REMEDIATION WORK PLAN

Property:

Concho Operating, LLC.
Birdseye 32 State #001H
Eddy County, New Mexico
Unit Letter "O", Section 32, Township 19 South, Range 31 East
Latitude 32.61882, Longitude -103.87544
2RP-4189

November 2017

Prepared for:

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

Prepared by:

Ryan Reich
Environmental Project Manager

Thomas Franklin
Environmental Manager

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APPENDICES

WORK PLAN

Concho Operating, LLC.
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1.0 INTRODUCTION

1.1 Site Description & Background

American Safety Services Inc. (ASSI) has prepared this Work Plan for the Concho Operating, LLC. (COG) Birdseye 32 State #001H. This Work Plan is based upon the interpretation of the data collected by COG and ASSI.

The Birdseye 32 State #001H (referred to hereinafter as the "Site" or "subject Site") is located in Unit Letter "O", Section 32, Township 19 South, Range 31 East, Eddy County, New Mexico (GPS 32.61882N, -103.87544W).

Remedial actions were conducted by COG and 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	
Total Ranking Score			**0**

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 350 to 400 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 The Site in Eddy County, New Mexico and surrounding topography.

3.0 INITIAL RESPONSE & ACTIVITIES

3.1 Initial Response

On May 26, 2017, COG personnel responded to a reportable release that occurred on April 24th. One barrel (bbls) of oil and two hundred ninety-nine (299) bbls of produced water were released directly to the ground due to a hole in a flowline. None of the fluids were recovered. The release impacted approximately fourteen thousand four-hundred (14,400) square feet of adjacent pasture area (Figure 3).

3.2 Backhoe Trenching Activities

On May 26th COG personnel along with GCI Sweatt Construction were present to collect delineation samples utilizing mechanical means (i.e., backhoe tractor).

A total of twenty-six (26) samples were collected from two (2) test trenches and four (4) cardinal horizontal sample points. Twelve (12) samples were collected from trench 1 (T1) and six (6) samples were collected from trench 2 (T2) which were analyzed for BTEX, TPH, and Chloride (Table 1). A total of six (6) samples were collected, two in each cardinal direction (i.e., North, South, East and West) for the purpose of horizontal delineation and were analyzed for Chloride (Table 1).

Two (2) test trenches (i.e., T1 and T2), were advanced to delineate Chloride at depth. Trench locations are shown on Figure 4. Discrete samples were collected from T1 at the following depths: Surface, 1', 2', 3', 4', 6', 8', 10', 12', 14', 16', and 18', below ground surface (bgs). At T2 discrete samples were collected at the following depths: Surface, 1', 2', 3', 4' and 9' bgs. Soil was field screened for Chloride utilizing electro conductivity during trenching operations.

3.2.1 Trackhoe Trenching Activities

On October 27th, in response to the May 26th attempt to delineate Chloride at depth, ASSI personnel were present to collect further delineation samples utilizing mechanical means (i.e., trackhoe excavator). Mr. Ryan Reich, an ASSI environmental professional, was present to document onsite activities.

One (1) trench (Trench 2A) was advanced to delineate Chloride at depth. A total of five (5) samples were collected from the test trench and were analyzed for Chloride. Trench locations are shown on Figure 4. Discrete samples were collected from Trench 2 (A) at the following depths: 5', 6', 7', 8' and 9', bgs. Soil was field screened for Chloride utilizing electro conductivity during trenching 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 T1 vertical delineation was achieved at a depth of fourteen (14) feet bgs with a Chloride concentration of 333 mg/Kg. At location Trench 2A (T2) vertical delineation was achieved at a depth of seven (7) feet bgs with a Chloride concentration of 308.62 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 C.

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., Trench) 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 COG and 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.

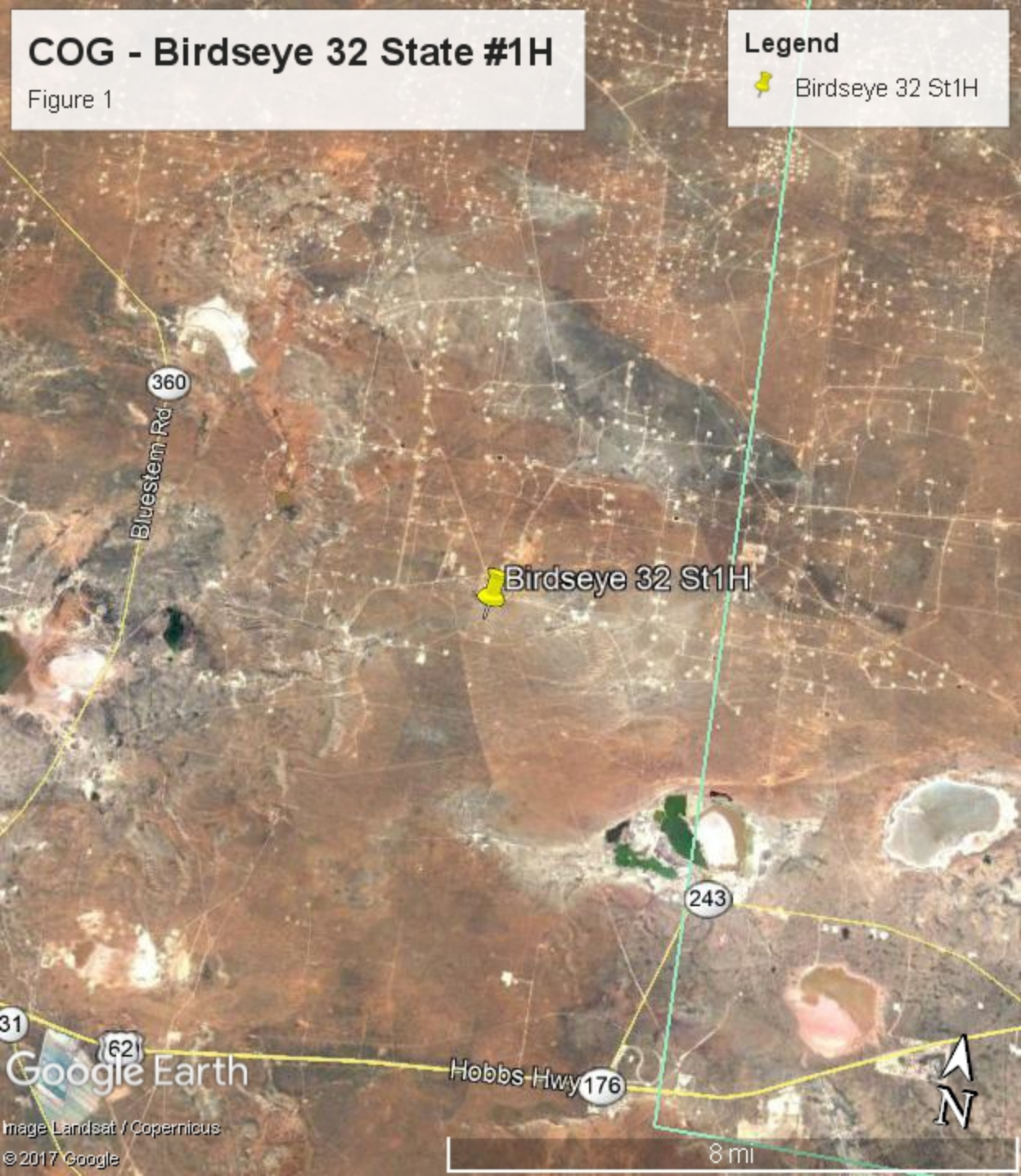
Based on the analytical data presented in Table 1, COG and ASSI propose to complete a removal action of the impacted material. The area adjacent to and around T1 will be excavated to a depth of approximately four (4) feet bgs and have a 20 mil liner installed at the bottom of the excavated area. The area adjacent to and around Trench 2 (T2) will be excavated to a depth of approximately two (2) feet bgs (Figure 4). All material will be removed by mechanical means, be temporarily stockpiled onsite and subsequently removed (hauled away) offsite to a proper disposal facility under appropriate manifest. The excavated areas will be backfilled to grade with clean imported material and the surface grade contoured to the surrounding landscape.

APPENDIX A

Figures

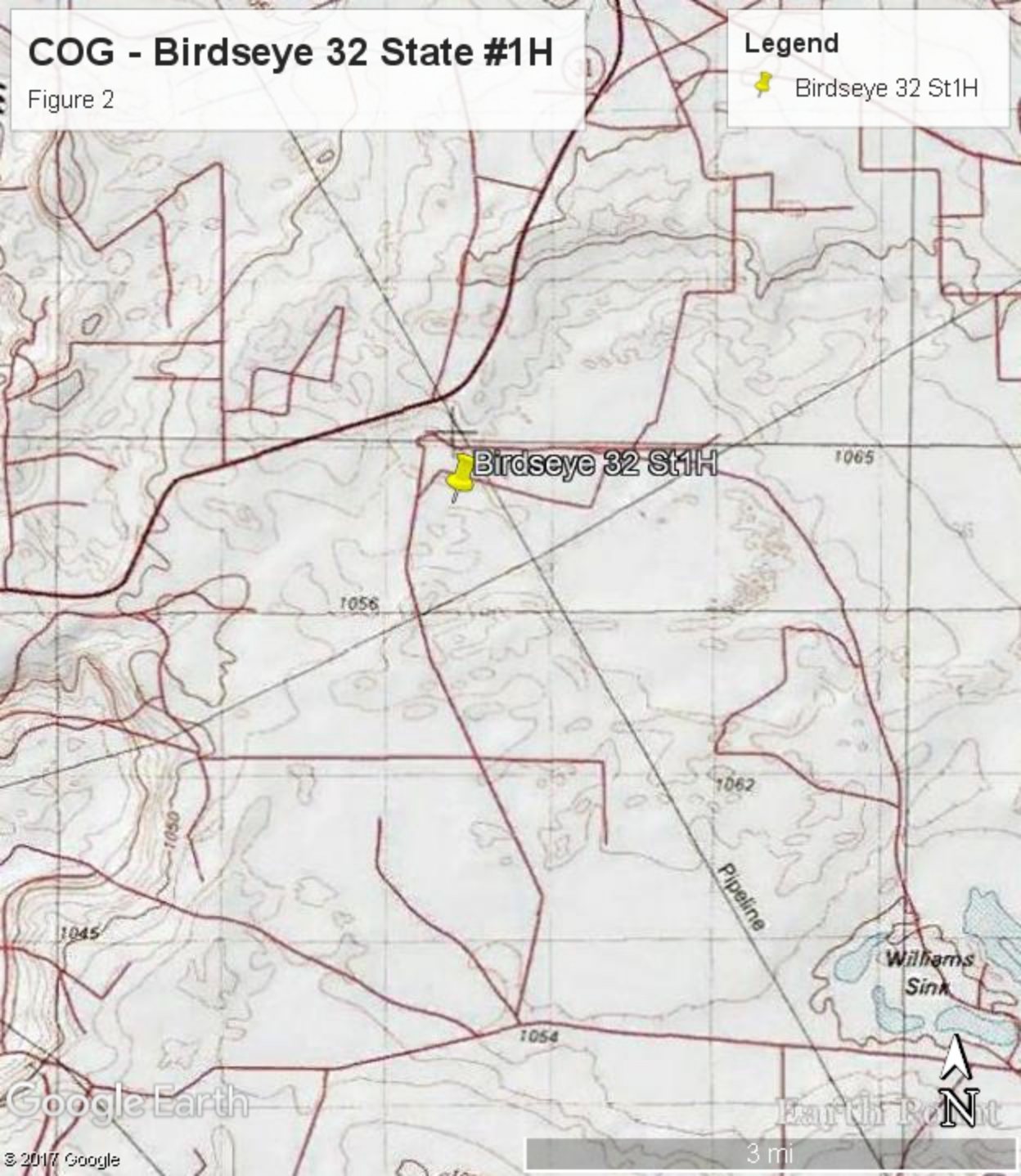
COG - Birdseye 32 State #1H

Figure 1



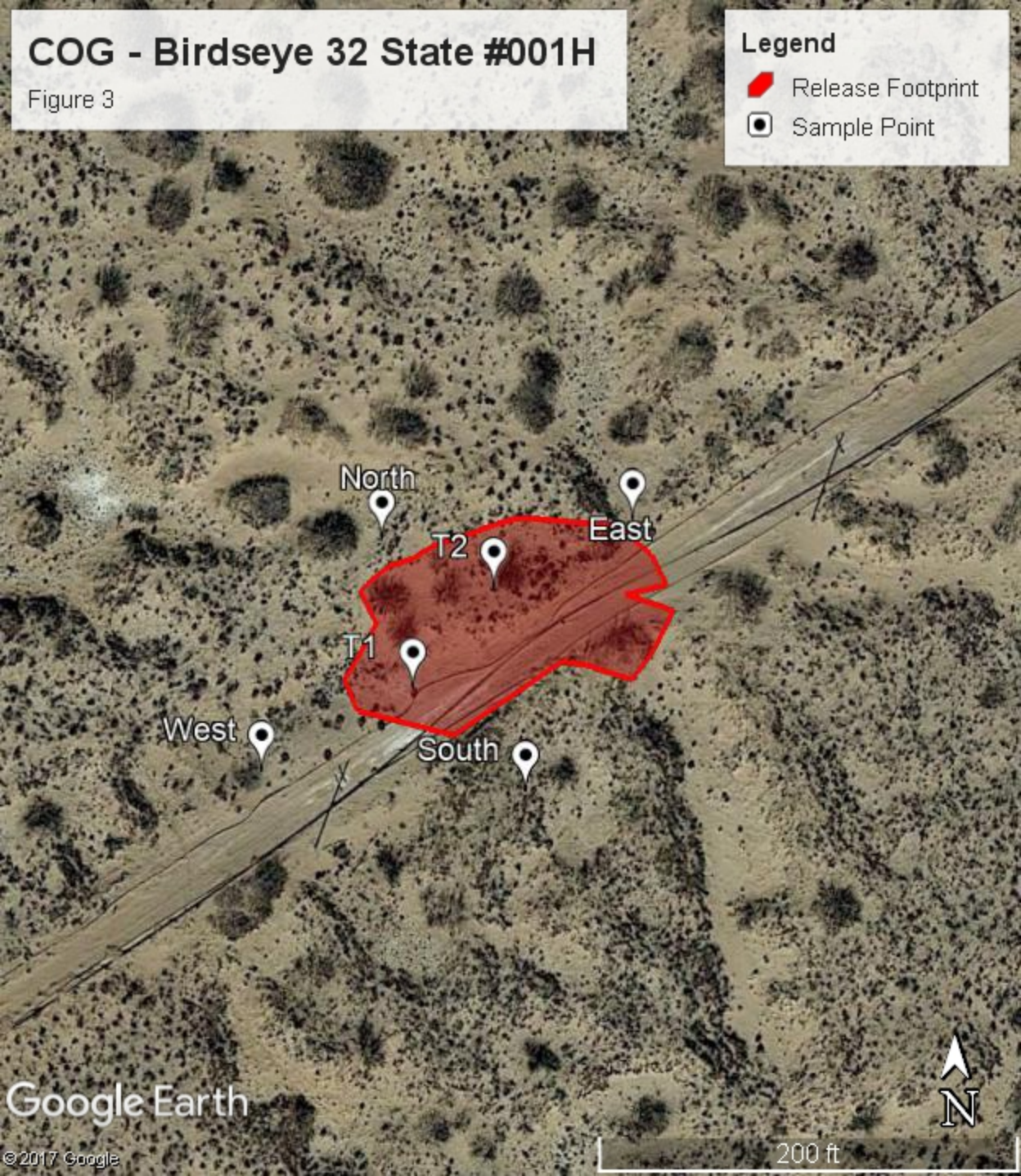
COG - Birdseye 32 State #1H

Figure 2



COG - Birdseye 32 State #001H

Figure 3



N

Trench 2A (T2)

T1

90'

160'

Legend

4' with liner

2'

Sample Point

Concho Operating LLC
Birdseye 32 State #001H
Eddy County, New Mexico
32.61882N, -103.87544W

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
Birdseye 32 State #001H
Eddy County, New Mexico
NMOCD REF: 2RP-4189

SAMPLE LOCATION	SAMPLE DEPTH (bgs)	SAMPLE DATE	SOIL STATUS	8021B					8015M			300.0
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYLBENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO (mg/Kg)	DRO (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**	**5,000**	**600**
Vertical Delination Sampling												
T1	Surface	5/16/2017	In-Situ	<0.00364	<0.00364	<0.00364	<0.00364	<0.00364	69.0	425	494	**3,120**
T1	1'	5/16/2017	In-Situ	<0.00345	<0.00345	<0.00345	0.233	0.233	89.3	626	715	**1,810**
T1	2'	5/16/2017	In-Situ	<0.00348	<0.00348	<0.00348	<0.00348	<0.00348	<15.0	<15.0	<15.0	**11,400**
T1	3'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**16,000**
T1	4'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**11,200**
T1	6'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**5,040**
T1	8'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**6,720**
T1	10'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**2,680**
T1	12'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**3,170**
T1	14'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	333
T1	16'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	94.0
T1	18'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	162
T2	Surface	5/16/2017	In-Situ	<0.00352	<0.00352	<0.00352	<0.00352	<0.00352	<15.0	722	722	**2,510**
T2	1'	5/16/2017	In-Situ	<0.00389	<0.00389	<0.00389	<0.00389	<0.00389	<15.0	<15.0	<15.0	304
T2	2'	5/16/2017	In-Situ	<0.00351	<0.00351	<0.00351	<0.00351	<0.00351	<15.0	<15.0	<15.0	**2,660**
T2	3'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	73.2
T2	4'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	112
T2	9'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	**4,490**
Trench 2 A	5'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	376.16
Trench 2 A	6'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	**1,010.7**
Trench 2 A	7'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	308.62
Trench 2 A	8'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	203.22
Trench 2 A	9'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	364.88
West	Surface	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	65.0
West	1'	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	25.1
East	Surface	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	99.6
East	1'	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	<9.90
North	Surface	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	23.9
North	1'	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	<9.63
South	Surface	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	<9.69
South	1'	3/21/2017	In-Situ	-	-	-	-	-	-	-	-	117

mg/Kg - milligrams per Kilogram

— = Not Established

Concentrations in **BOLD** exceed the NMOCD Guidelines

Proposed excavted area

Proposed area for liner

APPENDIX C

Laboratory Analysis

Certificate of Analysis Summary 553603

COG Operating LLC, Artesia, NM

Project Name: Birdseye 32 St #1H

Project Id:
Contact: Aaron Lieb
Project Location: Birdseye 32 St #1H

Date Received in Lab: Sat May-20-17 10:30 am
Report Date: 31-MAY-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	553603-001		553603-002		553603-003		553603-004		553603-005		553603-006	
	Field Id:	T1-Surface		T1-1'		T1-2'		T1-3'		T1-4'		T1-6'	
	Depth:			1 ft		2 ft		3 ft		4 ft		6 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-16-17 11:30		May-16-17 11:30		May-16-17 11:30		May-16-17 11:30		May-16-17 11:30		May-16-17 11:30	
BTEX by EPA 8021B	***Extracted:***	May-24-17 07:30		May-23-17 07:30		May-23-17 07:30							
	Analyzed:	May-24-17 08:58		May-23-17 11:12		May-23-17 10:55							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00364	0.00364	<0.00345	0.00345	<0.00348	0.00348						
Toluene		<0.00364	0.00364	<0.00345	0.00345	<0.00348	0.00348						
Ethylbenzene		<0.00364	0.00364	<0.00345	0.00345	<0.00348	0.00348						
m,p-Xylenes		<0.00727	0.00727	0.167	0.00690	<0.00697	0.00697						
o-Xylene		<0.00364	0.00364	0.0660	0.00345	<0.00348	0.00348						
Total Xylenes		<0.00364	0.00364	0.233	0.00345	<0.00348	0.00348						
Total BTEX		<0.00364	0.00364	0.233	0.00345	<0.00348	0.00348						
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48	
	Analyzed:	May-25-17 22:54		May-25-17 23:03		May-25-17 23:12		May-25-17 23:40		May-25-17 23:50		May-25-17 23:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3120	48.5	1810	9.60	11400	98.8	16000	97.8	11200	95.8	5040	48.3
TPH By SW8015 Mod	***Extracted:***	May-24-17 11:00		May-24-17 11:00		May-24-17 11:00							
	Analyzed:	May-24-17 13:52		May-24-17 14:12		May-24-17 14:32							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
C6-C10 Gasoline Range Hydrocarbons		69.0	15.0	89.3	15.0	<15.0	15.0						
C10-C28 Diesel Range Hydrocarbons		425	15.0	626	15.0	<15.0	15.0						
Total TPH		494	15.0	715	15.0	<15.0	15.0						

Brandi Ritcherson
Project Manager

Certificate of Analysis Summary 553603

COG Operating LLC, Artesia, NM

Project Name: Birdseye 32 St #1H

Project Id:
Contact: Aaron Lieb
Project Location: Birdseye 32 St #1H

Date Received in Lab: Sat May-20-17 10:30 am
Report Date: 31-MAY-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	553603-007		553603-008		553603-009		553603-010		553603-011		553603-012	
	Field Id:	T1-8'		T1-10'		T1-12'		T1-14'		T1-16'		T1-18'	
	Depth:	8 ft		10 ft		12 ft		14 ft		16 ft		18 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-16-17 11:45		May-16-17 11:45		May-16-17 11:45		May-16-17 11:45		May-16-17 12:00		May-16-17 12:00	
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48	
	Analyzed:	May-26-17 00:08		May-26-17 00:18		May-26-17 00:27		May-26-17 00:36		May-26-17 01:04		May-26-17 01:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6720	48.6	2680	45.5	3170	49.5	333	9.98	94.0	9.94	162	9.82

Brandi Ritcherson
Project Manager

Certificate of Analysis Summary 553603

COG Operating LLC, Artesia, NM

Project Name: Birdseye 32 St #1H

Project Id:
Contact: Aaron Lieb
Project Location: Birdseye 32 St #1H

Date Received in Lab: Sat May-20-17 10:30 am
Report Date: 31-MAY-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	553603-013		553603-014		553603-015		553603-016		553603-017		553603-018	
	Field Id:	T2-Surface		T2-1'		T2-2'		T2-3'		T2-4'		T2-9'	
	Depth:			1 ft		2 ft		3 ft		4 ft		9 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-16-17 12:15		May-16-17 12:15		May-16-17 12:15		May-16-17 12:15		May-16-17 12:15		May-16-17 12:15	
BTEX by EPA 8021B	***Extracted:***	May-23-17 07:30		May-23-17 07:30		May-23-17 07:30							
	Analyzed:	May-23-17 10:39		May-23-17 13:55		May-23-17 10:06							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00352	0.00352	<0.00389	0.00389	<0.00351	0.00351						
Toluene		<0.00352	0.00352	<0.00389	0.00389	<0.00351	0.00351						
Ethylbenzene		<0.00352	0.00352	<0.00389	0.00389	<0.00351	0.00351						
m,p-Xylenes		<0.00704	0.00704	<0.00778	0.00778	<0.00702	0.00702						
o-Xylene		<0.00352	0.00352	<0.00389	0.00389	<0.00351	0.00351						
Total Xylenes		<0.00352	0.00352	<0.00389	0.00389	<0.00351	0.00351						
Total BTEX		<0.00352	0.00352	<0.00389	0.00389	<0.00351	0.00351						
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48		May-25-17 21:48	
	Analyzed:	May-26-17 01:42		May-26-17 01:51		May-26-17 02:01		May-26-17 02:10		May-26-17 02:19		May-26-17 02:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2510	96.3	304	9.71	2660	97.8	73.2	9.58	112	9.49	4490	46.9
TPH By SW8015 Mod	***Extracted:***	May-24-17 11:00		May-24-17 11:00		May-24-17 11:00							
	Analyzed:	May-24-17 15:37		May-24-17 15:59		May-24-17 16:20							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
C6-C10 Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0						
C10-C28 Diesel Range Hydrocarbons		722	15.0	<15.0	15.0	<15.0	15.0						
Total TPH		722	15.0	<15.0	15.0	<15.0	15.0						

Brandi Ritcherson
Project Manager

Analytical Report 553603

for

COG Operating LLC

Project Manager: Aaron Lieb

Birdseye 32 St #1H

31-MAY-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-MAY-17

Project Manager: **Aaron Lieb**
COG Operating LLC
2407 Pecos Avenue
Artesia, NM 88210

Reference: XENCO Report No(s): **553603**
Birdseye 32 St #1H
Project Address: Birdseye 32 St #1H

Aaron Lieb:

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) 553603. 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. 553603 will be filed for 60 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

Sample Cross Reference 553603

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T1-Surface	S	05-16-17 11:30	N/A	553603-001
T1-1'	S	05-16-17 11:30	- 1 ft	553603-002
T1-2'	S	05-16-17 11:30	- 2 ft	553603-003
T1-3'	S	05-16-17 11:30	- 3 ft	553603-004
T1-4'	S	05-16-17 11:30	- 4 ft	553603-005
T1-6'	S	05-16-17 11:30	- 6 ft	553603-006
T1-8'	S	05-16-17 11:45	- 8 ft	553603-007
T1-10'	S	05-16-17 11:45	- 10 ft	553603-008
T1-12'	S	05-16-17 11:45	- 12 ft	553603-009
T1-14'	S	05-16-17 11:45	- 14 ft	553603-010
T1-16'	S	05-16-17 12:00	- 16 ft	553603-011
T1-18'	S	05-16-17 12:00	- 18 ft	553603-012
T2-Surface	S	05-16-17 12:15	N/A	553603-013
T2-1'	S	05-16-17 12:15	- 1 ft	553603-014
T2-2'	S	05-16-17 12:15	- 2 ft	553603-015
T2-3'	S	05-16-17 12:15	- 3 ft	553603-016
T2-4'	S	05-16-17 12:15	- 4 ft	553603-017
T2-9'	S	05-16-17 12:15	- 9 ft	553603-018

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3018068 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3018240 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 553603

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-Surface**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-001	Date Collected:	05.16.17 11.30		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3120**	48.5	mg/kg	05.25.17 22.54		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.17 11.00	Basis:	Wet Weight
Seq Number:	3018186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	**69.0**	15.0	mg/kg	05.24.17 13.52		1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	**425**	15.0	mg/kg	05.24.17 13.52		1
Total TPH	PHC635	**494**	15.0	mg/kg	05.24.17 13.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	05.24.17 13.52	
o-Terphenyl	84-15-1	117	%	70-135	05.24.17 13.52	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.24.17 07.30	Basis:	Wet Weight
Seq Number:	3018240				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00364	0.00364	mg/kg	05.24.17 08.58	U	1
Toluene	108-88-3	<0.00364	0.00364	mg/kg	05.24.17 08.58	U	1
Ethylbenzene	100-41-4	<0.00364	0.00364	mg/kg	05.24.17 08.58	U	1
m,p-Xylenes	179601-23-1	<0.00727	0.00727	mg/kg	05.24.17 08.58	U	1
o-Xylene	95-47-6	<0.00364	0.00364	mg/kg	05.24.17 08.58	U	1
Total Xylenes	1330-20-7	<0.00364	0.00364	mg/kg	05.24.17 08.58	U	1
Total BTEX		<0.00364	0.00364	mg/kg	05.24.17 08.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	80-120	05.24.17 08.58	
4-Bromofluorobenzene	460-00-4	88	%	80-120	05.24.17 08.58	

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-1'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-002	Date Collected:	05.16.17 11.30	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1810**	9.60	mg/kg	05.25.17 23.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.17 11.00	Basis:	Wet Weight
Seq Number:	3018186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	**89.3**	15.0	mg/kg	05.24.17 14.12		1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	**626**	15.0	mg/kg	05.24.17 14.12		1
Total TPH	PHC635	**715**	15.0	mg/kg	05.24.17 14.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.24.17 14.12	
o-Terphenyl	84-15-1	85	%	70-135	05.24.17 14.12	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.17 07.30	Basis:	Wet Weight
Seq Number:	3018068				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00345	0.00345	mg/kg	05.23.17 11.12	U	1
Toluene	108-88-3	<0.00345	0.00345	mg/kg	05.23.17 11.12	U	1
Ethylbenzene	100-41-4	<0.00345	0.00345	mg/kg	05.23.17 11.12	U	1
m,p-Xylenes	179601-23-1	**0.167**	0.00690	mg/kg	05.23.17 11.12		1
o-Xylene	95-47-6	**0.0660**	0.00345	mg/kg	05.23.17 11.12		1
Total Xylenes	1330-20-7	**0.233**	0.00345	mg/kg	05.23.17 11.12		1
Total BTEX		**0.233**	0.00345	mg/kg	05.23.17 11.12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	80-120	05.23.17 11.12	
4-Bromofluorobenzene	460-00-4	103	%	80-120	05.23.17 11.12	

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-2'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-003	Date Collected:	05.16.17 11.30	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11400**	98.8	mg/kg	05.25.17 23.12		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.17 11.00	Basis:	Wet Weight
Seq Number:	3018186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.24.17 14.32	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	<15.0	15.0	mg/kg	05.24.17 14.32	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.17 14.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	05.24.17 14.32	
o-Terphenyl	84-15-1	100	%	70-135	05.24.17 14.32	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.17 07.30	Basis:	Wet Weight
Seq Number:	3018068				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00348	0.00348	mg/kg	05.23.17 10.55	U	1
Toluene	108-88-3	<0.00348	0.00348	mg/kg	05.23.17 10.55	U	1
Ethylbenzene	100-41-4	<0.00348	0.00348	mg/kg	05.23.17 10.55	U	1
m,p-Xylenes	179601-23-1	<0.00697	0.00697	mg/kg	05.23.17 10.55	U	1
o-Xylene	95-47-6	<0.00348	0.00348	mg/kg	05.23.17 10.55	U	1
Total Xylenes	1330-20-7	<0.00348	0.00348	mg/kg	05.23.17 10.55	U	1
Total BTEX		<0.00348	0.00348	mg/kg	05.23.17 10.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	80-120	05.23.17 10.55	
4-Bromofluorobenzene	460-00-4	106	%	80-120	05.23.17 10.55	

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-3'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-004	Date Collected:	05.16.17 11.30	Sample Depth:	3 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16000**	97.8	mg/kg	05.25.17 23.40		10

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-4'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-005	Date Collected:	05.16.17 11.30	Sample Depth:	4 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11200**	95.8	mg/kg	05.25.17 23.50		10

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-6'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-006	Date Collected:	05.16.17 11.30	Sample Depth:	6 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5040**	48.3	mg/kg	05.25.17 23.59		5

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-8'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-007	Date Collected:	05.16.17 11.45	Sample Depth:	8 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6720**	48.6	mg/kg	05.26.17 00.08		5

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-10'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-008	Date Collected:	05.16.17 11.45	Sample Depth:	10 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2680**	45.5	mg/kg	05.26.17 00.18		5

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-12'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-009	Date Collected:	05.16.17 11.45	Sample Depth:	12 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3170**	49.5	mg/kg	05.26.17 00.27		5

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-14'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-010	Date Collected:	05.16.17 11.45	Sample Depth:	14 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**333**	9.98	mg/kg	05.26.17 00.36		1

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-16'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-011	Date Collected:	05.16.17 12.00	Sample Depth:	16 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**94.0**	9.94	mg/kg	05.26.17 01.04		1

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T1-18'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-012	Date Collected:	05.16.17 12.00	Sample Depth:	18 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**162**	9.82	mg/kg	05.26.17 01.33		1

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T2-Surface**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-013	Date Collected:	05.16.17 12.15		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2510**	96.3	mg/kg	05.30.17 17.29		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.17 11.00	Basis:	Wet Weight
Seq Number:	3018186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.24.17 15.37	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	**722**	15.0	mg/kg	05.24.17 15.37		1
Total TPH	PHC635	**722**	15.0	mg/kg	05.24.17 15.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	05.24.17 15.37	
o-Terphenyl	84-15-1	81	%	70-135	05.24.17 15.37	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.17 07.30	Basis:	Wet Weight
Seq Number:	3018068				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00352	0.00352	mg/kg	05.23.17 10.39	U	1
Toluene	108-88-3	<0.00352	0.00352	mg/kg	05.23.17 10.39	U	1
Ethylbenzene	100-41-4	<0.00352	0.00352	mg/kg	05.23.17 10.39	U	1
m,p-Xylenes	179601-23-1	<0.00704	0.00704	mg/kg	05.23.17 10.39	U	1
o-Xylene	95-47-6	<0.00352	0.00352	mg/kg	05.23.17 10.39	U	1
Total Xylenes	1330-20-7	<0.00352	0.00352	mg/kg	05.23.17 10.39	U	1
Total BTEX		<0.00352	0.00352	mg/kg	05.23.17 10.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	80-120	05.23.17 10.39	
1,4-Difluorobenzene	540-36-3	95	%	80-120	05.23.17 10.39	

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COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T2-1'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-014	Date Collected:	05.16.17 12.15	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**304**	9.71	mg/kg	05.26.17 01.51		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.17 11.00	Basis:	Wet Weight
Seq Number:	3018186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.24.17 15.59	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	<15.0	15.0	mg/kg	05.24.17 15.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.17 15.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	05.24.17 15.59	
o-Terphenyl	84-15-1	94	%	70-135	05.24.17 15.59	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.17 07.30	Basis:	Wet Weight
Seq Number:	3018068				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00389	0.00389	mg/kg	05.23.17 13.55	U	1
Toluene	108-88-3	<0.00389	0.00389	mg/kg	05.23.17 13.55	U	1
Ethylbenzene	100-41-4	<0.00389	0.00389	mg/kg	05.23.17 13.55	U	1
m,p-Xylenes	179601-23-1	<0.00778	0.00778	mg/kg	05.23.17 13.55	U	1
o-Xylene	95-47-6	<0.00389	0.00389	mg/kg	05.23.17 13.55	U	1
Total Xylenes	1330-20-7	<0.00389	0.00389	mg/kg	05.23.17 13.55	U	1
Total BTEX		<0.00389	0.00389	mg/kg	05.23.17 13.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	80-120	05.23.17 13.55	
1,4-Difluorobenzene	540-36-3	86	%	80-120	05.23.17 13.55	

Certificate of Analytical Results 553603

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T2-2'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-015	Date Collected:	05.16.17 12.15	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2660**	97.8	mg/kg	05.30.17 18.30		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	05.24.17 11.00	Basis:	Wet Weight
Seq Number:	3018186				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	05.24.17 16.20	U	1
C10-C28 Diesel Range Hydrocarbons	C10C28DRO	<15.0	15.0	mg/kg	05.24.17 16.20	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	05.24.17 16.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	05.24.17 16.20	
o-Terphenyl	84-15-1	96	%	70-135	05.24.17 16.20	

Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	05.23.17 07.30	Basis:	Wet Weight
Seq Number:	3018068				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00351	0.00351	mg/kg	05.23.17 10.06	U	1
Toluene	108-88-3	<0.00351	0.00351	mg/kg	05.23.17 10.06	U	1
Ethylbenzene	100-41-4	<0.00351	0.00351	mg/kg	05.23.17 10.06	U	1
m,p-Xylenes	179601-23-1	<0.00702	0.00702	mg/kg	05.23.17 10.06	U	1
o-Xylene	95-47-6	<0.00351	0.00351	mg/kg	05.23.17 10.06	U	1
Total Xylenes	1330-20-7	<0.00351	0.00351	mg/kg	05.23.17 10.06	U	1
Total BTEX		<0.00351	0.00351	mg/kg	05.23.17 10.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	80-120	05.23.17 10.06	
4-Bromofluorobenzene	460-00-4	114	%	80-120	05.23.17 10.06	

Certificate of Analytical Results 553603

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T2-3'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-016	Date Collected:	05.16.17 12.15	Sample Depth:	3 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**73.2**	9.58	mg/kg	05.26.17 02.10		1

Certificate of Analytical Results 553603

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T2-4'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-017	Date Collected:	05.16.17 12.15	Sample Depth:	4 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**112**	9.49	mg/kg	05.26.17 02.19		1

Certificate of Analytical Results 553603

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**T2-9'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553603-018	Date Collected:	05.16.17 12.15	Sample Depth:	9 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.25.17 21.48	Basis:	Wet Weight
Seq Number:	3018295			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4490**	46.9	mg/kg	05.26.17 02.29		5

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

+ NELAC certification not offered for this compound.

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

QC Summary 553603

COG Operating LLC

Birdseye 32 St #1H

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: SW9056P
Seq Number: 3018295 Matrix: Solid Date Prep: 05.25.17
MB Sample Id: 725242-1-BLK LCS Sample Id: 725242-1-BKS LCSD Sample Id: 725242-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.00	10.0	10.5	105	10.4	104	80-120	1	20	mg/kg	05.25.17 21:57	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: SW9056P
Seq Number: 3018295 Matrix: Solid Date Prep: 05.25.17
Parent Sample Id: 553595-001 MS Sample Id: 553595-001 S MSD Sample Id: 553595-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	565000	50000	615000	100	616000	102	80-120	0	20	mg/kg	05.25.17 22:26	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3018295 Matrix: Soil Date Prep: 05.25.17
Parent Sample Id: 553603-010 MS Sample Id: 553603-010 S MSD Sample Id: 553603-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	333	99.8	429	96	430	97	80-120	0	20	mg/kg	05.26.17 00:46	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3018186 Matrix: Solid Date Prep: 05.24.17
MB Sample Id: 725165-1-BLK LCS Sample Id: 725165-1-BKS LCSD Sample Id: 725165-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1110	111	1050	105	70-135	6	35	mg/kg	05.24.17 13:11	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1150	115	1060	106	70-135	8	35	mg/kg	05.24.17 13:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		116		101		70-135	%	05.24.17 13:11
o-Terphenyl	117		113		102		70-135	%	05.24.17 13:11

QC Summary 553603

COG Operating LLC

Birdseye 32 St #1H

Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3018186 | Matrix: Soil | Date Prep: 05.24.17
Parent Sample Id: 553603-003 | MS Sample Id: 553603-003 S | MSD Sample Id: 553603-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	998	963	96	931	93	70-135	3	35	mg/kg	05.24.17 14:54	
C10-C28 Diesel Range Hydrocarbons	<15.0	998	998	100	979	98	70-135	2	35	mg/kg	05.24.17 14:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	78		96		70-135	%	05.24.17 14:54
o-Terphenyl	85		92		70-135	%	05.24.17 14:54

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3018068 | Matrix: Solid | Date Prep: 05.23.17
MB Sample Id: 725094-1-BLK | LCS Sample Id: 725094-1-BKS | LCSD Sample Id: 725094-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.101	101	0.0973	97	70-130	4	35	mg/kg	05.23.17 07:21	
Toluene	<0.00199	0.0996	0.0945	95	0.108	108	70-130	13	35	mg/kg	05.23.17 07:21	
Ethylbenzene	<0.00199	0.0996	0.102	102	0.115	115	71-129	12	35	mg/kg	05.23.17 07:21	
m,p-Xylenes	<0.00398	0.199	0.206	104	0.211	106	70-135	2	35	mg/kg	05.23.17 07:21	
o-Xylene	<0.00199	0.0996	0.100	100	0.0910	91	71-133	9	35	mg/kg	05.23.17 07:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		82		96		80-120	%	05.23.17 07:21
4-Bromofluorobenzene	116		107		105		80-120	%	05.23.17 07:21

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3018240 | Matrix: Solid | Date Prep: 05.24.17
MB Sample Id: 725152-1-BLK | LCS Sample Id: 725152-1-BKS | LCSD Sample Id: 725152-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0829	83	0.0836	83	70-130	1	35	mg/kg	05.24.17 07:03	
Toluene	<0.00200	0.100	0.0955	96	0.0881	87	70-130	8	35	mg/kg	05.24.17 07:03	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0974	96	71-129	6	35	mg/kg	05.24.17 07:03	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.190	95	70-135	0	35	mg/kg	05.24.17 07:03	
o-Xylene	<0.00200	0.100	0.0934	93	0.0953	94	71-133	2	35	mg/kg	05.24.17 07:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		117		92		80-120	%	05.24.17 07:03
4-Bromofluorobenzene	86		110		115		80-120	%	05.24.17 07:03

QC Summary 553603

COG Operating LLC

Birdseye 32 St #1H

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

Seq Number: 3018068 Matrix: Soil Date Prep: 05.23.17

Parent Sample Id: 553455-001 MS Sample Id: 553455-001 S MSD Sample Id: 553455-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00358	0.179	0.135	75	0.133	75	70-130	1	35	mg/kg	05.23.17 07:54	
Toluene	<0.00358	0.179	0.137	77	0.135	76	70-130	1	35	mg/kg	05.23.17 07:54	
Ethylbenzene	<0.00358	0.179	0.164	92	0.138	78	71-129	17	35	mg/kg	05.23.17 07:54	
m,p-Xylenes	<0.00717	0.358	0.331	92	0.254	72	70-135	26	35	mg/kg	05.23.17 07:54	
o-Xylene	<0.00358	0.179	0.168	94	0.127	72	71-133	28	35	mg/kg	05.23.17 07:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		116		80-120	%	05.23.17 07:54
4-Bromofluorobenzene	107		118		80-120	%	05.23.17 07:54

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

Seq Number: 3018240 Matrix: Soil Date Prep: 05.24.17

Parent Sample Id: 553690-003 MS Sample Id: 553690-003 S MSD Sample Id: 553690-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0748	74	0.0731	73	70-130	2	35	mg/kg	05.24.17 07:36	
Toluene	<0.00202	0.101	0.0790	78	0.0716	72	70-130	10	35	mg/kg	05.24.17 07:36	
Ethylbenzene	<0.00202	0.101	0.0837	83	0.0716	72	71-129	16	35	mg/kg	05.24.17 07:36	
m,p-Xylenes	<0.00403	0.202	0.168	83	0.147	73	70-135	13	35	mg/kg	05.24.17 07:36	
o-Xylene	<0.00202	0.101	0.0785	78	0.0738	74	71-133	6	35	mg/kg	05.24.17 07:36	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	120		114		80-120	%	05.24.17 07:36
4-Bromofluorobenzene	116		120		80-120	%	05.24.17 07:36

CHAIN OF CUSTODY

Page 1 Of 2

XENCO LABORATORIES

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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)
www.xenco.com

Xenco Quote #
Xenco Job # 550360 3

Client / Reporting Information

Company Name / Branch: COG Operating LLC
Company Address: 2407 PECOS Avenue Artesia NM 88210
Email: alieb@concho.com dneel2@concho.com rhaskell@concho.com
Phone No: 575-748-1553
Project Contact: Aaron Lieb
Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: Birdseye 32 St.#1H
Project Location: Birdseye 32 St.#1H
Invoice To: COG Operating LLC
Attn: Robert Mcneill
600 W. Illinois
Midland TX 79701
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	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chloride	Field Comments
1	T1- Surf	Surf	5/16/17	11:30Am	S	1									X	X	X	
2	T1- 1'	1				1									X	X	X	
3	T1- 2'	2				1									X	X	X	
4	T1- 3'	3				1											X	
5	T1- 4'	4				1											X	
6	T1- 6'	6				1											X	
7	T1- 8'	8		11:45Am		1											X	
8	T1- 10'	10				1											X	
9	T1- 12'	12				1											X	
10	T1- 14'	14				1											X	

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/19/17 11:00 Am	1 Sid Butler 11:00A 5-19-17	2		2
3	Relinquished by:	Date Time:	Received By: 3 Julian M 10:22 5-20-17	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ✓

Temp: 3.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.2.

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 t 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 X terms will be enforced unless previously negotiated under a fully executed client contract.

Final 1.000

CHAIN OF CUSTODY

Page 2 Of 2

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)

www.xenco.com

Xenco Quote #

Xenco Job # 553603

Client / Reporting Information

Company Name / Branch: COG Operating LLC

Company Address: 2407 PECOS Avenue Artesia NM 88210

Email: alieb@concho.com dneel2@concho.com rhaskell@concho.com

Phone No: 575-748-1553

Project Contact: Aaron Lieb

Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: Birdseye 32 St.#1H

Project Location: Birdseye 32 St.#1H

Invoice To: COG Operating LLC
Attn: Robert Mcneill
600 W. Illinois
Midland TX 79701

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	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chloride	Field Comments
1	T1- 16'	16'	5/16/17	12:00	S	1											X	
2	T1 - 18'	18'		12:00		1											X	
3						3												
4	T2 - SURF	SURF		12:15pm		1									X	X	X	
5	T2 - 1'	1'				1									X	X	X	
6	T2 - 2'	2				1									X	X	X	
7	T2 - 3'	3				1											X	
8	T2 - 4'	4				1											X	
9	T2 - 9'	9				1											X	
10																	X	

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/19/17 11:00 am	1 Sid Butler 11:00A 5-19-17	2		2
3	Relinquished by:	Date Time:	Received By: 3 Julian M 10:30 5-20-17	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ✓

Temp: 3.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.2

Inter-Office Shipment #: 1044016

Date Printed: Tue May-23-17 11:12 am

Date/Time: 05/22/17 08:43
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Jessica Kramer
Delivery Priority: Fedex
Air Bill No.: 779201410522

Please send report to: Liz Givens
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: liz.givens@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
553603-001	S	T1-Surface	05/16/17 11:30	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-002	S	T1-1'	05/16/17 11:30	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-003	S	T1-2'	05/16/17 11:30	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-004	S	T1-3'	05/16/17 11:30	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-005	S	T1-4'	05/16/17 11:30	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-006	S	T1-6'	05/16/17 11:30	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-007	S	T1-8'	05/16/17 11:45	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-008	S	T1-10'	05/16/17 11:45	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-009	S	T1-12'	05/16/17 11:45	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-010	S	T1-14'	05/16/17 11:45	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-011	S	T1-16'	05/16/17 12:00	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-012	S	T1-18'	05/16/17 12:00	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-013	S	T2-Surface	05/16/17 12:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-014	S	T2-1'	05/16/17 12:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-015	S	T2-2'	05/16/17 12:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-016	S	T2-3'	05/16/17 12:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-017	S	T2-4'	05/16/17 12:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553603-018	S	T2-9'	05/16/17 12:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: Marithza Anaya

Marithza Anaya

Date Relinquished: 05/22/2017

Received By:

Mitsuko Konuma

Date Received: 05/23/2017 09:15

Inter-Office Shipment #: 1044016

Date Printed: Tue May-23-17 11:12 am

Cooler Temperature: 1.0

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1044016

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

Sent By: Jessica Kramer **Date Sent:** 05/22/2017 08:43 AM

Received By: Mitsuko Konuma **Date Received:** 05/23/2017 09:15 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 *Custody Seals Signed and dated for Containers/coolers	**N/A**	
#6 *IOS present?	**N/A**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**No**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 05/23/2017
Mitsuko Konuma

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 05/20/2017 10:30:00 AM

Work Order #: 553603

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)?	3.2	
#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)?	**Yes**	Houston
#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: Jessica Kramer Date: 05/22/2017
Jessica Kramer

Checklist reviewed by: Liz Givens Date: 05/22/2017
Liz Givens

Certificate of Analysis Summary 553604

COG Operating LLC, Artesia, NM

Project Name: Birdseye 32 St #1H

Project Id:
Contact: Aaron Lieb
Project Location: Birdseye 32 St #1H

Date Received in Lab: Sat May-20-17 10:30 am
Report Date: 26-MAY-17
Project Manager: Liz Givens

Analysis Requested													
	Lab Id:	553604-001		553604-002		553604-003		553604-004		553604-005		553604-006	
	Field Id:	North-Surface		North-1'		Sotuh-Surface		South-1'		East-Surface		East-1'	
	Depth:			1 ft				1 ft				1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-16-17 11:00		May-16-17 11:00		May-16-17 11:00		May-16-17 11:00		May-16-17 11:15		May-16-17 11:15	
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	May-26-17 02:27		May-26-17 02:27		May-26-17 02:27		May-26-17 02:27		May-26-17 02:27		May-26-17 02:27	
	Analyzed:	May-26-17 05:54		May-26-17 06:41		May-26-17 06:50		May-26-17 07:00		May-26-17 07:09		May-26-17 07:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		23.9	9.77	<9.63	9.63	<9.69	9.69	117	9.92	99.6	9.98	<9.90	9.90

Brandi Ritcherson
Project Manager

Certificate of Analysis Summary 553604

COG Operating LLC, Artesia, NM

Project Name: Birdseye 32 St #1H

Project Id:
Contact: Aaron Lieb
Project Location: Birdseye 32 St #1H

Date Received in Lab: Sat May-20-17 10:30 am
Report Date: 26-MAY-17
Project Manager: Liz Givens

Analysis Requested									
	Lab Id:	553604-007		553604-008					
	Field Id:	West-Surface		West-1'					
	Depth:			1 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	May-16-17 11:15		May-16-17 11:15					
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	***Extracted:***	May-26-17 02:27		May-26-17 02:27					
	Analyzed:	May-26-17 07:28		May-26-17 07:37					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		65.0	9.90	25.1	9.90				

Brandi Ritcherson
Project Manager

Analytical Report 553604

for

COG Operating LLC

Project Manager: Aaron Lieb

Birdseye 32 St #1H

26-MAY-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)

26-MAY-17

Project Manager: **Aaron Lieb**
COG Operating LLC
2407 Pecos Avenue
Artesia, NM 88210

Reference: XENCO Report No(s): **553604**
Birdseye 32 St #1H
Project Address: Birdseye 32 St #1H

Aaron Lieb:

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) 553604. 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. 553604 will be filed for 60 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

Sample Cross Reference 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
North-Surface	S	05-16-17 11:00	N/A	553604-001
North-1'	S	05-16-17 11:00	- 1 ft	553604-002
Sotuh-Surface	S	05-16-17 11:00	N/A	553604-003
South-1'	S	05-16-17 11:00	- 1 ft	553604-004
East-Surface	S	05-16-17 11:15	N/A	553604-005
East-1'	S	05-16-17 11:15	- 1 ft	553604-006
West-Surface	S	05-16-17 11:15	N/A	553604-007
West-1'	S	05-16-17 11:15	- 1 ft	553604-008

Client Name: COG Operating LLC

Project Name: Birdseye 32 St #1H

Project ID:
Work Order Number(s): *553604*

Report Date: *26-MAY-17*
Date Received: *05/20/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**North-Surface**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-001	Date Collected:	05.16.17 11.00		
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.9**	9.77	mg/kg	05.26.17 05.54		1

Final 1.000

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**North-1'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-002	Date Collected:	05.16.17 11.00	Sample Depth:	1 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.63	9.63	mg/kg	05.26.17 06.41	U	1

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**Sotuh-Surface**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-003	Date Collected:	05.16.17 11.00		
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.69	9.69	mg/kg	05.26.17 06.50	U	1

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**South-1'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-004	Date Collected:	05.16.17 11.00	Sample Depth:	1 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**117**	9.92	mg/kg	05.26.17 07.00		1

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**East-Surface**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-005	Date Collected:	05.16.17 11.15		
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.6**	9.98	mg/kg	05.26.17 07.09		1

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**East-1'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-006	Date Collected:	05.16.17 11.15	Sample Depth:	1 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	05.26.17 07.18	U	1

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**West-Surface**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-007	Date Collected:	05.16.17 11.15		
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**65.0**	9.90	mg/kg	05.26.17 07.28		1

Certificate of Analytical Results 553604

COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id:	**West-1'**	Matrix:	Soil	Date Received:	05.20.17 10.30
Lab Sample Id:	553604-008	Date Collected:	05.16.17 11.15	Sample Depth:	1 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	DHE			% Moisture:	
Analyst:	DHE	Date Prep:	05.26.17 02.27	Basis:	Wet Weight
Seq Number:	3018297			SUB:	TX104704215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.1**	9.90	mg/kg	05.26.17 07.37		1

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

+ NELAC certification not offered for this compound.

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

QC Summary 553604

COG Operating LLC

Birdseye 32 St #1H

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Seq Number: 3018297 Matrix: Solid Date Prep: 05.26.17

MB Sample Id: 725243-1-BLK LCS Sample Id: 725243-1-BKS LCSD Sample Id: 725243-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<1.00	10.0	10.4	104	10.4	104	80-120	0	20	mg/kg	05.26.17 03:06	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Seq Number: 3018297 Matrix: Soil Date Prep: 05.26.17

Parent Sample Id: 553604-001 MS Sample Id: 553604-001 S MSD Sample Id: 553604-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.9	97.7	126	105	127	106	80-120	1	20	mg/kg	05.26.17 06:04	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P

Seq Number: 3018297 Matrix: Soil Date Prep: 05.26.17

Parent Sample Id: 553606-001 MS Sample Id: 553606-001 S MSD Sample Id: 553606-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.60	96.0	105	109	104	108	80-120	1	20	mg/kg	05.26.17 04:11	

CHAIN OF CUSTODY

Page 1 Of 1

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)
www.xenco.com

Xenco Quote #
Xenco Job # 553604

Client / Reporting Information

Company Name / Branch: COG Operating LLC
Company Address: 2407 PECOS Avenue Artesia NM 88210
Email: alieb@concho.com dneel2@concho.com rhaskell@concho.com
Phone No: 575-748-1553
Project Contact: Aaron Lieb
Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: Birdseye 32 St.#1H
Project Location: Birdseye 32 St.#1H
Invoice To: COG Operating LLC, Attn: Robert Mcneill, 600 W. Illinois, Midland TX 79701
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	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Analytical Information: TPH	BTEX	Chloride	Field Comments
1	North - Surf	Surf	5/16/17	11:00 Am	S	1											X	
2	North - 1'	1'				1											X	
3	South - Surf	Surf				1											X	
4	South - 1'	1'				1											X	
5	East - Surf	Surf		11:15 Am		1											X	
6	East - 1'	1'				1											X	
7	West - Surf	Surf				1											X	
8	West - 1'	1'				1											X	
9																		
10																		

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/19/17 11:00 Am	Sid Butler 11:00 A 5-19-17	2		2
3	Relinquished by:	Date Time:	Received By: JJ 10:30 5-20-17	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice ✓

Temp: 3.4 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 3.2

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 t 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 Xe terms will be enforced unless previously negotiated under a fully executed client contract.

Inter-Office Shipment #: 1044017

Date Printed: Tue May-23-17 11:13 am Page 1 of 1

Date/Time: 05/22/17 08:44
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Jessica Kramer
Delivery Priority: Fedex
Air Bill No.: 779201410522

Please send report to: Liz Givens
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: liz.givens@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
553604-001	S	North-Surface	05/16/17 11:00	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-002	S	North-1'	05/16/17 11:00	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-003	S	Sotuh-Surface	05/16/17 11:00	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-004	S	South-1'	05/16/17 11:00	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-005	S	East-Surface	05/16/17 11:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-006	S	East-1'	05/16/17 11:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-007	S	West-Surface	05/16/17 11:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	
553604-008	S	West-1'	05/16/17 11:15	E300	Inorganic Anions by EPA 300/300.1	05/29/17	06/13/17	LIG	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: Marithza Anaya

Marithza Anaya

Date Relinquished: 05/22/2017

Received By:

Mitsuko Konuma

Date Received: 05/23/2017 09:15

Cooler Temperature: 1.0

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 1044017

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

Sent By: Jessica Kramer **Date Sent:** 05/22/2017 08:44 AM

Received By: Mitsuko Konuma **Date Received:** 05/23/2017 09:15 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**No**	
#5 *Custody Seals Signed and dated for Containers/coolers	**N/A**	
#6 *IOS present?	**N/A**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**No**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 05/23/2017
Mitsuko Konuma

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 05/20/2017 10:30:00 AM

Work Order #: 553604

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)?	3.2	
#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)?	**Yes**	Houston
#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: Jessica Kramer Date: 05/22/2017
Jessica Kramer

Checklist reviewed by: Liz Givens Date: 05/22/2017
Liz Givens

Certificate of Analysis Summary 566852

American Safety Services, Odessa, TX

Project Name: COG Birdseye 32 State #001 H

Project Id:
Contact: Thomas Franklin
Project Location: Eddy Co, NM

Date Received in Lab: Mon Oct-30-17 08:38 am
Report Date: 08-NOV-17
Project Manager: Brandi Ritcherson

Analysis Requested										
	Lab Id:	566852-001		566852-002		566852-003		566852-004		566852-005	
	Field Id:	Trench 2 (A)		Trench 2 (A)		Trench 2 (A)		Trench 2 (A)		Trench 2 (A)	
	Depth:	5- In		6- In		7- In		8- In		9- In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-27-17 09:00		Oct-27-17 09:02		Oct-27-17 09:04		Oct-27-17 09:06		Oct-27-17 09:08	
Chloride by EPA 300	***Extracted:***	Nov-06-17 16:00		Nov-06-17 16:00		Nov-06-17 16:00		Nov-06-17 16:00		Nov-06-17 16:00	
	Analyzed:	Nov-06-17 20:43		Nov-06-17 21:10		Nov-06-17 21:19		Nov-06-17 21:28		Nov-06-17 21:36	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Chloride		376.16	4.9900	1010.7	4.9603	308.62	4.9310	203.22	4.9801	364.88	4.9020

Brandi Ritcherson
Project Manager

Analytical Report 566852

for

American Safety Services

Project Manager: Thomas Franklin

COG Birdseye 32 State #001 H

08-NOV-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

08-NOV-17

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

Reference: XENCO Report No(s): **566852**
COG Birdseye 32 State #001 H
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) 566852. 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. 566852 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

Sample Cross Reference 566852

American Safety Services, Odessa, TX

COG Birdseye 32 State #001 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench 2 (A)	S	10-27-17 09:00	5 In	566852-001
Trench 2 (A)	S	10-27-17 09:02	6 In	566852-002
Trench 2 (A)	S	10-27-17 09:04	7 In	566852-003
Trench 2 (A)	S	10-27-17 09:06	8 In	566852-004
Trench 2 (A)	S	10-27-17 09:08	9 In	566852-005
Trench 2 (A)	S	10-27-17 09:10	10 In	Not Analyzed
Trench 2 (A)	S	10-27-17 09:12	11 In	Not Analyzed
Trench 2 (A)	S	10-27-17 09:14	12 In	Not Analyzed
Trench 2 (A)	S	10-27-17 09:16	13 In	Not Analyzed
Trench 2 (A)	S	10-27-17 09:18	14 In	Not Analyzed
Trench 2 (A)	S	10-27-17 09:20	15 In	Not Analyzed

Client Name: American Safety Services

Project Name: COG Birdseye 32 State #001 H

Project ID:
Work Order Number(s): *566852*

Report Date: *08-NOV-17*
Date Received: *10/30/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 566852

American Safety Services, Odessa, TX

COG Birdseye 32 State #001 H

Sample Id:	**Trench 2 (A)**	Matrix:	Soil	Date Received:	10.30.17 08.38
Lab Sample Id:	566852-001	Date Collected:	10.27.17 09.00	Sample Depth:	5 In
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 16.00	Basis:	Wet Weight
Seq Number:	3032576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**376.16**	4.9900	mg/L	11.06.17 20.43		1

Certificate of Analytical Results 566852

American Safety Services, Odessa, TX

COG Birdseye 32 State #001 H

Sample Id:	**Trench 2 (A)**	Matrix:	Soil	Date Received:	10.30.17 08.38
Lab Sample Id:	566852-002	Date Collected:	10.27.17 09.02	Sample Depth:	6 In
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 16.00	Basis:	Wet Weight
Seq Number:	3032576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1010.7**	4.9603	mg/L	11.06.17 21.10		1

Certificate of Analytical Results 566852

American Safety Services, Odessa, TX

COG Birdseye 32 State #001 H

Sample Id:	**Trench 2 (A)**	Matrix:	Soil	Date Received:	10.30.17 08.38
Lab Sample Id:	566852-003	Date Collected:	10.27.17 09.04	Sample Depth:	7 In
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 16.00	Basis:	Wet Weight
Seq Number:	3032576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**308.62**	4.9310	mg/L	11.06.17 21.19		1

Certificate of Analytical Results 566852

American Safety Services, Odessa, TX

COG Birdseye 32 State #001 H

Sample Id:	**Trench 2 (A)**	Matrix:	Soil	Date Received:	10.30.17 08.38
Lab Sample Id:	566852-004	Date Collected:	10.27.17 09.06	Sample Depth:	8 In
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 16.00	Basis:	Wet Weight
Seq Number:	3032576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**203.22**	4.9801	mg/L	11.06.17 21.28		1

Certificate of Analytical Results 566852

American Safety Services, Odessa, TX

COG Birdseye 32 State #001 H

Sample Id:	**Trench 2 (A)**	Matrix:	Soil	Date Received:	10.30.17 08.38
Lab Sample Id:	566852-005	Date Collected:	10.27.17 09.08	Sample Depth:	9 In
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	11.06.17 16.00	Basis:	Wet Weight
Seq Number:	3032576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**364.88**	4.9020	mg/L	11.06.17 21.36		1

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

+ NELAC certification not offered for this compound.

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

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282	(602) 437-0330	

QC Summary 566852

American Safety Services

COG Birdseye 32 State #001 H

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Seq Number: 3032576 Matrix: Solid Date Prep: 11.06.17

MB Sample Id: 7633898-1-BLK LCS Sample Id: 7633898-1-BKS LCSD Sample Id: 7633898-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.0000	250.00	234.38	94	234.63	94	90-110	0	20	mg/L	11.06.17 19:33	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Seq Number: 3032576 Matrix: Soil Date Prep: 11.06.17

Parent Sample Id: 566621-039 MS Sample Id: 566621-039 S MSD Sample Id: 566621-039 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	347.14	249.00	598.72	101	599.70	101	90-110	0	20	mg/L	11.07.17 20:29	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P

Seq Number: 3032576 Matrix: Soil Date Prep: 11.06.17

Parent Sample Id: 566853-002 MS Sample Id: 566853-002 S MSD Sample Id: 566853-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	25.482	246.00	247.56	90	248.42	91	90-110	0	20	mg/L	11.07.17 21:13	

XENCO LABORATORIES
Setting the Standard since 1990

CHAIN OF CUSTODY

Page 1 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)

www.xenco.com

Xenco Quote #:
Xenco Job #: 566852

Client / Reporting Information

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

Project Information

Project Name/Number: COG- Birdseye 32 State #001 H
Project Location: Eddy Co NM
Invoice To: COG- ATTN Becky Haskell
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	Hold	Field Comments
1	Trench 2(A)	5'	10/27/17	0900	S	1									X		On Ice
2	↓	6'	10/27/17	0902	S	1									X		↓
3		7'	10/27/17	0904	S	1									X		
4		8'	10/27/17	0906	S	1									X		
5		9'	10/27/17	0908	S	1									X		
6		10'	10/27/17	0910	S	1										X	
7		11'	10/27/17	0912	S	1										X	
8		12'	10/27/17	0914	S	1										X	
9		13'	10/27/17	0916	S	1										X	
10		14'	10/27/17	0918	S	1										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: temp @ office @ 07:30 4.0°C

Temp: 2.8 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.6

FED

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

	Relinquished by	Date Time	Received By	Relinquished By	Date Time
1	Relinquished by Sampler: [signature]	10/30/17 0830	1 Received By: [signature]	2 Relinquished By:	
3	Relinquished by:		Received By: 10 30 17 8:38	Relinquished By:	
			3	4	4
5	Relinquished by:		Received By:	Custody Seal #	
			5		

Preserved where applicable: [ ] On Ice: [x] Cooler Temp.: Thermo. Corr. Factor:

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.

If Chloride exceeds 600 mg/kg run deeper samples on hold

CHAIN OF CUSTODY

Page 2 Of 2

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)
www.xenco.com

Xenco Quote #
Xenco Job # 566852

Client / Reporting Information

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

Project Information

Project Name/Number: COG - Birdseye 32 State # 001 H
Project Location: Eddy Co NM
Invoice To: COG
PO Number:

Analytical Information

4 Chloride

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	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	Trench 2 (A)	15'	10/27/17	0920	S	1									on Ice
2															
3															
4															
5															
6	NFE														
7															
8															
9															
10															

Turnaround Time (Business days)

- ☐ Same Day TAT
- ☐ 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

Temp: 2.8 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.6

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	Mike Dial	10/30/17 0830	1	2		2
3	Relinquished by:	Date Time:	Received By: 10.30.178:38	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable	On Ice: X; Cooler Temp.; Thermo. Corr. Factor

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.

XENCO Laboratories
Prelogin/Nonconformance Report- Sample Log-In

Client: American Safety Services

Date/ Time Received: 10/30/2017 08:38:00 AM

Work Order #: 566852

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)?	2.6
#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)?	**No**
#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: Connie Hernandez Date: 10/30/2017

Checklist reviewed by: Brandi Ritcherson Date: 10/30/2017

APPENDIX D

Initial C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 25 2017
RECEIVED

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

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1711829670

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC OGRID # 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: Birdseye 32 State #001H	Facility Type: Flowline

Surface Owner: Federal	Mineral Owner: State	API No. 30-015-38295

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	32	19S	31E	330	South	2260	East	Eddy

Latitude 32.6105042 **Longitude** -103.8901062

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release: 1 bbls Oil & 299 bbls PW	Volume Recovered: 0 bbls
Source of Release: Flowline	Date and Hour of Occurrence: April 24, 2017 2:00 pm	Date and Hour of Discovery: April 24, 2017 2:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Ms. Weaver – NMOCD / Ms. Tucker – BLM / Ms. Groves - SLO	
By Whom? Rebecca Haskell	Date and Hour: April 25, 2017 Time of this Email	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by a hole in a flowline. The flowline was repaired.

Describe Area Affected and Cleanup Action Taken.*

The release was within a pasture. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant 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 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: Rebecca Haskell		OIL CONSERVATION DIVISION	
Printed Name:	Rebecca Haskell	Signed By Mike Bratcher Approved by Environmental Specialist:	
Title:	Senior HSE Coordinator	Approval Date: 4/26/17	Expiration Date: N/A
E-mail Address:	rhaskell@concho.com	Conditions of Approval: See attached	Attached ☒
Date: April 25, 2017	Phone: 432-683-7443		

* Attach Additional Sheets If Necessary

2RP-4189

APPENDIX E

Groundwater Data

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00641 POD1		CP	ED		4	1	36	19S	31E	610247	3609634*	300	130	170
CP 00642 POD1		CP	ED		2	2	25	19S	31E	611025	3611657*	250		
CP 00722 POD1		CP	LE	4	3	3	28	19S	31E	605106	3610273*	200		
CP 00722 POD3		CP	LE	2	4	1	33	19S	31E	605519	3609673*	220	140	80
CP 00723 POD1		CP	ED	2	1	1	33	19S	31E	605111	3610071*	139		
CP 00725 POD1		CP	ED	1	3	3	28	19S	31E	604906	3610473*	231		
CP 00829 POD1		CP	LE		2	4	16	19S	31E	606165	3614009*	120		
CP 00873 POD1		CP	LE		1	1	19	19S	31E	601772	3613147*	340	180	160
CP 01554 POD1		CP	LE	2	2	1	22	19S	31E	607166	3613354	400		
CP 01554 POD2		CP	LE	2	2	1	22	19S	31E	607165	3613322	400		

Average Depth to Water: 150 feet

Minimum Depth: 130 feet

Maximum Depth: 180 feet

Record Count: 10

PLSS Search:

Township: 19S Range: 31E

*UTM location was derived from PLSS - see Help