

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., 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-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <b>30-015-33746</b>
5. Indicate Type of Lease <b>FEDERAL</b> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

**COG Operating LLC**

**JUL 25 2007**

**OCD-ARTESIA**

3. Address of Operator

**550 W. Texas Ave., Suite 1300**

**Midland, TX 79701**

4. Well Location

Unit Letter **N** : **660'** feet from the **South** line and **1980'** feet from the **West** line

Section **21** Township **16S** Range **28E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

**3589' GR**

Pit or Below-grade Tank Application ☐ or Closure ☒

Pit type **DRILLING** Depth to Groundwater **100'** Distance from nearest fresh water well **1000'** Distance from nearest surface water **1000'**

Pit Liner Thickness: **12 mil** Below-Grade Tank: Volume bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: **Pit closure completed** ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

On July 11, 2007, pit closure began.  
Closure of the pits was completed July 11, 2007.

Attachments:

Diagram of well site and pit location  
Highlander Environmental reports

ACCEPTED FOR RECORD

**JUL 26 2007**

Gerry Guye, Deputy Field Inspector  
**NMOCD-District II ARTESIA**

Cleared to close by Mike Bratcher on 7/11/2007, As per Mike Bratcher 3.0' of material was removed from the Southeast corner and blended with fresh top soil berm, the material was spread evenly on the bottom of the reserve pit. Mud was placed in a lined trench and covered with 3.0' of soil.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE  TITLE **Regulatory Analyst** DATE **7-23-07**

Type or print name **Kanicia Carrillo** E-mail address: **kcarrillo@conchoresources.com** Telephone No. **432-685-4332**  
**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

Report Date: July 16, 2007  
3044

Work Order: 7071216  
COG Operating/Reindeer Federal #1

Page Number: 1 of 2  
Eddy County, NM

## Summary Report

Gary Miller  
Highlander Environmental Services  
1910 N. Big Spring Street  
Midland, TX, 79705

Report Date: July 16, 2007

Work Order: 7071216



Project Location: Eddy County, NM  
Project Name: COG Operating/Reindeer Federal #1  
Project Number: 3044

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
129709	North West 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129710	North East 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129711	South West 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129712	South East 10.0' BPB	soil	2007-07-10	00:00	2007-07-11
129713	Center 2.0' BPB	soil	2007-07-10	00:00	2007-07-11
129714	North 2.0' BPB	soil	2007-07-10	00:00	2007-07-11
129715	South 5.0' BPB	soil	2007-07-10	00:00	2007-07-11

### Sample: 129709 - North West 5.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

### Sample: 129710 - North East 5.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

### Sample: 129711 - South West 5.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

### Sample: 129712 - South East 10.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Report Date: July 16, 2007  
3044

Work Order: 7071216  
COG Operating/Reindeer Federal #1

Page Number: 2 of 2  
Eddy County, NM

**Sample: 129713 - Center 2.0' BPB**

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

**Sample: 129714 - North 2.0' BPB**

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

**Sample: 129715 - South 5.0' BPB**

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

Highlander Environmental Corp.  
Pit Sample Location Plat

Pit wall in feet 110'

Pit wall in feet 130'

x South East      x South West

x Center

Depth of pit in feet 7'

x North East      x North West

South

North

x Indicates Sample Location  
(Name by quarter i.e. NW, NE etc)

↓ Draw in North Arrow

<20'>

• Wellhead

Well Pad

Client: COG Operating LLC

Well Name: REINDEER Federal #1

API# 30-015-33746

**Job Number:**

3044

**Client:**

LOG Operating LLC

Well Name

REINDEER Federal #1

**API#**

30-015-33746

### Depth of Pit

7.0'

### Location and Depth of Background sample

All pit sample depths are below pit bottom (BPB)

[illegible]

DNR- Did not run at lab.

BGS- Below Ground Surface

BPB- Below Pit Bottom

Report Date: July 16, 2007  
3044

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COG Operating/Reindeer Federal #1

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Eddy County, NM

## Summary Report

Gary Miller  
Highlander Environmental Services  
1910 N. Big Spring Street  
Midland, TX, 79705

Report Date: July 16, 2007

Work Order: 7071216



Project Location: Eddy County, NM  
Project Name: COG Operating/Reindeer Federal #1  
Project Number: 3044

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
129709	North West 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129710	North East 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129711	South West 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129712	South East 10.0' BPB	soil	2007-07-10	00:00	2007-07-11
129713	Center 2.0' BPB	soil	2007-07-10	00:00	2007-07-11
129714	North 2.0' BPB	soil	2007-07-10	00:00	2007-07-11
129715	South 5.0' BPB	soil	2007-07-10	00:00	2007-07-11

### Sample: 129709 - North West 5.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

### Sample: 129710 - North East 5.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

### Sample: 129711 - South West 5.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

### Sample: 129712 - South East 10.0' BPB

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

**Sample: 129713 - Center 2.0' BPB**

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

**Sample: 129714 - North 2.0' BPB**

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00

**Sample: 129715 - South 5.0' BPB**

Param	Flag	Result	Units	RL
Chloride		<50.0	mg/Kg	2.00



5701 Abilene Avenue, Suite 9 Lubbock, Texas 79424 800•378•1156 806•794•1296 FAX 806•794•1296  
 700 East Street, Suite 1 El Paso, Texas 79902 915•585•3443 915•585•3443 FAX 915•125•1917  
 5007 Basin Street, Suite A1 Midland, Texas 79703 432•689•6307 FAX 432•689•6307  
 5011 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•261•5269  
 E-Mail: lab@traceanalysis.com

## Analytical and Quality Control Report

Gary Miller  
 Highlander Environmental Services  
 1910 N. Big Spring Street  
 Midland, TX, 79705

Report Date: July 17, 2007

Work Order: 7071216



Project Location: Eddy County, NM  
 Project Name: COG Operating/Reindeer Federal #1  
 Project Number: 3044

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
129709	North West 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129710	North East 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129711	South West 5.0' BPB	soil	2007-07-10	00:00	2007-07-11
129712	South East 10.0' BPB	soil	2007-07-10	00:00	2007-07-11
129713	Center 2.0' BPB	soil	2007-07-10	00:00	2007-07-11
129714	North 2.0' BPB	soil	2007-07-10	00:00	2007-07-11
129715	South 5.0' BPB	soil	2007-07-10	00:00	2007-07-11

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blain Leftwich, Director

### Standard Flags

**B** - The sample contains less than ten times the concentration found in the method blank



## Analytical Report

### Sample: 129709 - North West 5.0' BPB

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

### Sample: 129710 - North East 5.0' BPB

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

### Sample: 129711 - South West 5.0' BPB

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

### Sample: 129712 - South East 10.0' BPB

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

### Sample: 129713 - Center 2.0' BPB

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Report Date: July 17, 2007  
3044

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Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

**Sample: 129714 - North 2.0' BPB**

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

**Sample: 129715 - South 5.0' BPB**

Analysis: Chloride (Titration)      Analytical Method: SM 4500-Cl B      Prep Method: N/A  
QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      Sample Preparation:      Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<50.0	mg/Kg	25	2.00

**Method Blank (1)      QC Batch: 39105**

QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      QC Preparation: 2007-07-16      Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.500	mg/Kg	2

**Laboratory Control Spike (LCS-1)**

QC Batch: 39105      Date Analyzed: 2007-07-16      Analyzed By: AR  
Prep Batch: 33847      QC Preparation: 2007-07-16      Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	101	mg/Kg	1	100	<0.500	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	102	mg/Kg	1	100	<0.500	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: July 17, 2007  
3044

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**Matrix Spike (MS-1)**    Spiked Sample: 129936

QC Batch: 39105  
Prep Batch: 33847

Date Analyzed: 2007-07-16  
QC Preparation: 2007-07-16

Analyzed By: AR  
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	6130	mg/Kg	25	2500	3440.83	108	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	6150	mg/Kg	25	2500	3440.83	108	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Standard (ICV-1)**

QC Batch: 39105

Date Analyzed: 2007-07-16

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	97.4	97	85 - 115	2007-07-16

**Standard (CCV-1)**

QC Batch: 39105

Date Analyzed: 2007-07-16

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2007-07-16

Work Order # 7071216

## Analysis Request and Chain of Custody Record

**HIGHLANDER ENVIRONMENTAL CORP.**

1910 N. Big Spring St.

Midland, Texas 79705

(432) 682-4559

Fax (432) 682-3946

CLIENT NAME: COG OperatingSITE MANAGER: Gary MillerPROJECT NO.: 3044PROJECT NAME: COG Operating/Reindeer Federal #1EDDY County, NM

SAMPLE IDENTIFICATION

LAB I.D.  
NUMBER

DATE

TIME

MATRIX

COMP.

GRAB

NUMBER OF CONTAINERS

FILTERED (Y/N)

HCL

HNO3

ICE

NONE

PRESERVATIVE  
METHOD

BTX 8090/808

MTBE 8080/808

TPH 418.1 8015 MOD. T1005

PAH 8270

RCA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Volatiles

TCLP Semi Volatiles

EC

GC/MS Vol. 8240/8280/8284

GC/MS Semi. Vol. 8270/8285

PCB's 8080/808

Pest. 808/808

HOD, TSS, pH, TDS, Chlorides

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

1297097/110107

S X North West 5.0' BPB

1

X

710

S X North East 5.0' BPB

1

X

711

S X South West 5.0' BPB

1

X

712

S X South East 10.0' BPB

1

X

713

S X Center 2.0' BPB

1

X

714

S X North 2.0' BPB

1

X

715

S X South 5.0' BPB

1

X

RELINQUISHED BY: (Signature)

Date: 7/12/07Time: 10:56

RECEIVED BY: (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

SAMPLED BY: (Print &amp; Sign)

Date: 7/11/07

Time: \_\_\_\_\_

RELINQUISHED BY: (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

RECEIVED BY: (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

SAMPLE SHIPPED BY: (Circle)

FEDEX ☐ BUS ☐ AIRBILL # \_\_\_\_\_HAND DELIVERED ☒ UPS ☐ OTHER: \_\_\_\_\_

RELINQUISHED BY: (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

RECEIVED BY: (Signature)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

HIGHLANDER CONTACT PERSON:

Results by:

RECEIVING LABORATORY: Trace

RECEIVED BY: (Signature)

ADDRESS: \_\_\_\_\_

CITY: MidlandSTATE: TX

ZIP: \_\_\_\_\_

CONTACT: \_\_\_\_\_

PHONE: \_\_\_\_\_

DATE: 7-12-07TIME: 10:50Gary Miller

RUSH Charges

Authorized:

Yes ☐ No ☒

SAMPLE CONDITION WHEN RECEIVED:

MATRIX:

W-Water

A-Air

SD-Solid

REMARKS: all tests - Midland☒ Soil

SL-Sludge

O-Other

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Environmental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.