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
NOV 13 2018
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**	

Location of Release Source

PCS 1812057508

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**

Accepted for Record.
Sent Email to operator.

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."

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: 11/13/18

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: Incomplete No Soil DATA Accepted for Records. Date:

Printed Name: Title:

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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LIST OF APPENDICES

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

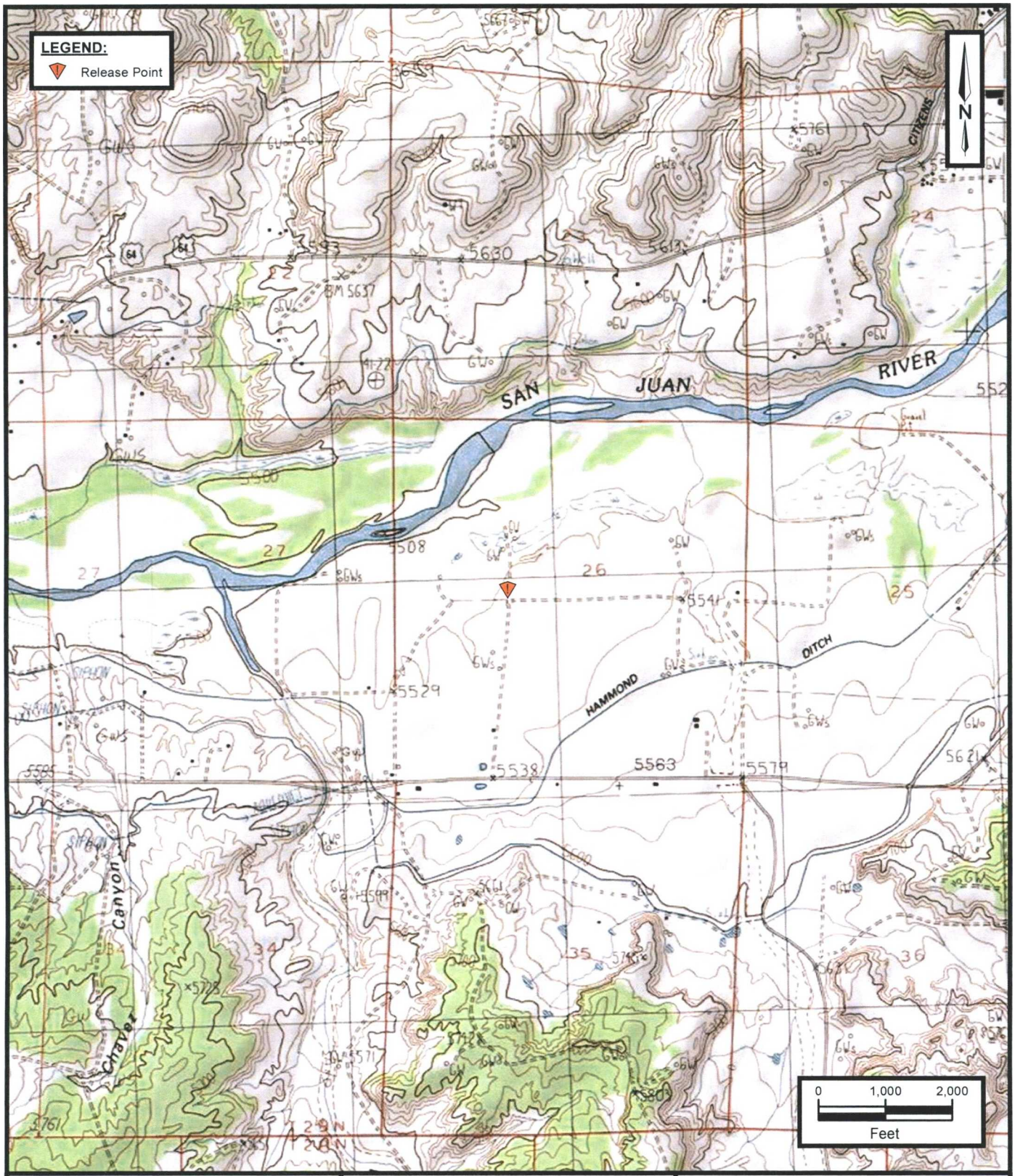
Apex's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work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

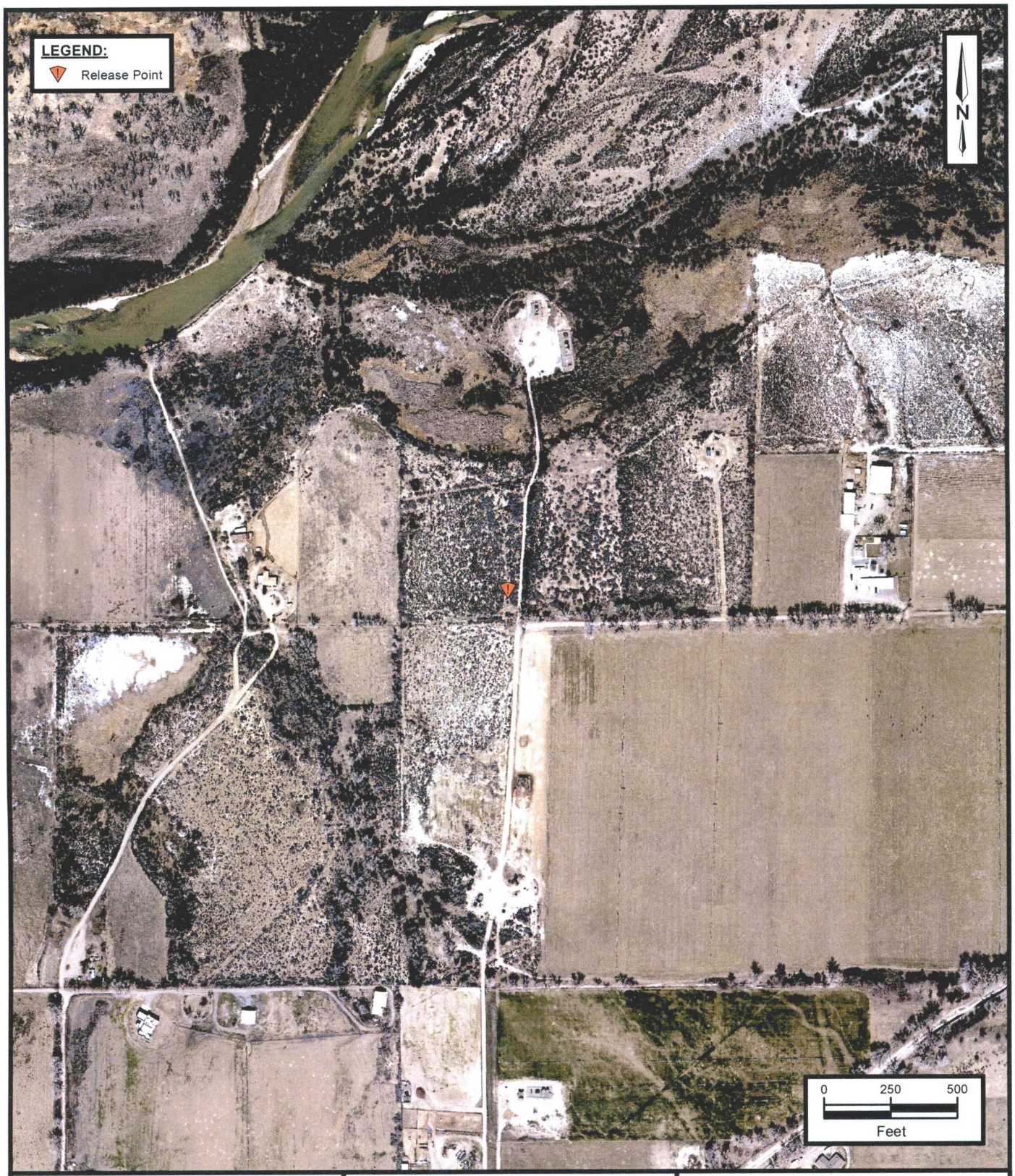
Project No. 725040112424

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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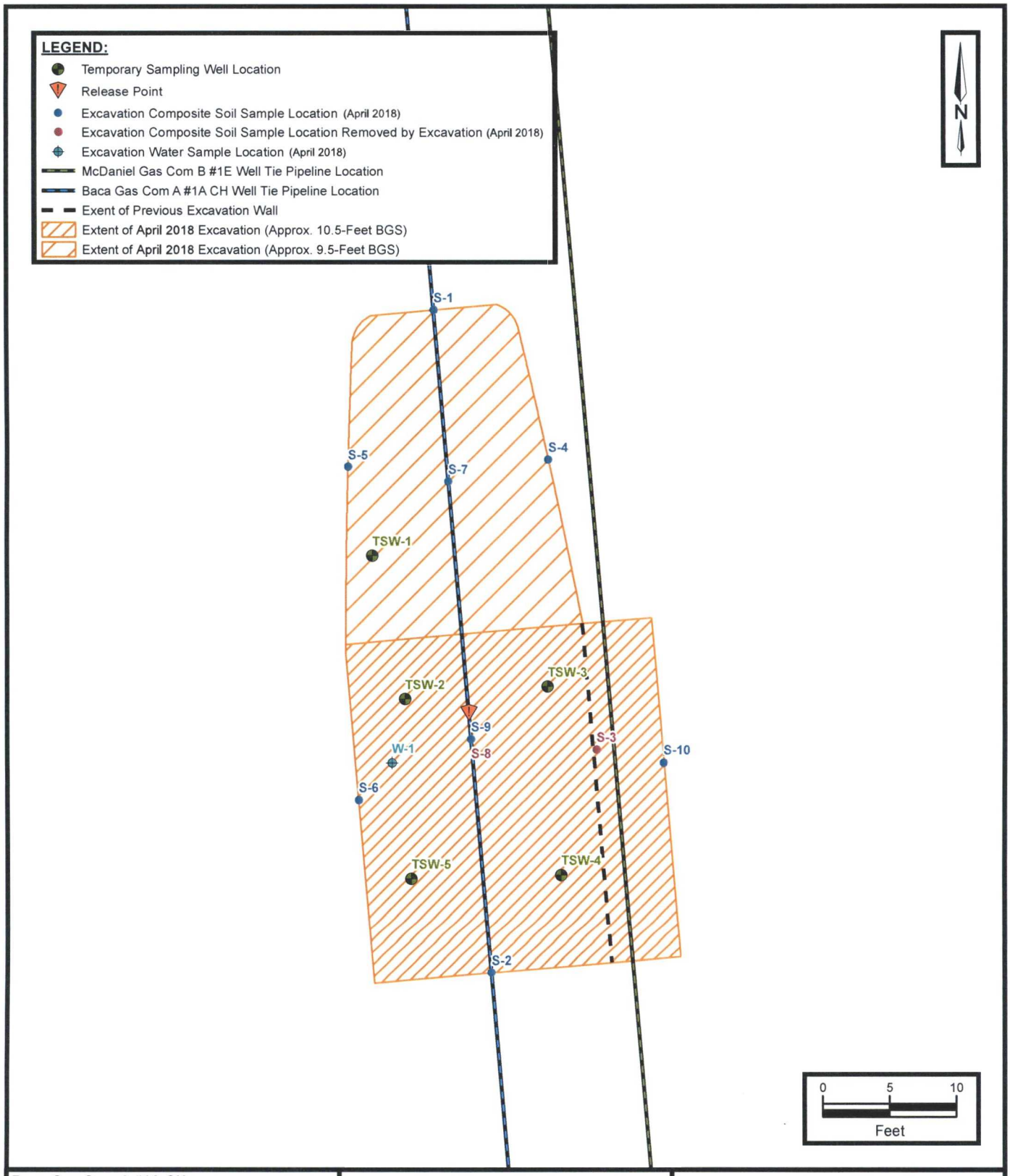
FIGURE 2

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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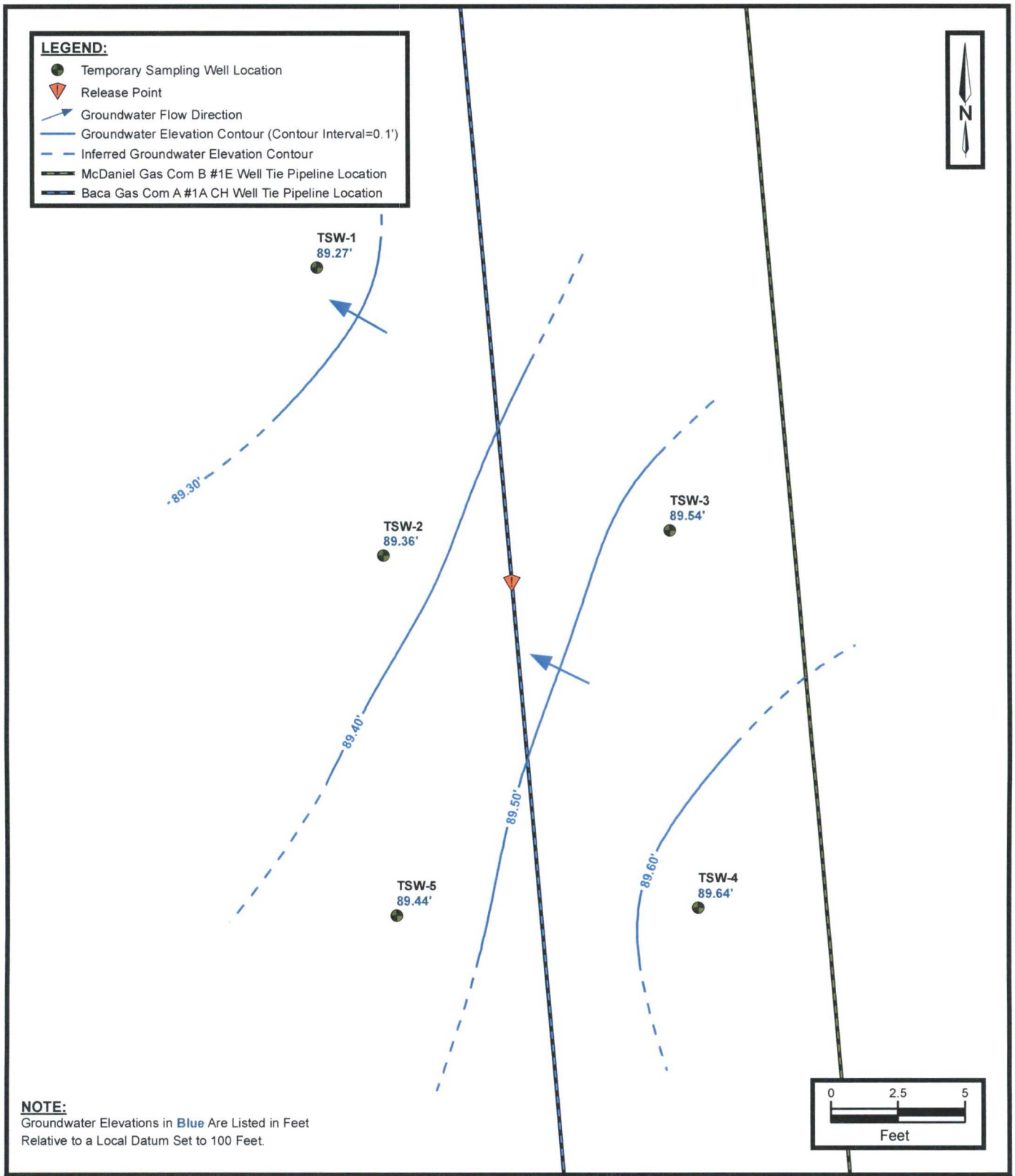
FIGURE 3

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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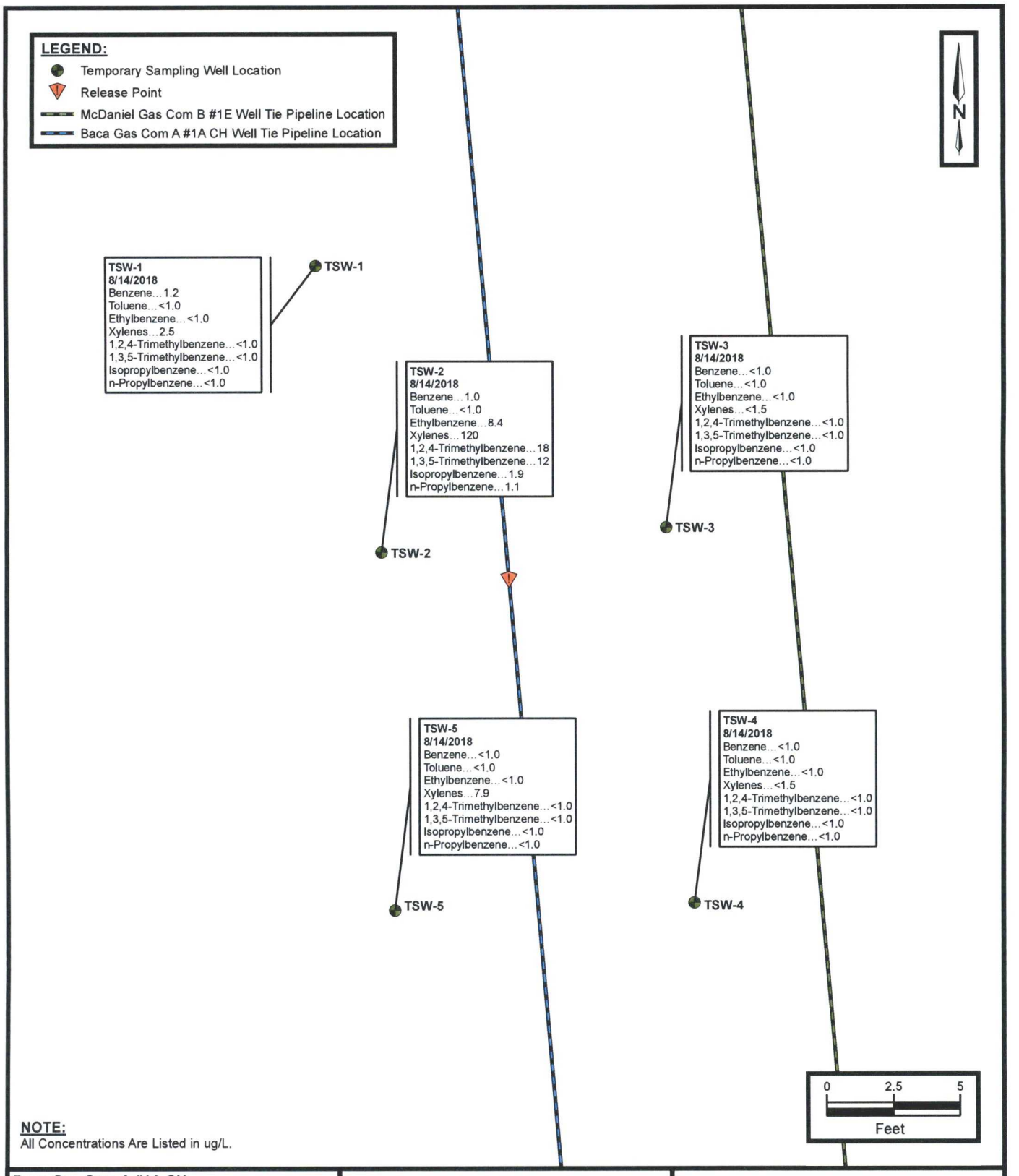
FIGURE 4

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

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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%	-	8/6/2018 ▽		SILTY CLAY Transitiong to Sand, Dark Yellowish Brown, Moist, No Odor	
				1.5			SAND, Dark Yellowish Brown, Wet, No Odor	
				0.9			SANDY SILTY CLAY, Dark Yellowish Brown, Wet, No Odor	
12.5				0.0			Bottom of Boring at 12 Feet BGS	-12'
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	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				0.8	8/6/2018 ▽			
				0.2			SILTY SAND, Dark Yellowish Brown, Fine to Medium Grained, Wet, No Odor	
			100%	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								

Q:\Projects\725040112424\Boring Logs.dwg Modified 10/8/2018 by jsimpson

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-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				-			BACKFILL, Silty Sand	Hydrated Bentonite Backfill
2.5				-				
				-				
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								

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

APEX

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
Project: Baca Gas Com A 1A
Lab ID: 1808974-005 **Matrix:** AQUEOUS

Client Sample ID: TSW-5
Collection Date: 8/14/2018 9:40:00 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	8/22/2018 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								
l yl 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. Fleeman

Phone: 505-345-3975

PO/SO #:

Sampler's Name: Chad Hamm

Sampler's Signature:

Proj. No. 72504012418

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

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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
Christa Waters	8/14/18	1754		08/15/18	0630

NOTES:

~~Bill to Apex~~ Bill Tom Lung 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