Review of 2020 Annual GW Monitoring Report: Content satisfactory

1. OCD requires the following based on the 2020 Annual GW Monitoring Report.

a. Continue the groundwater monitoring program on an annual basis
b. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022

2020 ANNUAL GROUNDWATER MONITORING REPORT

Artesia Tank Farm
Section 10, Township 18 South, Range 27 East
Artesia, Eddy County, New Mexico
NMOCD Reference # 2RP-6

Original Preparation Date:
March 4, 2021

Prepared for:

CENTURION PIPELINE LP
516 Veterans Airpark Lane Bldg. B
Midland TX 79705

Prepared By:
APEX Companies, LLC.
505 N. Big Spring Street, Suite 301A
Midland, TX 79701

Apex Project No. 725011096002

2020 ANNUAL GROUNDWATER MONITORING REPORT

Artesia Tank Farm
Section 10, Township 18 South, Range 27 East
Artesia, Eddy County, New Mexico
NMOCD Reference # 2RP-6

Aaron R. Sides
Project Manager

Hank W. McConnell P.G.
Branch Manager

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 – INTRODUCTION

1.1 - Site Background

In March 1993, a release of crude oil was discovered at the Artesia Tank Farm located approximately 12 miles southeast of Artesia, New Mexico, referred to hereinafter as the "Site". In August 1993, an initial assessment, which included the installation of 23 soil borings, concluded that impacts from light non-aqueous phase liquid (LNAPL) extended approximately 1,700 feet along Scoggin Draw. An interceptor trench and an associated groundwater separation/air-stripper remediation system was installed in November 1994 to control and remediate the LNAPL and dissolved-phase hydrocarbon plume associated with the release. A total of fourteen monitoring wells (MW-1 through MW-14) were eventually installed along Scoggin Draw to evaluate/monitor the extent of the groundwater impact. Quarterly reporting was performed throughout the operation of the remediation system, which was shut down in early 1997 and dismantled in the fall of 1998.

After New Mexico Oil Conservation Division (NMOCD) approval, all 14 monitoring wells were plugged and abandoned. Monitoring wells MW-4, MW-6, MW-7, MW-12, and MW-13 were plugged and abandoned on June 19, 2003. On August 18, 2005, monitoring wells MW-5, MW-8 and MW-14 were plugged and abandoned. On November 12 and 13, 2013 monitoring wells MW-1, MW-2, MW-2A, MW-3, MW-3A, MW-3B, MW-9, MW-10 and MW-11 were also plugged and abandoned.

On June 29, 2007, the NMOCD was notified that effective July 1, 2007, the Operator of Record for the Site and the associated water development easement (WM-72) transferred from BP Pipelines (North America) Inc. to Centurion Pipeline LP (Centurion).

A status report was submitted on April 4, 2012 entitled "Status Update Report". The laboratory analytical results in 2014 indicate that historical chemicals of concern (COC) concentrations in groundwater underlying areas outside the pump station compound were below the applicable New Mexico Water Quality Commission human health standard. The historical data provided in reports prepared by RT Hicks Consulting, Delta Environmental Consultants and the Antea Group shows general trends associated with biodegradation of the residual petroleum hydrocarbons and that the dissolved-phase contaminant plume is non-mobile and decreasing.

Additional remediation at the Site has been deferred until the Site is more accessible for removal of LNAPL. The NMOCD approved the completion of two (2) sentinel wells placed down gradient of potential contamination. The monitoring wells (MW-1 and MW-2) were installed in October 2016 by Apex. The results of the investigation and sampling activities are included in the "2016 Environmental Site Investigation and Annual Groundwater Report" prepared by Apex and dated December 2016. Annual groundwater samples are collected from the two monitoring wells and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX). The results are submitted in an annual groundwater monitoring report for submittal to the NMOCD.

1.2 - Site Description

The Artesia Tank Farm is located 12 miles southeast of Artesia in Section 10, Township 18 South, and Range 27 East in Eddy County, New Mexico. The geodetic coordinates of the Site are latitude

32.761507˚ N, longitude 104.270481˚ W. The Site is surrounded by primarily undeveloped rangeland periodically interrupted by oil and gas production.

A Topographic Map is included in Figure 1, a Site Vicinity Map, composed from an aerial photograph, is included in Figure 2, and a Site Details Map is included in Figure 3.

1.3 - Project Objective

The project objective of the groundwater monitoring at the Site is to monitor the groundwater down-gradient of the Artesia Tank Farm. Apex collected groundwater analytical samples from monitoring wells MW-1 and MW-2. The samples were analyzed for Benzene, Toluene, Ethylbenzene and Xylene (BTEX) utilizing Environmental Protection Agency (EPA) Method 8021B.

2.0 - SITE CHARACTERIZATION

2.1 – Site Geology and Hydrogeology

The lithology encountered during previous investigation activities at the Site consisted primarily of evaporates with intermittent layers of fine-grained sand. The surface contained intermittent caliche nodules. The United States Agricultural Department soil survey indicates that the Site is in the Artesia Group which consists of fine grain sandstones, evaporates, and dolostone.

2.2 - Groundwater Flow

Previous reports prepared by Antea Group indicate the groundwater flow direction (gradient) at the Site is generally south south-west. The shallow groundwater near the Site generally flows toward and along the Scoggin Draw, located to the east of the Site. A 2010 groundwater Gradient Map, prepared using information from the Antea Group, is included as Figure 4.

3.0 - REGULATORY GUIDELINES

3.1 – Site Ranking

The Site is under the jurisdiction of the ENMRD OCD. Initial Site activities were performed in accordance with the ENMRD OCD *Guidelines for Remediation of Leaks, Spills and Releases*, in addition to the OCD rules, specifically New Mexico Administrative Code (NMAC) 19.15.29 *Remediation Plan*. This guidance establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action.

Apex utilized the general site characteristics and information available from the New Mexico Office of the State Engineer to determine the appropriate OCD "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:

Ranking Criteria

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	
Ranking Criteria			**Ranking Score**
Total Ranking Score			**30**

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

The depth to the initial groundwater-bearing zone is less than 50 feet below grade surface (bgs) as observed in on-site groundwater monitoring wells, resulting in a ranking of "20" for depth to groundwater.

No water sources or wellheads were identified within 1,000 feet of the Site, resulting in a ranking of "0" for proximity to a wellhead protection area.

The Site is located approximately 260 feet to the west of the dry cut bank of Scoggin Draw, resulting in a ranking of "10" for distance to surface water.

The cleanup goals for groundwater at the Site were derived from the Water Quality Control Commission (WQCC) *Groundwater Quality Standards* of:

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

4.0 - GROUNDWATER SAMPLING PROGRAM

4.1 - Groundwater Sampling Program

Apex's groundwater sampling program consisted of collecting one (1) groundwater sample from each monitoring well annually. Before sample collection, Apex gauged depth to fluids in each monitoring

well utilizing an electronic oil/water interface meter, capable of detecting phase separated hydrocarbons (PSH).

Each monitoring well was purged utilizing low-flow sampling techniques. The groundwater samples were collected from each monitoring well once produced groundwater was consistent in color, clarity, pH, dissolved oxygen (DO), oxidation/reduction potential (ORP), temperature and conductivity.

Groundwater samples were collected and placed in laboratory prepared glassware, placed on ice in a cooler, and secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to Xenco Laboratories in Midland, Texas for standard turn-around times.

5.0 - LABORATORY ANALYTICAL METHODS

5.1 - Laboratory Analytical Methods

Groundwater samples were analyzed for BTEX utilizing EPA Method SW-846 8021B. Laboratory results for groundwater samples are summarized in Table 1. Laboratory results, including the executed chain-of-custody forms are provided in Appendix A.

6.0 - DATA EVALUATION

Apex compared the reported BTEX concentrations or laboratory method detection limits (MDL) associated with the groundwater samples collected from the Site to the applicable RRC Class 1 and Class 2 Impacted Groundwater Delineation and Remediation Limits and the *Draft Field Guide for the Assessment and Cleanup of Produced Water Releases* (collectively referred to as the RRC Limits).

6.1 - Annual Groundwater Analytical Monitoring

Groundwater samples were collected from monitoring wells MW-1 and MW-2 on August 13, 2020.

The laboratory analytical results for monitoring well MW-1 for benzene, toluene, ethylbenzene, and total xylene were 0.470 µg/L, 1.70 µg/L, <0.657 µg/L, and <0.630 µg/L, respectively, which are below the applicable NMAC 19.15.29 Remediation Plan and below the applicable WQCC regulations. The laboratory analytical results for monitoring well MW-2 for benzene, toluene, ethylbenzene, and total xylene were 1.41 µg/L J, 1.75 µg/L J, <0.657 µg/L, and 0.730 µg/L J, respectively, which are below the applicable NMAC 19.15.29 Remediation Plan and below the applicable WQCC regulations. All detections are estimates identified below the quantitation limit and above the detection limit. Toluene was detected in the trip blank below the quantitation limit and above the detection limit.

7.0 - FINDINGS AND CONCLUSIONS

Apex has the following findings and conclusions based on analytical results of the annual groundwater sampling event.

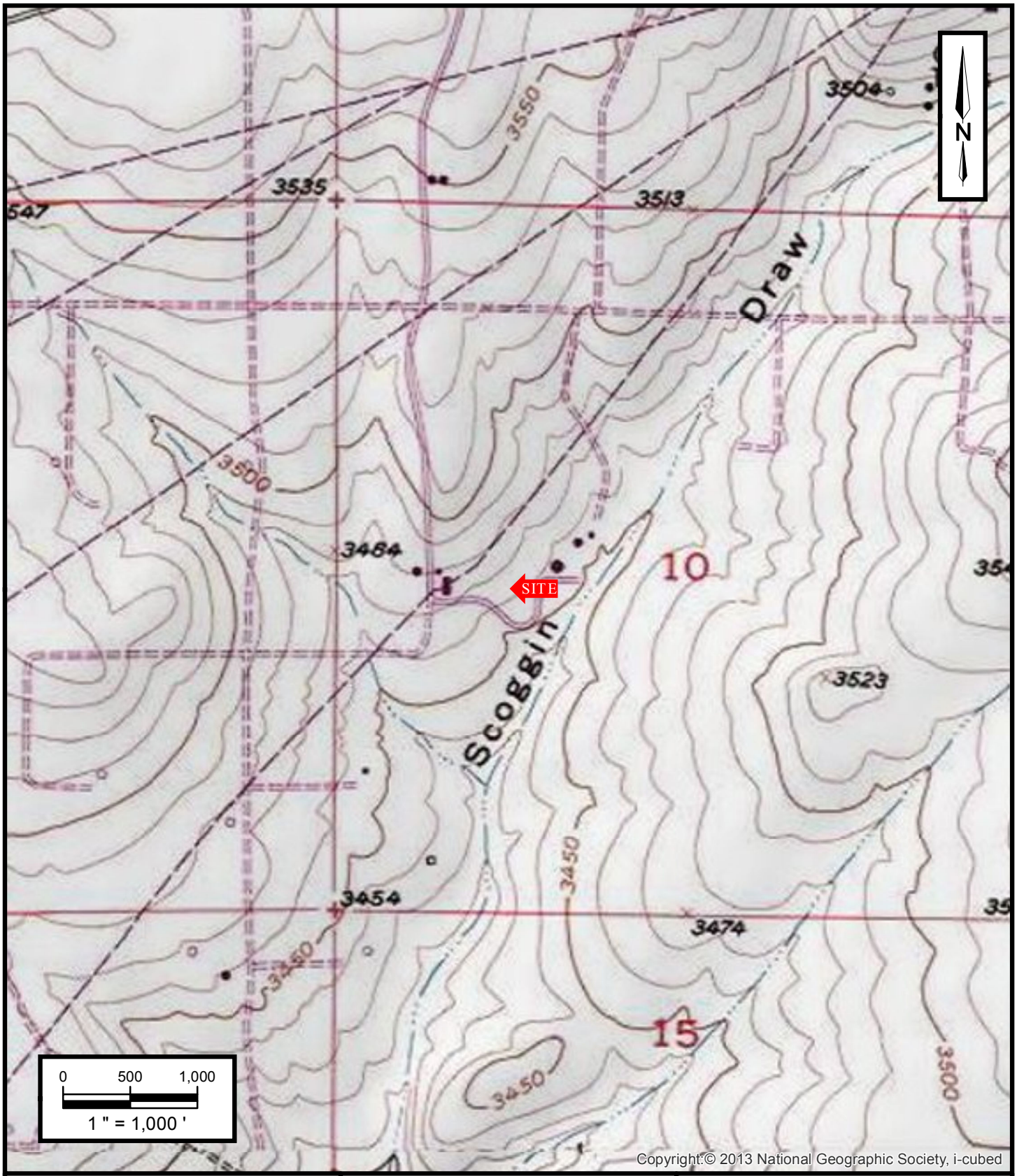
- The August 2020 BTEX concentrations in groundwater were not detected above the applicable WQCC regulatory limits, in samples collected from MW-1 and MW-2.

8.0 - RECOMMENDATIONS

Based on the results of the groundwater monitoring activities, Apex has the following recommendations:

- Report the results of the investigation to the NMOCD; and
- Continue the groundwater monitoring program on an annual basis to evaluate potential impacts from the Artesia Tank Farm.

Figures



Centurion Pipeline
Artesia Tank Farm
Artesia, Eddy County, New Mexico
32.761507 N, 104.270481 W

Project No. 725010670005

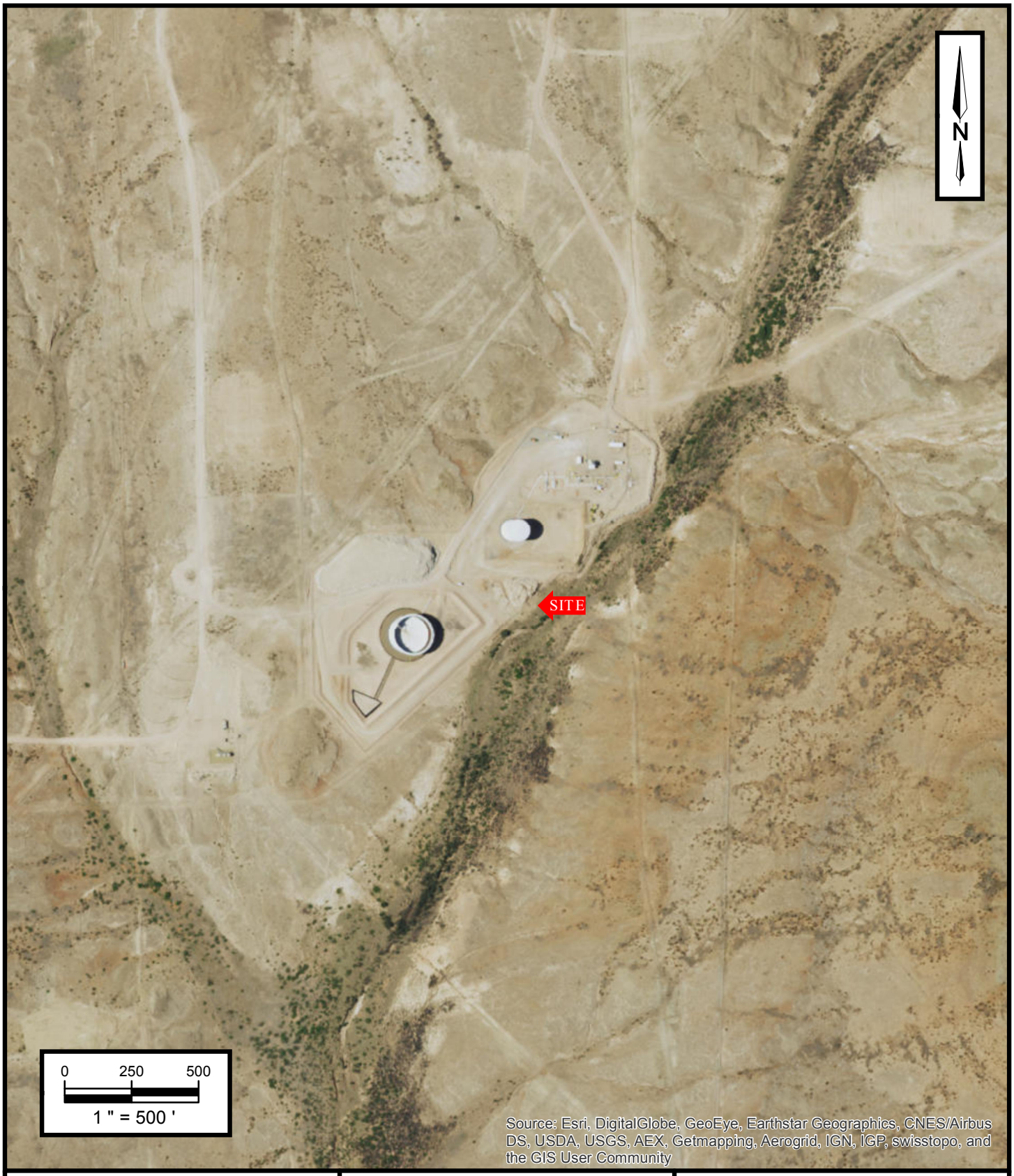
Apex
505 N Big Spring St., Suite 301A
Midland, Texas 79701
Phone: (432) 695-6016
www.apexcos.com
A Subsidiary of Apex Companies, LLC

FIGURE 1

Topographic Map

Spring Lake, New Mexico Quadrangle
1955

Z:\Houston South\Drafting\Midland 07\2015\7250715068\Figure 1.mxd 11/12/2015 NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US Projected Coordinate System



Centurion Pipeline
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FIGURE 2

Site Vicinity Map

Z:\Houston South\Drafting\Midland 07\2015\7250715068\Figure 2.mxd 11/12/2015 WGS 1984 Web Mercator Auxiliary Sphere Projected Coordinate System

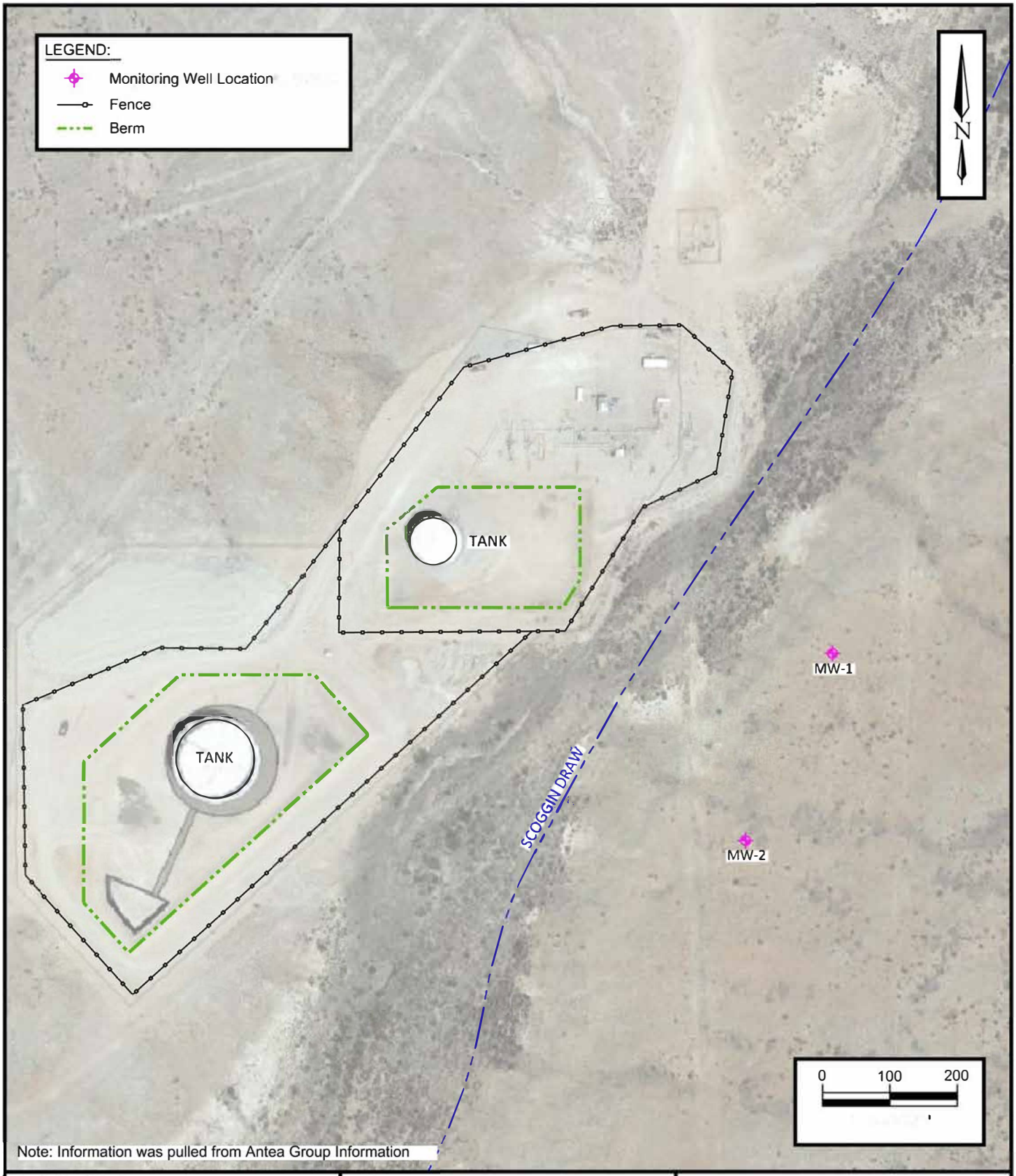

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FIGURE 3

Site Details Map

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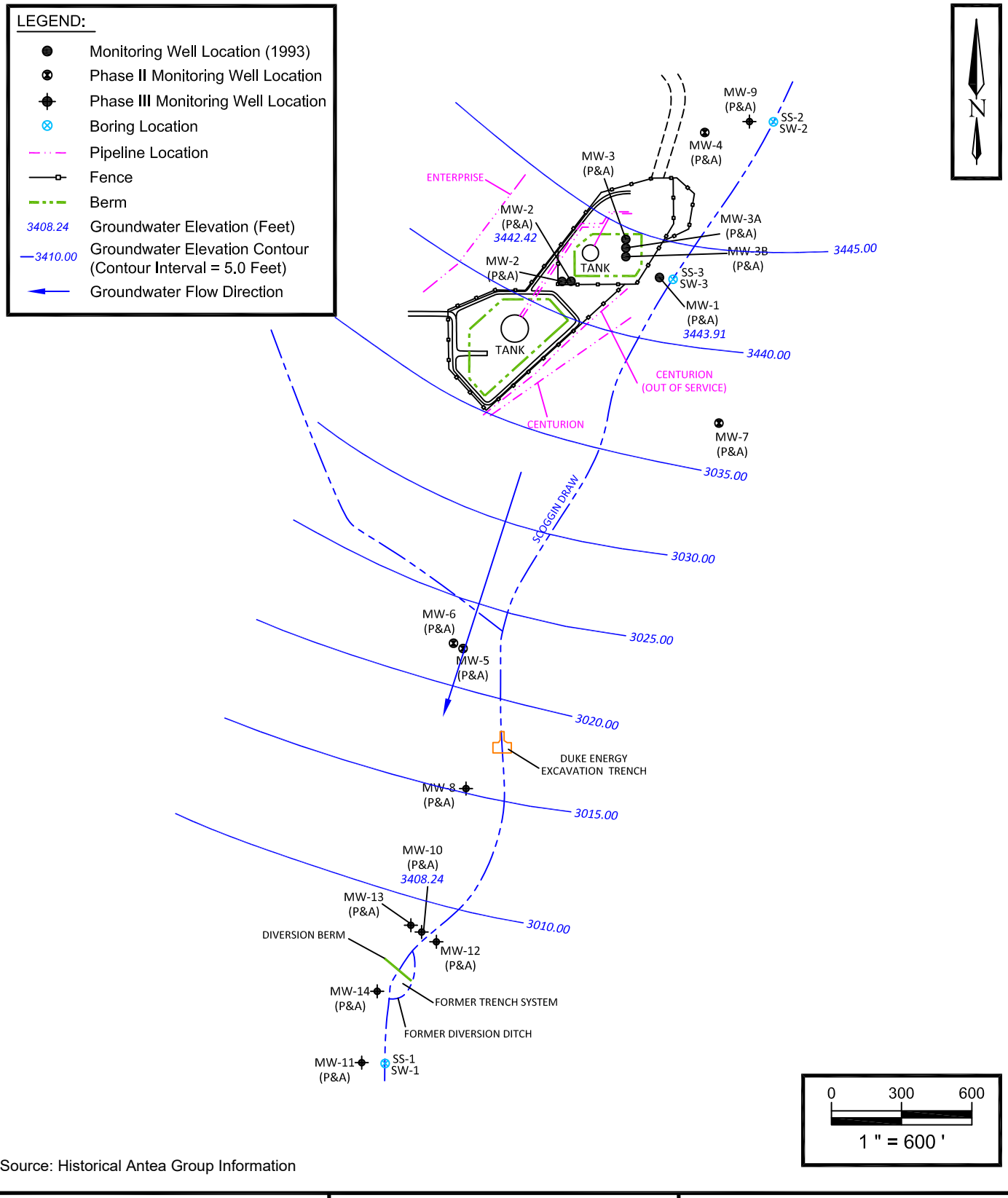

Source: Historical Antea Group Information

Centurion Pipeline
Artesia Tank Farm
Artesia, Eddy County, New Mexico
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FIGURE 4

Groundwater Gradient Map
June 10, 2010

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Tables

APEX

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Artesia Tank Farm, Eddy County, New Mexico

Sample I.D.	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		0.100	0.750	0.750	0.620
MW-1	11/30/16	0.00060	<0.00050	<0.00050	<0.00050
MW-1	07/12/17	<0.00060	<0.00050	<0.00050	<0.00050
MW-1	07/10/18	<0.000408	<0.000367	<0.000657	<0.00063
MW-1	09/27/19	<0.000408	<0.000367	<0.000657	<0.00063
MW-1	08/13/20	0.00047 J	* 0.00171 J	<0.000657	<0.00063
MW-2	11/30/16	2.3 J	<0.50	<0.50	3.5 J
MW-2	07/12/17	<0.60	<0.50	<0.50	<0.50
MW-2	07/10/18	<0.408	<0.367	<0.657	<0.630
MW-2	09/27/19	<0.408	<0.367	<0.657	<0.630
MW-2	08/13/20	0.00141 J	* 0.00175 J	<0.000657	0.00073 J

ND - Non detectable

NA - Not available

µg/L- micrograms per Liter

J - Analyte detected below quantitation limit

* - detected in trip blank (0.00165 mg/L J)

TABLE 2

GROUNDWATER ELEVATIONS
Artesia Tank Farm, Eddy County, New Mexico

Monitoring Well ID	Measurement Date	Top-of-Casing Elevation (Feet AMSL)	Total Depth (Feet)	Depth to Water (Feet BTOC)	Groundwater Elevation (Feet AMSL)
MW-1	11/30/16	NS	60.00	28.99	ND
MW-1	07/12/17	NS	62.88	30.84	ND
MW-1	07/10/18	NS	---	---	ND
MW-1	09/27/19	NS	---	36.52	ND
MW-1	08/13/20	NS	62.60	33.67	ND
MW-2	11/30/16	NS	60.00	27.98	ND
MW-2	07/12/17	NS	62.38	29.98	ND
MW-2	07/10/18	NS	---	---	ND
MW-2	09/27/19	NS	---	35.70	ND
MW-2	08/13/20	NS	62.30	33.02	ND

BTOC - Below the top of casing
AMSL - Above Mean Sea Level
NS - Not surveyed
ND - Not Determined

APPENDIX A

Laboratory Analytical Reports & Chain of Custody Documentation

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Analytical Report 670043

for

Apex/Midland

Project Manager: Aaron Sides

Centurion Artisa Tank Farm

08.21.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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08.21.2020

Project Manager: **Aaron Sides**
Apex/Midland
505 N. Big Spring Ste. 301 A
Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **670043**
Centurion Artisa Tank Farm
Project Address:

Aaron Sides:

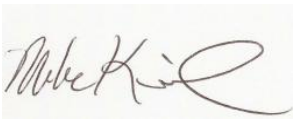
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 670043. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 670043 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,



Mike Kimmel
Client Services Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 670043

Apex/Midland, Midland, TX

Centurion Artisa Tank Farm

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	08.13.2020 11:40		670043-001
MW-2	W	08.13.2020 12:55		670043-002
Trip Blank	W	08.13.2020 00:00		670043-003

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CASE NARRATIVE

Client Name: Apex/Midland

Project Name: Centurion Artisa Tank Farm

Project ID:
Work Order Number(s): *670043*

Report Date: *08.21.2020*
Date Received: *08.13.2020*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results
670043
Apex/Midland, Midland, TX
Centurion Artisa Tank Farm

Sample Id: **MW-1** Matrix: Water Sample Depth:

Lab Sample Id: 670043-001 Date Collected: 08.13.2020 11:40 Date Received: 08.13.2020 16:45

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3134676 Date Prep: 08.15.2020 09:00

Prep seq: 7709535

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.000470**	0.00200	0.000408	mg/L	08.16.2020 03:26	J	1
Toluene	108-88-3	**0.00171**	0.00200	0.000367	mg/L	08.16.2020 03:26	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	08.16.2020 03:26	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	08.16.2020 03:26	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	08.16.2020 03:26	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	08.16.2020 03:26	U	
Total BTEX		**0.00218**		0.000367	mg/L	08.16.2020 03:26		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	104	70 - 130	%		

Sample Id: **MW-2** Matrix: Water Sample Depth:

Lab Sample Id: 670043-002 Date Collected: 08.13.2020 12:55 Date Received: 08.13.2020 16:45

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3134676 Date Prep: 08.15.2020 09:00

Prep seq: 7709535

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	**0.00141**	0.00200	0.000408	mg/L	08.16.2020 03:46	J	1
Toluene	108-88-3	**0.00175**	0.00200	0.000367	mg/L	08.16.2020 03:46	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	08.16.2020 03:46	U	1
m,p-Xylenes	179601-23-1	**0.000730**	0.00400	0.000630	mg/L	08.16.2020 03:46	J	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	08.16.2020 03:46	U	1
Total Xylenes	1330-20-7	**0.000730**		0.000630	mg/L	08.16.2020 03:46	J	
Total BTEX		**0.00389**		0.000367	mg/L	08.16.2020 03:46		

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	99	70 - 130	%		

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Certificate of Analytical Results
670043

Apex/Midland, Midland, TX
Centurion Artisa Tank Farm

Sample Id: **Trip Blank** Matrix: Water Sample Depth:

Lab Sample Id: 670043-003 Date Collected: 08.13.2020 00:00 Date Received: 08.13.2020 16:45

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3134676 Date Prep: 08.15.2020 09:00

Prep seq: 7709535

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	08.16.2020 04:07	U	1
Toluene	108-88-3	**0.00165**	0.00200	0.000367	mg/L	08.16.2020 04:07	J	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	08.16.2020 04:07	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	08.16.2020 04:07	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	08.16.2020 04:07	U	1
Total Xylenes	1330-20-7	<0.000630		0.000630	mg/L	08.16.2020 04:07	U	
Total BTEX		**0.00165**		0.000367	mg/L	08.16.2020 04:07	J	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	70 - 130	%		
4-Bromofluorobenzene	102	70 - 130	%		

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Certificate of Analytical Results
670043

Apex/Midland, Midland, TX
Centurion Artisa Tank Farm

Sample Id: **7709535-1-BLK** Matrix: Water Sample Depth:

Lab Sample Id: 7709535-1-BLK Date Collected: Date Received:

Analytical Method: BTEX by EPA 8021B Prep Method: 5030B

Analyst: KTL % Moist: Tech: KTL

Seq Number: 3134676 Date Prep: 08.15.2020 09:00

Prep seq: 7709535

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000408	0.00200	0.000408	mg/L	08.16.2020 03:04	U	1
Toluene	108-88-3	<0.000367	0.00200	0.000367	mg/L	08.16.2020 03:04	U	1
Ethylbenzene	100-41-4	<0.000657	0.00200	0.000657	mg/L	08.16.2020 03:04	U	1
m,p-Xylenes	179601-23-1	<0.000630	0.00400	0.000630	mg/L	08.16.2020 03:04	U	1
o-Xylene	95-47-6	<0.000642	0.00200	0.000642	mg/L	08.16.2020 03:04	U	1

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	99	70 - 130	%		
4-Bromofluorobenzene	106	70 - 130	%		

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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Form 2 - Surrogate Recoveries

Project Name: Centurion Artisa Tank Farm

Report Date: 08212020

Work Orders : 670043 **Project ID:**

Lab Batch #: 3134676 **Sample:** 7709535-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08.16.2020 01:05 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	70-130	
4-Bromofluorobenzene	0.0306	0.0300	102	70-130	

Lab Batch #: 3134676 **Sample:** 7709535-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08.16.2020 01:25 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	70-130	
4-Bromofluorobenzene	0.0308	0.0300	103	70-130	

Lab Batch #: 3134676 **Sample:** 670043-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08.16.2020 01:45 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	70-130	
4-Bromofluorobenzene	0.0301	0.0300	100	70-130	

Lab Batch #: 3134676 **Sample:** 670043-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08.16.2020 02:06 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	70-130	
4-Bromofluorobenzene	0.0297	0.0300	99	70-130	

Lab Batch #: 3134676 **Sample:** 7709535-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L **Date Analyzed:** 08.16.2020 03:04 **SURROGATE RECOVERY STUDY**

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	70-130	
4-Bromofluorobenzene	0.0318	0.0300	106	70-130	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

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BS / BSD Recoveries

Project Name: Centurion Artisa Tank Farm

Work Order #: 670043 **Project ID:**

Analyst: KTL **Date Prepared:** 08.15.2020 **Date Analyzed:** 08.16.2020

Lab Batch ID: 3134676 **Sample:** 7709535-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000408	0.100	0.0939	94	0.100	0.0977	98	4	70-130	25	
Toluene	<0.000367	0.100	0.102	102	0.100	0.106	106	4	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0892	89	0.100	0.0928	93	4	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.179	90	0.200	0.187	94	4	70-130	25	
o-Xylene	<0.000642	0.100	0.0903	90	0.100	0.0940	94	4	70-130	25	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

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Form 3 - MS / MSD Recoveries

Project Name: Centurion Artisa Tank Farm

Report Date: 08212020

Work Order # : 670043 **Project ID:**

Lab Batch ID: 3134676 **QC- Sample ID:** 670043-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 08.16.2020 **Date Prepared:** 08.15.2020 **Analyst:** KTL

Reporting Units: mg/L

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.000470	0.100	0.101	101	0.100	0.0980	98	3	70-130	25	
Toluene	0.00171	0.100	0.110	108	0.100	0.107	105	3	70-130	25	
Ethylbenzene	<0.000657	0.100	0.0950	95	0.100	0.0927	93	2	70-130	25	
m,p-Xylenes	<0.000630	0.200	0.191	96	0.200	0.187	94	2	70-130	25	
o-Xylene	<0.000642	0.100	0.0957	96	0.100	0.0934	93	2	70-130	25	

Matrix Spike Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200*|(C-F) / (C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A) / E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

CHAIN OF CUSTODY RECORD

Lab use only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Page 1 of 1

APEX

Office Location Midland
505 N. Big Spring
Midlan, TX 79701
Project Manager A. Sides

Laboratory: Xenco
Address: 1211 W. Florida Ave
Midland, TX 79701
Contact: Mike Kimmel
Phone: 214.902.0300
PO/SO #: CEN20-045-001

Sampler's Name: John Faught
Sampler's Signature:

Proj. No.
Project Name: Centurion Artsia Tank Farm

ANALYSIS REQUESTED: BTEX SW-846 8021B

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	8/13/20	1140		X	MW-1	/	/	3					X
W	8/13/20	1255		X	MW-2	/	/	3					X
W					Trip Blank	/	/	2					X
~~W~~					~~Temp Blank~~ (07)	/	/						

NFE
DP

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

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	8/13/20	1645		8/13/20	1645
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:
- Normal TAT

0.7/0.3·0.4

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Apex/Midland

Date/ Time Received: 08.13.2020 04.45.00 PM

Work Order #: 670043

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.3
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**Yes**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 08.14.2020

Brianna Teel

Checklist reviewed by: Mike Kimmel Date: 08.16.2020

Mike Kimmel

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 21832

CONDITIONS

Operator: CENTURION PIPELINE L.P. 516 Veterans Airpark Lane Midland, TX 79705	OGRID: 237722
	Action Number: 21832
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 Annual GW Monitoring Report: Content satisfactory 1. OCD requires the following based on the 2020 Annual GW Monitoring Report. a. Continue the groundwater monitoring program on an annual basis b. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022	12/29/2021