



Charles Beauvais  
ConocoPhillips  
2208 W Main St  
Artesia, New Mexico 88210  
575-988-2043

December 12, 2022

New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Subject: **Birdseye 32 State #001H Release  
Unit Letter O, Section 32, Township 19 South, Range 31 East  
Eddy County, New Mexico  
Incident ID nAB1711829670  
2RP-4189**

Sir or Madam:

ConocoPhillips Company ("COPC") entered into an Agreed Compliance Order ("ACO") with the New Mexico Oil Conservation Division ("NMOCD") on December 15, 2021, related to unresolved releases from COPC's predecessor-in-interest ("COG"). The ACO required COPC to submit characterization and/or remediation plans with proposed timeframes for the ongoing corrective actions or remediations identified to the NMOCD no later than March 31, 2022. As of March 11, 2022, COPC has submitted characterization and remediation plans for all of the properties identified and owned.

A Closure Request (dated October 2018) for the subject line 2RP-4189 (ID nAB1711829670) release was drafted by COG and previously submitted to the NMOCD on behalf of COPC. The document was uploaded and submitted to the NMOCD via CentreStack, a Secure Access & File Sharing platform, at the direction of Mr. Bradford Billings, NMOCD as a portion of the ACO submittals.

NMOCD has recently begun issuing determinations on ACO reports submitted via CentreStack, (referred to as Internal Manual Incident File Supporting Documentation (ENV) (IM-BNF)). This subject line incident was rejected by Brittany Hall, Projects Environmental Specialist – A. In the rejection, Ms. Hall notes that to close this incident, a new C-141 Closure form must be signed and submitted to the fee application portal along with the complete report that contains the missing appendices.

Thus, enclosed is a copy of the amended Closure Letter for the subject line incident. The attached amended Closure Letter with an executed C-141 will be submitted via the NMOCD Fee Application portal, as requested.

If you have any questions, please contact me at 575-988-2043.

Sincerely,

*Charles R. Beauvais*

Charles Beauvais  
Senior Environmental Engineer | Environmental Operations | ConocoPhillips

cc: Site Files

Attachments: C-141 Incident ID nAB1711829670, Rejection, Closure Letter

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: Charles R. Beauvais II Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: Jocelyn Harimon Date: 12/16/2022

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

Closure Approved by: Ashley Maxwell Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Chavira, Lisbeth**

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**From:** OCDOnline@state.nm.us  
**Sent:** Thursday, November 17, 2022 8:29 AM  
**To:** Beauvais, Charles R  
**Subject:** [EXTERNAL]The Oil Conservation Division (OCD) has rejected the application, Application ID: 159550

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o Charles Beauvais for COG OPERATING LLC),

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nAB1711829670, for the following reasons:

- **Incomplete report. There is no final C-141 submitted with the report. Please include a completed final C-141 with all reports. Please use the most current version of the C-141. In addition to the C-141 missing, all other appendices of the report are missing.**
- **Please submit a complete closure report through the OCD Permitting website by 1/20/2023.**

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 159550. Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

Thank you,  
Brittany Hall  
Projects Environmental Specialist - A  
505-517-5333  
Brittany.Hall@emnrd.nm.gov

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505



[Sheldon L. Hitchcock]  
[HSE Coordinator]

October 24, 2018

Maria Pruett  
Oil Conservation Division, District 2  
811 S First St.  
Artesia, NM 88210

Shelly Tucker  
Bureau of Land Management, CFO  
620 E. Green Street  
Carlsbad, NM 88220

**Re: Closure Letter**  
**Birdseye 32 State #001H**  
**API #: 30-015-38295**  
**RP#: 2RP-4189**  
**Unit Letter O Section 32, Township 19S, Range 31E**  
**Eddy County, NM**

Ms. Pruett/Ms. Tucker,

COG Operating, LLC (COG) is pleased to submit for your consideration the following closure report for the Birdseye 32 State #001H. This release occurred on April 24, 2017. Following the release an assessment of impacted soils was conducted. A remediation work plan was submitted to and subsequently approved by the New Mexico Oil Conservation Division (NMOCD) and Bureau of Land Management (BLM). A copy of the approved work plan is attached in Appendix V.

## **BACKGROUND**

The Birdseye 32 State #001H release is located in Unit Letter F, Section 33, Township 19 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for this release are 32.618982 North and -103.875229 West.

On April 24, 2017, a poly flowline approximately one (1) mile northeast of the Birdseye 32 State #001H location failed resulting in the release of approximately two-hundred and ninety-nine (299) barrels (bbls) of produced water and one (1) bbl of oil into the right-of-way.

Remediation activities were conducted in accordance with the approved work plan and NMOCD/BLM stipulations. The analytical results from the NMOCD and BLM stipulated confirmation soil sampling activities are summarized in the table below. A site diagram of the excavated area is presented in Appendix I.

October 24, 2018

**GROUNDWATER AND SITE RANKING**

According to the New Mexico Office of the State Engineer (NMOSE) groundwater in the project vicinity is approximately one-hundred and thirty (130) feet below ground surface (BGS) (Appendix II). No water well or surface water was observed within one-thousand (1,000) feet of the release site. Therefore the site ranking for this release is zero (0) based on the following:

Depth to groundwater >100-feet  
 Distance to surface water body >1000-feet  
 Wellhead Protection Area >1000-feet

**LABORATORY RESULTS**

Sample ID	Sample Depth (ft)	Chloride (mg/kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)
T1-Surface	0	3120	494	<0.00364	<0.00364
T1-1'	1	1810	715	<0.00345	0.233
T1-2'	2	11400	<15.0	<0.00348	<0.00348
T1-3'	3	16000			
T1-4'	4	11200			
T1-6'	6	5040			
T1-8'	8	6720			
T1-10'	10	2680			
T1-12'	12	3170			
T1-14'	14	333			
T1-16'	16	94.0			
T1-18'	18	162			
T2-Surface	0	2510	722	<0.00352	<0.00352
T2-1'	1	304	<15.0	<0.00389	<0.00389
T2-2'	2	2660	<15.0	<0.00351	<0.00351
T2-3'	3	73.2			
T2-4'	4	112			
T2-9'	9	4490			

October 24, 2018

## REMEDIAL ACTIONS

- The area in the vicinity of sample location T-1 was excavated to a depth of four (4) feet BGS and a 20-mil liner was installed at the bottom of the excavation.
- The impacted area in the vicinity of sample location T-2 was excavated to a depth of two (2) feet BGS.
- All of the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- The excavation was backfilled with clean “like” material, contoured to match the surrounding terrain and seeded with BLM LPC seed mixture.

October 24, 2018

## CLOSURE REQUEST

COG Production, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the Birdseye 32 State #001H incident that occurred on April 24, 2017.

Should you have any questions or concerns please do not hesitate to contact me.

Sincerely,



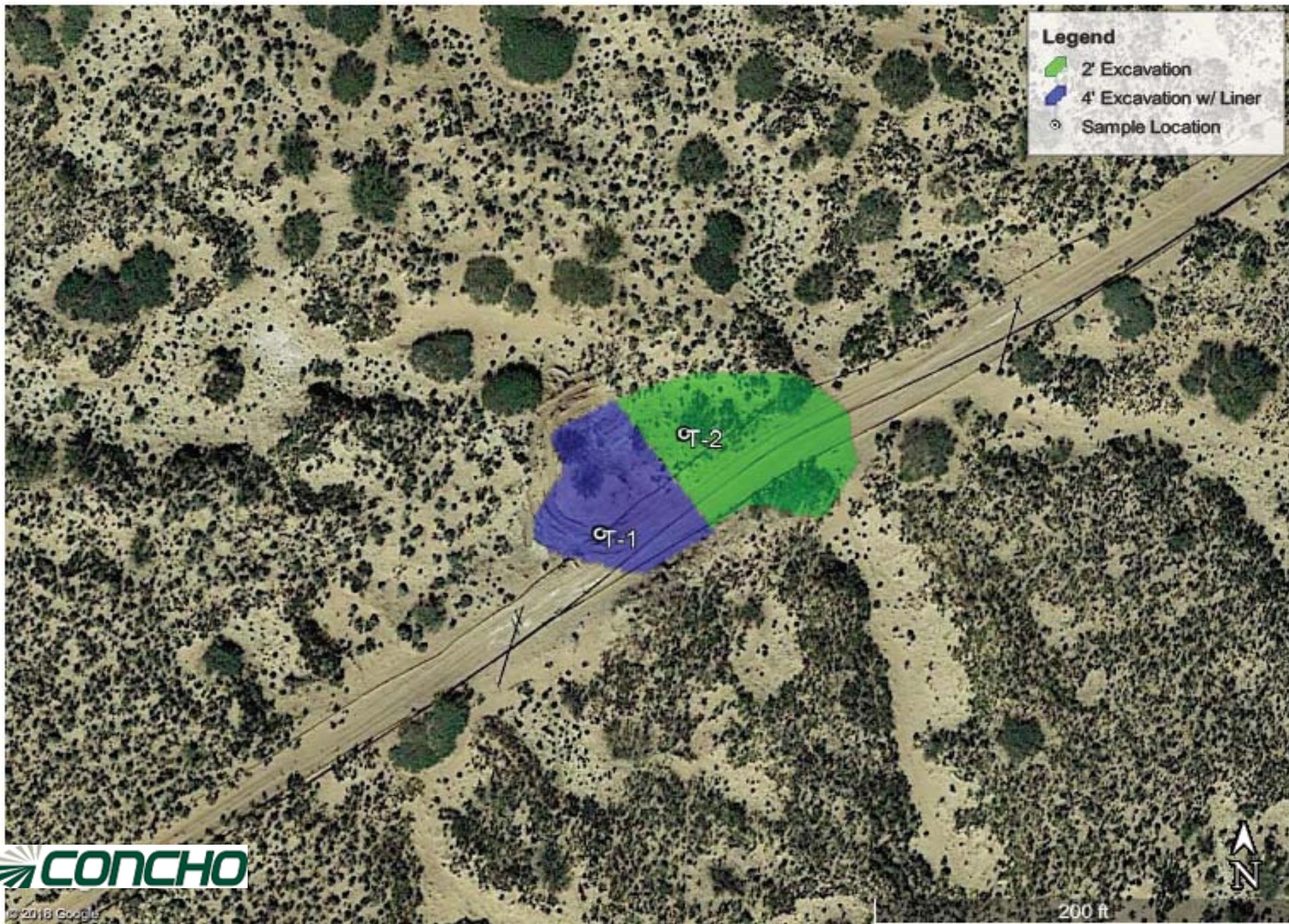
Sheldon L. Hitchcock  
HSE Coordinator  
[slhitchcock@concho.com](mailto:slhitchcock@concho.com)

Enclosed:

- Appendix I: Site Diagram
- Appendix II: Groundwater Data
- Appendix III: Initial C-141 (Copy)
- Appendix IV: Final C-141
- Appendix V: Work Plan (Copy)
- Appendix VI: Analytical Reports and Chain-of-Custody Forms

# APPENDIX I

# Birdseye 32 State #001H



# APPENDIX II



# 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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">CP 00723 POD1</a>	CP	ED		2	1	1	33	19S	31E	605111	3610071*	585	139		
<a href="#">CP 00725 POD1</a>	CP	ED		1	3	3	28	19S	31E	604906	3610473*	1035	231		
<a href="#">CP 00520</a>	CP	ED		4	4	1	10	20S	31E	607163	3606278*	3728	280	130	150
<a href="#">CP 00641 POD1</a>	CP	ED		4	1		36	19S	31E	610247	3609634*	4827	300	130	170

Average Depth to Water: **130 feet**

Minimum Depth: **130 feet**

Maximum Depth: **130 feet**

**Record Count:** 4

**Basin/County Search:**

**County:** Eddy

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 605420

**Northing (Y):** 3609574

**Radius:** 5000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# APPENDIX III

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

APR 25 2017

Form C-141  
Revised August 8, 2011

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

RECEIVED

Submit 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
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**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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

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: <i>Rebecca Haskell</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Rebecca Haskell	Signed By: <i>Mike Brundage</i> 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 <input checked="" type="checkbox"/>
Date: April 25, 2017 Phone: 432-683-7443		

\* Attach Additional Sheets If Necessary

2RP-4189

# APPENDIX IV

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 April 3, 2017

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

**Release Notification and Corrective Action**

**OPERATOR**  Initial Report  Final Report

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

Surface Owner: BLM	Mineral Owner: State	API No.: 30-015-38295
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**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	S	2260	E	Eddy

Latitude: 32.6105042 Longitude: -103.8901062 NAD83

**NATURE OF RELEASE**

Type of Release: Oil & Produced Water	Volume of Release: 1bbl Oil & 229bbls of PW	Volume Recovered: 0bbls
Source of Release: Flowline	Date and Hour of Occurrence: April 24, 2017 2:00pm	Date and Hour of Discovery: April 24, 2017 2:00pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Ms. Weaver-NMOCD Ms. Tucker-BLM Ms. Groves-NMSLO	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
A flowline failed resulting in the release. The flowline was repaired.

Describe Area Affected and Cleanup Action Taken.\*  
The release was within the pasture. The release was vertically and horizontally delineated. A remediation work plan was drafted and subsequently approved by NMOCD and BLM. The remediation was carried out in accordance with the approved work plan.

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: <i>Sheldon Hitchcock</i>		<b><u>OIL CONSERVATION DIVISION</u></b>	
Printed Name: Sheldon L. Hitchcock		Approved by Environmental Specialist:	
Title: HSE Coordinator	Approval Date:	Expiration Date:	
E-mail Address: slhitchcock@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 10/24/2018	Phone: 575-746-2010		

\* Attach Additional Sheets If Necessary

# APPENDIX V



**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:

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Ryan Reich  
Environmental Project Manager

---

Thomas Franklin  
Environmental Manager

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**APPENDICES**

**Appendix A**

- Figure 1 – Site Vicinity Map
- Figure 2 – Topography Map
- Figure 3 – Release Footprint Map
- Figure 4 – Proposed Excavated Depths Map

**Appendix B**

- Table 1 - Soil Analytical Summary Table

**Appendix C**

- Laboratory Analysis and Chain-of-Custody

**Appendix D**

- Initial C-141

**Appendix E**

- Groundwater Data

## WORK PLAN

**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

### 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	
<b>Total Ranking Score</b>			<b>0</b>

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

- The depth to the initial groundwater-bearing zone is 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 24<sup>th</sup>. 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 26<sup>th</sup> 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 27<sup>th</sup>, in response to the May 26<sup>th</sup> 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

 Birdseye 32 St1H

Figure 1

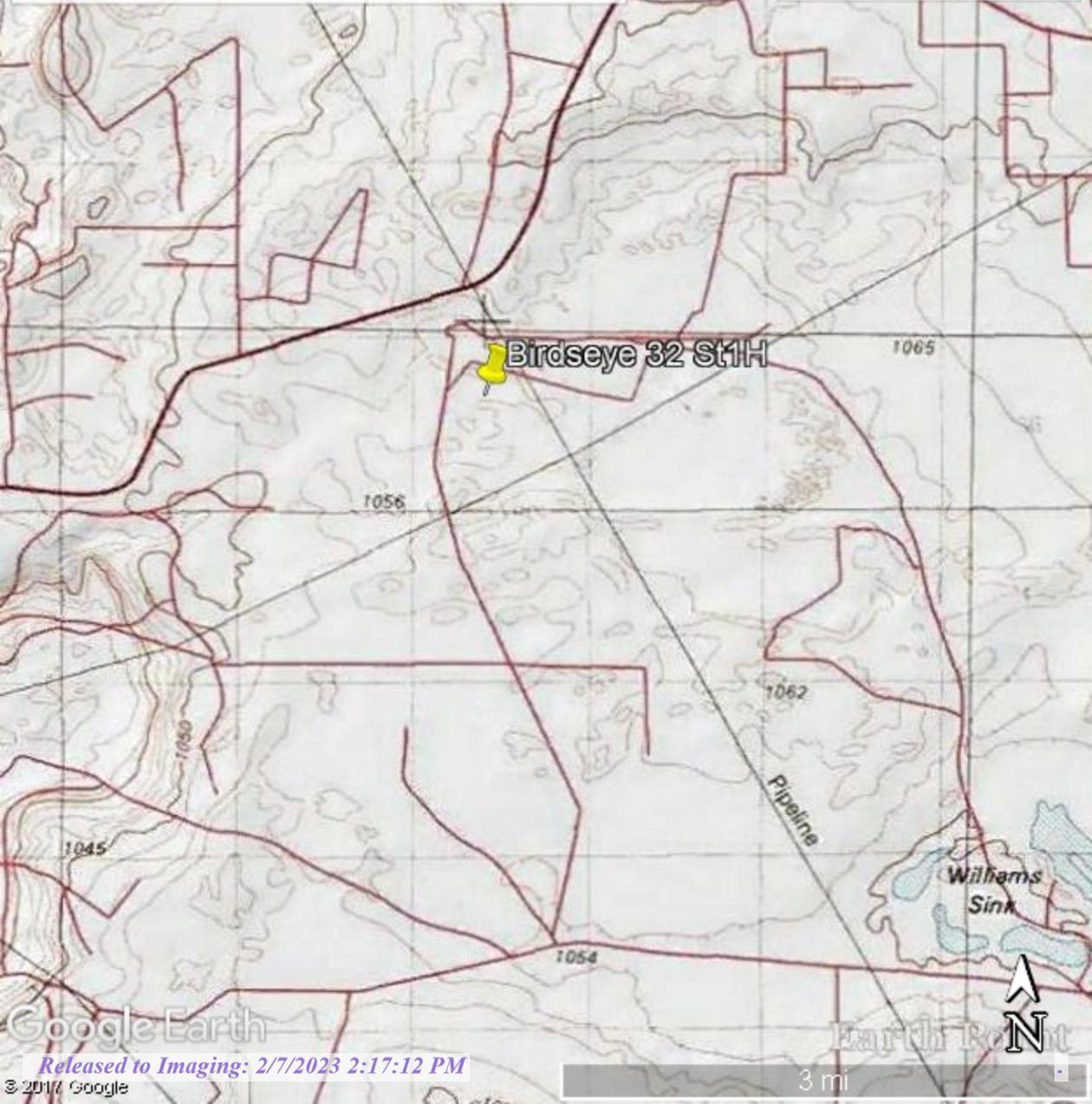


Google Earth

# COG - Birdseye 32 State #1H

 Birdseye 32 St1H

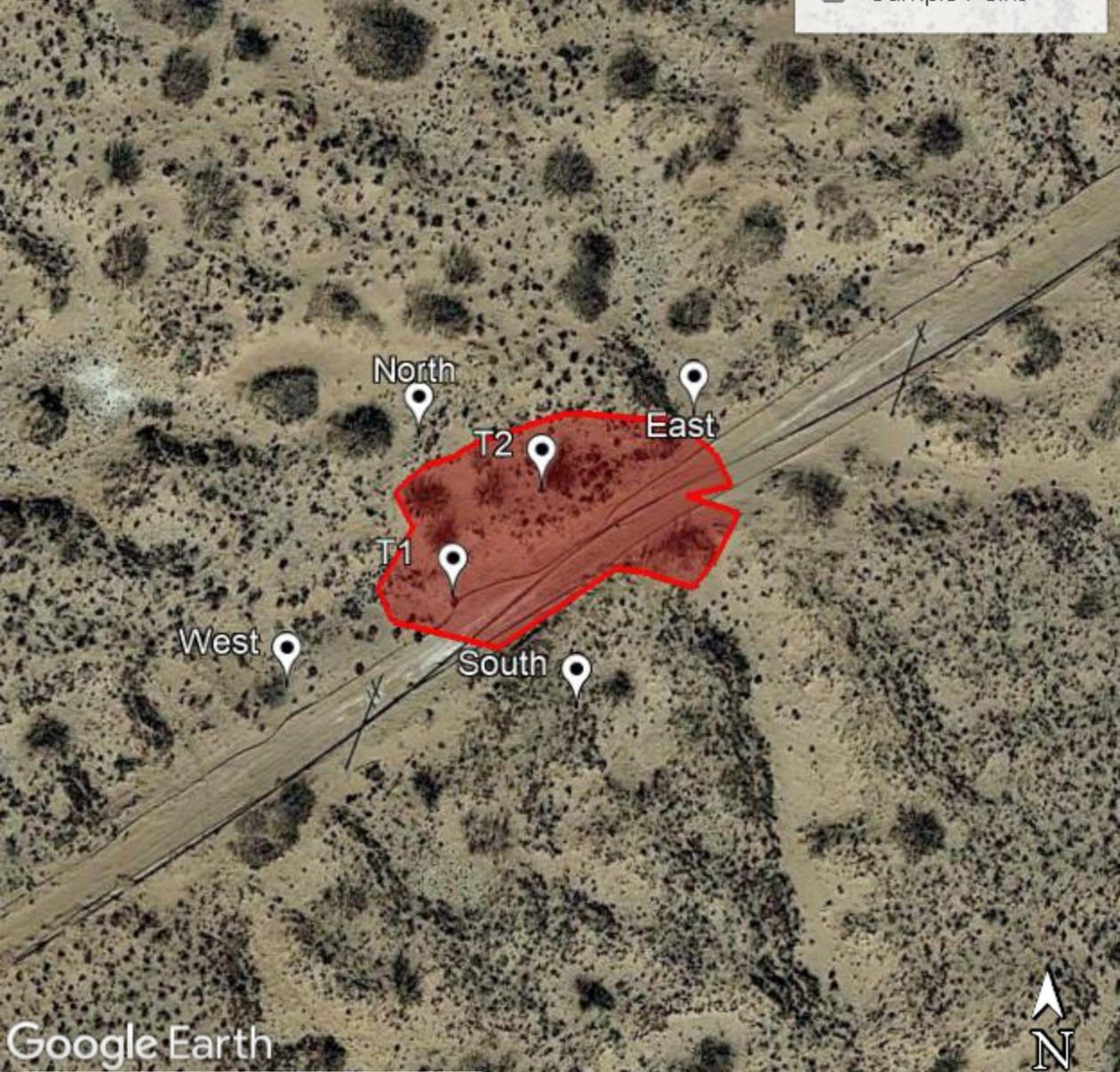
Figure 2

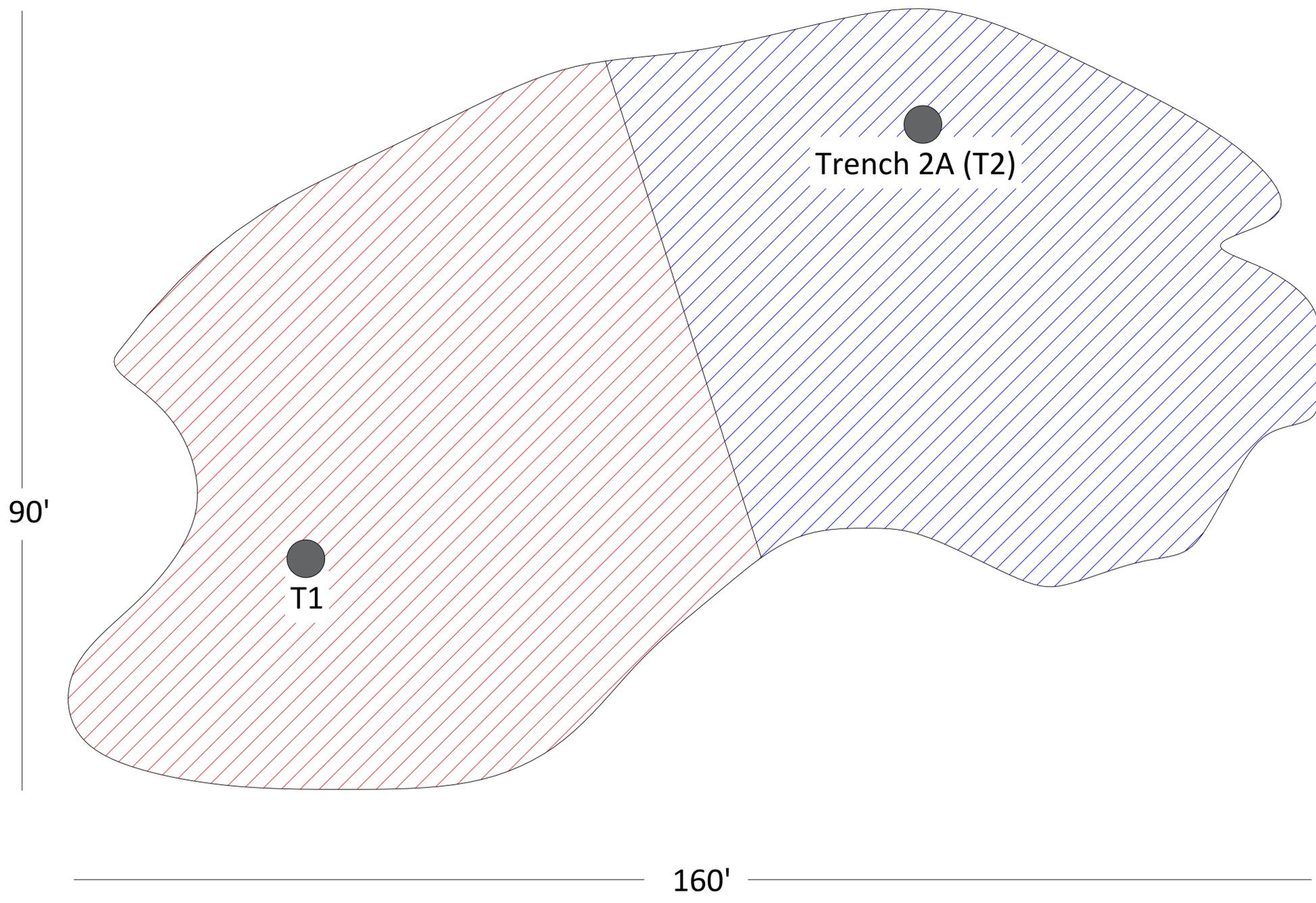


# COG - Birdseye 32 State #001H

Figure 3

-  Release Footprint
-  Sample Point





**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**

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 Delineation Sampling												
T1	Surface	5/16/2017	In-Situ	<0.00364	<0.00364	<0.00364	<0.00364	<0.00364	69.0	425	494	<b>3,120</b>
T1	1'	5/16/2017	In-Situ	<0.00345	<0.00345	<0.00345	0.233	0.233	89.3	626	715	<b>1,810</b>
T1	2'	5/16/2017	In-Situ	<0.00348	<0.00348	<0.00348	<0.00348	<0.00348	<15.0	<15.0	<15.0	<b>11,400</b>
T1	3'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>16,000</b>
T1	4'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>11,200</b>
T1	6'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>5,040</b>
T1	8'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>6,720</b>
T1	10'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>2,680</b>
T1	12'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>3,170</b>
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	<b>2,510</b>
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	<b>2,660</b>
T2	3'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	73.2
T2	4'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	112
T2	9'	5/16/2017	In-Situ	-	-	-	-	-	-	-	-	<b>4,490</b>
Trench 2 A	5'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	376.16
Trench 2 A	6'	10/27/2017	In-Situ	-	-	-	-	-	-	-	-	<b>1,010.7</b>
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 excavated 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

<i>Analysis Requested</i>	<i>Lab Id:</i>	553603-001	553603-002	553603-003	553603-004	553603-005	553603-006
	<i>Field Id:</i>	T1-Surface	T1-1'	T1-2'	T1-3'	T1-4'	T1-6'
	<i>Depth:</i>		1 ft	2 ft	3 ft	4 ft	6 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	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
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	May-24-17 07:30	May-23-17 07:30	May-23-17 07:30			
	<i>Analyzed:</i>	May-24-17 08:58	May-23-17 11:12	May-23-17 10:55			
	<i>Units/RL:</i>	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			
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	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
	<i>Analyzed:</i>	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
	<i>Units/RL:</i>	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
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	May-24-17 11:00	May-24-17 11:00	May-24-17 11:00			
	<i>Analyzed:</i>	May-24-17 13:52	May-24-17 14:12	May-24-17 14:32			
	<i>Units/RL:</i>	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			

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

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Brandi Ritcherson  
Project Manager



# Certificate of Analysis Summary 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

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

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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

<i>Analysis Requested</i>	<i>Lab Id:</i>	553603-013	553603-014	553603-015	553603-016	553603-017	553603-018
	<i>Field Id:</i>	T2-Surface	T2-1'	T2-2'	T2-3'	T2-4'	T2-9'
	<i>Depth:</i>		1 ft	2 ft	3 ft	4 ft	9 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	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
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	May-23-17 07:30	May-23-17 07:30	May-23-17 07:30			
	<i>Analyzed:</i>	May-23-17 10:39	May-23-17 13:55	May-23-17 10:06			
	<i>Units/RL:</i>	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			
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	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
	<i>Analyzed:</i>	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
	<i>Units/RL:</i>	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
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	May-24-17 11:00	May-24-17 11:00	May-24-17 11:00			
	<i>Analyzed:</i>	May-24-17 15:37	May-24-17 15:59	May-24-17 16:20			
	<i>Units/RL:</i>	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			

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

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Brandi Ritcherson  
Project Manager

# Analytical Report 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

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

*Certified and approved by numerous States and Agencies.*

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

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



## 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



## CASE NARRATIVE

*Client Name: COG Operating LLC*

*Project Name: Birdseye 32 St #1H*

Project ID:  
Work Order Number(s): 553603

Report Date: 31-MAY-17  
Date Received: 05/20/2017

---

### **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	



# Certificate of Analytical Results 553603



## 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	



# Certificate of Analytical Results 553603



## 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	



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-3'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-4'</b>	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	<b>11200</b>	95.8	mg/kg	05.25.17 23.50		10



# Certificate of Analytical Results 553603



## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-6'</b>	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	<b>5040</b>	48.3	mg/kg	05.25.17 23.59		5



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-8'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-10'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-12'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-14'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-16'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM Birdseye 32 St #1H

Sample Id: <b>T1-18'</b>	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



# Certificate of Analytical Results 553603



## 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	



# Certificate of Analytical Results 553603



## 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: <b>T2-9'</b>	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

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(432) 563-1800	(432) 563-1713
(602) 437-0330	



## COG Operating LLC

Birdseye 32 St #1H

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

Seq Number: 3018295

Matrix: Solid

Prep Method: SW9056P

MB Sample Id: 725242-1-BLK

LCS Sample Id: 725242-1-BKS

Date Prep: 05.25.17

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**

Seq Number: 3018295

Matrix: Solid

Prep Method: SW9056P

Parent Sample Id: 553595-001

MS Sample Id: 553595-001 S

Date Prep: 05.25.17

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**

Seq Number: 3018295

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 553603-010

MS Sample Id: 553603-010 S

Date Prep: 05.25.17

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**

Seq Number: 3018186

Matrix: Solid

Prep Method: TX1005P

MB Sample Id: 725165-1-BLK

LCS Sample Id: 725165-1-BKS

Date Prep: 05.24.17

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**

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



## COG Operating LLC

Birdseye 32 St #1H

Analytical Method: TPH By SW8015 Mod

Seq Number: 3018186

Parent Sample Id: 553603-003

Matrix: Soil

MS Sample Id: 553603-003 S

Prep Method: TX1005P

Date Prep: 05.24.17

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

Seq Number: 3018068

MB Sample Id: 725094-1-BLK

Matrix: Solid

LCS Sample Id: 725094-1-BKS

Prep Method: SW5030B

Date Prep: 05.23.17

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

Seq Number: 3018240

MB Sample Id: 725152-1-BLK

Matrix: Solid

LCS Sample Id: 725152-1-BKS

Prep Method: SW5030B

Date Prep: 05.24.17

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



## COG Operating LLC

Birdseye 32 St #1H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3018068

Parent Sample Id: 553455-001

Matrix: Soil

MS Sample Id: 553455-001 S

Prep Method: SW5030B

Date Prep: 05.23.17

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

Seq Number: 3018240

Parent Sample Id: 553690-003

Matrix: Soil

MS Sample Id: 553690-003 S

Prep Method: SW5030B

Date Prep: 05.24.17

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



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 Stafford, Texas (281-240-4200)  
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# CHAIN OF CUSTODY

Page 1 of 2

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

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Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch: COG Operating LLC		Project Name/Number: Birdseye 32 St.#1H		Xenco Quote #		Xenco Job #	
Company Address: 2407 PECOS Avenue Artesia NM 88210		Project Location: Birdseye 32 St.#1H		5034003			
Email: alieb@concho.com dnee12@concho.com rtskell@concho.com Phone No: 575-748-1553		Invoice To: COG Operating LLC Attn: Robert McNeill 600 W. Illinois Midland TX 79701					
Project Contact: Aaron Lieb		PO Number:					
Sampler's Name: Aaron Lieb							
No.	Field ID / Point of Collection	Collection	Matrix	# of bottles	HCl	Number of preserved bottles	Field Comments
1	TI- Surf	Surf	S	1		TPH	
2	TI- 1'			1		BTEX	
3	TI- 2'			1		Chloride	
4	TI- 3'			1			
5	TI- 4'			1			
6	TI- 6'			1			
7	TI- 8'			1			
8	TI- 10'			1			
9	TI- 12'			1			
10	TI- 14'			1			
Turnaround Time (Business days)		Data Deliverable Information		Notes:			
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg /raw data)			
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC+ Forms			
<input type="checkbox"/> 2 Day EMERGENCY		<input type="checkbox"/> Contract TAT		<input type="checkbox"/> TRRP Level IV			
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist		<input type="checkbox"/> UST / RG -411			
TAT Starts Day received by Lab, if received by 5:00 pm							
Relinquished by: [Signature]		Date Time: 11:00 AM 5/19/17		Received By: [Signature]		Date Time: 11:00 AM 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 AM 5-19-17		Received By: [Signature]		Date Time: 10:33 AM 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 AM 5-19-17		Received By: [Signature]		Date Time: 10:33 AM 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 AM 5-19-17		Received By: [Signature]		Date Time: 10:33 AM 5-19-17	

Temp: 24  
 CF:(0-6: -0.2°C)  
 (6-23: +0.2°C)  
 Corrected Temp: 3.2  
 IR ID: R-8



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# CHAIN OF CUSTODY

Page 2 of 2

San Antonio, Texas (210-509-3334)  
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Phoenix, Arizona (480-355-0900)

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Xenco Quote #

Xenco Job #

5536003

<b>Client / Reporting Information</b>		<b>Project Information</b>		<b>Analytical Information</b>		<b>Matrix Codes</b>	
Company Name / Branch: COG Operating LLC		Project Name/Number: Birdseye 32 St.#1H		Xenco Quote #		Xenco Job #	
Company Address: 2407 PECOS Avenue Artesia NM 88210		Project Location: Birdseye 32 St.#1H		Date Time:		Received By:	
Email: alleh@concho.com dneelz@concho.com rhaskell@concho.com		Invoice To: COG Operating LLC		Date Time:		Received By:	
Project Contact: Aaron Lieb		Attn: Robert McNeill		Date Time:		Received By:	
Sampler's Name: Aaron Lieb		Midland TX 79701		Date Time:		Received By:	
Field ID / Point of Collection		PO Number:		Date Time:		Received By:	

No.	Field ID / Point of Collection	Collection		Matrix	# of bottles	Number of preserved bottles							TPH	BTEX	Chloride	Notes:	Field Comments
		Sample Depth	Date			Time	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4					
1	T1-16'	16'	5/16/17	12:00	5	1											
2	T1-18'	18'		12:00	1												
3	T2-Surf	Surf		12:15pm	1												
4	T2-1'	1'			1												
5	T2-2'	2'			1												
6	T2-3'	3'			1												
7	T2-4'	4'			1												
8	T2-9'	9'			1												
9					1												
10					1												

Turnaround Time (Business days)

Same Day TAT     5 Day TAT  
 Next Day EMERGENCY     7 Day TAT  
 2 Day EMERGENCY     Contract TAT  
 3 Day EMERGENCY     TRRP Checklist

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

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

1	Relinquished By: [Signature]	Date Time: 5/19/17 11:00 am	Received By: 1 [Signature]	Date Time: 5-19-17 11:00 am	Relinquished By: 2 [Signature]	Date Time:	Received By: 2 [Signature]	Date Time:
3	Relinquished By: [Signature]	Date Time:	Received By: 3 [Signature]	Date Time: 10:30	Relinquished By: 4 [Signature]	Date Time:	Received By: 4 [Signature]	Date Time:
5	Relinquished By: [Signature]	Date Time:	Received By: 5 [Signature]	Date Time:	Relinquished By: 4 [Signature]	Date Time:	Received By: 4 [Signature]	Date Time:

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 any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xer terms will be enforced unless previously negotiated under a fully executed client contract.

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

Date Printed: Tue May-23-17 11:12 am Page 1 of 2

Date/Time: 05/22/17 08:43

Created by: Jessica Kramer

Please send report to: Liz Givens

Lab# From: **Midland**

Delivery Priority: Fedex

Address: 1211 W. Florida Ave, Midland TX 79701

Lab# To: **Houston**

Air Bill No.: 779201410522

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

Received By: \_\_\_\_\_

*Mitsuko Konuma*

Mitsuko Konuma

Date Relinquished: 05/22/2017

Date Received: 05/23/2017 09:15

Date Printed: Tue May-23-17 11:12 am Page 2 of 2

Cooler Temperature: 1.0



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

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

IOS #: 1044016

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:

[Signature]
Mitsuko Konuma

Date: 05/23/2017



# 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  
Jessica Kramer

Date: 05/22/2017

Checklist reviewed by: Liz Givens  
Liz Givens

Date: 05/22/2017



# 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

<i>Analysis Requested</i>	<i>Lab Id:</i>	553604-001	553604-002	553604-003	553604-004	553604-005	553604-006
	<i>Field Id:</i>	North-Surface	North-1'	Sotuh-Surface	South-1'	East-Surface	East-1'
	<i>Depth:</i>		1 ft		1 ft		1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
<i>Sampled:</i>	May-16-17 11:00	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
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	May-26-17 02:27					
	<i>Analyzed:</i>	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
	<i>Units/RL:</i>	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

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Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

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

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

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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

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*Certified and approved by numerous States and Agencies.*

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# 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



## CASE NARRATIVE

*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

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### **Sample receipt non conformances and comments:**

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### **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



# Certificate of Analytical Results 553604

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>North-1'</b>	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: <b>South-1'</b>	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: <b>East-1'</b>	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: <b>West-1'</b>	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

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 9701 Harry Hines Blvd, Dallas, TX 75220  
 5332 Blackberry Drive, San Antonio TX 78238  
 1211 W Florida Ave, Midland, TX 79701  
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



COG Operating LLC

Birdseye 32 St #1H

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3018297

MB Sample Id: 725243-1-BLK

Matrix: Solid

LCS Sample Id: 725243-1-BKS

Prep Method: E300P

Date Prep: 05.26.17

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

Seq Number: 3018297

Parent Sample Id: 553604-001

Matrix: Soil

MS Sample Id: 553604-001 S

Prep Method: E300P

Date Prep: 05.26.17

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

Seq Number: 3018297

Parent Sample Id: 553606-001

Matrix: Soil

MS Sample Id: 553606-001 S

Prep Method: E300P

Date Prep: 05.26.17

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	



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

Date/Time: 05/22/17 08:44

Created by: Jessica Kramer

Please send report to: Liz Givens

Lab# From: **Midland**

Delivery Priority: Fedex

Address: 1211 W. Florida Ave, Midland TX 79701

Lab# To: **Houston**

Air Bill No.: 779201410522

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

Received By:

*Mitsuko Konuma*

Mitsuko Konuma

Date Relinquished: 05/22/2017

Date Received: 05/23/2017 09:15

Cooler Temperature: 1.0



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

Acceptable Temperature Range: 0 - 6 degC

IOS #: 1044017

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:

  
Mitsuko Konuma

Date: 05/23/2017



# 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  
Jessica Kramer

Date: 05/22/2017

Checklist reviewed by: Liz Givens  
Liz Givens

Date: 05/22/2017



# 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

<i>Analysis Requested</i>	<i>Lab Id:</i>	566852-001	566852-002	566852-003	566852-004	566852-005	
	<i>Field Id:</i>	Trench 2 (A)					
	<i>Depth:</i>	5- In	6- In	7- In	8- In	9- In	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	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	
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Nov-06-17 16:00					
	<i>Analyzed:</i>	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	
	<i>Units/RL:</i>	mg/L RL					
Chloride		376.16 4.9900	1010.7 4.9603	308.62 4.9310	203.22 4.9801	364.88 4.9020	

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Version: 1.9%

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

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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



# 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



## CASE NARRATIVE

*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	<b>1010.7</b>	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	<b>364.88</b>	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

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4147 Greenbriar Dr, Stafford, TX 77477  
 9701 Harry Hines Blvd, Dallas, TX 75220  
 5332 Blackberry Drive, San Antonio TX 78238  
 1211 W Florida Ave, Midland, TX 79701  
 2525 W. Huntington Dr. - Suite 102, Tempe AZ 85282

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



American Safety Services  
COG Birdseye 32 State #001 H

Analytical Method: Chloride by EPA 300

Seq Number: 3032576

MB Sample Id: 7633898-1-BLK

Matrix: Solid

LCS Sample Id: 7633898-1-BKS

Prep Method: E300P

Date Prep: 11.06.17

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

Seq Number: 3032576

Parent Sample Id: 566621-039

Matrix: Soil

MS Sample Id: 566621-039 S

Prep Method: E300P

Date Prep: 11.06.17

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

Seq Number: 3032576

Parent Sample Id: 566853-002

Matrix: Soil

MS Sample Id: 566853-002 S

Prep Method: E300P

Date Prep: 11.06.17

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	



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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)

# CHAIN OF CUSTODY

Page 1 of 2

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Client / Reporting Information		Project Information		Analytical Information		Matrix Codes									
Company Name / Branch: American Safety Services Inc.		Project Name/Number: Cob- Bredseye, 32 state # 001 H		Xenoco Quote #		Xenoco Job #									
Company Address: 8715 Andrews Hwy Odessa Tx 79765		Project Location: Bldg 6 NW		S100852											
Email: franklin@americansafety.net Zimmerman@americansafety.net Thomas Franklin		Invoice To: Cob- ATN Bredseye Haskell													
Phone No: 432-557-9868		PO Number:													
Sampler's Name: Mike Diez															
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Notes
1	Trench A (A)	5'	10/27/17	0900	S	1									Chloride Hold
2		6'	10/27/17	0902	S	1									On Ice
3		7'	10/27/17	0904	S	1									
4		8'	10/27/17	0906	S	1									
5		9'	10/27/17	0908	S	1									
6		10'	10/27/17	0910	S	1									
7		11'	10/27/17	0912	S	1									
8		12'	10/27/17	0914	S	1									
9		13'	10/27/17	0916	S	1									
10		14'	10/27/17	0918	S	1									
Turnaround Time (Business days)															
<input type="checkbox"/> Same Day TAT		<input checked="" type="checkbox"/> 5 Day TAT		<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg /raw data)									
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC+ Forms		<input type="checkbox"/> TRRP Level IV									
<input type="checkbox"/> 2 Day EMERGENCY		<input type="checkbox"/> Contract TAT		<input type="checkbox"/> Level 3 (CLP Forms)		<input type="checkbox"/> UST / RG -411									
<input type="checkbox"/> 3 Day EMERGENCY				<input type="checkbox"/> TRRP Checklist											
TAT Starts Day received by Lab, if received by 5:00 pm															
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY															
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Custody Seal #		Preserved where applicable	
1. <i>M. Diez</i>		10/26/17 0830		1. <i>M. Zimmerman</i>		10/26/17 1030		1. <i>M. Zimmerman</i>		10/26/17 1030		4		On Ice <input checked="" type="checkbox"/>	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Cooler Temp.		Thermo Corr. Factor	
3.				3.				4.				2.8		IR ID: R-8	
5.				5.				Temp @ office @ 07:30 4.0°C				CF: (0-6: -0.2°C)		Corrected Temp: 2.6	

IF Chloride exceeds 600 mg/kg can deeper samples on hold

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 losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



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# CHAIN OF CUSTODY

Page 2 of 2

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

www.xenco.com

Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes									
Company Name / Branch: American Safety Services Inc.		Project Name/Number: 100A-Barkseye 3A Strike T-001 H		Xenoco Quote #		Xenoco Job #									
Company Address: 8715 Andrews Hwy Odessa Tx 79765		Project Location: Eddy 6 NW		Xenoco Job #		500852									
Email: tfranklin@americansafety.net tzimmerman@americansafety.net		Invoice To:		Xenoco Job #		500852									
Phone No: 432-957-9868		PO Number:		Xenoco Job #		500852									
Project Contact: Thomas Franklin				Xenoco Job #		500852									
Sampler's Name / <del>Thomas Franklin</del> Mike O'Leary				Xenoco Job #		500852									
No.	Field ID / Point of Collection	Sample Depth	Collection Date	Time	Matrix	# of bottles	HCI	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	Trench 2 (A)	15'	10/21/19	0920	5	1									+ Chloride
2															on Ice
3															
4															
5															
6															
7															
8															
9															
10															
Turnaround Time (Business days)		Data Deliverable Information		Temp: 2.8		IR ID: R-8		CF: (0-6: -0.2°C)		Corrected Temp: 2.6					
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> 5 Day TAT		<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg / raw data)									
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC+ Forms		<input type="checkbox"/> TRRP Level IV									
<input type="checkbox"/> 2 Day EMERGENCY		<input type="checkbox"/> Contract TAT		<input type="checkbox"/> Level 3 (CLP Forms)		<input type="checkbox"/> UST / RG-411									
<input type="checkbox"/> 3 Day EMERGENCY				<input type="checkbox"/> TRRP Checklist											
TAT Starts Day received by Lab, if received by 5:00 pm		SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		FED-EX / UPS: Tracking #											
Relinquished by Sampler:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
1. <i>Mike O'Leary</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630	
Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
3. <i>Mike O'Leary</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630	
Relinquished by:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
5. <i>Mike O'Leary</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630		<i>Thomas Franklin</i>		10/20/17 0630	
Custody Seal #		Preserved where applicable		On Ice		Cooler Temp.		Thermo. Corr. Factor							
4				<input checked="" type="checkbox"/>											

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



Client: American Safety Services

Date/ Time Received: 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  
Connie Hernandez

Date: 10/30/2017

Checklist reviewed by: Brandi Ritcherson  
Brandi Ritcherson

Date: 10/30/2017



## APPENDIX D

Initial C-141

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

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

APR 25 2017

Form C-141  
Revised August 8, 2011

RECEIVED

Submit 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

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: <i>Rebecca Haskell</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Rebecca Haskell	Signed By: <i>Mike Brundage</i> 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 <input checked="" type="checkbox"/>
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	DepthWell	DepthWater	Water Column
<a href="#">CP 00641 POD1</a>		CP	ED	4	1	36	19S	31E		610247	3609634*	300	130	170
<a href="#">CP 00642 POD1</a>		CP	ED	2	2	25	19S	31E		611025	3611657*	250		
<a href="#">CP 00722 POD1</a>		CP	LE	4	3	3	19S	31E		605106	3610273*	200		
<a href="#">CP 00722 POD3</a>		CP	LE	2	4	1	19S	31E		605519	3609673*	220	140	80
<a href="#">CP 00723 POD1</a>		CP	ED	2	1	1	19S	31E		605111	3610071*	139		
<a href="#">CP 00725 POD1</a>		CP	ED	1	3	3	19S	31E		604906	3610473*	231		
<a href="#">CP 00829 POD1</a>		CP	LE	2	4	16	19S	31E		606165	3614009*	120		
<a href="#">CP 00873 POD1</a>		CP	LE	1	1	19	19S	31E		601772	3613147*	340	180	160
<a href="#">CP 01554 POD1</a>		CP	LE	2	2	1	19S	31E		607166	3613354	400		
<a href="#">CP 01554 POD2</a>		CP	LE	2	2	1	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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/9/17 12:44 PM

WATER COLUMN/ AVERAGE DEPTH  
TO WATER

# APPENDIX VI



# 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

<i>Analysis Requested</i>	<i>Lab Id:</i>	553603-001	553603-002	553603-003	553603-004	553603-005	553603-006
	<i>Field Id:</i>	T1-Surface	T1-1'	T1-2'	T1-3'	T1-4'	T1-6'
	<i>Depth:</i>		1 ft	2 ft	3 ft	4 ft	6 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	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
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	May-24-17 07:30	May-23-17 07:30	May-23-17 07:30			
	<i>Analyzed:</i>	May-24-17 08:58	May-23-17 11:12	May-23-17 10:55			
	<i>Units/RL:</i>	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			
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	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
	<i>Analyzed:</i>	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
	<i>Units/RL:</i>	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
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	May-24-17 11:00	May-24-17 11:00	May-24-17 11:00			
	<i>Analyzed:</i>	May-24-17 13:52	May-24-17 14:12	May-24-17 14:32			
	<i>Units/RL:</i>	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			

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

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Brandi Ritcherson  
Project Manager



# Certificate of Analysis Summary 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

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

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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

<i>Analysis Requested</i>	<i>Lab Id:</i>	553603-013	553603-014	553603-015	553603-016	553603-017	553603-018
	<i>Field Id:</i>	T2-Surface	T2-1'	T2-2'	T2-3'	T2-4'	T2-9'
	<i>Depth:</i>		1 ft	2 ft	3 ft	4 ft	9 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	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
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	May-23-17 07:30	May-23-17 07:30	May-23-17 07:30			
	<i>Analyzed:</i>	May-23-17 10:39	May-23-17 13:55	May-23-17 10:06			
	<i>Units/RL:</i>	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			
<b>Inorganic Anions by EPA 300/300.1 SUB: TX104704215</b>	<i>Extracted:</i>	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
	<i>Analyzed:</i>	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
	<i>Units/RL:</i>	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
<b>TPH By SW8015 Mod</b>	<i>Extracted:</i>	May-24-17 11:00	May-24-17 11:00	May-24-17 11:00			
	<i>Analyzed:</i>	May-24-17 15:37	May-24-17 15:59	May-24-17 16:20			
	<i>Units/RL:</i>	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			

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

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Brandi Ritcherson  
Project Manager

# Analytical Report 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

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

*Certified and approved by numerous States and Agencies.*

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

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## 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



## CASE NARRATIVE

*Client Name: COG Operating LLC*

*Project Name: Birdseye 32 St #1H*

Project ID:  
Work Order Number(s): 553603

Report Date: 31-MAY-17  
Date Received: 05/20/2017

---

### **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	



# Certificate of Analytical Results 553603

## 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	



# Certificate of Analytical Results 553603

## 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	



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-3'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-4'</b>	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	<b>11200</b>	95.8	mg/kg	05.25.17 23.50		10



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-6'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-8'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-10'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-12'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-14'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: <b>T1-16'</b>	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



# Certificate of Analytical Results 553603

## COG Operating LLC, Artesia, NM

Birdseye 32 St #1H

Sample Id: **T1-18'**  
Lab Sample Id: 553603-012

Matrix: Soil  
Date Collected: 05.16.17 12.00

Date Received: 05.20.17 10.30  
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



# Certificate of Analytical Results 553603

## 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	



# Certificate of Analytical Results 553603

## 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: <b>T2-9'</b>	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

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COG Operating LLC

Birdseye 32 St #1H

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3018295

MB Sample Id: 725242-1-BLK

Matrix: Solid

LCS Sample Id: 725242-1-BKS

Prep Method: SW9056P

Date Prep: 05.25.17

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

Seq Number: 3018295

Parent Sample Id: 553595-001

Matrix: Solid

MS Sample Id: 553595-001 S

Prep Method: SW9056P

Date Prep: 05.25.17

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

Seq Number: 3018295

Parent Sample Id: 553603-010

Matrix: Soil

MS Sample Id: 553603-010 S

Prep Method: E300P

Date Prep: 05.25.17

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

Seq Number: 3018186

MB Sample Id: 725165-1-BLK

Matrix: Solid

LCS Sample Id: 725165-1-BKS

Prep Method: TX1005P

Date Prep: 05.24.17

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



COG Operating LLC

Birdseye 32 St #1H

Analytical Method: TPH By SW8015 Mod

Seq Number: 3018186

Parent Sample Id: 553603-003

Matrix: Soil

MS Sample Id: 553603-003 S

Prep Method: TX1005P

Date Prep: 05.24.17

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

Seq Number: 3018068

MB Sample Id: 725094-1-BLK

Matrix: Solid

LCS Sample Id: 725094-1-BKS

Prep Method: SW5030B

Date Prep: 05.23.17

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

Seq Number: 3018240

MB Sample Id: 725152-1-BLK

Matrix: Solid

LCS Sample Id: 725152-1-BKS

Prep Method: SW5030B

Date Prep: 05.24.17

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



## COG Operating LLC

Birdseye 32 St #1H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3018068

Parent Sample Id: 553455-001

Matrix: Soil

MS Sample Id: 553455-001 S

Prep Method: SW5030B

Date Prep: 05.23.17

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

Seq Number: 3018240

Parent Sample Id: 553690-003

Matrix: Soil

MS Sample Id: 553690-003 S

Prep Method: SW5030B

Date Prep: 05.24.17

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



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

# CHAIN OF CUSTODY

Page 1 of 2

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

www.xenco.com

Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch: COG Operating LLC		Project Name/Number: Birdseye 32 St.#1H		Xenco Quote #		Xenco Job #	
Company Address: 2407 PECOS Avenue Artesia NM 88210		Project Location: Birdseye 32 St.#1H		5034003			
Email: alieb@concho.com dheel2@concho.com rtaskel@concho.com Phone No: 575-748-1553		Invoice To: COG Operating LLC Attn: Robert McNeill 600 W. Illinois Midland TX 79701					
Project Contact: Aaron Lieb		PO Number:					
Sampler's Name: Aaron Lieb							
No.	Field ID / Point of Collection	Collection	Matrix	# of bottles	HCl	Number of preserved bottles	Field Comments
1	TI- Surf	Surf	S	1		TPH	
2	TI- 1'			1		BTEX	
3	TI- 2'			1		Chloride	
4	TI- 3'			1			
5	TI- 4'			1			
6	TI- 6'			1			
7	TI- 8'			1			
8	TI- 10'			1			
9	TI- 12'			1			
10	TI- 14'			1			
Turnaround Time (Business days)		Data Deliverable Information		Notes:			
<input type="checkbox"/> Same Day TAT		<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg /raw data)			
<input type="checkbox"/> Next Day EMERGENCY		<input type="checkbox"/> 7 Day TAT		<input type="checkbox"/> Level III Std QC+ Forms			
<input type="checkbox"/> 2 Day EMERGENCY		<input type="checkbox"/> Contract TAT		<input type="checkbox"/> TRRP Level IV			
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist		<input type="checkbox"/> UST / RG -411			
TAT Starts Day received by Lab, if received by 5:00 pm							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
Relinquished by: [Signature]		Date Time: 11:00 5/19/17		Received By: [Signature]		Date Time: 11:00 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 5-19-17		Received By: [Signature]		Date Time: 10:33 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 5-19-17		Received By: [Signature]		Date Time: 10:33 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 5-19-17		Received By: [Signature]		Date Time: 10:33 5-19-17	
Relinquished by: [Signature]		Date Time: 10:33 5-19-17		Received By: [Signature]		Date Time: 10:33 5-19-17	

Temp: 2.4  
 CF:(0-6: -0.2°C)  
 (6-23: +0.2°C)  
 Corrected Temp: 3.2  
 IR ID: R-8



Setting the Standard since 1990  
 Stafford, Texas (281-240-4200)  
 Dallas, Texas (214-502-0300)

# CHAIN OF CUSTODY

Page 2 of 2

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

Phoenix, Arizona (480-355-0900)

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Xenco Quote #

Xenco Job #

5536003

<b>Client / Reporting Information</b>		<b>Project Information</b>		<b>Analytical Information</b>		<b>Matrix Codes</b>	
Company Name / Branch: COG Operating LLC		Project Name/Number: Birdseye 32 St.#1H		Xenco Quote #		Xenco Job #	
Company Address: 2407 PECOS Avenue Artesia NM 88210		Project Location: Birdseye 32 St.#1H		Date Time:		Received By:	
Email: alleh@concho.com dneel@concho.com rhaskel@concho.com		Invoice To: COG Operating LLC Attn: Robert McNeill 600 W. Illinois Midland TX 79701		Date Time:		Received By:	
Project Contact: Aaron Lieb		PO Number:		Date Time:		Received By:	
Sampler's Name: Aaron Lieb				Date Time:		Received By:	

No.	Field ID / Point of Collection	Collection		Matrix	# of bottles	Number of preserved bottles							TPH	BTEX	Chloride	Notes:	Field Comments
		Sample Depth	Date			Time	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4					
1	T1-16'	16'	5/16/17	12:00	5	1											
2	T1-18'	18'		12:00	1												
3	T2-Surf	Surf		12:15pm	1												
4	T2-1'	1'			1												
5	T2-2'	2'			1												
6	T2-3'	3'			1												
7	T2-4'	4'			1												
8	T2-9'	9'			1												
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     TRRP Checklist

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

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

Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:	Received By:	Date Time:
1	5/16/17 11:00 am	1	5/16/17 11:00 am	2	5/16/17 11:00 am	2	5/16/17 11:00 am
3	5/16/17 10:30	3	5/16/17 10:30	4	5/16/17 10:30	4	5/16/17 10:30

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 any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xer terms will be enforced unless previously negotiated under a fully executed client contract.

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

Date Printed: Tue May-23-17 11:12 am Page 1 of 2

Date/Time: 05/22/17 08:43

Created by: Jessica Kramer

Please send report to: Liz Givens

Lab# From: **Midland**

Delivery Priority: Fedex

Address: 1211 W. Florida Ave, Midland TX 79701

Lab# To: **Houston**

Air Bill No.: 779201410522

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

Received By: \_\_\_\_\_

*Mitsuko Konuma*

Mitsuko Konuma

Date Relinquished: 05/22/2017

Date Received: 05/23/2017 09:15

Date Printed: Tue May-23-17 11:12 am Page 2 of 2

Cooler Temperature: 1.0



Inter Office Report- Sample Receipt Checklist

Sent To: Houston

Acceptable Temperature Range: 0 - 6 degC

IOS #: 1044016

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:

  
Mitsuko Konuma

Date: 05/23/2017



# 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  
Jessica Kramer

Date: 05/22/2017

Checklist reviewed by: Liz Givens  
Liz Givens

Date: 05/22/2017

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 167783

**CONDITIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 167783
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
amaxwell	None	2/7/2023