CLOSURE REPORT

Property:

Breitburn Operating
Jalmat Field Yates Sand Unit No. 235
Lea County, New Mexico
Unit Letter "A", Section 11, Township 22 South, Range 35 East
Latitude 32.4108, Longitude -103.3310
1RP-5718

February 2020

Prepared for:

Breitburn Operating
PO Box 678
Andrews, TX

Attn: **Mr. Thomas Haigood**

Prepared by:

Thomas Franklin
Environmental Manager

Taylor Rather
Environmental Coordinator

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APPENDICES

CLOSURE REPORT

Maverick Natural Resources
Jalmat Field Yates Sand Unit No. 235
Lea County, New Mexico
Unit Letter "A", Section 11, Township 22 South, Range 35 East
Latitude 32.4108, Longitude -103.3310
1RP-5718

February 2020

1.0 INTRODUCTION

1.1 Site Description & Background

American Safety Services Inc. (ASSI) has prepared this Closure Report for the Breitburn Operating (i.e., Maverick Natural Resources) at the Jalmat Field Yates Sand Unit No. 235 (referred to hereinafter as the "Site" or "subject Site"). This Closure Report is based upon data collected by ASSI on February 2, 2020 and the interpretation of that data.

The Site is located in Unit Letter "A", Section 11, Township 22 South, Range 35 East, Lea County, New Mexico (GPS 32.4108, -103.3310). Figures 1, 2, and 3 in Appendix A show the Site location.

Remedial action was conducted in accordance with New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), the New Mexico Oil Conservation Division (NMOCD), and rules under the New Mexico Administrative Code (*NMAC 19.15.29 Release Notification*).

1.2 Project Objective

The objective of the Closure Report is to present documentation of the remedial activities that were performed at the Site to the NMOCD.

1.3 Standard of Care

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

1.4 Reliance

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

2.0 SITE RANKING & PROPOSED REMEDIAL ACTION GOALS

To address activities related to releases, the NMOCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the NMOCD rules, specifically NMAC 19.15.29.9 *Release Notification*. These documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

In accordance with the NMAC 19.15.29, ASSI utilized the general site characteristics to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the table below:

Ranking Criteria			Ranking Score
Depth to Groundwater	<50 feet	20	**10**
	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	**0**
	200 to 1,000 feet	10	
	>1,000 feet	0	
Total Ranking Score			**10**

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

- The depth to the initial groundwater-bearing zone fifty to ninety-nine feet at the Site.
- The impacted area is greater than 200 feet from a private domestic water source.
- Distance to the nearest surface water body is greater than 1,000 ft.

Based on a Total Ranking Score of 10, cleanup goals for soils remaining in place include: 10 milligrams per kilogram (mg/Kg) for Benzene, 50 mg/Kg for Total Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), 2,500 mg/Kg for Total Petroleum Hydrocarbons (TPH) and 10,000 mg/Kg for Chloride.

Figure 4 shows the location of the Site in Lea Co, New Mexico and surrounding topography.

3.0 INITIAL RESPONSE & SAMPLING ACTIVITIES

3.1 Initial Response

On February 2, 2020, ASSI personnel performed a site inspection in response to a release of fifteen (15) barrels (bbls) of produced water (1RP-5718). The cause of the release was due to a 2-inch injection line valve being inadvertently opened, which in turn allowed the release to occur directly on to the ground. None of the fluid was recovered. The release footprint was determined to be approximately twenty-two thousand five hundred (22,500) square feet of production pad.

3.2 Soil Sampling Activities

Initial sampling activities were conducted on February 2nd by ASSI personnel, using a stainless-steel hand auger. Five (5) auger holes were installed at discrete locations collecting material at intervals ranging from surface to two (2) foot below ground surface (bgs). Table 1 in Appendix B presents analytical results. Figure 3 in Appendix A shows auger hole locations. Soil was field screened for Chloride utilizing an electro conductivity meter during sampling activities.

3.3 Soil Sampling Analytical Results

Thirteen (13) soil samples were collected during initial sampling activities from sample locations Auger Hole-1 through Auger Hole-5. On February 2nd, samples were delivered by ASSI personnel for laboratory analysis. The samples were analyzed for BTEX, TPH, and Chloride (Table 1). Analytical results were compared to *Table I of the NMAC 19.15.29.12* and show BTEX, TPH, and Chloride concentrations are not above NMOCD guidelines for clean-up goals at sample locations Auger Hole-1 through Auger Hole-5.

4.0 LABORATORY ANALYTICAL METHODS

The samples were analyzed for BTEX using EPA method EPA 8021B, TPH utilizing EPA method SW8015 Mod, and Chloride utilizing EPA method 300. Laboratory analysis is provided in Appendix D.

Soil was collected in laboratory prepared glassware, placed on ice, and packed in a cooler. The sample coolers and completed chain-of-custody forms were relinquished to Xenco Laboratories in Midland, TX for a normal turn-around time.

Figure 3 in Appendix A indicates the approximate location of the auger holes installed within the release footprint and in relation to pertinent land features.

5.0 CONCLUSION

Based upon the samples collected and interpretation of the analytical data by ASSI, the constituents of concern (COCs) has been vertically delineated.

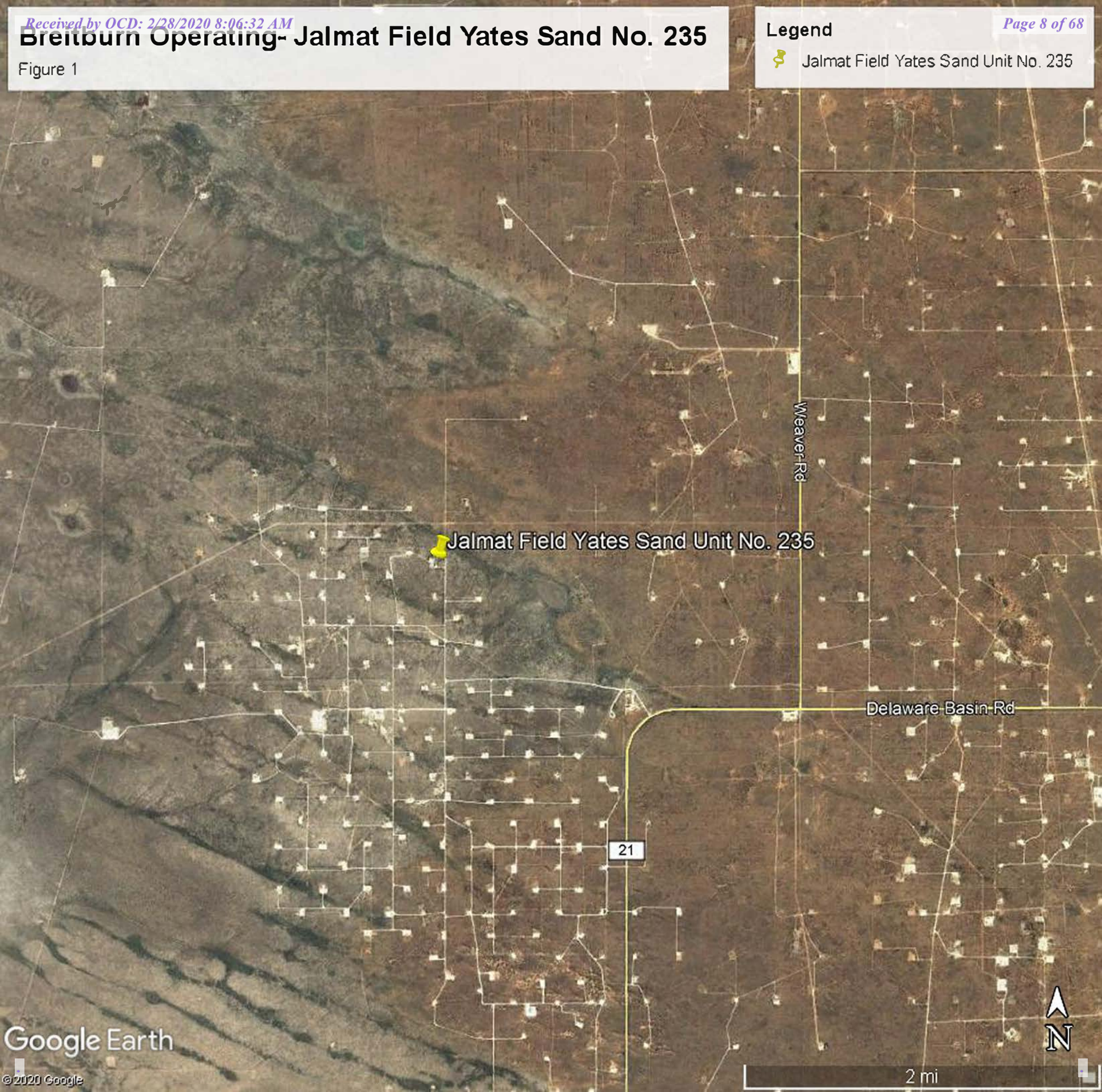
Based on the analytical data presented in Table 1, ASSI on behalf of Breitburn Operating, recommends foregoing any further remedial action and proposes to close the Site per NMOCD rules.

APPENDIX A

Figures

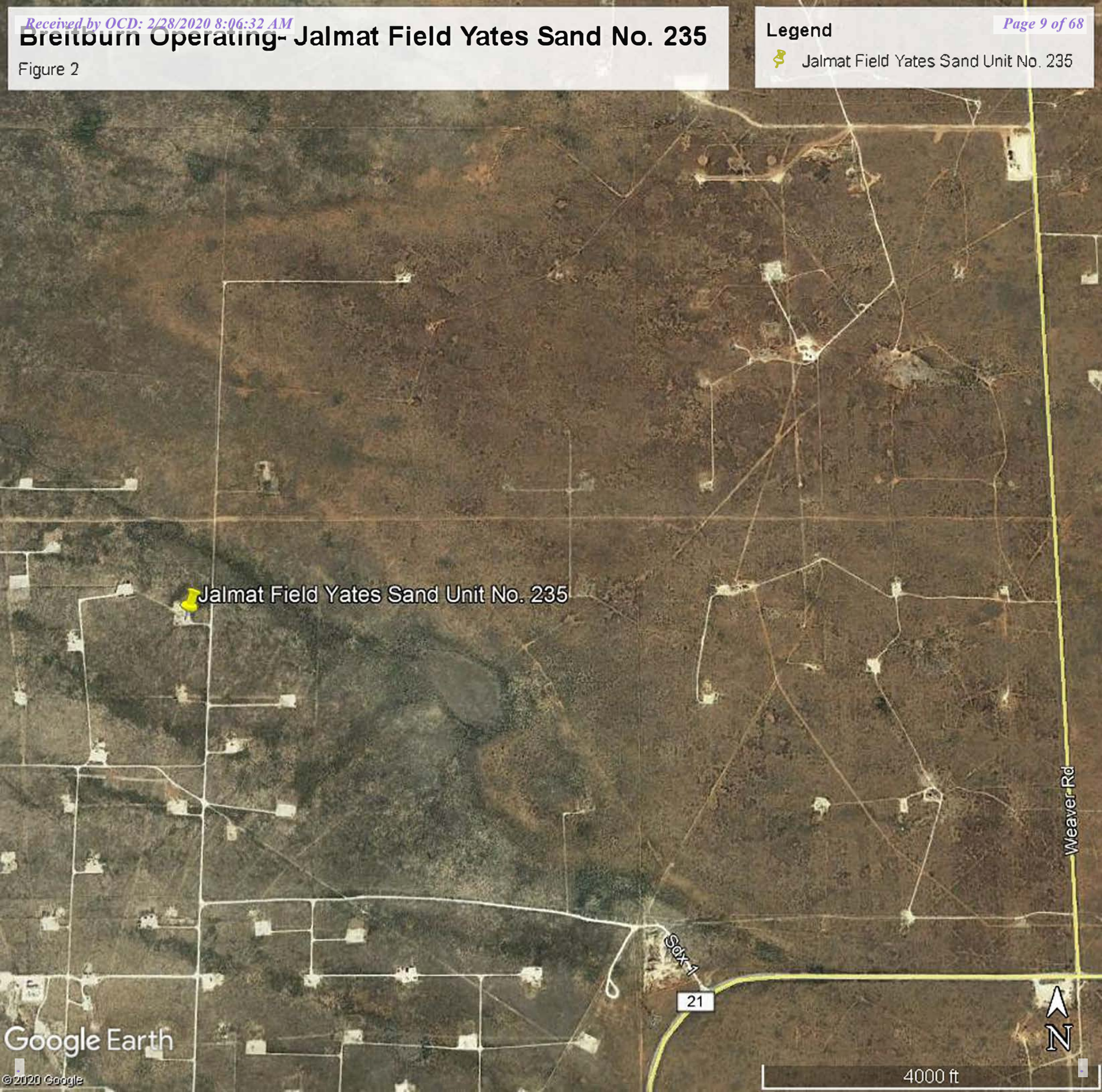
Breitburn Operating- Jalmat Field Yates Sand No. 235

Figure 1



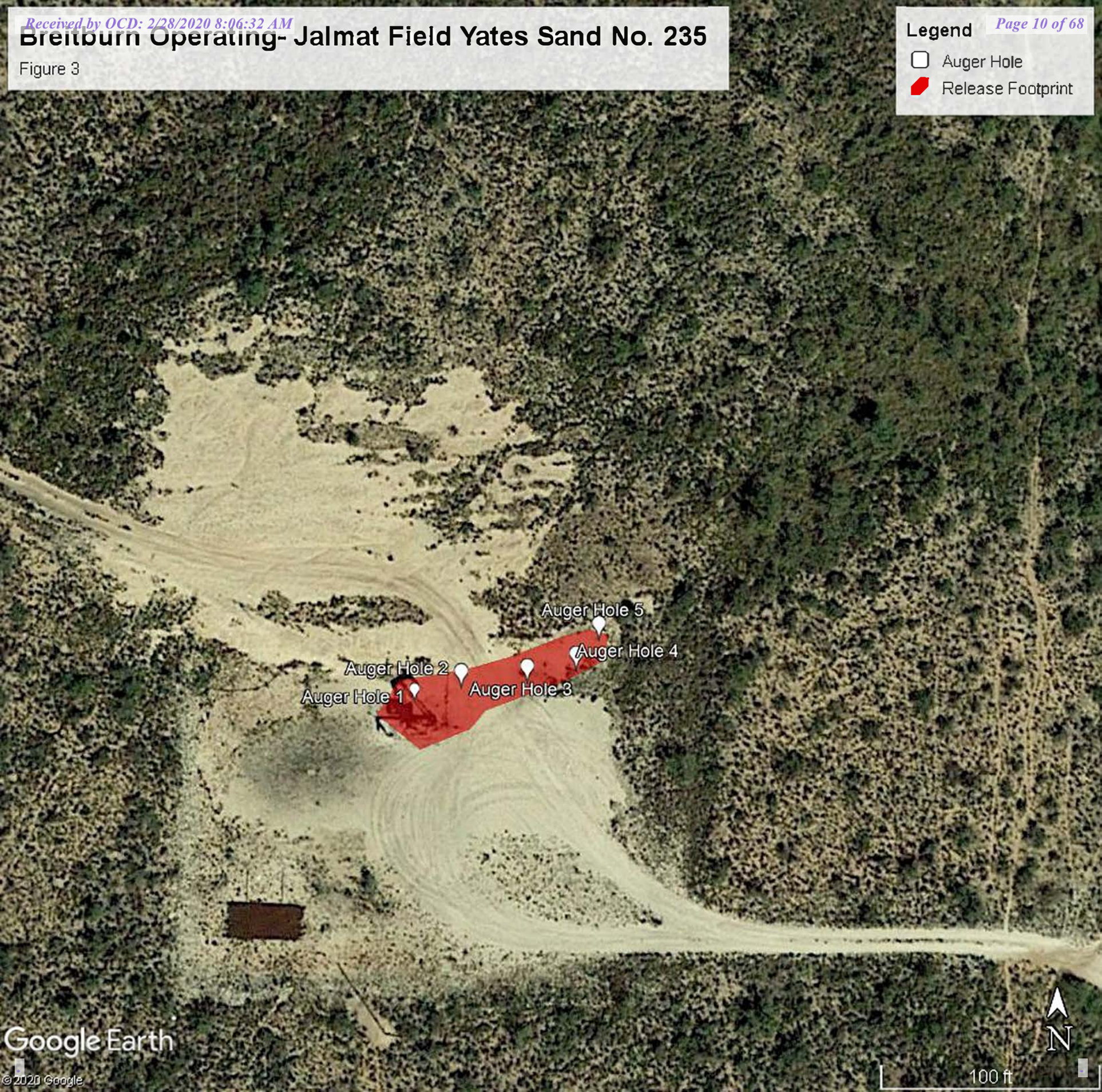
Breitburn Operating- Jalmat Field Yates Sand No. 235

Figure 2



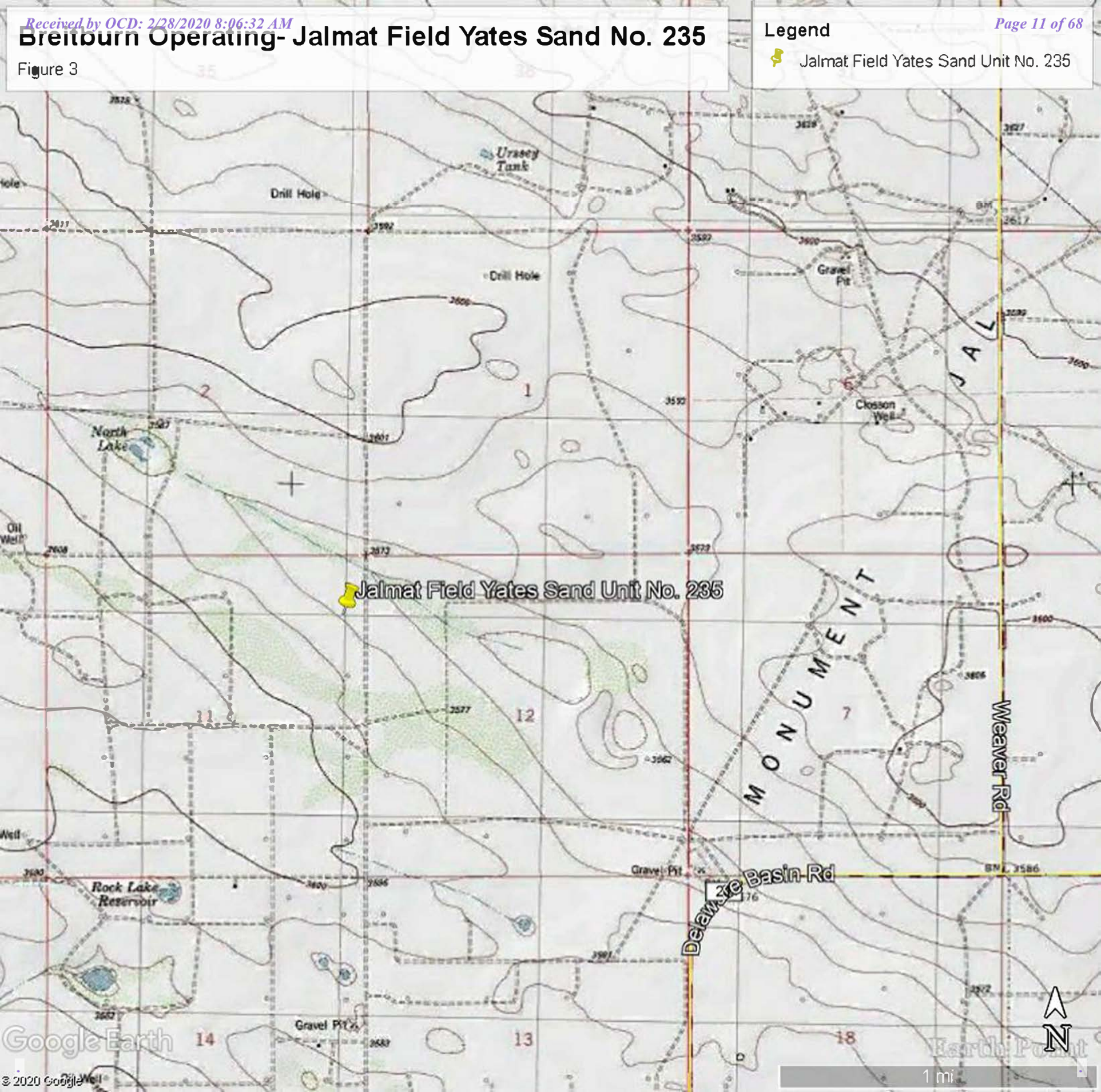
Breitburn Operating- Jalmat Field Yates Sand No. 235

Figure 3



Breitburn Operating- Jalmat Field Yates Sand No. 235

Figure 3



APPENDIX B

Table 1

TABLE 1
Summary of Delineation Sampling Analytical Results
Concentrations of Benzene, BTEX, TPH & Chloride in Soil
Breitburn Operating (Maverick Natural Resources)

Lea County, New Mexico
1RP-5718

SAMPLE LOCATION	SAMPLE DEPTH feet (bgs)	SAMPLE DATE	SOIL STATUS	8021B					8015M				EPA 300
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYLBENZENE (mg/Kg)	XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	MRO (mg/Kg)	Total TPH (mg/Kg)	CHLORIDE (mg/Kg)
NMAC 19.15.29				10	NE	NE	NE	50	1,000		NE	2,500	10,000
Delination Sampling													
Auger Hole 1	0-1'	2/2/2020	In-situ	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50	3,713.8
Auger Hole 1	1'-1.5'	2/2/2020	In-situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<49.9	<49.9	<49.9	<49.9	3,021.2
Auger Hole 1	1.5'-2'	2/2/2020	In-situ	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50	1,689.9
Auger Hole 2	0-1'	2/2/2020	In-situ	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	3,288.7
Auger Hole 2	1'-1.5'	2/2/2020	In-situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<49.9	<49.9	<49.9	<49.9	2,380.7
Auger Hole 2	1.5'-2'	2/2/2020	In-situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<50.0	<50.0	<50.0	<50	1,807.2
Auger Hole 3	0-1'	2/2/2020	In-situ	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50	32.7
Auger Hole 3	1'-1.5'	2/2/2020	In-situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<50.0	<50.0	<50.0	<50	37.8
Auger Hole 3	1.5'-2'	2/2/2020	In-situ	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	6.37
Auger Hole 4	0-1'	2/2/2020	In-situ	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50	<5.0000
Auger Hole 4	1'-1.5'	2/2/2020	In-situ	<0.00198	<0.00199	<0.00199	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	11
Auger Hole 4	1.5'-2'	2/2/2020	In-situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<50.0	<50.0	<50.0	<50.0	<5.0302
Auger Hole 5	0-1'	2/2/2020	In-situ	<0.00198	<0.00200	<0.00200	<00.002	<0.002	<49.8	<49.8	<49.8	<49.8	<5.0100

mg/Kg - milligrams per Kilogram

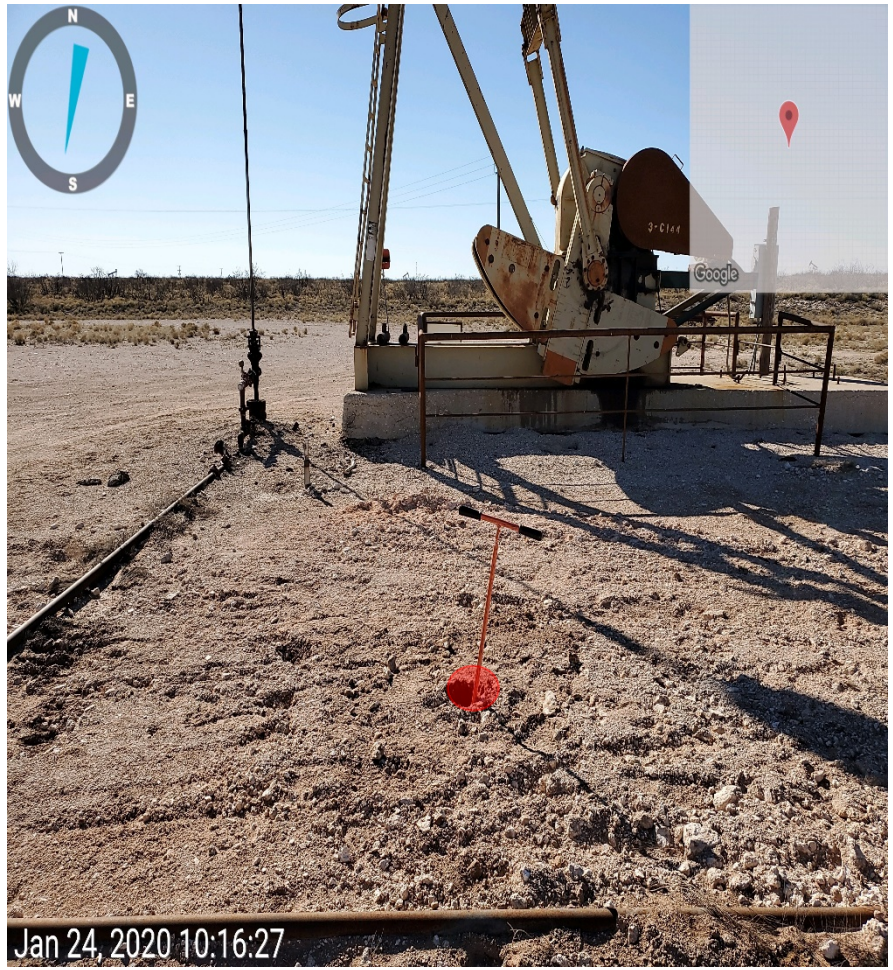
NE - not established

In-situ - sample collected in-place

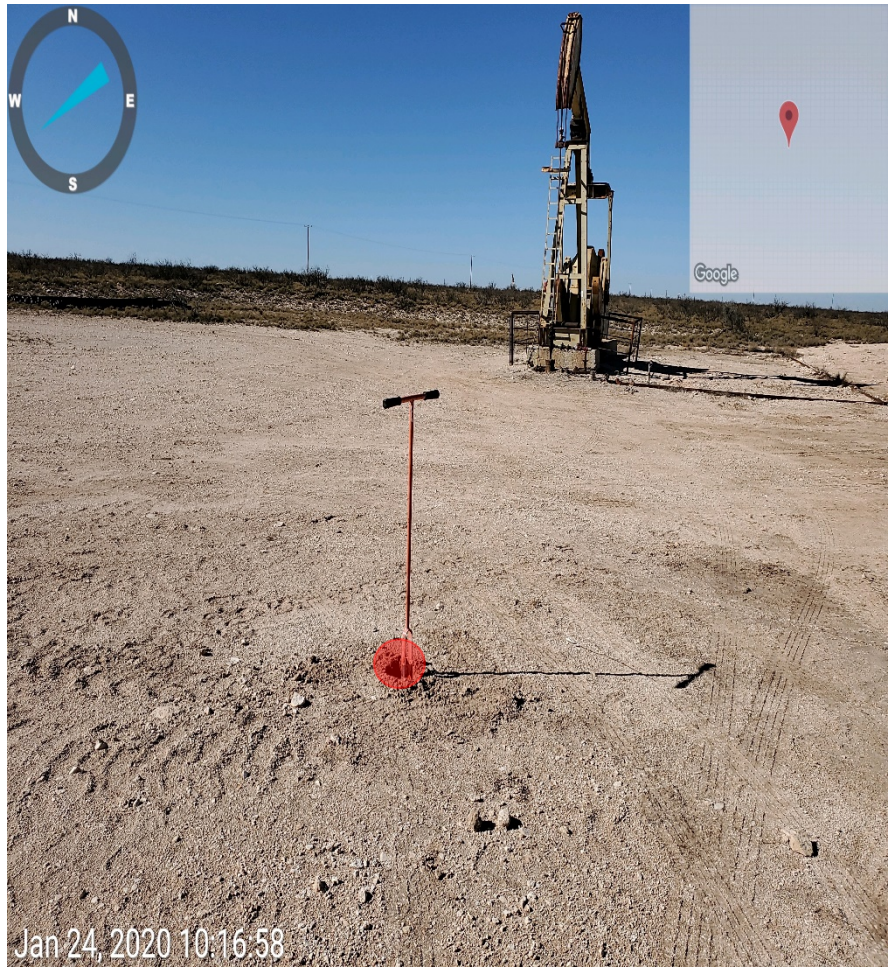
Total TPH reported values are rounded-off to 3-significant figures using the LIMS Odd/Even Rounding Rule which is a laboratory accepted standard

APPENDIX C

Photo Page



View Southwest - Sample location Auger Hole 1 (red circle) middle of photograph.



View Southwest – Sample location Auger Hole 2 (red circle) middle of photograph.

MAVERICK NATURAL RESOURCES

AMERICAN SAFETY SERVICES INC

View Southwest - Sample location Auger Hole 3 (red circle) middle of photograph.

View Southwest – Sample location Auger Hole 4 (red circle) middle of photograph.

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View Southwest - Sample location Auger Hole 5 (red circle) middle of photograph.

MAVERICK NATURAL RESOURCES

AMERICAN SAFETY SERVICES INC

APPENDIX D

Laboratory Analysis

Certificate of Analysis Summary 650605

American Safety Services, Odessa, TX

Project Name: Maverick Natural Resources-Jalmat 235

Project Id:

Contact: Thomas Franklin

Project Location: Lea Co.NM

Date Received in Lab: Wed Jan-29-20 09:14 am

Report Date: 04-FEB-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	650605-001		650605-002		650605-003		650605-004		650605-005		650605-006	
	Field Id:	Auger Hole 1		Auger Hole 1		Auger Hole 1		Auger Hole 2		Auger Hole 2		Auger Hole 2	
	Depth:	0.0-1.0 ft		1.0-1.5 ft		1.5-2.0 ft		0.0-1.0 ft		1.0-1.5 ft		1.5-2.0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-24-20 09:00		Jan-24-20 09:02		Jan-24-20 09:04		Jan-24-20 09:09		Jan-24-20 09:11		Jan-24-20 09:13	
BTEX by EPA 8021B	***Extracted:***	Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30	
	Analyzed:	Feb-03-20 06:29		Feb-03-20 06:49		Feb-03-20 07:09		Feb-03-20 07:29		Feb-03-20 07:50		Feb-03-20 08:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00396	0.00396	<0.00401	0.00401	<0.00402	0.00402	<0.00403	0.00403	<0.00399	0.00399	<0.00399	0.00399
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.002	0.002	<0.00201	0.00201	<0.00202	0.00202	<0.002	0.002	<0.002	0.002
Total BTEX		<0.00198	0.00198	<0.002	0.002	<0.00201	0.00201	<0.00202	0.00202	<0.002	0.002	<0.002	0.002
Chloride by EPA 300	***Extracted:***	Jan-29-20 16:20		Jan-29-20 16:20		Jan-29-20 16:42		Jan-29-20 16:42		Jan-29-20 16:42		Jan-29-20 16:42	
	Analyzed:	Jan-29-20 23:23		Jan-29-20 23:30		Jan-29-20 17:55		Jan-29-20 18:02		Jan-29-20 18:09		Jan-29-20 18:15	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Chloride		3713.8	24.802	3021.2	24.950	1689.9	24.950	3288.7	25.202	2380.7	25.050	1807.2	25.253
TPH by SW8015 Mod	***Extracted:***	Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00	
	Analyzed:	Jan-29-20 22:08		Jan-29-20 23:12		Jan-29-20 23:33		Jan-29-20 23:54		Jan-30-20 00:15		Jan-30-20 00:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0
Total TPH		<50	50	<49.9	49.9	<50	50	<49.8	49.8	<49.9	49.9	<50	50

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 650605

American Safety Services, Odessa, TX

Project Name: Maverick Natural Resources-Jalmat 235

Project Id:

Contact: Thomas Franklin

Project Location: Lea Co.NM

Date Received in Lab: Wed Jan-29-20 09:14 am

Report Date: 04-FEB-20

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	650605-007		650605-008		650605-009		650605-010		650605-011		650605-012	
	Field Id:	Auger Hole 3		Auger Hole 3		Auger Hole 3		Auger Hole 4		Auger Hole 4		Auger Hole 4	
	Depth:	0.0-1.0 ft		1.0-1.5 ft		1.5-2.0 ft		0.0-1.0 ft		1.0-1.5 ft		1.5-2.0 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-24-20 09:18		Jan-24-20 09:20		Jan-24-20 09:22		Jan-24-20 09:27		Jan-24-20 09:29		Jan-24-20 09:21	
BTEX by EPA 8021B	***Extracted:***	Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30		Feb-02-20 11:30	
	Analyzed:	Feb-03-20 08:30		Feb-03-20 10:04		Feb-03-20 10:25		Feb-03-20 10:45		Feb-03-20 11:05		Feb-03-20 11:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00397	0.00397	<0.00399	0.00399	<0.00398	0.00398	<0.00403	0.00403	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00198	0.00198	<0.002	0.002	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.002	0.002
Total BTEX		<0.00198	0.00198	<0.002	0.002	<0.00199	0.00199	<0.00202	0.00202	<0.00199	0.00199	<0.002	0.002
Chloride by EPA 300	***Extracted:***	Jan-29-20 16:42		Jan-29-20 16:42		Jan-29-20 16:42		Jan-29-20 16:42		Jan-29-20 16:42		Jan-29-20 16:42	
	Analyzed:	Jan-29-20 17:35		Jan-29-20 18:35		Jan-29-20 18:42		Jan-29-20 18:49		Jan-29-20 18:55		Jan-29-20 19:02	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Chloride		32.679	4.9702	37.792	5.0505	6.3700	4.9603	<5.0000	5.0000	11.039	4.9900	<5.0302	5.0302
TPH by SW8015 Mod	***Extracted:***	Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00		Jan-29-20 15:00	
	Analyzed:	Jan-30-20 00:56		Jan-30-20 01:17		Jan-30-20 01:38		Jan-30-20 01:59		Jan-30-20 02:42		Jan-30-20 03:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0
Total TPH		<50	50	<50	50	<49.9	49.9	<50	50	<49.9	49.9	<50	50

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The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 650605

American Safety Services, Odessa, TX

Project Name: Maverick Natural Resources-Jalmat 235

Project Id:

Contact: Thomas Franklin

Project Location: Lea Co.NM

Date Received in Lab: Wed Jan-29-20 09:14 am

Report Date: 04-FEB-20

Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	650605-013						
	Field Id:	Auger Hole 5						
	Depth:	0.0-1.0 ft						
	Matrix:	SOIL						
	Sampled:	Jan-24-20 09:36						
BTEX by EPA 8021B	***Extracted:***	Feb-02-20 11:30						
	Analyzed:	Feb-03-20 11:45						
	Units/RL:	mg/kg	RL					
Benzene		<0.00200	0.00200					
Toluene		<0.00200	0.00200					
Ethylbenzene		<0.00200	0.00200					
m,p-Xylenes		<0.00400	0.00400					
o-Xylene		<0.00200	0.00200					
Total Xylenes		<0.002	0.002					
Total BTEX		<0.002	0.002					
Chloride by EPA 300	***Extracted:***	Jan-29-20 16:42						
	Analyzed:	Jan-29-20 19:09						
	Units/RL:	mg/L	RL					
Chloride		<5.0100	5.0100					
TPH by SW8015 Mod	***Extracted:***	Jan-29-20 15:00						
	Analyzed:	Jan-30-20 03:25						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8					
Diesel Range Organics (DRO)		<49.8	49.8					
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8					
Total TPH		<49.8	49.8					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Version: 1.%

Jessica Kramer
Project Assistant

Analytical Report 650605

for

American Safety Services

Project Manager: Thomas Franklin

Maverick Natural Resources-Jalmat 235

04-FEB-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04-FEB-20

Project Manager: **Thomas Franklin**
American Safety Services
8715 Andrews Hwy
Odessa, TX 79765

Reference: XENCO Report No(s): **650605**
Maverick Natural Resources-Jalmat 235
Project Address: Lea Co.NM

Thomas Franklin:

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 XENCO Report Number(s) 650605. 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 XENCO Laboratories. 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. 650605 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Auger Hole 1	S	01-24-20 09:00	0.0 - 1.0 ft	650605-001
Auger Hole 1	S	01-24-20 09:02	1.0 - 1.5 ft	650605-002
Auger Hole 1	S	01-24-20 09:04	1.5 - 2.0 ft	650605-003
Auger Hole 2	S	01-24-20 09:09	0.0 - 1.0 ft	650605-004
Auger Hole 2	S	01-24-20 09:11	1.0 - 1.5 ft	650605-005
Auger Hole 2	S	01-24-20 09:13	1.5 - 2.0 ft	650605-006
Auger Hole 3	S	01-24-20 09:18	0.0 - 1.0 ft	650605-007
Auger Hole 3	S	01-24-20 09:20	1.0 - 1.5 ft	650605-008
Auger Hole 3	S	01-24-20 09:22	1.5 - 2.0 ft	650605-009
Auger Hole 4	S	01-24-20 09:27	0.0 - 1.0 ft	650605-010
Auger Hole 4	S	01-24-20 09:29	1.0 - 1.5 ft	650605-011
Auger Hole 4	S	01-24-20 09:21	1.5 - 2.0 ft	650605-012
Auger Hole 5	S	01-24-20 09:36	0.0 - 1.0 ft	650605-013

CASE NARRATIVE

Client Name: American Safety Services

Project Name: Maverick Natural Resources-Jalmat 235

Project ID:
Work Order Number(s): *650605*

Report Date: *04-FEB-20*
Date Received: *01/29/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3115335 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7695757-1-BLK.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 1**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-001	Date Collected:	01.24.20 09.00	Sample Depth:	0.0 - 1.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.20	Basis:	Wet Weight
Seq Number:	3114893				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3713.8**	24.802	mg/L	01.29.20 23.23		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.29.20 22.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.29.20 22.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.29.20 22.08	U	1
Total TPH	PHC635	<50	50	mg/kg	01.29.20 22.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	01.29.20 22.08	
o-Terphenyl	84-15-1	112	%	70-135	01.29.20 22.08	

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 1**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-001	Date Collected:	01.24.20 09.00	Sample Depth:	0.0 - 1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.03.20 06.29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.03.20 06.29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.03.20 06.29	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.03.20 06.29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.03.20 06.29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.03.20 06.29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.03.20 06.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	77	%	70-130	02.03.20 06.29	
1,4-Difluorobenzene	540-36-3	116	%	70-130	02.03.20 06.29	

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 1**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-002	Date Collected:	01.24.20 09.02	Sample Depth:	1.0 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.20	Basis:	Wet Weight
Seq Number:	3114893				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3021.2**	24.950	mg/L	01.29.20 23.30		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.29.20 23.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.29.20 23.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.29.20 23.12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.29.20 23.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	01.29.20 23.12	
o-Terphenyl	84-15-1	108	%	70-135	01.29.20 23.12	

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 1**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-002	Date Collected:	01.24.20 09.02	Sample Depth:	1.0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.03.20 06.49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.03.20 06.49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.03.20 06.49	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.03.20 06.49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.03.20 06.49	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.03.20 06.49	U	1
Total BTEX		<0.002	0.002	mg/kg	02.03.20 06.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	02.03.20 06.49	
4-Bromofluorobenzene	460-00-4	78	%	70-130	02.03.20 06.49	

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American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 1**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-003	Date Collected:	01.24.20 09.04	Sample Depth:	1.5 - 2.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1689.9**	24.950	mg/L	01.29.20 17.55		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.29.20 23.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.29.20 23.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.29.20 23.33	U	1
Total TPH	PHC635	<50	50	mg/kg	01.29.20 23.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	01.29.20 23.33	
o-Terphenyl	84-15-1	108	%	70-135	01.29.20 23.33	

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American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 1**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-003	Date Collected:	01.24.20 09.04	Sample Depth:	1.5 - 2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.03.20 07.09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.03.20 07.09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.03.20 07.09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.03.20 07.09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.03.20 07.09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.03.20 07.09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.03.20 07.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.03.20 07.09	
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.03.20 07.09	

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 2**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-004	Date Collected:	01.24.20 09.09	Sample Depth:	0.0 - 1.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3288.7**	25.202	mg/L	01.29.20 18.02		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.29.20 23.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.29.20 23.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.29.20 23.54	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.29.20 23.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	01.29.20 23.54	
o-Terphenyl	84-15-1	113	%	70-135	01.29.20 23.54	

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 2**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-004	Date Collected:	01.24.20 09.09	Sample Depth:	0.0 - 1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.03.20 07.29	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.03.20 07.29	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.03.20 07.29	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.03.20 07.29	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.03.20 07.29	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.03.20 07.29	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.03.20 07.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	74	%	70-130	02.03.20 07.29	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.03.20 07.29	

Certificate of Analytical Results 650605

American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 2**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-005	Date Collected:	01.24.20 09.11	Sample Depth:	1.0 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2380.7**	25.050	mg/L	01.29.20 18.09		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.30.20 00.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.30.20 00.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.30.20 00.15	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.30.20 00.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	01.30.20 00.15	
o-Terphenyl	84-15-1	112	%	70-135	01.30.20 00.15	

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American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 2**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-005	Date Collected:	01.24.20 09.11	Sample Depth:	1.0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.03.20 07.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.03.20 07.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.03.20 07.50	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.03.20 07.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.03.20 07.50	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.03.20 07.50	U	1
Total BTEX		<0.002	0.002	mg/kg	02.03.20 07.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	72	%	70-130	02.03.20 07.50	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.20 07.50	

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American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 2**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-006	Date Collected:	01.24.20 09.13	Sample Depth:	1.5 - 2.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1807.2**	25.253	mg/L	01.29.20 18.15		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.20 00.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.30.20 00.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.30.20 00.35	U	1
Total TPH	PHC635	<50	50	mg/kg	01.30.20 00.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	01.30.20 00.35	
o-Terphenyl	84-15-1	112	%	70-135	01.30.20 00.35	

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Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 2**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-006	Date Collected:	01.24.20 09.13	Sample Depth:	1.5 - 2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.03.20 08.10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.03.20 08.10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.03.20 08.10	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.03.20 08.10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.03.20 08.10	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.03.20 08.10	U	1
Total BTEX		<0.002	0.002	mg/kg	02.03.20 08.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	74	%	70-130	02.03.20 08.10	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.03.20 08.10	

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Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 3**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-007	Date Collected:	01.24.20 09.18	Sample Depth:	0.0 - 1.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32.679**	4.9702	mg/L	01.29.20 17.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.20 00.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.30.20 00.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.30.20 00.56	U	1
Total TPH	PHC635	<50	50	mg/kg	01.30.20 00.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	01.30.20 00.56	
o-Terphenyl	84-15-1	112	%	70-135	01.30.20 00.56	

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Sample Id:	**Auger Hole 3**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-007	Date Collected:	01.24.20 09.18	Sample Depth:	0.0 - 1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.03.20 08.30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.03.20 08.30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.03.20 08.30	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.03.20 08.30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.03.20 08.30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.03.20 08.30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.03.20 08.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.03.20 08.30	
4-Bromofluorobenzene	460-00-4	72	%	70-130	02.03.20 08.30	

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Sample Id:	**Auger Hole 3**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-008	Date Collected:	01.24.20 09.20	Sample Depth:	1.0 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.792**	5.0505	mg/L	01.29.20 18.35		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.20 01.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.30.20 01.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.30.20 01.17	U	1
Total TPH	PHC635	<50	50	mg/kg	01.30.20 01.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	01.30.20 01.17	
o-Terphenyl	84-15-1	115	%	70-135	01.30.20 01.17	

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Sample Id:	**Auger Hole 3**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-008	Date Collected:	01.24.20 09.20	Sample Depth:	1.0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.03.20 10.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.03.20 10.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.03.20 10.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.03.20 10.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.03.20 10.04	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.03.20 10.04	U	1
Total BTEX		<0.002	0.002	mg/kg	02.03.20 10.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	70	%	70-130	02.03.20 10.04	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.20 10.04	

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Sample Id:	**Auger Hole 3**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-009	Date Collected:	01.24.20 09.22	Sample Depth:	1.5 - 2.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.3700**	4.9603	mg/L	01.29.20 18.42		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.30.20 01.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.30.20 01.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.30.20 01.38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.30.20 01.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	01.30.20 01.38	
o-Terphenyl	84-15-1	112	%	70-135	01.30.20 01.38	

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Sample Id:	**Auger Hole 3**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-009	Date Collected:	01.24.20 09.22	Sample Depth:	1.5 - 2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.03.20 10.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.03.20 10.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.03.20 10.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.03.20 10.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.03.20 10.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.03.20 10.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.03.20 10.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.03.20 10.25	
1,4-Difluorobenzene	540-36-3	115	%	70-130	02.03.20 10.25	

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Sample Id:	**Auger Hole 4**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-010	Date Collected:	01.24.20 09.27	Sample Depth:	0.0 - 1.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.0000	5.0000	mg/L	01.29.20 18.49	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.20 01.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.30.20 01.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.30.20 01.59	U	1
Total TPH	PHC635	<50	50	mg/kg	01.30.20 01.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	01.30.20 01.59	
o-Terphenyl	84-15-1	114	%	70-135	01.30.20 01.59	

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Sample Id:	**Auger Hole 4**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-010	Date Collected:	01.24.20 09.27	Sample Depth:	0.0 - 1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.03.20 10.45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.03.20 10.45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.03.20 10.45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.03.20 10.45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.03.20 10.45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.03.20 10.45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.03.20 10.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.03.20 10.45	
1,4-Difluorobenzene	540-36-3	117	%	70-130	02.03.20 10.45	

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Sample Id:	**Auger Hole 4**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-011	Date Collected:	01.24.20 09.29	Sample Depth:	1.0 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.039**	4.9900	mg/L	01.29.20 18.55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.30.20 02.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.30.20 02.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.30.20 02.42	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.30.20 02.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	01.30.20 02.42	
o-Terphenyl	84-15-1	110	%	70-135	01.30.20 02.42	

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Sample Id:	**Auger Hole 4**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-011	Date Collected:	01.24.20 09.29	Sample Depth:	1.0 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.03.20 11.05	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.03.20 11.05	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.03.20 11.05	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.03.20 11.05	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.03.20 11.05	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.03.20 11.05	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.03.20 11.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	119	%	70-130	02.03.20 11.05	
4-Bromofluorobenzene	460-00-4	83	%	70-130	02.03.20 11.05	

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Sample Id:	**Auger Hole 4**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-012	Date Collected:	01.24.20 09.21	Sample Depth:	1.5 - 2.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.0302	5.0302	mg/L	01.29.20 19.02	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.20 03.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.30.20 03.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.30.20 03.03	U	1
Total TPH	PHC635	<50	50	mg/kg	01.30.20 03.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	01.30.20 03.03	
o-Terphenyl	84-15-1	107	%	70-135	01.30.20 03.03	

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Sample Id:	**Auger Hole 4**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-012	Date Collected:	01.24.20 09.21	Sample Depth:	1.5 - 2.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.03.20 11.25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.03.20 11.25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.03.20 11.25	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.03.20 11.25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.03.20 11.25	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.03.20 11.25	U	1
Total BTEX		<0.002	0.002	mg/kg	02.03.20 11.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.03.20 11.25	
4-Bromofluorobenzene	460-00-4	76	%	70-130	02.03.20 11.25	

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Sample Id:	**Auger Hole 5**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-013	Date Collected:	01.24.20 09.36	Sample Depth:	0.0 - 1.0 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	01.29.20 16.42	Basis:	Wet Weight
Seq Number:	3114871				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.0100	5.0100	mg/L	01.29.20 19.09	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.29.20 15.00	Basis:	Wet Weight
Seq Number:	3114959				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.30.20 03.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.30.20 03.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.30.20 03.25	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.30.20 03.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	01.30.20 03.25	
o-Terphenyl	84-15-1	108	%	70-135	01.30.20 03.25	

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American Safety Services, Odessa, TX

Maverick Natural Resources-Jalmat 235

Sample Id:	**Auger Hole 5**	Matrix:	Soil	Date Received:	01.29.20 09.14
Lab Sample Id:	650605-013	Date Collected:	01.24.20 09.36	Sample Depth:	0.0 - 1.0 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.02.20 11.30	Basis:	Wet Weight
Seq Number:	3115335				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.03.20 11.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.03.20 11.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.03.20 11.45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.03.20 11.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.03.20 11.45	U	1
Total Xylenes	1330-20-7	<0.002	0.002	mg/kg	02.03.20 11.45	U	1
Total BTEX		<0.002	0.002	mg/kg	02.03.20 11.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	118	%	70-130	02.03.20 11.45	
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.03.20 11.45	

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.

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

QC Summary 650605

American Safety Services

Maverick Natural Resources-Jalmat 235

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3114893 Matrix: Solid Date Prep: 01.29.20
MB Sample Id: 7695519-1-BLK LCS Sample Id: 7695519-1-BKS LCSD Sample Id: 7695519-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858340	250.00	268.47	107	268.32	107	90-110	0	20	mg/L	01.29.20 20:17	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3114871 Matrix: Solid Date Prep: 01.29.20
MB Sample Id: 7695490-1-BLK LCS Sample Id: 7695490-1-BKS LCSD Sample Id: 7695490-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858340	250.00	256.25	103	254.34	102	90-110	1	20	mg/L	01.29.20 17:22	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3114893 Matrix: Soil Date Prep: 01.29.20
Parent Sample Id: 650476-029 MS Sample Id: 650476-029 S MSD Sample Id: 650476-029 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	129.80	249.00	399.76	108	397.50	108	90-110	1	20	mg/L	01.29.20 20:37	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3114893 Matrix: Soil Date Prep: 01.29.20
Parent Sample Id: 650551-003 MS Sample Id: 650551-003 S MSD Sample Id: 650551-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.885	251.00	287.09	110	287.17	110	90-110	0	20	mg/L	01.29.20 22:10	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3114871 Matrix: Soil Date Prep: 01.29.20
Parent Sample Id: 650605-007 MS Sample Id: 650605-007 S MSD Sample Id: 650605-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	32.679	248.51	292.74	105	291.43	104	90-110	0	20	mg/L	01.29.20 17:42	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 650605

American Safety Services

Maverick Natural Resources-Jalmat 235

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3114871 Matrix: Soil Date Prep: 01.29.20
Parent Sample Id: 650605-013 MS Sample Id: 650605-013 S MSD Sample Id: 650605-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.0711	250.50	272.49	108	272.59	108	90-110	0	20	mg/L	01.29.20 19:15	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3114959 Matrix: Solid Date Prep: 01.29.20
MB Sample Id: 7695497-1-BLK LCS Sample Id: 7695497-1-BKS LCSD Sample Id: 7695497-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	930	93	976	98	70-135	5	20	mg/kg	01.29.20 21:27	
Diesel Range Organics (DRO)	<15.0	1000	936	94	950	95	70-135	1	20	mg/kg	01.29.20 21:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		111		114		70-135	%	01.29.20 21:27
o-Terphenyl	114		99		113		70-135	%	01.29.20 21:27

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3114959 Matrix: Solid Date Prep: 01.29.20
MB Sample Id: 7695497-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.29.20 21:06	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3114959 Matrix: Soil Date Prep: 01.29.20
Parent Sample Id: 650605-001 MS Sample Id: 650605-001 S MSD Sample Id: 650605-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	24.3	997	979	96	973	95	70-135	1	20	mg/kg	01.29.20 22:29	
Diesel Range Organics (DRO)	19.4	997	955	94	934	92	70-135	2	20	mg/kg	01.29.20 22:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		126		70-135	%	01.29.20 22:29
o-Terphenyl	110		109		70-135	%	01.29.20 22:29

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

QC Summary 650605

American Safety Services

Maverick Natural Resources-Jalmat 235

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3115335 Matrix: Solid Date Prep: 02.02.20

MB Sample Id: 7695757-1-BLK LCS Sample Id: 7695757-1-BKS LCSD Sample Id: 7695757-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.112	112	0.0920	92	70-130	20	35	mg/kg	02.03.20 03:09	
Toluene	<0.000456	0.100	0.106	106	0.0910	91	70-130	15	35	mg/kg	02.03.20 03:09	
Ethylbenzene	<0.000565	0.100	0.101	101	0.0867	87	70-130	15	35	mg/kg	02.03.20 03:09	
m,p-Xylenes	<0.00101	0.200	0.196	98	0.170	85	70-130	14	35	mg/kg	02.03.20 03:09	
o-Xylene	<0.000344	0.100	0.101	101	0.0873	87	70-130	15	35	mg/kg	02.03.20 03:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		114		109		70-130	%	02.03.20 03:09
4-Bromofluorobenzene	68	**	90		86		70-130	%	02.03.20 03:09

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3115335 Matrix: Soil Date Prep: 02.02.20

Parent Sample Id: 650475-002 MS Sample Id: 650475-002 S MSD Sample Id: 650475-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000513	0.100	0.0775	77	0.0926	92	70-130	18	35	mg/kg	02.03.20 03:50	
Toluene	0.000805	0.100	0.0696	69	0.0848	84	70-130	20	35	mg/kg	02.03.20 03:50	X
Ethylbenzene	<0.000565	0.100	0.0564	56	0.0670	67	70-130	17	35	mg/kg	02.03.20 03:50	X
m,p-Xylenes	<0.00101	0.200	0.109	55	0.128	64	70-130	16	35	mg/kg	02.03.20 03:50	X
o-Xylene	<0.000344	0.100	0.0523	52	0.0646	65	70-130	21	35	mg/kg	02.03.20 03:50	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		103		70-130	%	02.03.20 03:50
4-Bromofluorobenzene	96		84		70-130	%	02.03.20 03:50

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)
San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)

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CHAIN OF CUSTODY

Page 1 Of 2

Xenco Quote #:
Xenco Job #: 650665

Client / Reporting Information

Company Name / Branch: American Safety Services Inc.
Company Address: 8715 Andrews Hwy, Odessa Tx 79765
Email: tfranklin@americansafety.net, mdial@americansafety.net
Phone No: 432-557-9868, 432-557-6195
Project Contact: Thomas Franklin
Samplers's Name:

Project Information

Project Name/Number: Maverick Natural Resources-Jalmat 235
Project Location: Lea Co. NM
Invoice To: Bill ASSI Attn Thomas Franklin
PO Number:

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chloride 300	TPH 8015	BTEX 8021	Hold							Field Comments
1	Auger Hole 1	0.0-1.0'	1/24/2020	0900	S	1									X	X	X								
2	Auger Hole 1	1.0-1.5'	1/24/2020	0902	S	1									X	X	X								
3	Auger Hole 1	1.5-2.0'	1/24/2020	0904	S	1									X	X	X								
4	Auger Hole 2	0.0-1.0'	1/24/2020	0909	S	1									X	X	X								
5	Auger Hole 2	1.0-1.5'	1/24/2020	0911	S	1									X	X	X								
6	Auger Hole 2	1.5-2.0'	1/24/2020	0913	S	1									X	X	X								
7	Auger Hole 3	0.0-1.0'	1/24/2020	0918	S	1									X	X	X								
8	Auger Hole 3	1.0-1.5'	1/24/2020	0920	S	1									X	X	X								
9	Auger Hole 3	1.5-2.0'	1/24/2020	0922	S	1									X	X	X								
10	Auger Hole 4	0.0-1.0'	1/24/2020	0927	S	1									X	X	X								

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Relinquished by Sampler: [signature]	1/24/20	1 [signature] 914	2		2
3 Relinquished by:	Date Time:	3 Received By:	4 Relinquished By:	Date Time:	4 Received By:
5 Relinquished by:	Date Time:	5 Received By:	Custody Seal #	Preserved where applicable	On Ice: [checked] Cooler Temp.: 1.0 Thermo. Corr. Factor: 0

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

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XENCO LABORATORIES

Setting the Standard since 1990

CHAIN OF CUSTODY

Page 2 Of 2

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)
San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
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Xenco Quote # | Xenco Job # 450005

Client / Reporting Information

Company Name / Branch: American Safety Services Inc.
Company Address: 8715 Andrews Hwy, Odessa Tx 79765
Email: tfranklin@americansafety.net; mdial@americansafety.net
Phone No: 432-557-9868; 432-557-6195
Project Contact: Thomas Franklin
Samplers's Name

Project Information

Project Name/Number: Maverick Natural Resources-Jalmat 235
Project Location: Lea Co. NM
Invoice To: Bill ASSI Attn Thomas Franklin
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chloride 300	TPH 8015	BTEX 8021	Hold	Field Comments
1	Auger Hole 4	1.0-1.5'	1/24/2020	0929	S	1									X	X	X		
2	Auger Hole 4	1.5-2.0'	1/24/2020	0931	S	1									X	X	X		
3	Auger Hole 5	0.0-1.0'	1/24/2020	0936	S	1									X	X	X		
4	[redacted]																		
5																			
6																			
7																			
8																			
9																			
10																			

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [X] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1				2		2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
			5			

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

Final 1.000
Page 39 of 40
Received by OCD: 2/28/2020 8:06:32 AM

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: American Safety Services

Date/ Time Received: 01.29.2020 09.14.00 AM

Work Order #: 650605

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.6
#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?	**N/A**

*** 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: 01.29.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 01.30.2020
Jessica Kramer

APPENDIX E

Initial C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Breitburn Operating, LP (Maverick Natural Resources, LLC)	OGRID 370080
Contact Name Thomas Haigood	Contact Telephone (432) 701-7802
Contact email: Thomas.haigood@mavresources.com	Incident # *(assigned by OCD)*
Contact mailing address PO Box 678 Andrews, TX	

Location of Release Source

Latitude 32.41055 Longitude -103.33083
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Jalmat Field Yates sand Unit No. 235	Site Type: Production
Date Release Discovered: 6/28/19	API# *(if applicable)* 30-025-38928

Unit Letter	Section	Township	Range	County
A	11	22S	35E	Lea

Surface Owner: [x] 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)15	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	[ ] Yes [ ] No
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe) Water from P&A Wellbore	Volume/Weight Released (provide units) unknown Was advised as of 2 pm 11/9/2018 leak has stopped flowing	Volume/Weight Recovered (provide units) 100 bbl water trucked from emergency containment to disposal

Cause of Release: 9:00 A.M. Lease Operator arrives on location to discover that fluid was spraying from a 2" injection line valve, that bad been inadvertently opened. A bull was moving away from the line as the operator was pulling up and it appears that the bull had contacted the valve and opened it. Apparently, the valve had no plug in it, therefore approximately 15 bbls of produced water sprayed over an area of 150' by 150'. The operator immediately shut in the valve. The overspray impacted the pasture area off the pad, but not waterway was impacted.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?

If YES, for what reason(s) does the responsible party consider this a major release?

☐ Yes ☒ No

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Immediate notice was provided via email to Dylan Rose-Coss 6/28/19 at 12:17 PM

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ■ The source of the release has been stopped.
- ■ The impacted area has been secured to protect human health and the environment.
- ■ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ■ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Thomas Haigood Title: Permian HSE Specialist

Signature: Date: 6/28/2019

email: Thomas.haigood@mavresources.com Telephone: (432)523-1807

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Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release? 207 (ft bgs)

Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Thomas Haigood Title: Permian HSE Specialist

Signature:  Date: 06/28/2019

email: Thomas.haigood@mavresources.com Telephone: (432) 701-7802

OCD Only

Received by: Date:

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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ■ Detailed description of proposed remediation technique
- ■ Scaled sitemap with GPS coordinates showing delineation points
- ■ Estimated volume of material to be remediated
- ■ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ■ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Thomas Haigood Title: Permian HSE Specialist

Signature: Date: 06/28/2019

email: Thomas.haigood@mavresources.com Telephone: (432) 701-7802

OCD Only

Received by: Date:

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Date:

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: Thomas Haigood Title: Permian HSE Specialist

Signature: Date: 05/09/2019

email: Thomas.hagood@maverickresources.com Telephone: (432)701-7802

OCD Only

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

APPENDIX F

Groundwater Data

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater ▼ Geographic Area: New Mexico ▼ GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322238103225201

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

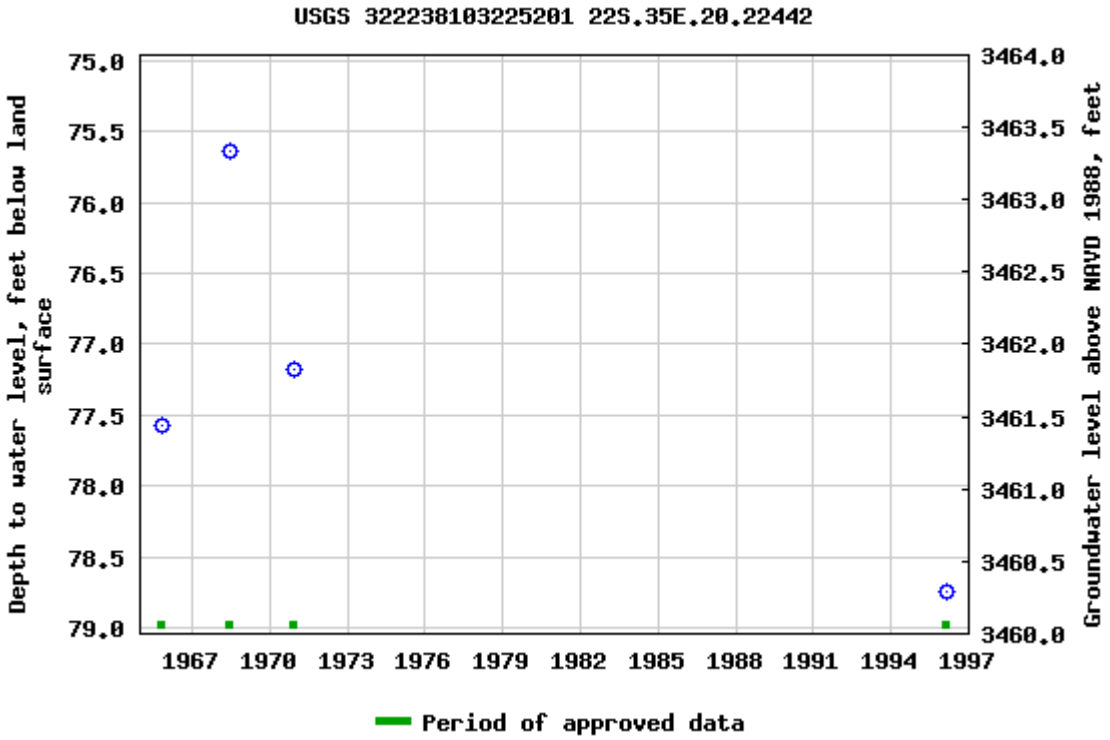
USGS 322238103225201 22S.35E.20.22442

Available data for this site Groundwater: Field measurements ▼ GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°22'38", Longitude 103°22'52" NAD27
Land-surface elevation 3,539 feet above NAVD88
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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