Lab ID: 1808974-002
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	1.0	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Toluene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Ethylbenzene	8.4	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2,4-Trimethylbenzene	18	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,3,5-Trimethylbenzene	12	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Naphthalene	ND	2.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
2-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Acetone	ND	10		µg/L	1	8/22/2018 1:40:57 PM	W53638
Bromobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Bromodichloromethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Bromoform	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Bromomethane	ND	3.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
2-Butanone	ND	10		µg/L	1	8/22/2018 1:40:57 PM	W53638
Carbon disulfide	ND	10		µg/L	1	8/22/2018 1:40:57 PM	W53638
Carbon Tetrachloride	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Chlorobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Chloroethane	ND	2.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Chloroform	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Chloromethane	ND	3.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
2-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
4-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
cis-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Dibromochloromethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Dibromomethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,1-Dichloroethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,1-Dichloroethene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,3-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
2,2-Dichloropropane	ND	2.0		µg/L	1	8/22/2018 1:40:57 PM	W53638

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-2
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:10:00 AM
Lab ID: 1808974-002
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Hexachlorobutadiene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
2-Hexanone	ND	10		µg/L	1	8/22/2018 1:40:57 PM	W53638
Isopropylbenzene	1.9	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
4-Isopropyltoluene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
4-Methyl-2-pentanone	ND	10		µg/L	1	8/22/2018 1:40:57 PM	W53638
Methylene Chloride	ND	3.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
n-Butylbenzene	ND	3.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
n-Propylbenzene	1.1	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
sec-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Styrene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
tert-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
trans-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Trichlorofluoromethane	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Vinyl chloride	ND	1.0		µg/L	1	8/22/2018 1:40:57 PM	W53638
Xylenes, Total	120	1.5		µg/L	1	8/22/2018 1:40:57 PM	W53638
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	8/22/2018 1:40:57 PM	W53638
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	8/22/2018 1:40:57 PM	W53638
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/22/2018 1:40:57 PM	W53638
Surr: Toluene-d8	99.3	70-130		%Rec	1	8/22/2018 1:40:57 PM	W53638

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Project: Baca Gas Com A 1A
Lab ID: 1808974-003 **Matrix:** AQUEOUS

Client Sample ID: TSW-3
Collection Date: 8/14/2018 9:20:00 AM
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Toluene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Ethylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Naphthalene	ND	2.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
2-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Acetone	ND	10		µg/L	1	8/22/2018 3:49:57 AM	W53606
Bromobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Bromodichloromethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Bromoform	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Bromomethane	ND	3.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
2-Butanone	ND	10		µg/L	1	8/22/2018 3:49:57 AM	W53606
Carbon disulfide	ND	10		µg/L	1	8/22/2018 3:49:57 AM	W53606
Carbon Tetrachloride	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Chlorobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Chloroethane	ND	2.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Chloroform	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Chloromethane	ND	3.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
2-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
4-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
cis-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Dibromochloromethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Dibromomethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,1-Dichloroethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,1-Dichloroethene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,3-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
2,2-Dichloropropane	ND	2.0		µg/L	1	8/22/2018 3:49:57 AM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-3
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:20:00 AM
Lab ID: 1808974-003
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Hexachlorobutadiene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
2-Hexanone	ND	10		µg/L	1	8/22/2018 3:49:57 AM	W53606
Isopropylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
4-Isopropyltoluene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
4-Methyl-2-pentanone	ND	10		µg/L	1	8/22/2018 3:49:57 AM	W53606
Methylene Chloride	ND	3.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
n-Butylbenzene	ND	3.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
n-Propylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
sec-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Styrene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
tert-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
trans-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Trichlorofluoromethane	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Vinyl chloride	ND	1.0		µg/L	1	8/22/2018 3:49:57 AM	W53606
Xylenes, Total	ND	1.5		µg/L	1	8/22/2018 3:49:57 AM	W53606
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	8/22/2018 3:49:57 AM	W53606
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/22/2018 3:49:57 AM	W53606
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	8/22/2018 3:49:57 AM	W53606
Surr: Toluene-d8	97.6	70-130		%Rec	1	8/22/2018 3:49:57 AM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-4
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:30:00 AM
Lab ID: 1808974-004
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Toluene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Ethylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Naphthalene	ND	2.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
2-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Acetone	ND	10		µg/L	1	8/22/2018 4:18:56 AM	W53606
Bromobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Bromodichloromethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Bromoform	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Bromomethane	ND	3.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
2-Butanone	ND	10		µg/L	1	8/22/2018 4:18:56 AM	W53606
Carbon disulfide	ND	10		µg/L	1	8/22/2018 4:18:56 AM	W53606
Carbon Tetrachloride	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Chlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Chloroethane	ND	2.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Chloroform	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Chloromethane	ND	3.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
2-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
4-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
cis-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Dibromochloromethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Dibromomethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,1-Dichloroethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,1-Dichloroethene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,3-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
2,2-Dichloropropane	ND	2.0		µg/L	1	8/22/2018 4:18:56 AM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-4
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:30:00 AM
Lab ID: 1808974-004
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Hexachlorobutadiene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
2-Hexanone	ND	10		µg/L	1	8/22/2018 4:18:56 AM	W53606
Isopropylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
4-Isopropyltoluene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
4-Methyl-2-pentanone	ND	10		µg/L	1	8/22/2018 4:18:56 AM	W53606
Methylene Chloride	ND	3.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
n-Butylbenzene	ND	3.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
n-Propylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
sec-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Styrene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
tert-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
trans-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Trichlorofluoromethane	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Vinyl chloride	ND	1.0		µg/L	1	8/22/2018 4:18:56 AM	W53606
Xylenes, Total	ND	1.5		µg/L	1	8/22/2018 4:18:56 AM	W53606
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	8/22/2018 4:18:56 AM	W53606
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	8/22/2018 4:18:56 AM	W53606
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/22/2018 4:18:56 AM	W53606
Surr: Toluene-d8	99.6	70-130		%Rec	1	8/22/2018 4:18:56 AM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-5
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:40:00 AM
Lab ID: 1808974-005
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Toluene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Ethylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Naphthalene	ND	2.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
2-Methylnaphthalene	ND	4.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Acetone	ND	10		µg/L	1	8/22/2018 4:48:08 AM	W53606
Bromobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Bromodichloromethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Bromoform	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Bromomethane	ND	3.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
2-Butanone	ND	10		µg/L	1	8/22/2018 4:48:08 AM	W53606
Carbon disulfide	ND	10		µg/L	1	8/22/2018 4:48:08 AM	W53606
Carbon Tetrachloride	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Chlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Chloroethane	ND	2.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Chloroform	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Chloromethane	ND	3.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
2-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
4-Chlorotoluene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
cis-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Dibromochloromethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Dibromomethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,1-Dichloroethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,1-Dichloroethene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,3-Dichloropropane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
2,2-Dichloropropane	ND	2.0		µg/L	1	8/22/2018 4:48:08 AM	W53606

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: APEX TITAN
Client Sample ID: TSW-5
Project: Baca Gas Com A 1A
Collection Date: 8/14/2018 9:40:00 AM
Lab ID: 1808974-005
Matrix: AQUEOUS
Received Date: 8/15/2018 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Hexachlorobutadiene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
2-Hexanone	ND	10		µg/L	1	8/22/2018 4:48:08 AM	W53606
Isopropylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
4-Isopropyltoluene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
4-Methyl-2-pentanone	ND	10		µg/L	1	8/22/2018 4:48:08 AM	W53606
Methylene Chloride	ND	3.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
n-Butylbenzene	ND	3.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
n-Propylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
sec-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Styrene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
tert-Butylbenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
trans-1,2-DCE	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Trichlorofluoromethane	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Vinyl chloride	ND	1.0		µg/L	1	8/22/2018 4:48:08 AM	W53606
Xylenes, Total	7.9	1.5		µg/L	1	8/22/2018 4:48:08 AM	W53606
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	8/22/2018 4:48:08 AM	W53606
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	8/22/2018 4:48:08 AM	W53606
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/22/2018 4:48:08 AM	W53606
Surr: Toluene-d8	101	70-130		%Rec	1	8/22/2018 4:48:08 AM	W53606

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808974**

23-Aug-18

Client: APEX TITAN

Project: Baca Gas Com A 1A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **W53606**	RunNo: **53606**
Prep Date:	Analysis Date: **8/21/2018**	SeqNo: **1767669** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808974**

23-Aug-18

Client: APEX TITAN
Project: Baca Gas Com A 1A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **W53606**	RunNo: **53606**
Prep Date:	Analysis Date: **8/21/2018**	SeqNo: **1767669** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **W53606**	RunNo: **53606**
Prep Date:	Analysis Date: **8/21/2018**	SeqNo: **1767675** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.9	70	130			
Toluene	19	1.0	20.00	0	95.5	70	130			
Chlorobenzene	19	1.0	20.00	0	96.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808974**

23-Aug-18

Client: APEX TITAN

Project: Baca Gas Com A 1A

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **W53606**	RunNo: **53606**
Prep Date:	Analysis Date: **8/21/2018**	SeqNo: **1767675** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20	1.0	20.00	0	102	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	99.1	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID **1808974-001a ms**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **TSW-1**	Batch ID: **W53606**	RunNo: **53606**
Prep Date:	Analysis Date: **8/21/2018**	SeqNo: **1767689** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	1.207	102	60.5	137			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	119	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.8		10.00		98.0	70	130			

Sample ID **1808974-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **TSW-1**	Batch ID: **W53606**	RunNo: **53606**
Prep Date:	Analysis Date: **8/21/2018**	SeqNo: **1767690** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	1.207	97.2	60.5	137	4.44	20	
Toluene	20	1.0	20.00	0	97.8	70	130	3.99	20	
Chlorobenzene	20	1.0	20.00	0	99.1	70	130	2.67	20	
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130	5.23	20	
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130	3.95	20	
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130	0	0	
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.4	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808974**

23-Aug-18

Client: APEX TITAN

Project: Baca Gas Com A 1A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **W53638**	RunNo: **53638**
Prep Date:	Analysis Date: **8/22/2018**	SeqNo: **1768879** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808974**

23-Aug-18

Client: APEX TITAN

Project: Baca Gas Com A 1A

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **W53638**	RunNo: **53638**
Prep Date:	Analysis Date: **8/22/2018**	SeqNo: **1768879** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **W53638**	RunNo: **53638**
Prep Date:	Analysis Date: **8/22/2018**	SeqNo: **1768880** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	98.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1808974**

23-Aug-18

Client: APEX TITAN

Project: Baca Gas Com A 1A

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **W53638**	RunNo: **53638**
Prep Date:	Analysis Date: **8/22/2018**	SeqNo: **1768880** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	109	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.9	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 1808974 | RcptNo: 1

Received By: Anne Thorne 8/15/2018 6:30:00 AM

Completed By: Ashley Gallegos 8/15/2018 2:38:35 PM

Reviewed By: ENM 8/16/18

labeled by: JAB 08/16/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° 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 VOA Vials ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: JAB 08/16/18

Special Handling (if applicable)

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

Person Notified: ____ Date: ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

CHAIN OF CUSTODY RECORD

APEX

Office Location 606 S Rio Grande Suit A Aztec NM 87410

Project Manager K Summers

Laboratory: Hall Environmental Lab

Address: 4901 Hawkins NE Albuquerque NM 87107

Contact: A. Freeman

Phone: 505-345-3975

PO/SO #:

Sampler's Name: Chad Hamm

Sampler's Signature:

Proj. No. 72504011418

Project Name: Baca Gas Com A #1A

No/Type of Containers

ANALYSIS REQUESTED

BTEX 8021

Lab use only

Due Date:

Temp. of coolers when received (C°): 1.0

1 2 3 4 5

Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Li	250 ml	Glass Jar	P/O	Lab Sample ID (Lab Use Only)
W	8/14/18	900			TSW-1			3					X 1808974-001
W	8/14/18	910			TSW-2			3					X -002
W	8/14/18	920			TSW-3			3					X -003
W	8/14/18	930			TSW-4			3					X -004
W	8/14/18	940			TSW-5			3					X -005

Turn around time ☐ Normal ☐ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	8-14-18	1343		8/14/18	1344
	8/14/18	1352		8/14/18	1352
	8/14/18	1754		08/15/18	0630

NOTES:

~~Bill to Apex~~ Bill Tom Luna Enterprise #N36112

(Corp Rate)

Per Kyle change to 8260 full list 8/21

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil

Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other