

May 29, 2015

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

**Re: Ebony State #4**  
**30-015-39412**  
**Sec. 25, T17S-R27E**  
**Eddy County, NM**

Mr. Mike Bratcher,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated 12/22/2015.

### **Background**

The release was caused by a split on the weld of a 6" poly line. The split occurred on a Y that ties into the manifold and main system. Vacuum trucks were dispatched to recover all standing fluid. An area of approximately 1200 feet by 400 feet was impacted. The release ran down a power line right-a-way and across a neighboring well pad location.

### **Groundwater**

Based on the Chevron Trend Maps, the release area would be classified at a site ranking of **Ten** due to the depth of groundwater at approximately **78'** per New Mexico Office of the State Engineer.

### **Soil Assessment and Analytical Results**

Initial soil samples were taken on 1-19-2015. Samples indicated TPH and BTEX were within RRALs for site ranking ten. Chloride concentration in several sampling areas were high for surface reclamation, therefore further delineation was conducted on 4-16-2015. The impacted area was divided into 11 sampling areas and samples were taken in one foot intervals to the depth of 4' at which 2 foot intervals were sampled (see attached site diagram).

#### **CORPORATE ADDRESS**

One Concho Center | 600 West Illinois Avenue | Midland, Texas 79701  
PHONE 432.683.7443 | FAX 432.683.7441

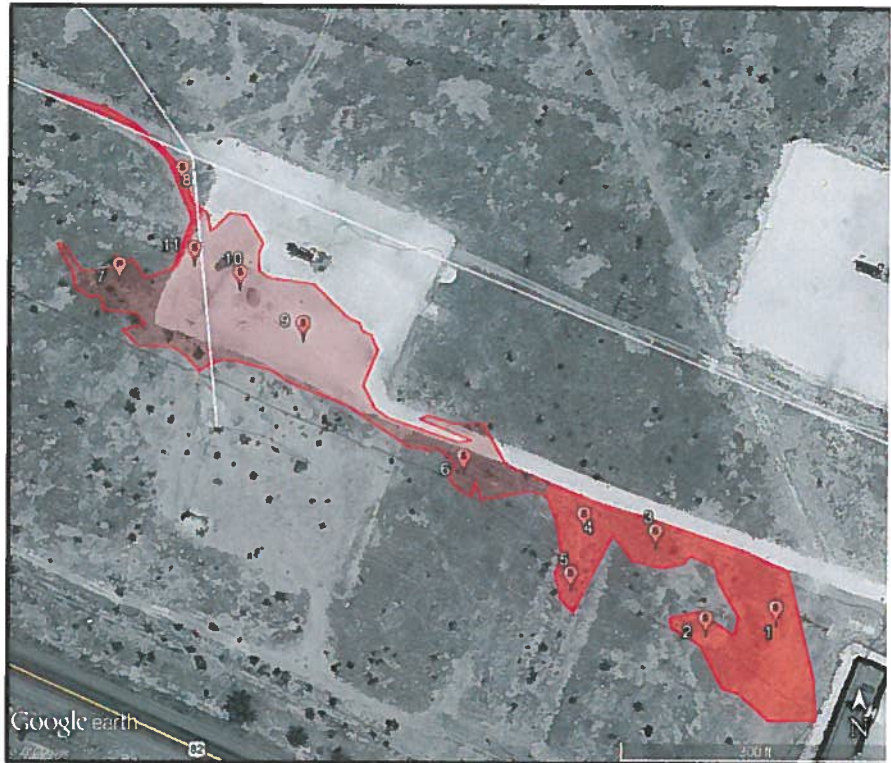
#### **LOCAL ADDRESS**

Concho West | 2208 Main Street | Artesia, New Mexico 88210  
PHONE 575.748.6940 | FAX 575.746.2096

## Work Plan

COG proposes the following excavations based, which will be backfilled with like material. The areas in dark red are proposed excavation. Please see the attached diagram for corresponding analytical data.

- S1 – 3' Excavation
- S2 – 2' Excavation
- S3 – 1' Excavation
- S4 – 3' Excavation
- S5 – 3' Excavation
- S6 – No excavation
- S7 – No Excavation
- S8 – 3' Excavation
- S9 – No Excavation
- S10 – No Excavation
- S11 – No Excavation



If there are no objections or further stipulations, COG Operating LLC would like to begin the remediation process based on approval of this work plan. Please feel free to contact me with any questions or concerns at (505) 350-1336

Sincerely,

Amanda Trujillo

Senior Environmental Scientist

Enclosed

- (1) C-141 Initial (Copy)
- (2) Site Diagram and Summary Table
- (3) Laboratory Analysis



May 15, 2015

# Ebony State #4 (30-015-39412)

S7	Cl-
1'	16
2'	16
3'	16
4'	16
S8	Cl-
1'	10100
2'	7280
3'	1720
4'	1710
6'	528
8'	256
S9	Cl-
1'	1220
2'	112
3'	192
4'	864
6'	1140
8'	1330
S10	Cl-
1'	<16.0
2'	32
3'	64
4'	96
6'	32
8'	<16.0
S11	Cl-
1'	592
2'	225
3'	176
4'	32
6'	944
8'	944



S1	Cl-
1'	19600
2'	20000
3'	10400
4'	11200
6'	1920
8'	1200
S2	Cl-
1'	3920
2'	4000
3'	32
4'	16
S3	Cl-
1'	3400
2'	64
3'	64
4'	64
S4	Cl-
1'	12800
2'	8130
3'	7520
4'	16
S5	Cl-
1'	12800
2'	2240
3'	8800
4'	6130
6'	736
8'	464

S6	Cl-
1'	16
2'	16
3'	16
4'	48

Site Ranking: Ten Depth to GW per SEO: 78

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

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised August 8, 2011

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

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

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: Ebony State #4	Facility Type: Battery

Surface Owner: State	Mineral Owner:	API No. 30-015-39412
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**LOCATION OF RELEASE**

Unit Letter H	Section 25	Township 17S	Range 27E	Feet from the 2125	North/South Line North	Feet from the 330	East/West Line East	County Eddy
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Latitude 32.8064185882875 Longitude -104.224758515762

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 3500 bbls PW	Volume Recovered: 1500 bbls PW
Source of Release: Flowline	Date and Hour of Occurrence: 12/11/2014 8:00 am	Date and Hour of Discovery: 12/11/2014 8:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Amanda Trujillo	Date and Hour: 12/11/2014 5:41 pm	
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.\*

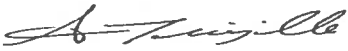
Describe Cause of Problem and Remedial Action Taken.\*

The release was caused by a split on the weld of a 6" poly line. The split occurred on a Y that ties into the manifold and main system. Vacuum trucks were dispatched to recover any standing fluids.

Describe Area Affected and Cleanup Action Taken.\*

The release originated behind the Ebony State #4. The impacted area is located from the battery due west approximately 800' down a power line right-of-way. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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

Signature: 	<b>OIL CONSERVATION DIVISION</b>		
Printed Name: Amanda Trujillo	Approved by Environmental Specialist:		
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:	
E-mail Address: <a href="mailto:atrujillo@concho.com">atrujillo@concho.com</a>	Conditions of Approval:		Attached <input type="checkbox"/>
Date: December 22, 2014 Phone: 575-748-6940			

\* Attach Additional Sheets If Necessary

February 05, 2015

GARRETT MERKET

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: EBONY STATE #4

Enclosed are the results of analyses for samples received by the laboratory on 01/30/15 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S1 - 1' (H500281-01)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64		
Total BTEX	<0.300	0.300	02/02/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 61-154

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	19600	16.0	02/02/2015	ND	416	104	400	7.41			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/02/2015	ND	207	104	200	1.08			
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	215	107	200	2.00			

Surrogate: 1-Chlorooctane 99.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S1 - 2' (H500281-02)**

BTEX 80218			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64		
Total BTEX	<0.300	0.300	02/02/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.9 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	20000	16.0	02/02/2015	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	207	104	200	1.08	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	215	107	200	2.00	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 120 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S1 - 3' (H500281-03)**

BTEx 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64		
Total BTEx	<0.300	0.300	02/02/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 99.5 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	16.0	02/02/2015	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	207	104	200	1.08	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	215	107	200	2.00	

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S1 - 4' (H500281-04)**
**BTEX 8021B**
**mg/kg**
**Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.9 % 61-154

**Chloride, SM4500Cl-B**
**mg/kg**
**Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	02/02/2015	ND	416	104	400	7.41	

**TPH 8015M**
**mg/kg**
**Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	207	104	200	1.08	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	215	107	200	2.00	

Surrogate: 1-Chlorooctane 97.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 115 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S2 - 1' (H500281-05)**

BTX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64		
Total BTX	<0.300	0.300	02/02/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3920	16.0	02/02/2015	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/02/2015	ND	207	104	200	1.08		
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	215	107	200	2.00		

Surrogate: 1-Chlorooctane 98.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 114 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 GARRETT MERKET  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 01/30/2015  
 Reported: 02/05/2015  
 Project Name: EBONY STATE #4  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 01/29/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 2' (H500281-06)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	4000	16.0	02/02/2015	ND	416	104	400	7.41			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/02/2015	ND	207	104	200	1.08			
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	215	107	200	2.00			

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S2 - 3' (H500281-07)**

BTEX 8021B		mg/kg	Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 103 % 61-154

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/02/2015	ND	416	104	400	7.41	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 99.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S2 - 4' (H500281-08)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 93.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 111 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S3 - 1' (H500281-09)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64		
Total BTEX	<0.300	0.300	02/02/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	3400	16.0	02/02/2015	ND	416	104	400	8.00			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03			
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2			

Surrogate: 1-Chlorooctane 110 % 47.2-157

Surrogate: 1-Chlorooctadecane 126 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S3 - 2' (H500281-10)**

BTEX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64		
Total BTEX	<0.300	0.300	02/02/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.7 % 61-154

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	64.0	16.0	02/02/2015	ND	416	104	400	8.00			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03			
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2			

Surrogate: 1-Chlorooctane 104 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S3 - 3' (H500281-11)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/02/2015	ND	416	104	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S3 - 4' (H500281-12)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/02/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/02/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/02/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/02/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 114 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S4 - 1' (H500281-13)**

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/03/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.01	83.5	6.00	9.64		
Total BTX	<0.300	0.300	02/03/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 99.6 % 61-154

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	12800	16.0	02/02/2015	ND	416	104	400	8.00			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03			
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2			

Surrogate: 1-Chlorooctane 98.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S4 - 2' (H500281-14)**

BTEX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/03/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.01	83.5	6.00	9.64		
Total BTEX	<0.300	0.300	02/03/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8130	16.0	02/02/2015	ND	416	104	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S4 - 3' (H500281-15)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/03/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 98.8 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7520	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 108 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S4 - 4' (H500281-16)**

BTEX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2015	ND	1.87	93.3	2.00	6.89		
Toluene*	<0.050	0.050	02/03/2015	ND	1.78	89.0	2.00	7.61		
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.67	83.6	2.00	9.24		
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.01	83.5	6.00	9.64		
Total BTEX	<0.300	0.300	02/03/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 123 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S5 - 1' (H500281-17)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.87	93.3	2.00	6.89	
Toluene*	<0.050	0.050	02/03/2015	ND	1.78	89.0	2.00	7.61	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.67	83.6	2.00	9.24	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.01	83.5	6.00	9.64	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 99.8 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12800	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S5 - 2' (H500281-18)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

Chloride, SM4500CI-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S5 - 3' (H500281-19)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 120 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S5 - 4' (H500281-20)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6130	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 110 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S6 - 1' (H500281-21)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S6 - 2' (H500281-22)**

BTEx 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEx	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 109 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S6 - 3' (H500281-23)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S6 - 4' (H500281-24)**

BTEX 8021B			mg/kg							
			Analyzed By: ms							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90		
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79		
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953		
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929		
Total BTEX	<0.300	0.300	02/03/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIC) 98.7 % 61-154

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/02/2015	ND	416	104	400	8.00		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03		
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2		

Surrogate: 1-Chlorooctane 104 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S7 - 1' (H500281-25)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03	
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2	

Surrogate: 1-Chlorooctane 110 % 47.2-157

Surrogate: 1-Chlorooctadecane 126 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S7 - 2' (H500281-26)**

BTEX 8021B			mg/kg		Analyzed By: ms				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/02/2015	ND	190	95.0	200	6.03		
DRO >C10-C28	<10.0	10.0	02/02/2015	ND	182	91.1	200	16.2		

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S7 - 3' (H500281-27)**

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEx	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 101 % 61-154

Chloride, SM4500CI-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	8.00		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	02/03/2015	ND	182	91.1	200	1.17		
DRO >C10-C28	<10.0	10.0	02/03/2015	ND	203	101	200	7.91		

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 126 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S7 - 4' (H500281-28)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/02/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2015	ND	182	91.1	200	1.17	
DRO >C10-C28	<10.0	10.0	02/03/2015	ND	203	101	200	7.91	

Surrogate: 1-Chlorooctane 90.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 120 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S8 - 1' (H500281-29)**

BTX 8021B		mg/kg	Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 61-154

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10100	16.0	02/02/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2015	ND	182	91.1	200	1.17	
DRO >C10-C28	<10.0	10.0	02/03/2015	ND	203	101	200	7.91	

Surrogate: 1-Chlorooctane 89.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 101 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S8 - 2' (H500281-30)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7280	16.0	02/02/2015	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2015	ND	182	91.1	200	1.17	
DRO >C10-C28	<10.0	10.0	02/03/2015	ND	203	101	200	7.91	

Surrogate: 1-Chlorooctane 98.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 127 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S8 - 3' (H500281-31)**
**BTEX 8021B**
**mg/kg**
**Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 61-154

**Chloride, SM4500Cl-B**
**mg/kg**
**Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1720	16.0	02/02/2015	ND	416	104	400	0.00	

**TPH 8015M**
**mg/kg**
**Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2015	ND	182	91.1	200	1.17	
DRO >C10-C28	<10.0	10.0	02/03/2015	ND	203	101	200	7.91	

Surrogate: 1-Chlorooctane 90.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 113 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 01/30/2015  
Reported: 02/05/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S8 - 4' (H500281-32)**
**BTEX 8021B**
**mg/kg**
**Analyzed By: ms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/03/2015	ND	1.85	92.7	2.00	1.90	
Toluene*	<0.050	0.050	02/03/2015	ND	1.83	91.7	2.00	1.79	
Ethylbenzene*	<0.050	0.050	02/03/2015	ND	1.75	87.3	2.00	0.953	
Total Xylenes*	<0.150	0.150	02/03/2015	ND	5.18	86.3	6.00	0.929	
Total BTEX	<0.300	0.300	02/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.1 % 61-154

**Chloride, SM4500Cl-B**
**mg/kg**
**Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1710	16.0	02/02/2015	ND	416	104	400	0.00	

**TPH 8015M**
**mg/kg**
**Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/03/2015	ND	182	91.1	200	1.17	
DRO >C10-C28	<10.0	10.0	02/03/2015	ND	203	101	200	7.91	

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 129 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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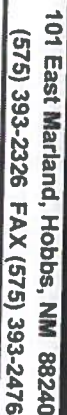
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**Celey D. Keene, Lab Director/Quality Manager**



29-1-9

Page 35 of 38



992091

Page 36 of 38





101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

pg 3 of 4

Company Name: COG Operating LLC		P.O. #:		BILL TO										ANALYSIS REQUEST									
Project Manager: Garrett Merkel																							
Address: 2208 West Main		Company: COG Operating LLC																					
City: Artesia		Attn: Robert McNeill																					
Phone #: (575) 748-6940		Address: 600 W Illinois																					
Fax #: Project Owner:		City: Midland																					
Project Name: Ebony State #4		State: TX Zip: 79701																					
Project Location:		Phone #: (432) 221-0388																					
Sample Name: Garrett Merkel		Fax #:																					
FOR LAB USE ONLY																							
Lab I.D.		Sample I.D.																					
HS00281-																							
21 S6-1		(G)RAB OR (C)OMP.																					
22 S6-2		# CONTAINERS																					
23 S6-3		GROUNDWATER																					
24 S6-4		WASTEWATER																					
25 S7-1		SOIL																					
26 S7-2		OIL																					
27 S7-3		SLUDGE																					
28 S7-4		OTHER																					
29 S8-1		ACID/BASE																					
30 S8-2		ICE / COOL																					
		OTHER																					
		DATE																					
		TIME																					
		BTEX																					
		TPH																					
		Chloride																					

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients' exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 1/29/15	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By: [Signature]	Date: 1/15/15	Received By: [Signature]	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Time:	1:15 pm	Time:	REMARKS: gcarasco@concho.com
Time:		Time:	atrujillo@concho.com, gmerkel@concho.com

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
FORN - 096 R 2.0	Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/>	[Signature]
Sampler - UPS - Bus - Other	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
1442		

**101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476**

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

29/12/20

<b>Company Name:</b> COG Operating LLC <b>Project Manager:</b> Garrett Merkel <b>Address:</b> 2208 West Main <b>City:</b> Artesia <b>State:</b> NM <b>Zip:</b> 88210 <b>Phone #:</b> (575) 748-6940 <b>Fax #:</b> <b>Project #:</b> <b>Project Name:</b> Ebony State #4 <b>Project Location:</b> <b>Sampler Name:</b> Garrett Merkel				<b>P.O. #:</b> <b>Company:</b> COG Operating LLC <b>Attn:</b> Robert McNeill <b>Address:</b> 600 W Illinois <b>City:</b> Midland <b>State:</b> TX <b>Zip:</b> 79701 <b>Phone #:</b> (432) 221-0388 <b>Fax #:</b>	
--	--	--	--	---	--

<b>Lab I.D.</b> 1500281-31 32		<b>Sample I.D.</b> S8-3 S8-4		<b>DATE</b> 1/29/15 1/29/15		<b>TIME</b>  	
		(G)RAB OR (C)OMP.				BTEX	
		# CONTAINERS				TPH	
		GROUNDWATER				Chloride	
		WASTEWATER					
		SOIL					
		OIL					
		SLUDGE					
		OTHER :					
		ACID/BASE					
		ICE / COOL					
		OTHER :					

<b>Delivered By:</b> (Circle One) FORM-006 R 2.0 Sampler - UPS - Bus - Other:		<b>Sample Condition</b> Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		<b>CHECKED BY:</b> (Initials)		<b>REMARKS:</b> gcarra@concho.com gmerkel@concho.com	
<b>Relinquished By:</b>		<b>Received By:</b>		<b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b>		<b>Fax Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Fax #:</b>	



February 18, 2015

GARRETT MERKET

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: EBONY STATE #4

Enclosed are the results of analyses for samples received by the laboratory on 02/12/15 17:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 02/12/2015  
Reported: 02/18/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S1 - 6' (H500422-01)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1920	16.0	02/16/2015	ND	400	100	400	0.00		

**Sample ID: S1 - 8' (H500422-02)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1200	16.0	02/16/2015	ND	400	100	400	0.00		

**Sample ID: S5 - 6' (H500422-03)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	736	16.0	02/16/2015	ND	400	100	400	0.00		

**Sample ID: S5 - 8' (H500422-04)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	464	16.0	02/16/2015	ND	400	100	400	0.00		

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**COG OPERATING  
GARRETT MERKET  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONEReceived: 02/12/2015  
Reported: 02/18/2015  
Project Name: EBONY STATE #4  
Project Number: NONE GIVEN  
Project Location: NOT GIVENSampling Date: 01/29/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene**Sample ID: S8 - 6' (H500422-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	02/16/2015	ND	400	100	400	0.00	

**Sample ID: S8 - 8' (H500422-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	02/16/2015	ND	400	100	400	3.92		

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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**Celey D. Keene, Lab Director/Quality Manager**



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Garrett Merkel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6940

Project #:

Project Name: Ebony State #4

Project Location:

Sampler Name: Garrett Merkel

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

HS0042-

01 S1-6'  
02 S1-8'  
03 S5-6'  
04 S5-8'  
05 S8-6'  
06 S8-8'

(G)RAB OR (C)OMP.  
# CONTAINERS  
GROUNDWATER  
WASTEWATER  
SOIL  
OIL  
SLUDGE  
OTHER  
ACID/BASE  
ICE / COOL  
OTHER

MATRIX

PRESERV.

SAMPLING

DATE TIME

BTEX  
TPH  
Chloride

X  
X  
X  
X  
X  
X

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Relinquished By:

Date:

Received By:

Phone Result:

Yes No

Add'l Phone #:

Add'l Fax #:

REMARKS:

atrujillo@concho.com, gmerkel@concho.com

Relinquished By:

Date:

Received By:

Phone Result:

Yes No

Add'l Phone #:

Add'l Fax #:

REMARKS:

atrujillo@concho.com, gmerkel@concho.com

Delivered By: (Circle One)

FORM-008 R 2.0  
Sampler - UPS - Bus - Other:

Sample Condition  
Cool Intact  
Dryes Yes  
No No

CHECKED BY:

(Initials)

Time:

Received By:

Phone Result:

Yes No

Add'l Phone #:

Add'l Fax #:

REMARKS:

atrujillo@concho.com, gmerkel@concho.com



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

April 17, 2015

GARRETT MERKET  
COG Operating, LLC  
500 W. ILLINOIS  
Midland, TX 79701

RE: EBONY

Enclosed are the results of analyses for samples received by the laboratory on 04/16/15 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Caley D. Keene  
Lab Director/Quality Manager



**Analytical Results For:**

 COG Operating, LLC  
 GARRETT MERKET  
 500 W. ILLINOIS  
 Midland TX, 79701  
 Fax To: None

 Received: 04/16/2015  
 Reported: 04/17/2015  
 Project Name: EBONY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 04/16/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S 9 - 1 ' (H501001-01)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1220	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 9 - 2 ' (H501001-02)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 9 - 3 ' (H501001-03)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 9 - 4 ' (H501001-04)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	04/17/2015	ND	432	108	400	3.77	

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG Operating, LLC  
 GARRETT MERKET  
 500 W. ILLINOIS  
 Midland TX, 79701  
 Fax To: None

 Received: 04/16/2015  
 Reported: 04/17/2015  
 Project Name: EBONY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 04/16/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S 9 - 6 ' (H501001-05)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 9 - 8 ' (H501001-06)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1330	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 10 - 1 ' (H501001-07)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 10 - 2' (H501001-08)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 10 - 3 ' (H501001-09)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/17/2015	ND	432	108	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG Operating, LLC  
 GARRETT MERKET  
 500 W. ILLINOIS  
 Midland TX, 79701  
 Fax To: None

 Received: 04/16/2015  
 Reported: 04/17/2015  
 Project Name: EBONY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 04/16/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S 10 - 4 ' (H501001-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/17/2015	ND	432	108	400	3.77	

**Sample ID: S 10 - 6 ' (H501001-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/17/2015	ND	400	100	400	3.92	

**Sample ID: S 10 - 8 ' (H501001-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/17/2015	ND	400	100	400	3.92	

**Sample ID: S 11 - 1 ' (H501001-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	04/17/2015	ND	400	100	400	3.92	

**Sample ID: S 11 - 2 ' (H501001-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	04/17/2015	ND	400	100	400	3.92	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG Operating, LLC  
GARRETT MERKET  
500 W. ILLINOIS  
Midland TX, 79701  
Fax To: None

Received: 04/16/2015  
Reported: 04/17/2015  
Project Name: EBONY  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 04/16/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Jodi Henson

**Sample ID: S 11 - 3 ' (H501001-15)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	04/17/2015	ND	400	100	400	3.92	

**Sample ID: S 11 - 4 ' (H501001-16)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/17/2015	ND	400	100	400	3.92	

**Sample ID: S 11 - 6 ' (H501001-17)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	04/17/2015	ND	400	100	400	3.92	

**Sample ID: S 11 - 8 ' (H501001-18)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	04/17/2015	ND	400	100	400	3.92	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: COG Operating LLC

Project Manager: Garrett Merkel

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6940

Project #:

Project Name: Ebony

Project Location:

Sampler Name: Garrett Merkel

BILL TO

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER	MATRIX SOIL OIL SLUDGE OTHER	PRESERV ACID/BASE ICE / COOL OTHER	SAMPLING DATE	TIME	BTEX	TPH	Chloride							
H500001	S9-1'	G			X		4/16/15				X							
	S9-2'	G			X		4/16/15				X							
	S9-3'	G			X		4/16/15				X							
	S9-4'	G			X		4/16/15				X							
	S9-6'	G			X		4/16/15				X							
	S9-8'	G			X		4/16/15				X							
	S10-1'	G			X		4/16/15				X							
	S10-2'	G			X		4/16/15				X							
	S10-3'	G			X		4/16/15				X							
	S10-4'	G			X		4/16/15				X							

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Relinquished By:

Date:

Received By:

Relinquished By:

Date:

Received By:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:  
FORM-006 R 2.0

Sample Condition  
Cool ☐ Intact ☐

CHECKED BY:  
(initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:  
Fax Result: ☐ Yes ☐ No Add'l Fax #:  
REMARKS: gcartrascoc@concho.com  
atrujillo@concho.com, gmerkel@concho.com

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476





101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**BILL TO**

**ANALYSIS REQUEST**

<b>Company Name:</b> COG Operating LLC		<b>P.O. #:</b>
<b>Project Manager:</b> Garrett Market		<b>Company:</b> COG Operating LLC
<b>Address:</b> 2208 West Main		<b>Attn:</b> Robert McNeill
<b>City:</b> Artesia	<b>State:</b> NM <b>Zip:</b> 88210	<b>Address:</b> 600 W Illinois
<b>Phone #:</b> (575) 748-6940	<b>Fax #:</b>	<b>City:</b> Midland
<b>Project #:</b>	<b>Project Owner:</b>	<b>State:</b> TX <b>Zip:</b> 79701
<b>Project Name:</b> Ebony		<b>Phone #:</b> (432) 221-0388
<b>Project Location:</b>		<b>Fax #:</b>
<b>Sampler Name:</b> Garrett Market		

FOR LAB USE ONLY		Lab I.D.		Sample I.D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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