

# Closure Report

## Site Description

|                    |                               |
|--------------------|-------------------------------|
| Site Name:         | Montana 1 Fee 3               |
| Company:           | COG Operating LLC             |
| Legal Description: | U/L M, Section 01, T19S, R25E |
| County:            | Eddy County, NM               |
| GPS Coordinates:   | N 32.69530° W 104.43092°      |

## Release Data

|                    |            |
|--------------------|------------|
| Date of Release:   | 12/29/2015 |
| Type of Release:   | Oil        |
| Source of Release: | Tank fire  |
| Volume of Release: | 270 bbls   |
| Volume Recovered:  | 80 bbls    |

## Remediation Specifications

|                         |  |   |
|-------------------------|--|---|
| Remediation Parameters: | Excavate the entire leak area to a depth of 6 inches. Backfill the site with clean soil. |   |
| Remediation Activities: | 11/16/2016 to 11/17/2016   |   |
| Plan Sent to OCD:       | 11/04/2016   | Email from Cliff Brunson to Mike Bratcher |
| OCD Approval of Plan:   | 11/10/2016   | Email from Mike Bratcher to Cliff Brunson |
| Plan Sent to BLM:       | n/a  | n/a                                       |
| BLM Approval of Plan:   | n/a  | n/a                                       |

## Supporting Documentation

|                  |  |
|------------------|--|
| Initial C-141    | Signed 12/30/2015                                  |
| Final C-141      | Signed 11/28/2016                                  |
| Site Diagram     | September 2016                                     |
| Groundwater Plot | 100'-125'  |
| TOPO Maps        | September 2016                                     |
| Lab Summary      | 09/20/2016   |
| Lab Analysis     | 09/20/2016   |
| Correspondence   | Request and approval of remediation plan via email |

## Request for Closure

Based on the completion of the remediation plan as agreed upon, BBC International requests closure approval from NMOCD.

Cliff Brunson, President of BBC International Inc.

11/30/2016

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

**NM OIL CONSERVATION**

ARTESIA DISTRICT

Form C-141  
Revised August 8, 2011

DEC 30 2015

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

RECEIVED

**Release Notification and Corrective Action**

*NAB153648194*

**OPERATOR**  Initial Report  Final Report

|   |                            |
|---|----------------------------|
| Name of Company Cimarex Energy <i>1106683</i> | Contact Christine Alderman |
| Address 600 N Marienfeld Ste 600 Midland TX   | Telephone No. 432-853-7059 |
| Facility Name Montana 1 Fee 3                 | Facility Type production   |

|               |               |                      |
|---------------|---------------|----------------------|
| Surface Owner | Mineral Owner | API No. 30-015-39616 |
|---------------|---------------|----------------------|

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| M           | 01      | 19S      | 25E   | 990           | S                | 330           | W              | Eddy   |

Latitude 32.6854 Longitude -104.4459

**NATURE OF RELEASE**

|  |   |   |
|--|---|---|
| Type of Release oil/ due to fire   | Volume of Release 270 bbls                          | Volume Recovered 80                           |
| Source of Release tank   | Date and Hour of Occurrence 12/29/2015              | Date and Hour of Discovery 12/29/2015 1:00 pm |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Mike Bratcher/Heather Patterson |   |
| By Whom? Christine Alderman  | Date and Hour 12/30/2015 10:00 am                   |   |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.           |   |

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
This well is shut in but the center oil tank blew up and out of the containment. When it did it tore the connecting valve off the oil tank next to it. Some fluids got out of the containment and into the pasture area. A vacuum truck was on location after the fire was put out and recovered what fluid it could.

Describe Area Affected and Cleanup Action Taken.\*  
Tank battery area and some pasture area. An environmental consulting company will assess the impact and develop a workplan.

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>Christine Alderman</i>  | <b>OIL CONSERVATION DIVISION</b>  |                      |
| Printed Name: Christine Alderman      | Approved by Environmental Specialist: <i>[Signature]</i>                                      |                      |
| Title: ESH Supervisor                 | Approval Date: 12/30/15   | Expiration Date: N/A |
| E-mail Address: calderman@cimarex.com | Conditions of Approval:<br>Remediation per O.C.D. Rules & Guidelines <input type="checkbox"/> |                      |
| Date: 12/30/2015 Phone: 432-853-7059  | <b>SUBMIT REMEDIATION PROPOSAL NO</b>   |                      |

\* Attach Additional Sheets If Necessary

LATER THAN: *1/31/16*

*2RP3468*

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: Cimarex Energy                | Contact: Christine Alderman |
| Address: 600 N Marienfeld Ste 600, Midland, TX | Telephone No. 432-853-7059  |
| Facility Name: Montana 1 Fee 3                 | Facility Type: Production   |

|                |                |                      |
|----------------|----------------|----------------------|
| Surface Owner: | Mineral Owner: | API No. 30-015-39616 |
|----------------|----------------|----------------------|

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County          |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|-----------------|
| M           | 1       | 19S      | 25E   | 990           | South            | 330           | West           | Eddy County, NM |

Latitude N 32.68540° Longitude W 104.44590°

**NATURE OF RELEASE**

|  |   |  |
|--|---|--|
| Type of Release: Oil   | Volume of Release: 270 bbls                                 | Volume Recovered: 80 bbls                          |
| Source of Release: Tank fire   | Date and Hour of Occurrence<br>12/29/2015                   | Date and Hour of Discovery<br>12/29/2015 @ 1:00 pm |
| Was Immediate Notice Given?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?<br>Mike Bratcher, Heather Patterson- NMOCD |  |
| By Whom? Christine Alderman  | Date and Hour: 12/30/2015 @ 10:00 am                        |  |
| Was a Watercourse Reached?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | If YES, Volume Impacting the Watercourse.                   |  |

If a Watercourse was Impacted, Describe Fully.\*

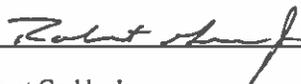
Describe Cause of Problem and Remedial Action Taken.\*

This well is shit in but the center oil tank blew up and out of the containment. When it did, it tore the connecting valve off the oil tank next to it. Some oil leaked out of the containment and into the pasture. A vacuum truck was on location after the fire was put out and recovered the fluids capable of being recovered.

Describe Area Affected and Cleanup Action Taken.\*

The affected area included inside the battery area as well as in the surrounding pasture. Remediation was completed in accordance with the remediation plan approved by Mike Bratcher of NMOCD via email on 11/10/2016.

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: Robert Grubbs Jr   | Approved by Environmental Specialist: |                                   |
| Title: Senior HSE Coordinator  | Approval Date:                        | Expiration Date:                  |
| E-mail Address: rgrubbs@concho.com   | Conditions of Approval:               | Attached <input type="checkbox"/> |
| Date: November 28, 2016  | Phone: (432) 853-7059                 |                                   |

\* Attach Additional Sheets If Necessary

# COG Operating Montana 1 Fee #003





# Groundwater Plot

## COG Montana 1 Fee #3

County  
Eddy

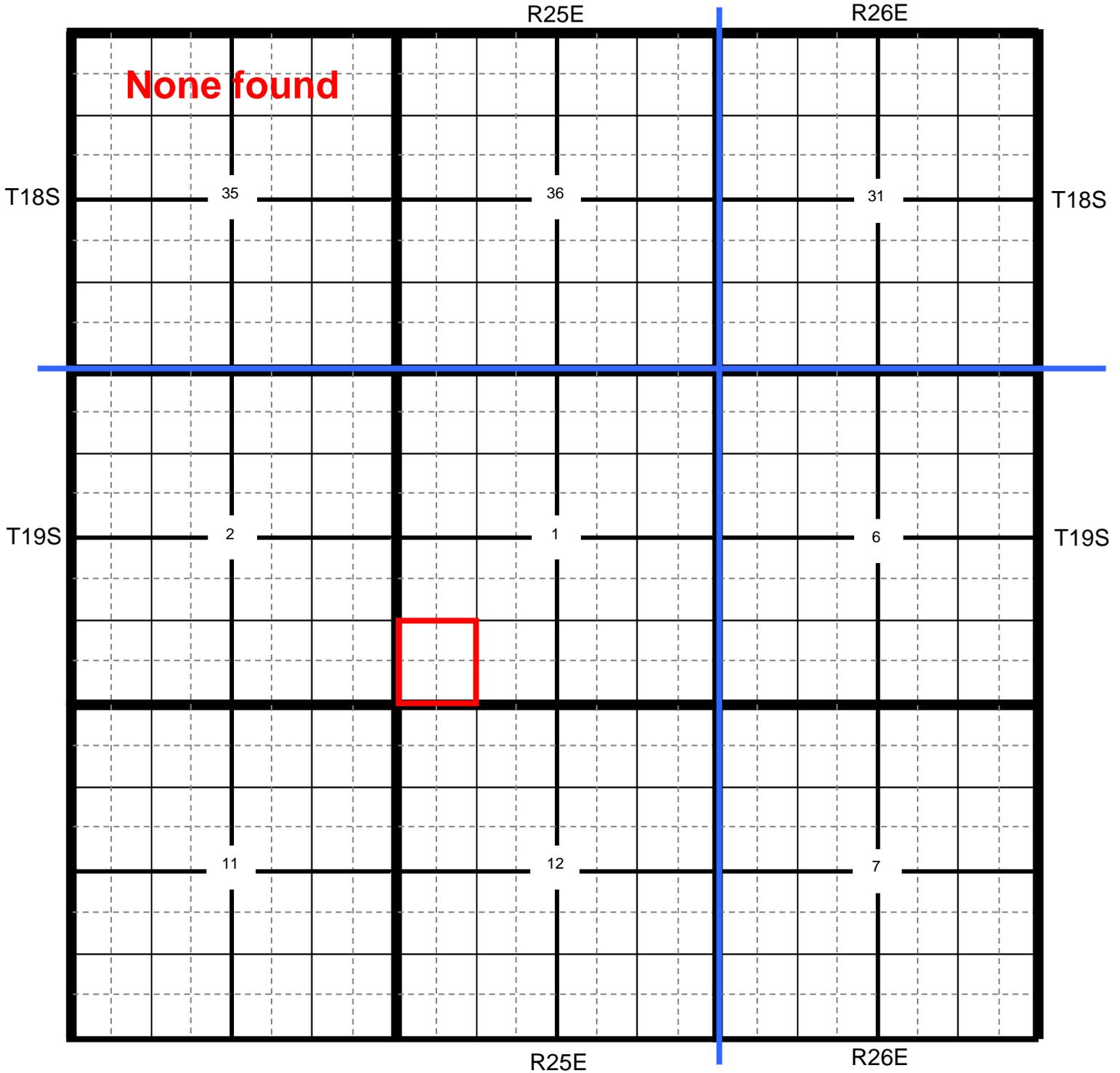
Unit Letter  
M

Section  
1

Township  
19S

Range  
25E

Trend Map 100'-125'



📍 Location

● OCD

● USGS

● SEO

● All Databases

COG Montana 1 Fee #3

|                       |                         |                     |                        |                     |
|-----------------------|-------------------------|---------------------|------------------------|---------------------|
| <i>County</i><br>Eddy | <i>Unit Letter</i><br>M | <i>Section</i><br>1 | <i>Township</i><br>19S | <i>Range</i><br>25E |
|-----------------------|-------------------------|---------------------|------------------------|---------------------|

Trend Map 100'-125"

1

2

|                            |               |               |               |
|----------------------------|---------------|---------------|---------------|
| NW/NW<br><b>None found</b> | NE/NW         | NW/NE         | NE/NE         |
| Unit Letter D              | Unit Letter C | Unit Letter B | Unit Letter A |
| SW/NW                      | SE/NW         | SW/NE         | SE/NE         |
| Unit Letter E              | Unit Letter F | Unit Letter G | Unit Letter H |
| NW/SW                      | NE/SW         | NW/SE         | NE/SE         |
| Unit Letter L              | Unit Letter K | Unit Letter J | Unit Letter I |
| SW/SW                      | SE/SW         | SW/SE         | SE/SE         |
| Unit Letter M              | Unit Letter N | Unit Letter O | Unit Letter P |

3

4

**Laboratory Analytical Results Summary  
Montana 1 Fee #003**

| Analyte              | Method     | Sample<br>Date | S1 @<br>SURFACE | S1 @ 1'    | S1 @ 2'   | S1 @ 3'   | S1 @ 4' | S1 @ 6' |
|----------------------|------------|----------------|-----------------|------------|-----------|-----------|---------|---------|
|                      |            |                | 9/20/16         | 9/20/16    | 9/20/16   | 9/20/16   | 9/20/16 | 9/20/16 |
|                      |            |                | mg/Kg           | mg/Kg      | mg/Kg     | mg/Kg     | mg/Kg   | mg/Kg   |
| <b>Benzene</b>       | BTEX 8021B |                | <0.050          | <0.050     | <0.050    | <0.050    | <0.050  | <0.050  |
| <b>Toluene</b>       | BTEX 8021B |                | <0.050          | <0.050     | <0.050    | <0.050    | <0.050  | <0.050  |
| <b>Ethylbenzene</b>  | BTEX 8021B |                | <0.050          | <0.050     | <0.050    | <0.050    | <0.050  | <0.050  |
| <b>Total Xylenes</b> | BTEX 8021B |                | <b>0.437</b>    | <0.150     | <0.150    | <0.150    | <0.150  | <0.150  |
| <b>Total BTEX</b>    | BTEX 8021B |                | <b>0.437</b>    | <0.300     | <0.300    | <0.300    | <0.300  | <0.300  |
| <b>Chloride</b>      | SM4500Cl-B |                | <b>48</b>       | <b>128</b> | <b>48</b> | <b>32</b> | <16.0   | <16.0   |
| <b>GRO</b>           | TPH 8015M  |                | <10.0           | <10.0      | <10.0     | <10.0     | <10.0   | <10.0   |
| <b>DRO</b>           | TPH 8015M  |                | <b>243</b>      | <10.0      | <10.0     | <10.0     | <10.0   | <10.0   |

| Analyte              | Method     | Sample<br>Date | S2 @<br>SURFACE | S2 @ 1'   | S2 @ 2'   | S2 @ 3'    | S2 @ 4'    | S2 @ 6'    |
|----------------------|------------|----------------|-----------------|-----------|-----------|------------|------------|------------|
|                      |            |                | 9/20/16         | 9/20/16   | 9/20/16   | 9/20/16    | 9/20/16    | 9/20/16    |
|                      |            |                | mg/Kg           | mg/Kg     | mg/Kg     | mg/Kg      | mg/Kg      | mg/Kg      |
| <b>Benzene</b>       | BTEX 8021B |                | <0.050          | <0.050    | <0.050    | <0.050     | <0.050     | <0.050     |
| <b>Toluene</b>       | BTEX 8021B |                | <b>0.051</b>    | <0.050    | <0.050    | <0.050     | <0.050     | <0.050     |
| <b>Ethylbenzene</b>  | BTEX 8021B |                | <0.050          | <0.050    | <0.050    | <0.050     | <0.050     | <0.050     |
| <b>Total Xylenes</b> | BTEX 8021B |                | <b>0.697</b>    | <0.150    | <0.150    | <0.150     | <0.150     | <0.150     |
| <b>Total BTEX</b>    | BTEX 8021B |                | <b>0.748</b>    | <0.300    | <0.300    | <0.300     | <0.300     | <0.300     |
| <b>Chloride</b>      | SM4500Cl-B |                | <b>144</b>      | <b>80</b> | <b>64</b> | <b>144</b> | <b>544</b> | <b>448</b> |
| <b>GRO</b>           | TPH 8015M  |                | <b>62.5</b>     | <10.0     | <10.0     | <10.0      | <10.0      | <10.0      |
| <b>DRO</b>           | TPH 8015M  |                | <b>1910</b>     | <10.0     | <10.0     | <10.0      | <10.0      | <10.0      |



September 27, 2016

DAKOTA NEEL  
COG OPERATING  
P. O. BOX 1630  
ARTESIA, NM 88210

RE: MONTANA FEE

Enclosed are the results of analyses for samples received by the laboratory on 09/21/16 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - SURFACE (H602128-01)**

| 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           | 09/24/2016 | ND              | 1.82 | 91.1       | 2.00          | 0.992 |           |
| Toluene*              | <0.050       | 0.050           | 09/24/2016 | ND              | 1.84 | 92.1       | 2.00          | 0.714 |           |
| Ethylbenzene*         | <0.050       | 0.050           | 09/24/2016 | ND              | 1.77 | 88.4       | 2.00          | 0.904 |           |
| <b>Total Xylenes*</b> | <b>0.437</b> | 0.150           | 09/24/2016 | ND              | 5.32 | 88.7       | 6.00          | 1.05  |           |
| <b>Total BTEX</b>     | <b>0.437</b> | 0.300           | 09/24/2016 | ND              |      |            |               |       |           |

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140

| Chloride, SM4500Cl-B |             | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>48.0</b> | 16.0            | 09/26/2016 | ND              | 432 | 108        | 400           | 3.64 |           |

| 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            | 09/22/2016 | ND              | 178 | 89.2       | 200           | 7.92 |           |
| <b>DRO &gt;C10-C28</b> | <b>243</b> | 10.0            | 09/22/2016 | ND              | 176 | 88.0       | 200           | 8.92 |           |

Surrogate: 1-Chlorooctane 82.8 % 35-147

Surrogate: 1-Chlorooctadecane 98.7 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - 1' (H602128-02)**

| 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           | 09/24/2016 | ND              | 1.82 | 91.1       | 2.00          | 0.992 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 1.84 | 92.1       | 2.00          | 0.714 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 1.77 | 88.4       | 2.00          | 0.904 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 5.32 | 88.7       | 6.00          | 1.05  |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 128    | 16.0            | 09/23/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 178 | 89.2       | 200           | 7.92 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 176 | 88.0       | 200           | 8.92 |           |  |

Surrogate: 1-Chlorooctane 76.0 % 35-147

Surrogate: 1-Chlorooctadecane 89.3 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - 2' (H602128-03)**

| 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           | 09/24/2016 | ND              | 1.82 | 91.1       | 2.00          | 0.992 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 1.84 | 92.1       | 2.00          | 0.714 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 1.77 | 88.4       | 2.00          | 0.904 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 5.32 | 88.7       | 6.00          | 1.05  |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |       |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 73.6-140

| Chloride, SM4500Cl-B |             | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>48.0</b> | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 178 | 89.2       | 200           | 7.92 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 176 | 88.0       | 200           | 8.92 |           |  |

Surrogate: 1-Chlorooctane 73.2 % 35-147

Surrogate: 1-Chlorooctadecane 87.0 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - 3' (H602128-04)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.6-140

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 32.0   | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 178 | 89.2       | 200           | 7.92 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 176 | 88.0       | 200           | 8.92 |           |  |

Surrogate: 1-Chlorooctane 72.3 % 35-147

Surrogate: 1-Chlorooctadecane 86.3 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - 4' (H602128-05)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 73.6-140

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |  |

Surrogate: 1-Chlorooctane 80.0 % 35-147

Surrogate: 1-Chlorooctadecane 93.0 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - 6' (H602128-06)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

*Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.6-140*

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | <16.0  | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |  |

*Surrogate: 1-Chlorooctane 84.4 % 35-147*
*Surrogate: 1-Chlorooctadecane 102 % 28-171*

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - SURFACE (H602128-07)**

| BTEX 8021B            |              | mg/kg           |            | Analyzed By: MS |      |            |               | S-04 |           |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte               | Result       | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*              | <0.050       | 0.050           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |
| <b>Toluene*</b>       | <b>0.051</b> | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |
| Ethylbenzene*         | <0.050       | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |
| <b>Total Xylenes*</b> | <b>0.697</b> | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |
| <b>Total BTEX</b>     | <b>0.748</b> | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 220 % 73.6-140

| Chloride, SM4500CI-B |            | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result     | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>144</b> | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |

| TPH 8015M              |             | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>GRO C6-C10</b>      | <b>62.5</b> | 50.0            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |
| <b>DRO &gt;C10-C28</b> | <b>1910</b> | 50.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |

Surrogate: 1-Chlorooctane 92.8 % 35-147

Surrogate: 1-Chlorooctadecane 132 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 1' (H602128-08)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.6-140

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 80.0   | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |  |

Surrogate: 1-Chlorooctane 87.9 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 2' (H602128-09)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 73.6-140

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 64.0   | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |

Surrogate: 1-Chlorooctane 85.1 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 3' (H602128-10)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 73.6-140

| Chloride, SM4500Cl-B |            | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result     | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>144</b> | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |  |

Surrogate: 1-Chlorooctane 84.0 % 35-147

Surrogate: 1-Chlorooctadecane 99.8 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 4' (H602128-11)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 73.6-140

| Chloride, SM4500Cl-B |            | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result     | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| <b>Chloride</b>      | <b>544</b> | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |  |

Surrogate: 1-Chlorooctane 86.4 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: MONTANA FEE  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/20/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 6' (H602128-12)**

| 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           | 09/24/2016 | ND              | 2.26 | 113        | 2.00          | 1.18 |           |  |
| Toluene*       | <0.050 | 0.050           | 09/24/2016 | ND              | 2.30 | 115        | 2.00          | 1.47 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 09/24/2016 | ND              | 2.20 | 110        | 2.00          | 1.07 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 09/24/2016 | ND              | 6.63 | 110        | 6.00          | 1.11 |           |  |
| Total BTEX     | <0.300 | 0.300           | 09/24/2016 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 73.6-140

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 448    | 16.0            | 09/26/2016 | ND              | 416 | 104        | 400           | 3.92 |           |  |

| 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            | 09/23/2016 | ND              | 202 | 101        | 200           | 5.55 |           |  |
| DRO >C10-C28 | <10.0  | 10.0            | 09/23/2016 | ND              | 212 | 106        | 200           | 4.06 |           |  |

Surrogate: 1-Chlorooctane 87.1 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- S-04            The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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**

**BILL TO**

**ANALYSIS REQUEST**

Company Name: COG Operating LLC  
 Project Manager: Dakota Neel  
 Address: 2208 West Main  
 City: Artesia State: NM Zip: 88210  
 Phone #: 432-215-2783 Fax #: 432-215-2783  
 Project #: Project Owner:  
 Project Name: Montana Fee  
 Project Location:  
 Sampler Name: Dakota Neel  
 P.O. #: Company: COG Operating LLC  
 Attn: Robert McNeill  
 Address: 600 W Illinois  
 City: Midland  
 State: TX Zip: 79701  
 Phone #: (432) 221-0388  
 Fax #:

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX      |            |      |     |        |         | DATE      | TIME | BTEX | TPH | Chloride |
|----------|-------------|-------------------|--------------|-------------|------------|------|-----|--------|---------|-----------|------|------|-----|----------|
|          |             |                   |              | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER : |           |      |      |     |          |
| Hobbs 1  | S1-1'       |                   |              |             |            |      |     |        | 9/20/16 | 8:00 a.m. | X    | X    | X   |          |
| 2        | S1-1'       |                   |              |             |            |      |     |        | 9/20/16 | 8:00 a.m. | X    | X    | X   |          |
| 3        | S1-2'       |                   |              |             |            |      |     |        | 9/20/16 | 8:00 a.m. | X    | X    | X   |          |
| 4        | S1-3'       |                   |              |             |            |      |     |        | 9/20/16 | 8:00 a.m. | X    | X    | X   |          |
| 5        | S1-4'       |                   |              |             |            |      |     |        | 9/20/16 | 8:00 a.m. | X    | X    | X   |          |
| 6        | S1-6'       |                   |              |             |            |      |     |        | 9/20/16 | 8:00 a.m. | X    | X    | X   |          |

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Relinquished By: *DOR*  
 Date: 9-21-16  
 Time: 13:00  
 Received By: *Dee Neel*  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Delivered By: (Circle One)  
 Sampler - UPS - Bus - Other: *3.80c*  
 Sample Condition: Cool - Intact  
 Yes  No  
 Yes  No  
 CHECKED BY: *[Signature]*  
 Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_  
 REMARKS: *#75*  
[dneel2@concho.com](mailto:dneel2@concho.com)

10FZ



**From:** Bratcher, Mike, EMNRD  
**To:** [Cliff Brunson](#)  
**Cc:** [Patterson, Heather, EMNRD](#); [Robert Grubbs](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#); [Weaver, Crystal, EMNRD](#)  
**Subject:** RE: COG - Montana 1 Fee #003  
**Date:** Thursday, November 10, 2016 7:18:33 AM

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RE: COG (well was formerly Cimarex) \* Montana 1-3 \* **2RP-3468** \* DOR: 12/29/15

Cliff,

Your proposal for remediation of the above referenced release is approved. Please advise once remedial activities have been scheduled.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact me.

**Mike Bratcher**  
**NMOCD District 2**  
**811 S. First Street**  
**Artesia, NM 88210**  
**O: 575-748-1283 X108**  
**C: 575-626-0857**  
**F: 575-748-9720**

---

**From:** Cliff Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]  
**Sent:** Friday, November 04, 2016 1:52 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Patterson, Heather, EMNRD; Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** COG - Montana 1 Fee #003

Mike,

This e-mail is to confirm our discussion concerning the remediation plan for the COG Montana 1 Fee #003 release. I have attached the information packet that we used in our discussion with a cover page describing the remediation plan that we agreed upon.

If you would please reply back via e-mail with your concurrence on this plan, it would be greatly appreciated.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS  
President  
BBC International, Inc.  
World-Wide Environmental Specialists  
Mailing Address:  
P. O. Box 805  
Hobbs, NM 88241-0805 USA  
Shipping Address:  
1324 W. Marland St.  
Hobbs, NM 88240 USA  
Phone: (575) 397-6388  
Fax: (575) 397-0397  
E-Mail: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)



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