



## REMEDIATION WORK PLAN

Property:

**Concho Operating, LLC.  
Big Papi Federal Com #002H  
Eddy County, New Mexico  
Unit Letter "C", Section 04, Township 26 South, Range 29 East  
Latitude 32.077566, Longitude -103.986229  
2RP-4141**

September 2017

Prepared for:

**Concho Operating, LLC.  
600 West Illinois Avenue  
Midland, TX 79701  
Attn: Mrs. Rebecca Haskell**

Prepared by:

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Ryan Reich  
Environmental Project Manager

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Jack Zimmerman, P.G., C.P.G  
Senior Geologist

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## **WORK PLAN**

**Concho Operating, LLC.  
Big Papi Federal Com #002H  
Eddy County, New Mexico  
Unit Letter "C", Section 04, Township 26 South, Range 29 East  
Latitude 32.077566, Longitude -103.986229  
2RP-4141**

September 2017

### **1.0 INTRODUCTION**

#### **1.1 Site Description & Background**

American Safety Services Inc. (ASSI) has prepared this Work Plan for the Concho Operating, LLC. (COG) Big Papi Federal Com #002H (referred to hereinafter as the "Site" or "subject Site"). This Work Plan is based upon the interpretation of the data collected by ASSI.

The Big Papi Federal #002H is located in Unit Letter "C", Section 04, Township 26 South, Range 29 East, Eddy County, New Mexico (GPS 32.077566N, -103.986229W).

Remedial actions were conducted by ASSI in accordance with New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (NMOCD) rules (*NMAC 19.15.29 Release Notification*) and the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

#### **1.2 Project Objective**

The objective of the Work Plan is to present documentation of the activities that were performed to date and to request an effective means to remediate the Site.

#### **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 period. ASSI makes no warranties, express 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 with the client.

## 1.4 Reliance

This report has been prepared for the exclusive use of COG, 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 COG and ASSI. Any unauthorized distribution or reuse is at the sole risk of COG. 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

The Site is subject to regulatory oversight by the NMOCD. 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 *Release Notification*. These documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

In accordance with the NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases*, 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	0
	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	
<b>Total Ranking Score</b>			<b>0</b>

Based on ASSI's evaluation of the scoring criteria, the Site would have a Total Ranking Score of 0. This ranking is based on the following:

- The depth to the initial groundwater-bearing zone is 100 to 150 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 0, 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), 5,000 mg/Kg for Total Petroleum Hydrocarbons (TPH), and 600 mg/Kg for Chloride.

Figures 1 and 2 show the location of COG's Big Papi Federal Com #002H facility in Eddy County, New Mexico and surrounding topography.

### **3.0 INITIAL RESPONSE & ACTIVITIES**

#### **3.1 Initial Response**

On July 26, 2017, ASSI personnel completed drilling and sampling activities utilizing air rotary drilling techniques at the Big Papi Federal Com #002H facility. This action was in response to a reportable release that occurred on February 28, 2017. Thirty (30) barrels (bbls) of produced water was released directly to the ground. None of the fluids were recovered. The release impacted approximately eight thousand (8,000) square feet of pasture area (Figure 3).

#### **3.2 Drilling Activities**

On July 26<sup>th</sup> ASSI and COG personnel along with Scarborough Drilling were present to collect delineation samples utilizing air rotary drilling techniques. Mr. Ryan Reich, an ASSI environmental professional, was present to document onsite activities (written and photographic).

A total of seventeen (17) samples were collected, however, only eleven (11) samples were analyzed. Six (6) samples were analyzed from Soil Bore-1 and five (5) samples were analyzed from Soil Bore-2 for BTEX, TPH, and Chloride (Table 1).

Two (2) soil borings (i.e., Soil Bore-1 and Soil Bore-2), were advanced to delineate Chloride at depth. Soil boring locations are shown on Figure 4. Discrete samples were collected from Soil Bore-1 at the following depths: 1', 3', 5', 7', 10', and 20', below ground surface (bgs). At Soil Bore-2 discrete samples were collected at the following depths: 1', 3', 5' 7' and 15' bgs. Soil was field screened for Chloride utilizing electro conductivity during drilling operations.

#### **3.3 Soil Sampling Analytical Results**

Analytical results were compared to the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases* (Section VI A. Contaminated Soils) and show Chloride exceedances exist in soil above the NMOCD clean-up goals as discussed in Section 2.0 at both sample locations. However, at location Soil Bore-1 vertical delineation was achieved at a depth of nine (9) feet bgs with a Chloride concentration of 190 mg/Kg. At location Soil Bore-2 vertical delineation was achieved at a depth of seven (7) feet bgs with a Chloride concentration of 120 mg/Kg. Each location meets the NMOCD's threshold of 600 mg/Kg satisfying clean-up goal criteria.

#### **4.0 LABORATORY ANALYTICAL METHODS**

The samples were analyzed for TPH GRO/DRO utilizing EPA method SW-846 8015, BTEX using EPA method SW-846 8021B, and Chloride utilizing EPA method SW-846 300.1. Copies of the laboratory analysis are 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, Texas for normal turn-around time.

Figure 4 shows the approximate location of the sampling (i.e., Soil Bore) locations and dimensions of the proposed excavation area in relation to pertinent land features and general Site boundaries, which is included in Appendix A.

#### **5.0 WORK PLAN**

Based upon the data collected and the work completed by ASSI, the constituent of concern (COC) has been vertically delineated at both sample locations. Furthermore, laboratory analysis shows that TPH and BTEX concentrations are below the NMOCD clean-up goals.

Based on the analytical data presented in Table 1, COG and ASSI propose to complete a removal action of the impacted material. The area adjacent to and around Soil Bore-1 will be excavated to a depth of approximately four (4) feet bgs. The area adjacent to and around Soil Bore-2 will be excavated to a depth of approximately three (3) feet bgs (Figure 4). All material will be removed by mechanical means, be temporarily stockpiled onsite and subsequently removed (hailed away) offsite to a proper disposal facility under appropriate manifest. Prior to beginning backfilling operations, sidewall samples will be collected from each excavation in their prospective cardinal direction for Chloride only and submitted for laboratory analysis. The excavated areas will be backfilled to grade with clean imported material and the surface grade contoured to the surrounding landscape.



## APPENDIX A

### Figures

# COG - Big Papi Fed Com #2H

Figure 1



Big Papi Fed Com #2H

285

Peecos Hwy

Alcatraz



Google Earth

10 mi

©2017 Google

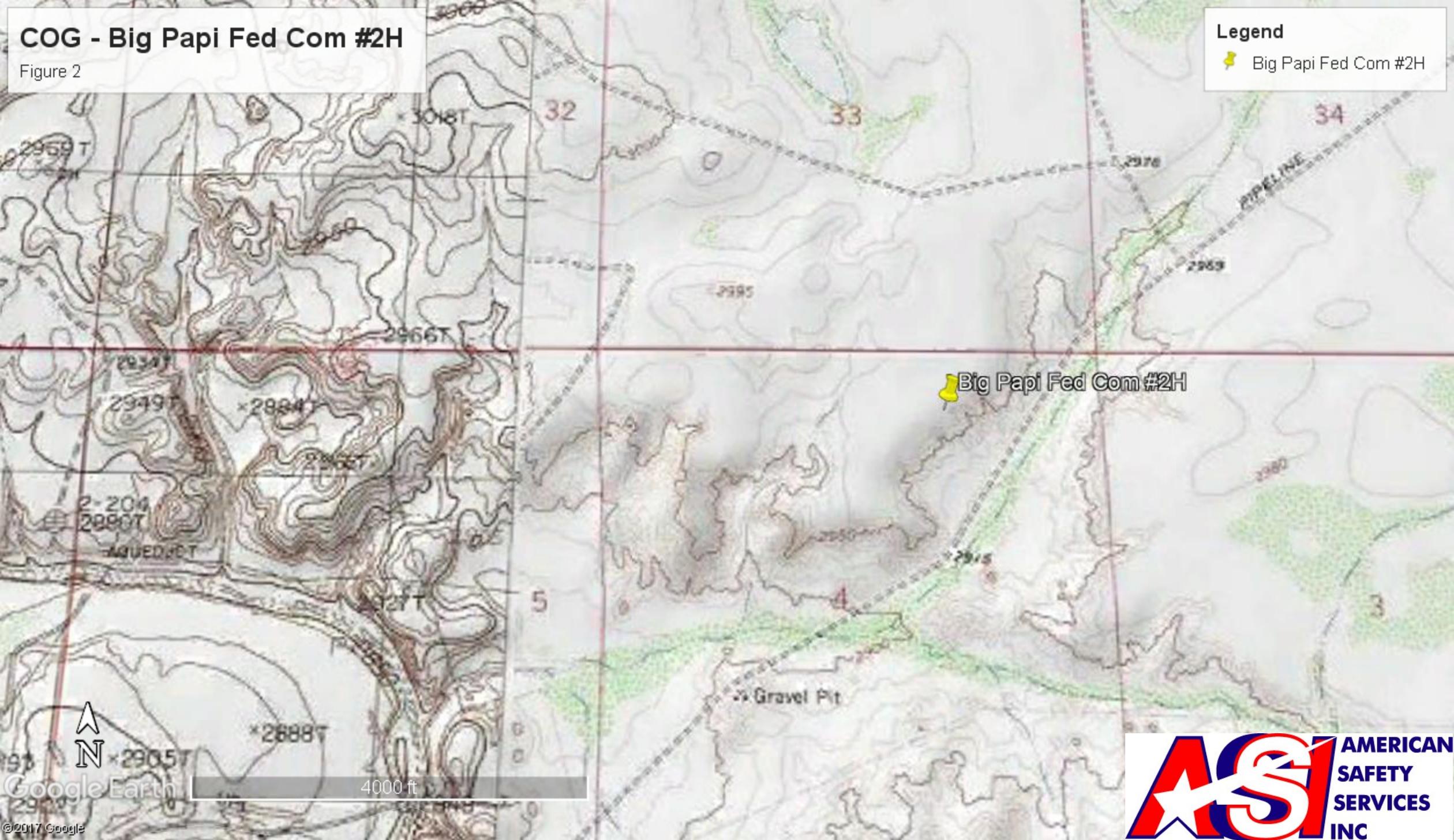


# COG - Big Papi Fed Com #2H

Figure 2

**Legend**

- 📍 Big Papi Fed Com #2H

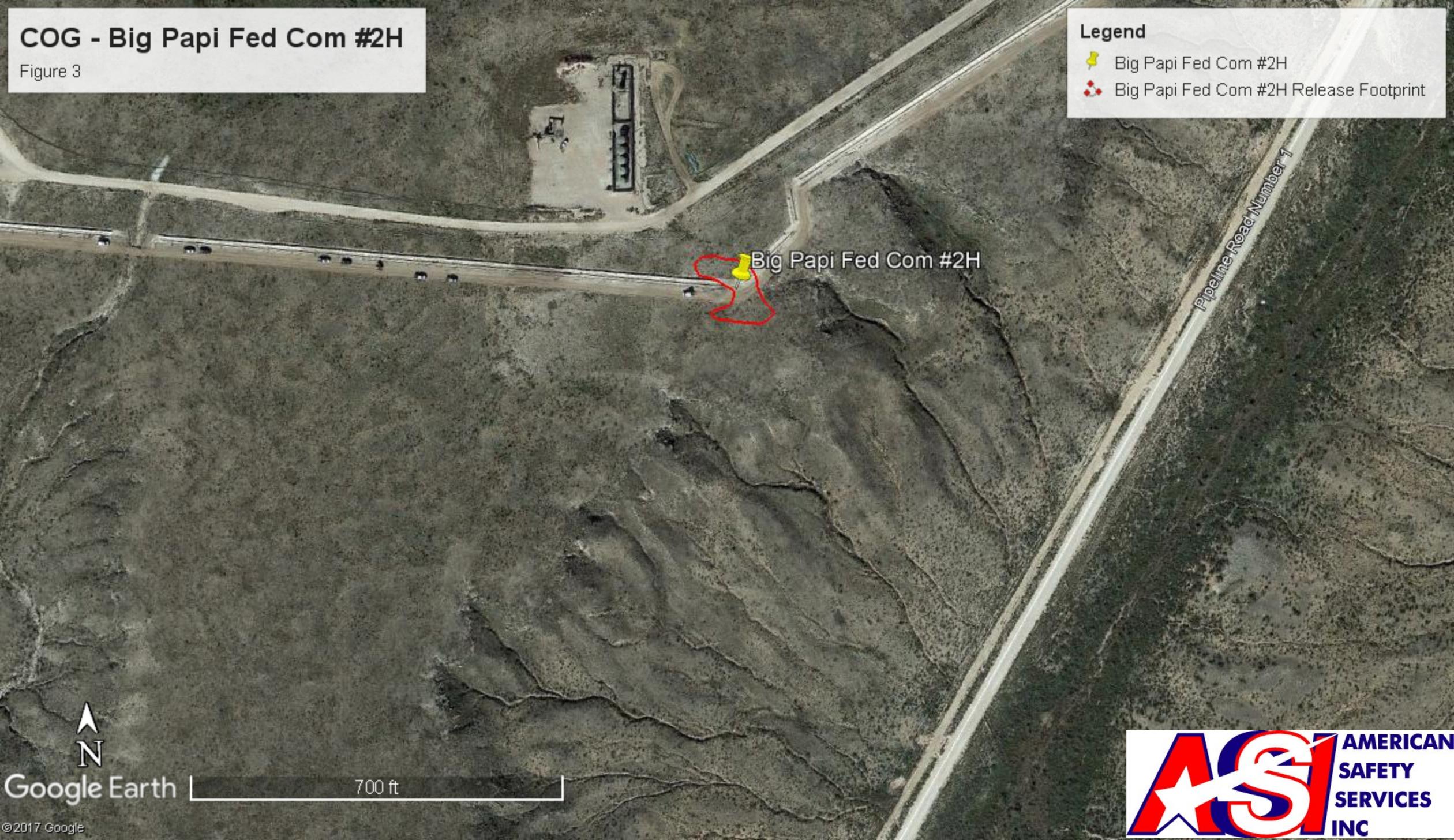


# COG - Big Papi Fed Com #2H

Figure 3

**Legend**

-  Big Papi Fed Com #2H
-  Big Papi Fed Com #2H Release Footprint



Big Papi Fed Com #2H

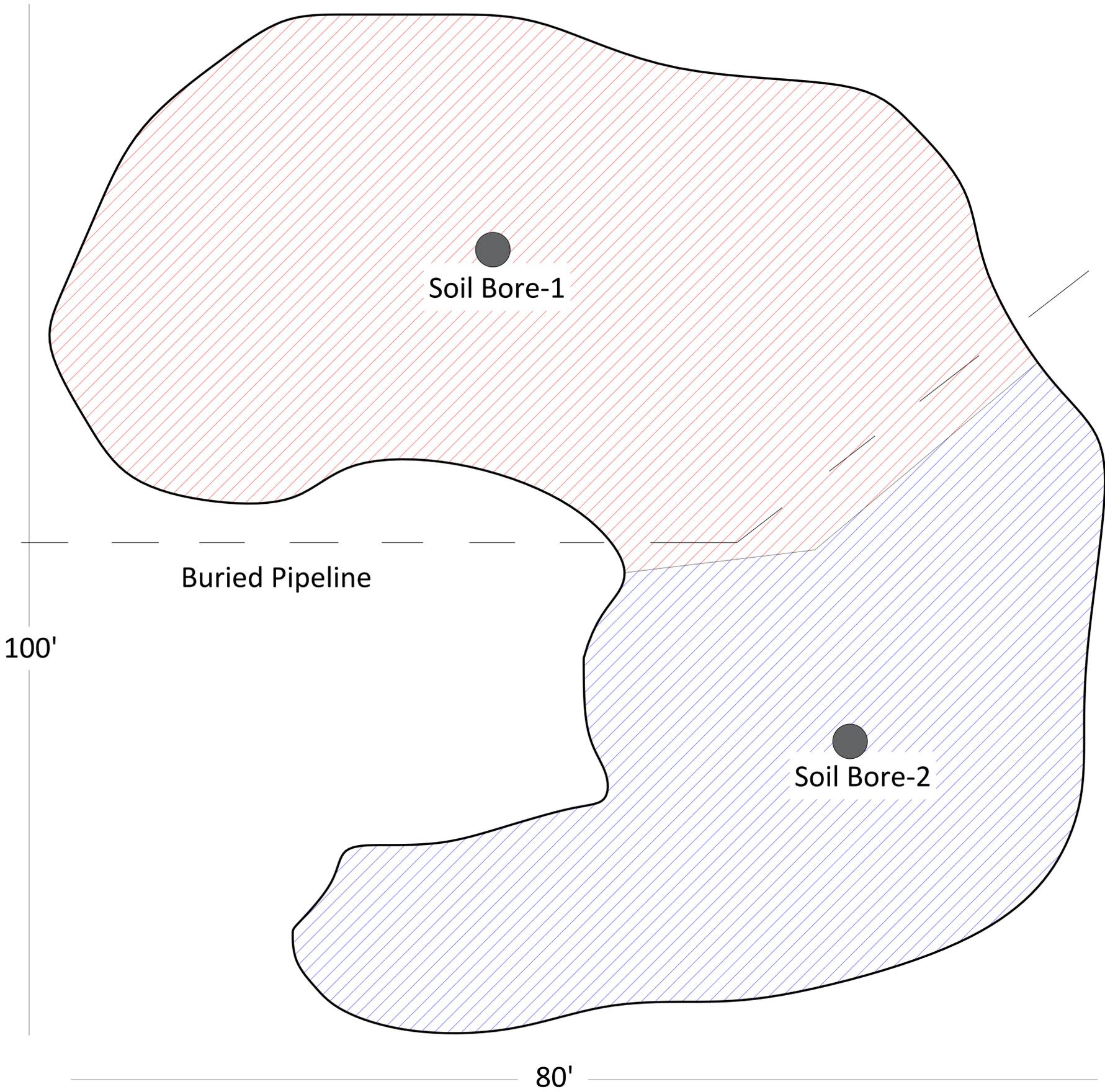
Pipeline Road Number 1



Google Earth

700 ft





**Legend**

-  — 4' Excavation
-  — 3' Excavation
-  — Sample Point

**Concho-  
Big Papi Federal Com #002H**  
Eddy Co, New Mexico  
32.0775N, -103.9862W



American Safety Services, Inc  
8715 Andrews Hwy  
Odessa, TX 79765  
Phone: (432) 552-7625

**FIGURE 4**  
**Proposed Excavation**  
**Depths**



## APPENDIX B

### Table 1

TABLE 1  
 Summary of Delineation Sampling Analytical Results  
 Concentrations of Benzene, BTEX, TPH & Chloride in Soil  
 Concho Operating, LLC  
 Big Papi Federal Com #002H  
 Eddy County, New Mexico  
 NMOCD REF: 2RP-4141

SAMPLE LOCATION	SAMPLE DEPTH (bgs)	SAMPLE DATE	SOIL STATUS	8021B					8015M				300.0
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYLBENZENE (mg/Kg)	XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	Total TPH (mg/Kg)	CHLORIDE (mg/Kg)
NMOCD - Guidelines for Remediation of Leaks, Spills and Releases				10	NE	NE	NE	50	NE	NE	NE	5,000	600
Vertical Delineation Sampling													
Soil Bore-1	0'-1'	7/26/2017	In-Situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<15.0	21.5	<15.0	21.5	<b>44,500</b>
Soil Bore-1	2'-3'	7/26/2017	In-Situ	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	27.2	<15.0	27.2	<b>3,840</b>
Soil Bore-1	4'-5'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	<b>1,610</b>
Soil Bore-1	6'-7'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	<b>1,080</b>
Soil Bore-1	9'-10'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	190
Soil Bore-1	19'-20'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	187
Soil Bore-2	0'-1'	7/26/2017	In-Situ	<0.00200	<0.00200	<0.00200	<0.002	<0.002	<15.0	<15.0	<15.0	<15	<b>12,200</b>
Soil Bore-2	2'-3'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	<b>3,160</b>
Soil Bore-2	4'-5'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	<b>785</b>
Soil Bore-2	6'-7'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	120
Soil Bore-2	14'-15'	7/26/2017	In-Situ	-	-	-	-	-	-	-	-	-	231

mg/Kg - milligrams per Kilogram

- = Not Established

Concentrations in **BOLD** exceed the NMOCD Guidelines

Proposed excavated area

\$'



## APPENDIX C

### Laboratory Analysis



# Certificate of Analysis Summary 558748

American Safety Services, Odessa, TX

Project Name: Big Papi Fed #2



**Project Id:**  
**Contact:** Thomas Franklin  
**Project Location:** Eddy Co.NM

**Date Received in Lab:** Thu Jul-27-17 08:50 am  
**Report Date:** 31-AUG-17  
**Project Manager:** Brandi Ritcherson

<i>Analysis Requested</i>	<i>Lab Id:</i>	558748-001	558748-002	558748-003	558748-004	558748-005	558748-007
	<i>Field Id:</i>	Soil Bore-1	Soil Bore-1	Soil Bore-1	Soil Bore-1	Soil Bore-1	Soil Bore-1
	<i>Depth:</i>	0-1	2-3	4-5	6-7	9-10	19-20
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jul-26-17 11:25	Jul-26-17 11:30	Jul-26-17 11:35	Jul-26-17 11:40	Jul-26-17 11:45	Jul-26-17 11:55
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Jul-31-17 14:00	Jul-31-17 14:00				
	<i>Analyzed:</i>	Jul-31-17 23:10	Jul-31-17 23:29				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Benzene		<0.00200 0.00200	<0.00201 0.00201				
Toluene		<0.00200 0.00200	<0.00201 0.00201				
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201				
m,p-Xylenes		<0.00399 0.00399	<0.00402 0.00402				
o-Xylene		<0.00200 0.00200	<0.00201 0.00201				
Total Xylenes		<0.002 0.002	<0.00201 0.00201				
Total BTEX		<0.002 0.002	<0.00201 0.00201				
<b>Inorganic Anions by EPA 300/300.1</b>	<i>Extracted:</i>	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22
	<i>Analyzed:</i>	Jul-31-17 15:52	Jul-31-17 16:00	Jul-31-17 16:08	Jul-31-17 16:15	Jul-31-17 15:29	Jul-31-17 16:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		44500 248	3840 49.6	1610 24.7	1080 24.9	190 4.98	187 4.91
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Jul-28-17 17:00	Jul-28-17 17:00				
	<i>Analyzed:</i>	Jul-29-17 06:42	Jul-29-17 07:03				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0				
Diesel Range Organics (DRO)		21.5 15.0	27.2 15.0				
Oil Range Hydrocarbons (ORO)		<15.0 15.0	<15.0 15.0				
Total TPH		21.5 15	27.2 15				

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.

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Brandi Ritcherson  
Project Manager



# Certificate of Analysis Summary 558748

American Safety Services, Odessa, TX

Project Name: Big Papi Fed #2



**Project Id:**  
**Contact:** Thomas Franklin  
**Project Location:** Eddy Co.NM

**Date Received in Lab:** Thu Jul-27-17 08:50 am  
**Report Date:** 31-AUG-17  
**Project Manager:** Brandi Ritcherson

<i>Analysis Requested</i>	<i>Lab Id:</i>	558748-010	558748-011	558748-012	558748-013	558748-015	
	<i>Field Id:</i>	Soil Bore-2	Soil Bore-2	Soil Bore-2	Soil Bore-2	Soil Bore-2	
	<i>Depth:</i>	0-1	2-3	4-5	6-7	14-15	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Jul-26-17 12:15	Jul-26-17 12:20	Jul-26-17 12:25	Jul-26-17 12:27	Jul-26-17 12:32	
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Jul-31-17 14:00					
	<i>Analyzed:</i>	Jul-31-17 23:47					
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00401 0.00401					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.002 0.002					
Total BTEX		<0.002 0.002					
<b>Inorganic Anions by EPA 300/300.1</b>	<i>Extracted:</i>	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22	Jul-31-17 15:22	
	<i>Analyzed:</i>	Jul-31-17 16:46	Jul-31-17 16:54	Jul-31-17 17:01	Jul-31-17 17:09	Jul-31-17 17:17	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		12200 98.2	3160 24.9	785 4.92	120 4.92	231 4.95	
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	Jul-31-17 11:00					
	<i>Analyzed:</i>	Jul-31-17 13:58					
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0					
Diesel Range Organics (DRO)		<15.0 15.0					
Oil Range Hydrocarbons (ORO)		<15.0 15.0					
Total TPH		<15 15					

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.

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Brandi Ritcherson  
Project Manager

# Analytical Report 558748

for  
American Safety Services

Project Manager: Thomas Franklin

Big Papi Fed #2

31-AUG-17

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):  
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)  
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)  
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)  
Xenco-San Antonio: Texas (T104704534)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)  
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



31-AUG-17

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

Reference: XENCO Report No(s): **558748**  
**Big Papi Fed #2**  
Project Address: Eddy 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) 558748. 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. 558748 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,

---

**Brandi Ritcherson**

Project Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

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- 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

+ 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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5332 Blackberry Drive, San Antonio TX 78238	(214) 902 0300	(214) 351-9139
1211 W Florida Ave, Midland, TX 79701	(210) 509-3334	(210) 509-3335
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# CHAIN OF CUSTODY

Page 1 of 2

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Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes													
Company Name / Branch: American Safety Services Inc.		Project Name/Number: Big Papi Field #2		Xenco Quote #		Xenco Job # 558748													
Company Address: 8715 Andrews Hwy Odessa TX 79765		Project Location: Eddy Co., NM		Xenco Job #		558748													
Email: <a href="mailto:franklin@americansafety.net">franklin@americansafety.net</a> <a href="mailto:zimmerman@americansafety.net">zimmerman@americansafety.net</a>		Invoice To: COG - ATTN: Becky Haskell		Xenco Job #		558748													
Phone No: 432-557-9868		PO Number:		Xenco Job #		558748													
Project Contact: Thomas Franklin		Sampers Name: Ryan Pate / Mike Dail		Xenco Job #		558748													
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCI	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chloride (Method 300)	BTEX 80213	TPH 8015 (Ext C35)	Hold	
1	Soil Bore -1	0-1	7/24/19	1125	S	1													
2		2-3	7/24/19	1130	S	1													
3		4-5	7/24/19	1135	S	1													
4		6-7	7/24/19	1140	S	1													
5		9-10	7/24/19	1145	S	1													
6		14-15	7/24/19	1150	S	1													
7		19-20	7/24/19	1155	S	1													
8		24-25	7/24/19	1200	S	1													
9		29-30	7/24/19	1205	S	1													
10	Soil Bore -2	0-1	7/24/19	1215	S	1													
Turnaround Time (Business days)		Data Deliverable Information		Notes:															
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> 5 Day TAT		IC TPH exceeds 5,000 mg/kg or if Benzene exceeds 10 mg/kg or if Total BTEX exceeds 50 mg/kg deeper samples on hold or if Chloride exceeds 100 mg/kg run deeper samples															
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 7 Day TAT		FED-EX / UPS: Tracking #															
<input type="checkbox"/> 2 Day EMERGENCY		<input checked="" type="checkbox"/> Contract TAT																	
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist																	
TAT Starts Day received by Lab, if received by 5:00 pm		SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																	
Relinquished by Sampler: <i>M. Pate</i>		Date Time: 7/25/19 05:00		Received By: <i>M. Pate</i>		Date Time: 7/25/19 05:00		Temp: 5.9		CF: (-0.6: +0.2°C)		Corrected Temp: 5.7		IR ID: R-8					
Relinquished by: <i>M. Pate</i>		Date Time: 7/25/19 05:00		Received By: <i>M. Pate</i>		Date Time: 7/25/19 05:00													
Relinquished by: <i>M. Pate</i>		Date Time: 7/25/19 05:00		Received By: <i>M. Pate</i>		Date Time: 7/25/19 05:00													
Relinquished by: <i>M. Pate</i>		Date Time: 7/25/19 05:00		Received By: <i>M. Pate</i>		Date Time: 7/25/19 05:00													

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 losses or expenses incurred by the Client if such losses 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 will be enforced unless previously negotiated under a fully executed client contract.



Setting the Standard since 1990  
 Stafford, Texas (281-240-4200)  
 Dallas Texas (214-902-0300)

# CHAIN OF CUSTODY

Page 2 of 2

San Antonio, Texas (210-509-3334)  
 Midland, Texas (432-704-5251)

www.xenco.com

Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		Xenoco Quote #		Xenoco Job #		Matrix Codes											
Company Name / Branch: American Safety Services Inc. Company Address: 8715 Andrews Hwy Odessa TX 79765		Project Name/Number: Big Pip Fed #2 Project Location: Eddy Co. NM Invoice To: CDS. ATTN Becky Heskell PO Number:		558748		558748		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											
Email: franklin@americansafety.net zimmmerman@americansafety.net Project Contact: Thomas Franklin		Phone No: 432-557-9868 - Brent only																	
Sampler's Name Paper Pack / White Dial		Field ID / Point of Collection						Field Comments											
No.	Sample Depth	Collection Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE						
1	Soil Bore - 2	2-3	7/24/17 12:20	S	1														
2		4-5	7/24/17 12:25	S	1														
3		6-7	7/24/17 12:27	S	1														
4		9-10	7/24/17 12:30	S	1														
5		14-15	7/24/17 12:32	S	1														
6		19-20	7/24/17 12:37	S	1														
7		24-25	7/24/17 12:42	S	1														
8																			
9																			
10																			
Turnaround Time (Business days)		Data Deliverable Information		Notes:															
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> 5 Day TAT		<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg /raw data)													
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC + Forms		<input type="checkbox"/> TRRP Level IV													
<input type="checkbox"/> 2 Day EMERGENCY		<input checked="" type="checkbox"/> Contract TAT		<input type="checkbox"/> Level 3 (CLP Forms)		<input type="checkbox"/> UST / RG -411													
<input type="checkbox"/> 3 Day EMERGENCY				<input type="checkbox"/> TRRP Checklist															
TAT Starts Day received by Lab, if received by 5:00 pm		SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		FED-EX / UPS: T															
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Rece							
1. <i>M. Kelly</i>		7/24/17 08:22		1. <i>M. Kelly</i>		7/24/17 08:22		2. <i>M. Kelly</i>		7/24/17 08:22		2. <i>M. Kelly</i>							
Relinquished by:		Date Time:		Received By:		Date Time:		Custody Seal #		Preserved where applicable		On Ice		Cooler Temp.		Thermo. Corr. Factor			
3				3				4				<input checked="" type="checkbox"/>							
5				5															

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

**Client:** American Safety Services

**Date/ Time Received:** 07/27/2017 08:50:00 AM

**Work Order #:** 558748

**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)?	5.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seal present on shipping container/ cooler?	N/A
#5 *Custody Seals intact on shipping container/ cooler?	N/A
#6 Custody Seals intact on sample bottles?	N/A
#7 *Custody Seals Signed and dated?	N/A
#8 *Chain of Custody present?	Yes
#9 Sample instructions complete on Chain of Custody?	Yes
#10 Any missing/extra samples?	No
#11 Chain of Custody signed when relinquished/ received?	Yes
#12 Chain of Custody agrees with sample label(s)?	Yes
#13 Container label(s) legible and intact?	Yes
#14 Sample matrix/ properties agree with Chain of Custody?	Yes
#15 Samples in proper container/ bottle?	Yes
#16 Samples properly preserved?	Yes
#17 Sample container(s) intact?	Yes
#18 Sufficient sample amount for indicated test(s)?	Yes
#19 All samples received within hold time?	Yes
#20 Subcontract of sample(s)?	No
#21 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:** Shawnee Smith Date: 07/28/2017  
 Shawnee Smith

**Checklist reviewed by:** Brandi Ritcherson Date: 07/28/2017  
 Brandi Ritcherson



## APPENDIX D

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

Form C-141  
Revised August 8, 2011

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

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

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: BIG PAPI FEDERAL COM #002H	Facility Type: Battery

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-37833
------------------------	------------------------	----------------------

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	04	26S	29E	330'	North	1980	West	Eddy

Latitude 32.0780182 Longitude -103.9915085

**NATURE OF RELEASE**

Type of Release: Oil	Volume of Release: 8 bbls Oil	Volume Recovered: 7 bbls Oil
Source of Release: Lightning	Date and Hour of Occurrence: 8/23/2016 12:00:00 AM	Date and Hour of Discovery: 8/23/2016 1:00:00 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

This release was caused when lightning hit an out of service facility causing it to explode. Vacuum trucks were dispatched to recover all standing fluids and the resulting tank debris has been removed.

Describe Area Affected and Cleanup Action Taken.\*

The release remained on location and in the bermed area. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Dakota Neel	Approved by Environmental Specialist:	
Title: Environmental Coordinator	Approval Date:	Expiration Date:
E-mail Address: dneel2@concho.com	Conditions of Approval:	
Date: August 31, 2016 Phone: 575-748-6933	Attached <input type="checkbox"/>	

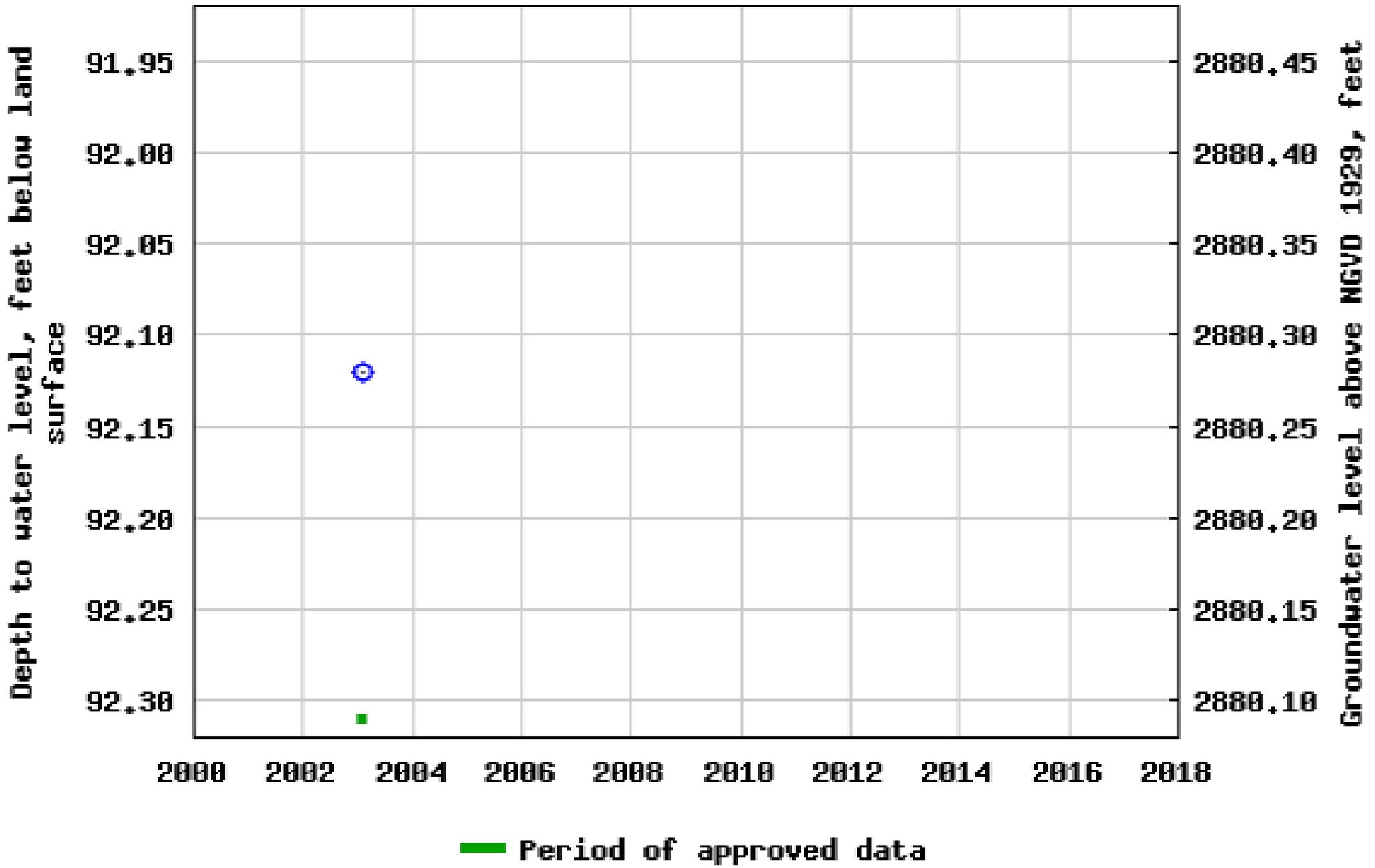
\* Attach Additional Sheets If Necessary



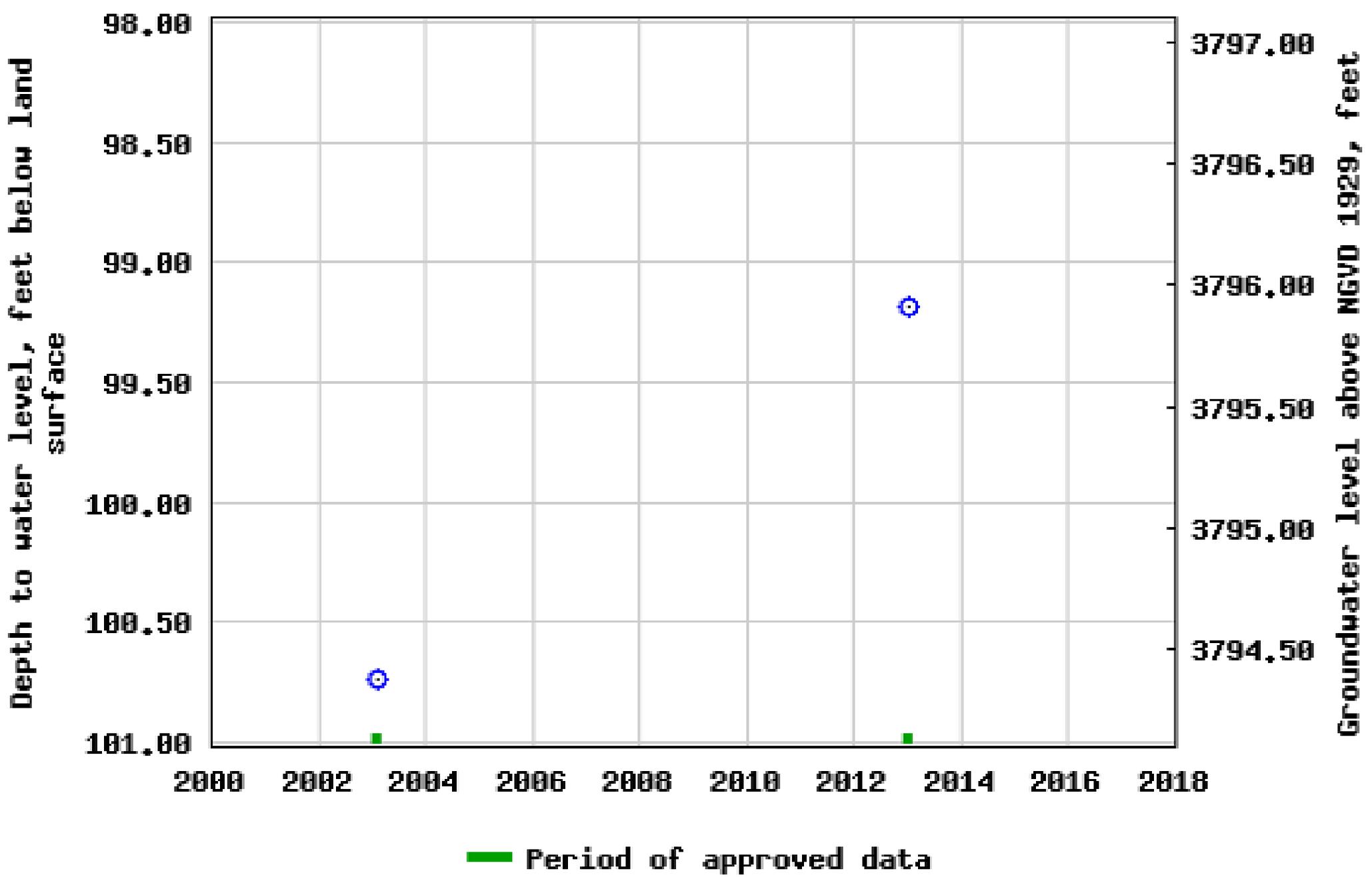
## APPENDIX E

### Groundwater Data

# USGS 320303104012301 26S.28E.14.21412



# USGS 320138104320001 26S.24E.19.43111



# USGS 320309104020401 26S.28E.14.11111

