

### 2057 Commerce Drive Midland, TX 79703

432.520.7720 PHONE 432.520.7701 FAX

www.trcsolutions.com

September 21, 2017

Mike Bratcher New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 2 811 S. First Street Artesia, NM 88210

Shelly Tucker Carlsbad Field Office United States Department of the Interior Bureau of Land Management 620 E. Greene Street Carlsbad, New Mexico 88220

Re: Soil Investigation Summary and Proposed Remediation Workplan

Yellowstone 3 Federal #003 (2RP-3668) GPS: N 32.0699768° W 104.3898697°

Unit Letter "L", Section 3, Township 26 South, Range 25 East

Eddy County, New Mexico

Dear Mr. Bratcher and Ms. Tucker,

TRC Environmental Corporation (TRC), on behalf of COG Operating, LLC (COG) has prepared this Soil Investigation Summary and Proposed Remediation Workplan (Workplan) for the Yellowstone 3 Federal #003 Release Site (Release Site). The purpose of this Workplan is to propose remediation activities designed to advance the Yellowstone 3 Federal #003 Release Site toward a New Mexico Oil Conservation Division (NMOCD) approved Site Closure Status. The legal description of the Release Site is Unit Letter "L", Section 3, Township 26 South, Range 25 East, in Eddy County, New Mexico. The GPS coordinates for the site are N 32.0699768° W 104.3898697°. The subject property is administered by the United States Bureau of Land Management (BLM). A Site Location Map and Site Map are provided as Figure 1 and Figure 2, respectively.

On April 12, 2016, COG discovered a produced water release from a hole in the load line. The release measured approximately 2,605 square feet in area. On April 28, 2016, submitted a Release Notification and Corrective Action (Form C-141) to the NMOCD. During initial response activities, COG dispatched a vacuum truck to remove all freestanding fluids. Approximately fifteen (15) barrels of fluid was released from the load line, with approximately twelve (12) barrels recovered. The Form C-141 is attached to this report.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify any registered water wells in Section 3, Township 26 South, Range 25 East. A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) Eddy District Office indicates groundwater should be encountered at approximately twenty five (25) feet below ground surface (bgs). Based on the NMOCD site classification system, twenty (20) points will be assigned to the subject area ranking as a result of this criterion.

No water wells were observed within one-thousand (1,000) feet of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

No surface water was observed within one-thousand (1,000) feet of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

Based on the NMOCD Site Classification criteria, the Release Site soil remediation levels are 10 milligrams per Kilogram (mg/Kg) for benzene, 50 mg/Kg for benzene, toluene, ethylbenzene and xylenes (BTEX), and one hundred (100) mg/Kg for total petroleum hydrocarbons (TPH). Per NMOCD request, chloride remediation levels for the Release Site will be two hundred fifty (250) mg/Kg.

On May 25, 2016, a COG representative collected twenty nine (29) delineation soil samples (S1-1', S1-2', S1-3', S1-4', S1-6', S1-8', S1-10', S1-12', S2-1', S2-2', S2-3', S2-3', S2-4', S2-6', S2-8', S2-10', S2-12', S3-Surface, S3-1', S3-2', S3-3', S3-4', S3-6', S3-8', S4-1', S4-2', S4-3', S4-4', S4-6', and S4-7') from the impacted area (see attached Figure 2 and Table 1 for sample locations and analytical results). The soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for determination of chloride using Method SM 4500 Cl-B. Chloride concentrations ranged from less than the applicable laboratory Method Detection Limit (MDL) for soil samples S2-3', S2-4', S4-3', S4-4' and S4-6' to 36,800 mg/Kg for soil sample S3-Surface. A review of laboratory analytical results indicated chloride concentrations were below NMOCD regulatory guidelines for the submitted soil samples, with the exception of soil samples S1-3', S2-1', S2-2', S2-10',S2-12', S3-1', S3-Surface, S3-2', S4-1', and S4-2'.

On July 12, 2016, a COG representative advanced two (2) trenches and collected four (4) soil samples (BG1-8', BG2-1', BG2-8', and BG2-10') outside of the release area and submitted to the laboratory for chloride analysis. Laboratory analytical results indicated chloride concentrations ranged from less than the applicable laboratory MDL for soil sample BG2-1' to 176 mg/Kg for soil sample BG1-8', which are below NMOCD regulatory guidelines.

On January 10, 2017, a COG representative advanced one (1) trench in the vicinity of trench S1 and collected and submitted nine (9) soil samples (T1-1', T1-2', T1-3', T1-4', T1-5', T1-6', T1-8', T1-10', and T1-11') to the laboratory for BTEX analysis (Method SW 846-8021BM), TPH analysis (Method 846-8015M), and/or chloride analysis (Method SM 4500 CL-B). Laboratory analytical results indicated benzene, BTEX, and TPH concentrations for the submitted samples were less than the applicable laboratory MDL and NMOCD regulatory guidelines. Laboratory analytical results indicated chloride concentrations ranged from 144 mg/Kg for soil sample T1-3' to 1,600 mg/Kg for soil sample T1-1'. A review of laboratory analytical results indicated chloride concentrations were below NMOCD regulatory guidelines for soil samples T1-3' and T1-4'.

On March 7, 2017, a COG representative advanced one (1) trench in the vicinity of trenches S2 and S3 and collected and submitted three (3) soil samples (T2-12', T2-14', and T2-16') to the laboratory for chloride analysis. Laboratory analytical results indicated chloride concentrations for soil samples T2-12', T2-14', and T2-16' were 353 mg/Kg, 288 mg/Kg, and 416 mg/Kg, respectively, and above NMOCD regulatory guidelines.

Based on the analytical results of the soil samples collected on March 25, 2016 through March 7, 2017, COG proposes the following field activities designed to remediate the Yellowstone 3 Federal #003:

- Utilizing a backhoe, excavate the Release Site to a depth of approximately three (3) feet bgs in the area represented by trench S1 and to approximately two (2) feet bgs in the areas represented by trenches S2, S3, and S4. The excavated soils will be stockpiled on a plastic liner adjacent to the excavation pending transportation to a NMOCD approved disposal facility.
- Following excavation activities, the excavation will be backfilled with locally purchased non-impacted "like" soil.
- The excavated soil will be transported under manifest to an NMOCD approved disposal facility.
- Prepare and submit a "Remediation Summary and Site Closure Request" to the NMOCD and NMSLO.

COG is prepared to begin the activities outlined in this Proposed Remediation Workplan on NMOCD and NMSLO approval.

If you have any questions, or if additional information is required, please feel free to call me at 432-520-7720 (office) or 432-664-6699 (cell).

Thank you,

Nikki Green Project Manager

TRC Environmental Corporation

Jeffrey Kindley, PG Senior Project Manager

TRC Environmental Corporation

**Attachments:** 

Figure 1 - Site Location Map

Figure 2 - Site Map

Table 1 - Concentration of Chloride in Soil

Laboratory Analytical Results

Release Notification and Corrective Action (Form C-141)

cc: Rebecca Haskell

COG Operating, LLC 600 W. Illinois Avenue Midland, Texas 79701

File

TABLE 1

### CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

### COG Operating LLC Yellowstone 3 Federal #3 EDDY COUNTY, NEW MEXICO

All concentrations are reported in mg/Kg

	a	g 0.77			HODS: SW 846			MI	ETHOD: SW 8015	М	SM4500Cl-B
SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C <sub>6</sub> -C <sub>10</sub>	TPH DRO C <sub>10</sub> -C <sub>28</sub>	TOTAL TPH C <sub>6</sub> -C <sub>28</sub>	CHLORIDE
NMOCD Site Classification Criteria			10				50			100	250
S1-1'	05/25/16	Trench									128
S1-2'	05/25/16	Trench									240
S1-3'	05/25/16	Trench									464
S1-4'	05/25/16	Trench									144
S1-6'	05/25/16	Trench									128
S1-8'	05/25/16	Trench									96.0
S1-10'	05/25/16	Trench									144
S1-12'	05/25/16	Trench									208
S2-1'	05/25/16	Trench									5,840
S2-2'	05/25/16	Trench									928
S2-3'	05/25/16	Trench									<16.0
S2-4'	05/25/16	Trench									<16.0
S2-6'	05/25/16	Trench									240
S2-8'	05/25/16	Trench									208
S2-10'	05/25/16	Trench									272
S2-12'	05/25/16	Trench									1,230
S3- Surface	05/25/16	Trench									36,800
S3-1'	05/25/16	Trench									9,730
S3-2'	05/25/16	Trench									8,260
S3-3'	05/25/16	Trench									128
S3-4'	05/25/16	Trench									48.0
S3-6'	05/25/16	Trench									240
S3-8'	05/25/16	Trench									208

TABLE 1

### CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

### COG Operating LLC Yellowstone 3 Federal #3 EDDY COUNTY, NEW MEXICO

All concentrations are reported in mg/Kg

	GAN EDY E	COTT		MET	HODS: SW 846	-8021b		MI	ETHOD: SW 8015	М	SM4500Cl-B
SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C <sub>6</sub> -C <sub>10</sub>	TPH DRO C <sub>10</sub> -C <sub>28</sub>	TOTAL TPH C <sub>6</sub> -C <sub>28</sub>	CHLORIDE
NMOCD Site Classification Criteria			10				50			100	250
S4-1'	05/25/16	Trench									9,730
S4-2'	05/25/16	Trench									1,800
S4-3'	05/25/16	Trench									<16.0
S4-4'	05/25/16	Trench									<16.0
S4-6'	05/25/16	Trench									<16.0
S4-7'	05/25/16	Trench									160
BG1-8'	07/12/16	Trench									176
BG2-1'	07/12/16	Trench									<16.0
BG2-8'	07/12/16	Trench									128
BG2-10'	07/12/16	Trench									96.0
T1-1'	01/10/17	Trench	< 0.050	< 0.050	< 0.050	< 0.150	< 0.150	<10.0	<10.0	<10.0	1,600
T1-2'	01/10/17	Trench	< 0.050	< 0.050	< 0.050	< 0.150	< 0.150	<10.0	<10.0	<10.0	720
T1-3'	01/10/17	Trench	< 0.050	< 0.050	< 0.050	< 0.150	< 0.150	<10.0	<10.0	<10.0	144
T1-4'	01/10/17	Trench	< 0.050	< 0.050	< 0.050	< 0.150	< 0.150	<10.0	<10.0	<10.0	160
T1-5'	01/10/17	Trench	< 0.050	< 0.050	< 0.050	< 0.150	< 0.150	<10.0	<10.0	<10.0	416
T1-6'	01/10/17	Trench	< 0.050	< 0.050	< 0.050	< 0.150	< 0.150	<10.0	<10.0	<10.0	704
T1-8'	01/10/17	Trench	-	-	-	-	-	-	-	-	1,310
T1-10'	01/10/17	Trench	-	-	ı	-	-	-	-	-	640
T1-11'	01/10/17	Trench	-	-	-	-	-	-	-	-	464
T2-12'	03/07/17	Trench	-	-	-	-	-	-	-	-	352
T2-14'	03/07/17	Trench	-	-	ı	-	-	-	-		288
T2-16'	03/07/17	Trench	-	-	-	-	-	-	-		416



June 06, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: YELLOWSTONE FEDERAL #3

Enclosed are the results of analyses for samples received by the laboratory on 06/01/16 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keine

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



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

Received: Reported: 06/01/2016

06/06/2016

Project Name: Project Number: YELLOWSTONE FEDERAL #3

NONE GIVEN NONE GIVEN

Project Location:

Sampling Date:

Sampling Type:

05/25/2016 Soil

Cool & Intact

Sampling Condition: Sample Received By:

Jodi Henson

### Sample ID: S1 - 1' (H601195-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/03/2016	ND	432	108	400	0.00	
Sample ID: S1 - 2' (H601	.195-02)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP	544 ex				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	06/03/2016	ND	432	108	400	0.00	
Sample ID: S1 - 3' (H601	195-03)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	06/03/2016	ND	432	108	400	0.00	
Sample ID: S1 - 4' (H601	195-04)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	06/03/2016	ND	432	108	400	0.00	

### 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.

Celeg Di Keeno -



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

Received:

06/01/2016

Sampling Date:

05/25/2016

Reported:

06/06/2016

Sampling Type:

Soil

Project Name:

YELLOWSTONE FEDERAL #3

Reporting Limit

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

Analyte

NONE GIVEN

Sample ID: S1 - 6' (H601195-05)

Chloride,	SM4500CI-B
-----------	------------

mg/kg

Analyzed By: AP

Method Blank

ND

BS % Recovery

432

True Value QC

Qualifier

Chloride

Result 128

16.0 06/03/2016

108

Qualifier

Analyzed

Analyzed By: AP

400

Sample ID: S1 - 8' (H601195-06)

Analyte

Analyte

Analyte

Analyte

Cnioriae,	SM4500CI-B

mg/kg Result

96.0

Reporting Limit

16.0

Reporting Limit

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 06/03/2016

Analyzed

Analyzed

06/03/2016

Analyzed

06/03/2016

Method Blank ND

BS 432

% Recovery 108

True Value QC 400

RPD 0.00

RPD

0.00

Chloride

Sample ID: S1 - 10' (H601195-07)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Chloride

Chloride

Chloride

Result 144

Result

208

Result

5840

16.0 06/03/2016 Method Blank ND

BS 432

% Recovery

True Value QC

RPD Qualifier

108

400

0.00

Sample ID: S1 - 12' (H601195-08)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

ND

BS

% Recovery

True Value QC

**RPD** 

Qualifier

Method Blank

ND

400

100

400

Oualifier

Sample ID: S2 - 1' (H601195-09)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

BS

400

% Recovery

100

400

3.92

True Value OC RPD 3.92

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 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,

Celeg to treens



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

Received:

06/01/2016

Reported:

06/06/2016

Project Name:

YELLOWSTONE FEDERAL #3

Project Number:

NONE GIVEN

Project Location:

NONE GIVEN

Sampling Date:

05/25/2016

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S2 - 2' (H601195-10)

Chloride, SM4500CI-B

Chloride

mg/kg

Analyzed By: AP

Analyte

Result 928

Reporting Limit 16.0

Analyzed 06/03/2016 Method Blank ND

BS

% Recovery 100

True Value QC 400

RPD

3.92

Qualifier

Sample ID: S2 - 3' (H601195-11)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

400

Qualifier

Analyte

Result

<16.0

Reporting Limit Analyzed 16.0 06/03/2016 Method Blank ND

BS 400 % Recovery 100

True Value QC 400

RPD

3.92

Sample ID: S2 - 4' (H601195-12)

Chloride, SM4500CI-B

Analyte

Analyte

Analyte

mg/kg

Analyzed By: AP

Analyzed

Method Blank

% Recovery

True Value QC

Qualifier

Chloride

Chloride

Chloride

Chloride

<16.0

Result

240

Result

208

Result

16.0

Reporting Limit

Reporting Limit

16.0

Reporting Limit

16.0

06/03/2016

Analyzed

06/03/2016

Analyzed

06/03/2016

ND

BS 400

100

400

RPD

3.92

Sample ID: S2 - 6' (H601195-13)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

ND

Method Blank

ND

BS

400

BS

400

% Recovery

True Value QC RPD

Qualifier

Sample ID: S2 - 8' (H601195-14)

mg/kg

100

400

3.92

Chloride, SM4500CI-B

Analyzed By: AP

% Recovery

100

True Value QC

400

**RPD** 

3.92

Qualifier

Cardinal Laboratories

\*=Accredited Analyte

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.

Celego treens



COG OPERATING **DAKOTA NEEL** P. O. BOX 1630 ARTESIA NM, 88210 NONE

Fax To:

Received: Reported: 06/01/2016

06/06/2016

Project Name:

YELLOWSTONE FEDERAL #3

Project Number: Project Location: NONE GIVEN

NONE GIVEN

Sampling Date:

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

05/25/2016

Sample ID: S2 - 10' (H601195-15)

Chloride, SM4500CI-B

Chloride

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

Result 272

Result

1230

Reporting Limit

16.0

16.0

Reporting Limit

16.0

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 06/03/2016 Method Blank ND

BS

% Recovery 100

True Value QC

**RPD** 

Qualifier

Sample ID: S2 - 12' (H601195-16)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

400

400

3.92

Analyte

Analyte

Analyte

Reporting Limit

Analyzed 06/03/2016 Method Blank ND

BS 400 % Recovery 100

True Value QC

**RPD** Qualifier

Sample ID: S3 - SURFACE (H601195-17)

Chloride, SM4500Cl-B

Result

36800

Result

9730

Analyzed

06/03/2016

Analyzed

06/03/2016

Analyzed By: AP Method Blank

ND

BS

400

% Recovery

100

True Value QC

400

400

Qualifier

RPD

3.92

3.92

3.92

Sample ID: S3 - 1' (H601195-18)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

ND

BS

400

% Recovery

100

RPD True Value QC

Qualifier

Chloride

Sample ID: S3 - 2' (H601195-19)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyte Chloride

Result

8260

Analyzed 06/03/2016

Method Blank

ND

BS 400 % Recovery 100

True Value QC 400

400

RPD

3.92

Qualifier

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 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 Labor

Celeg to treens -



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

Received:

06/01/2016

06/06/2016

Sampling Date:

05/25/2016

Reported:

Sampling Type:

Soil

Project Name:

YELLOWSTONE FEDERAL #3

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

NONE GIVEN

Sample ID: S3 - 3' (H601195-20)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte

Result

Reporting Limit

Analyzed

Method Blank

BS

% Recovery 100

True Value QC

Qualifier

Qualifier

Chloride

128

16.0

06/03/2016

ND

400

400

Sample ID: S3 - 4' (H601195-21)

Chloride,	SM4500CI-B
-----------	------------

mg/kg Result

Analyzed By: AP

Chloride

Analyte

48.0

Reporting Limit 16.0

Analyzed 06/03/2016 Method Blank ND

BS % Recovery 400

True Value QC 400

RPD 3.92

**RPD** 

3.92

Sample ID: S3 - 6' (H601195-22)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte Result

Analyzed

Method Blank

BS

% Recovery

100

True Value QC

RPD **Oualifier** 

Chloride

240

06/03/2016 16.0

ND

400

100

400

3.92

Sample ID: S3 - 8' (H601195-23)

Analyte

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Chloride

Result 208

Result

9730

Reporting Limit 16.0

Reporting Limit

16.0

Reporting Limit

Analyzed 06/03/2016

Analyzed

06/03/2016

Method Blank ND

BS 400 % Recovery 100

% Recovery

100

True Value QC **RPD**  Qualifier

Sample ID: S4 - 1' (H601195-24)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Method Blank

ND

BS

400

400

True Value QC

400

3.92

RPD

3.92

Qualifier

Chloride

Cardinal Laboratories

Analyte

\*=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 conseq 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 There-



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

Reported: 06/06/2016

Project Name: YELLOWSTONE FEDERAL #3

Project Number: NONE GIVEN

Project Location: NONE GIVEN

Sampling Date:

Sampling Type: Soil

Sampling Condition: Sample Received By: Cool & Intact

05/25/2016

Jodi Henson

Sample ID: S4 - 2' (H601195-25)

Received:

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

06/01/2016

Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier Chloride 1800 16.0 06/03/2016 ND 400 100 400 3.92

Sample ID: S4 - 3' (H601195-26)

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 06/03/2016 ND 400 100 400 3.92

Sample ID: S4 - 4' (H601195-27)

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 06/03/2016 ND 400 100 400 3.92

Sample ID: S4 - 6' (H601195-28)

Chloride, SM4500CI-B Analyzed By: AP mg/kg Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC **RPD** Qualifier Chloride <16.0 16.0 06/06/2016 ND 416 104 400 3.92

Sample ID: S4 - 7' (H601195-29)

Chloride, SM4500CI-B Analyzed By: AP mg/kg Analyte Reporting Limit Result Analyzed Method Blank BS % Recovery True Value QC **RPD** Qualifier Chloride 160 06/06/2016 16.0 ND 416 104 400 3.92

### 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 or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its or applicable service. In no event shall Cardinal be liable for incidental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its or negative states 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



### **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

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 substitations, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 & Keene



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

Company Name:	COG Operating LLC						- 1	- 1	_				4	8	BILL TO			****			1		ANAI YSIS	El	ŝ	S	- 1	Ĭ	2	╗	REQUEST				
Project Manager:	Dakota Neel								_	P.O. #:	9	#	ı	·				$\dashv$	$\dashv$	$\dashv$	$\dashv$	4		$\dashv$		-	- 1		1	_ [		$\dashv$	$\dashv$		$\perp$
Address: 2208	2208 West Main									ပ္ပ	3	Company:	3		COG Operating LLC	rating LL	<u>۱</u>			-	-	_		-		-									
City: Artesia	State: NM		Zip	_	00	88210	10			Attn:	Ξ				Robert McNeill	cNeill			-							-									
Phone #:	(575) 748-6930 Fax #:									B	육	Address:	99		600 W Illinois	Illinois																			
Project #:	Project Owner:	er:								City:	Υ.				Midland	₫.										_									
Project Name: Yo	Project Name: Yellowstone Federal #3									33	te	State: TX	×		Zip: 79701	20																			
Project Location:										밁	유	0	7.	43	Phone #: (432) 221-0388	8																			Na Paris
Sampler Name:	Dakota Neel	The state of the s								Fax #:	*			1	ļ	-		-														į.	ķ.		-
FOR LAB USE ONLY		1		٦	١	MATRIX	訓	×I	ŀ		밁	PRESERV	ű	2	SAMPI ING	NG.	ı					-		_		-						Į.	f a		_
		OMP.	RS	TER	R																											0.	.3		
Lab I.D. 4601195	Sample I.D.	(G)RAB OR (C	# CONTAINER	GROUNDWAT	WASTEWATE	SOIL	OIL	SLUDGE		OTHER:	ACID/BASE:	ICE / COOL		OTHER:	DATE	TIME	ш	BTEX	TPH	Chloride															
The second secon	S1-1'											-			5/25/16	10:00 AM	A	-	$\dashv$	$\dashv$	4	$\dashv$	1	$\dashv$	I	-	1	_			1	+	+	4	
2	S1-2'							-	-				×		5/25/16		A		The second second second	×	-	_	The same of	+		-+							-		
3	S1-3 <sup>'</sup>												×		5/25/16		A			×		-		+		+		_	-		1		-		
Г	S1-4'							-					×		5/25/16	10:00 AM	AM			×	^			-		-						-	-	_	
S	S1-6'												×		5/25/16	10:00 AM	AM			×			0000	-								-			
6	S1-8'							+					×		5/25/16	10:00 AM	AM			×		+		+		++	11	11				+	+		Ш
-4	\$1-10'												×		5/25/16	10:00 AM	AM			×				-		-			1			-			
8	S1-12'								-			L.	×		5/25/16	-	AM			×	^					-							$  \cdot  $		
erej er enne i diament menne i i menne i menne i menne i menne i menne												-							+	+	-	-		+											
PLEASE NOTE: Liability and D analyses. All claims including the service. In no event shall Cardin	PLEASE NOTE: Lability 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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and neceived by Cardinal within 30 days after completion of the applicable service. In no worst shall Cardinal le liable for included an or contract of the cause whatsoever shall be deemed waved unless made in writing and neceived by Cardinal within 30 days after completion of the applicable service.	any claim e deemed	arisin	d wh	ther ess m	basec ade	inc	ing a	nd of	ecei tort	ed sha	ll be	d m	na de	to the amount p	aid by the clie fer completio	nt for i	the e applic	able	H	+	-		H		-						-	-		L
Relinguished Ry	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.    Received By:   Date:   Phone Performance   Ph	Cardinal, regardless of whe	regar	edless	₽╬	ether	such	clai	inia	base	8	on	N.	9	e above stated	Phone Result:	Ras			)	Z		Add'i Dhono #	2		Ł		1	1	1				Contraction	

s. Please fax written changes to 575-393-2476

Sampler - UPS - Bus - Other: Delivered By: (Circle One) Relinquished By:

Time:

Received By:

Phone Result:

☐ Yes

O No

Add'I Fax #:

Sample Condition
Cool Intact
Yes Yes
No No 超带

5.20



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

Company Name.	COG Operating LLC						1774 1774 1774 1774	8//	BILL TO	1900 1900 1900 1900 1900 1900 1900 1900	14.15			N	ANALYSIS RECHEST	
Project Manager:	Dakota Neel				9	P.O. #:				200000000000000000000000000000000000000	7		4	-		
Address: 2208	2208 West Main				ह	Company:	any		COG Operating LLC	ting LLC						
City: Artesia	State: NM		Zip	88210	Attn:	<u> </u>			Robert McNeill	Veill				-		
Phone #:	(575) 748-6930 Fax #:				Α	Address:	SS:		600 W Illinois	inois						
Project #:	Project Owner:	er:			City:	ς.			Midland							
Project Name: Y	Yellowstone Federal #3				Sta	State: TX	Z		Zip: 79701	_				×		
Project Location:					Ph	one	#	(432	Phone #: (432) 221-0388		-					
Sampler Name:	Dakota Neel				Fa	Fax #:		ľ		And the second second second second						
FOR LAB USE ONLY		·.		MATRIX		R	PRESERV	~	SAMPLING	S						
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	BTEX	TPH	Chloride	5-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
-6	S2-1'								5/25/16	10:00 AM	٦		×	$\dashv$		1
ō	S2-2'						×		5/25/16	10:00 AM			×			
	S2-3'						×		5/25/16	10:00 AM			×			
12	S2-4'						×		5/25/16	10:00 AM			×	-		
3	S2-6'						×		5/25/16	10:00 AM			×	-		
14	S2-8'						×		5/25/16	10:00 AM			×	+		
5	S2-10'						×		5/25/16	10:00 AM			×			
6	S2-12'						×	_	5/25/16	10:00 AM			×			
													+	+		
PLEASE NOTE: Liability and 0 analyses. All claims including t	PLEASE NOTE: Lability 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 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	r any claim e deemed	arising	whether based in contract d unless made in writing an	or tort,	shall ved by	be limi Cardir	hal wit	the amount paid hin 30 days after	by the client for the completion of the	the e applica	ble	-	$\mathbf{I}$	-	
affliates or successors arising of Relinquished Rv.	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 Ry:	Cardinal,	regard	less of whether such claim	is base	use, o	nany	of the	its incurred by cli above stated rea	ent, its subsidiari	es,					
relinquistied by:	Date:	Re	çeiv	Received By:	-					Phone Result:	sult:	☐ Yes	□ No		Add'I Phone #:	

s. Please fax written changes to 575-393-2476

Sampler - UPS - Bus - Other: Delivered By: (Circle One)

5.20

Relinquished By:

Date:

Received By:

Phone Result: Yes Phone Result: Yes REMARKS: dneel2@concho.com atrujillo@concho.com

Add'l Phone #: Add'l Fax #:

Time:

Date: Time:

Sample Condition
Cool Intact
Lives Lives
In No No



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

Company Name:	COG Operating LLC							****		w		8	BILL TO				-		ANAI YSIS	REOHEST	=	7	7					
Project Manager:	Dakota Neel	-						-	ö	P.O. #:								$\dashv$	- 1	_ i	å	⊣8	1	$\forall$	1		-	1
Address: 2208	2208 West Main							_	è	Company:	Į,	.	COG Operating LLC	ting LLC				-										
City: Artesia	State: NM		Zip		88	88210	_	_	Attn:				Robert McNeill	Veill													-	
Phone #:	(575) 748-6930 Fax #:							_	bb	Address:	S		600 W Illinois	inois														
Project #:	Project Owner:	ier:						_	City:	.,			Midland															
Project Name: Y	Yellowstone Federal #3							(0	itat	State: TX	₹ I		Zip: 79701	_														
Project Location:								77	ho	ne	#	(43	Phone #: (432) 221-0388	The state of the s														
Sampler Name:	Dakota Neel						9	-	Fax #:	#		ľ																
FOR LAB USE ONLY		$\dashv$			2	MATRIX	×	ŀ	닠	PRESERV.	SE	?	SAMPLING	ดี														
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	****	OTHER:	ACID/BASE:	CE / COOL	OTHER:	DATE	TIME	BTEX	ГРН	Chloride											
17	S3-SURFACE				-	-			-		×		5/25/16	10:00 AM	7		×	+		4		+		$\dagger$	4		+	
8	S3-1'										×		5/25/16	10:00 AM			× :	+			And the state of t	+		1	4		+	
18	S3-2'							-		_	×		5/25/16	10:00 AM			×		AND THE RESIDENCE AND THE PROPERTY OF THE PROP	_		+			1		+	- 1
25	S3-3'							-	_		×		5/25/16	10:00 AM			×	1		_		+	-		_		+	1
37	S3-4'						-		_		×		5/25/16	10:00 AM			×	1		_		+		1	1	Books and the second	+	
93	S3-6'	+			_	-	-	-	-		×		5/25/16	10:00 AM			×			4		+	-	Ħ	1		+	11
22	S3-8'				-		+		-		×		5/25/16	10:00 AM			×			1		++			1		1-1-	1
															-												++-	1 1
LEASE NOTE: Liability and D nalyses. All claims including the enrice. In no event shall Cardin fillates or successors arising to	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 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 consequental damages, including willout limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or accesses a relicion out of or related to the professional cardinal be liable for incidental or consequental damages, including willout limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,	or any clair be deeme ding withou	n arising d waive d limitat	g whet d unlea- tion, bu	her bar ss mad siness	e in w	ting a	ct or I	ort, s ceive	hall to d by	e lim Cardi loss	nal w	to the amount paid vithin 30 days after rofits incurred by cli	by the client for the completion of the ent, its subsidiarie	ne applicat	de l		ł	-	- 1	- 1	ŀ		ı	-		ŀ	1
Relinquished By:	Date:	S Re	Received By:	ed I	.¥		_	-						Phone Result:	ult:	□ Yes		No.	Add'I Phone #:				1					1

s. Please fax written changes to 575-393-2476

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Relinquished By:

Date: Time:

Received By:

0 N N

Add'l Phone #: Add'l Fax #:

Time: |-

Sample Condition CHECKED BY:
Cook Intact
Lives Lives
No Lives
No Lives
L

5.70



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

company Name: COG Operating LLC				6	BILL TO		anava:			ANALYSIS REQUEST	
Project Manager: Dakota Neel			P.O. #:		Control of the contro		7				丄
Address: 2208 West Main			Com	Company:	COG Operating LLC	ating LLC					
City: Artesia State: NM	Z	Zip 88210	Attn:	••	Robert McNeill	Neill					
Phone #: (575) 748-6930 Fax #:			Add	Address:	600 W Illinois	linois					
Project #: Project Owner:			City:		Midland	_					
Project Name: Yellowstone Federal #3			State	State: TX	Zip: 79701	7					
Project Location:			Pho	ne #: (4	Phone #: (432) 221-0388						
Sampler Name: Dakota Neel		A CALL OF THE CALL	Fax #:	#							
FOR LAB USE ONLY	+	MATRIX		DDESEBY	CAMBI INC	20					
	THE RESERVE AND ADDRESS OF THE PARTY NAMED IN	ATER									
Sample I.D.	(G)RAB OR # CONTAINE	GROUNDWA WASTEWAT SOIL OIL SLUDGE	OTHER :	ICE / COOL OTHER :	DATE	TIME	BTEX	ТРН	Chloride		
\$4-1'	-		-	×	5/25/16	10:00 AM	7		×		
35 84-2'				×	5/25/16	10:00 AM			×		
36 S4-3'				×	5/25/16	10:00 AM			×		
				×	5/25/16	10:00 AM			×		
28 S4-6'	-			×	5/25/16	10:00 AM			×		
29 84-7				×	5/25/16	10:00 AM			×		+
	-			-					The second secon		
	+		-				And of contrast				
	-		_								
PLEASE NOTE: Lability and Damages. Cardina'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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed whited unless made in writing and received by Cardinal within 31 days after completion of the cardinals.	claim ari	sing whether based in contract	or tort, sh	all be limited	to the amount pak	by the client for t	100		F	-	L
senice. In no event shall Cardinal be liable for incidental or consenuental damagne including without limitation beginning to the consenuental damagne including the con	ithout lim	itation, business interniptions, I	nes of us	or loss of	willing of days are	lant in subsidiari	e applicab	ē			

s. Please fax written changes to 575-393-2476

Sampler - UPS - Bus - Other: Delivered By: (Circle One)

5.20

Sample Condition
Cool Intact
Wes Wes
No No

CHECKED BY:

Relinquished By:

Time:

Received By:

affiliates or successors arising out of or related to the perform.

Relinquished By:

uental damages, including without limitation, business inten

ned wahed unless made in writing and received by Cardinal within 30 days after completion of the applicable roof limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, rail, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Phone Result: Yes Cara Result: Yes Cara Result: Yes Cara Result: Yes Cara Remarks: Area Cara Sco@concho.com Cara Sco@concho.com Cara Sco@concho.com Cara Sco@concho.com

O ON

Add'l Phone #: Add'l Fax #:

0

Received By

HOFE Page 12 of 12



July 19, 2016 .

LUPE CARRASCO
COG Operating, LLC
500 W. ILLINOIS
Midland, TX 79701

RE: YELLOWSTONE 3 FEDERAL #3

Enclosed are the results of analyses for samples received by the laboratory on 07/13/16 10:30.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

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



COG Operating, LLC **LUPE CARRASCO** 500 W. ILLINOIS Midland TX, 79701 Fax To: None

Received:

07/13/2016

Sampling Date:

BS

400

BS

400

07/12/2016

Reported:

07/19/2016

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #3

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

Analyte

Analyte

NONE GIVEN

Sample ID: BG1-8' (H601573-01)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyzed

Analyzed

07/15/2016

Analyzed

Analyzed

07/15/2016

Method Blank

% Recovery

% Recovery

100

True Value QC

Qualifier

Chloride

Result 176

16.0

Reporting Limit

Reporting Limit

16.0

Reporting Limit

Reporting Limit

16.0

07/15/2016

100

400

400

400

Result

<16.0

ND

400

Qualifier

Sample ID: BG2-1' (H601573-02)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

ND

True Value QC

RPD

0.00

0.00

0.00

RPD

0.00

Chloride

Sample ID: BG2-8' (H601573-03)

mg/kg

Analyte

Analyzed By: AP

% Recovery

Chloride

Result 128

Result

96.0

07/15/2016 16.0

Method Blank ND

BS 400

100

True Value QC

RPD Qualifier

Chloride

Sample ID: BG2-10' (H601573-04)

Chloride, SM4500CI-B

Analyte

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

ND

BS

400

% Recovery 100

True Value QC

**RPD** Qualifier

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. 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.

Celeg Ditrema



ND

### **Notes and Definitions**

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

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.

Celeg to Keens -



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

Company Name: COG Operating LLC		07.01111		
Project Manager: Lupe Carrasco	P.O. #:			ANALISIS REQUES!
Address: 2208 West Main	Company:	COG Operating LLC		
City: Artesia State: NM	Zip 88210 Attn:	Robert McNeill		
Phone #: (575) 748-6940 Fax #:	Address:	600 W Illinois		
Project #: Project Owner:		Midland		
Project Name: Yellowstone 3 Federal #3	State: TX	Zip: 79701		
Project Location:	Phone #: (	Phone #: (432) 221-0388		
Sampler Name: Lupe Carrasco	Fax #:			
FOR LAB USE ONLY	MATRIX PRESERV	V. SAMPLING		
Lab I.D. Sample I.D.	# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER:		TPH Chloride	
-\ BG1-8'		7/12/16	+	
₩ BG2-1'	×	7/12/16	×	
-5 BG2-8'	×	7/12/16	× :	
- 나 BG2-10'	×	7/12/16	× >	
nabjes. All claims including these for negligence and any other cause whatoever shall be deemed waked in contract or for, shall be limited to the amount paid by the client for the nabyes. All claims including these for negligence and any other cause whatoever shall be deemed waked unters made in witing and received by Cardinal within 30 days after completion of the applicable flivies 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.	any claim arising whether based in contract or tort, shall be limited in a deemed wahed unfets made in writing and roceived by Cardinals my without limitation, business interruptions, loss of use, or loss of lp Cardinal, regardless of whether such claim is based upon any of the	to the amount paid by the client for the within 30 days after completion of the applicable roffts incurred by client, its subsidiaries, e above stated reasons or otherwise.		
Relinquished By:  Date: Time: Time:	Received By:	sult:	☐ Yes ☐ No ☐ Yes ☐ No ☐ Gerrasco@concho ncho.com	No Add'I Phone #: □ No Add'I Fax #: □(@concho.com
	Sample Condition Cool Intact	CHECKED BY: (Initials)		-
Sampler - UPS - Bus - Other:	LI No LI No	uais)		



January 24, 2017

AARON LIEB

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: YELLOWSTONE 3 FEDERAL #003

Enclosed are the results of analyses for samples received by the laboratory on 01/19/17 10:50.

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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keine

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



COG OPERATING AARON LIEB P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

01/19/2017

Sampling Date:

01/10/2017

Reported:

01/24/2017

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #003

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Angela Cabrera

Project Location:

NONE GIVEN

Sample ID: T1 - 1' (H700131-01)

BTEX 8021B	mg/	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIL	101 9	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	01/20/2017	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS			***		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/19/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/19/2017	ND	197	98.5	200	2.76	
Surrogate: 1-Chlorooctane	71.9 9	% 35-147							
Surrogate: 1-Chlorooctadecane	87.3 9	% 28-171							

### Cardinal Laboratories

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.

Celeg D. Keens-

Celey D. Keene, Lab Director/Quality Manager

\*=Accredited Analyte



COG OPERATING AARON LIEB P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

01/19/2017

Sampling Date:

01/10/2017

Reported:

01/24/2017

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #003

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Angela Cabrera

Project Location:

NONE GIVEN

### Sample ID: T1 - 2' (H700131-02)

	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 %	6 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Analyte  Chloride	Result 720	Reporting Limit 16.0	Analyzed 01/20/2017	Method Blank ND	BS 416	% Recovery 104	True Value QC 400	RPD 3.77	Qualifier
,		16.0	01/20/2017			•			Qualifier
Chloride	720	16.0	01/20/2017	ND		•			Qualifier Qualifier
Chloride TPH 8015M	<b>720</b> mg/	16.0 kg	01/20/2017 Analyze	ND d By: MS	416	104	400	3.77	
Chloride TPH 8015M Analyte	720 mg/ Result	16.0 kg Reporting Limit	01/20/2017 Analyzed	ND d By: MS  Method Blank	416 BS	104 % Recovery	400 True Value QC	3.77 RPD	
Chloride TPH 8015M  Analyte GRO C6-C10	720 mg/ Result <10.0	16.0 kg  Reporting Limit 10.0 10.0	01/20/2017 Analyzed Analyzed 01/19/2017 01/19/2017	ND d By: MS  Method Blank  ND	416 BS 190	104 % Recovery 95.1	400 True Value QC 200	3.77 RPD 0.847	

### 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 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.

Celeg & Keine -



COG OPERATING
AARON LIEB
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

01/19/2017

Sampling Date:

01/10/2017

Reported:

01/24/2017

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #003

Sampling Type: Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Angela Cabrera

Project Location:

NONE GIVEN

Sample ID: T1 - 3' (H700131-03)

BTEX 8021B	mg/	kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIL	101 9	% 73.6-14	0					4	
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	01/20/2017	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS			No.		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/20/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/20/2017	ND	197	98.5	200	2.76	
Surrogate: 1-Chlorooctane	79.65	% 35-147	(						
Surrogate: 1-Chlorooctadecane	83.0 9	% 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 walved 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 use, or loss of profits incurred by client, its vabidiaries, 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 & Keene



COG OPERATING AARON LIEB P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

01/19/2017

Sampling Date:

01/10/2017

Reported:

01/24/2017

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #003

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Angela Cabrera

Project Location:

NONE GIVEN

Sample ID: T1 - 4' (H700131-04)

BTEX 8021B	mg/	kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 %	6 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	01/20/2017	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/20/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/20/2017	ND	197	98.5	200	2.76	
Surrogate: 1-Chlorooctane	78.0 %	6 35-147							
Surrogate: 1-Chlorooctadecane	93.7 %	6 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 claims 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.

Celeg to Keens-



COG OPERATING AARON LIEB P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:

01/19/2017

Sampling Date:

01/10/2017

Reported:

01/24/2017

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #003

Sampling Condition:

Cool & Intact

Project Number:

Sample Received By:

Project Location:

NONE GIVEN NONE GIVEN

Angela Cabrera

Sample ID: T1 - 5' (H700131-05)

BTEX 8021B	mg/	kg	Analyze	ed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIL	100 %	6 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC			- Same de la company		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	01/20/2017	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS			700		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/20/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/20/2017	ND	197	98.5	200	2.76	
Surrogate: 1-Chlorooctane	80.8 9	% 35-147							
Surrogate: 1-Chlorooctadecane	94.79	% 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 negligi 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.

Celeg & Kreens -



COG OPERATING
AARON LIEB
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

DTEV 9021D

01/19/2017

Sampling Date:

01/10/2017

Reported:

01/24/2017

Sampling Type:

Soil

Project Name:

YELLOWSTONE 3 FEDERAL #003

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

ma/ka

Sample Received By:

Angela Cabrera

Project Location:

NONE GIVEN

Sample ID: T1 - 6' (H700131-06)

BTEX 8021B	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/20/2017	ND	1.79	89.3	2.00	0.878	
Toluene*	<0.050	0.050	01/20/2017	ND	1.76	88.1	2.00	0.639	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.82	90.8	2.00	1.11	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.30	88.4	6.00	1.11	
Total BTEX	<0.300	0.300	01/20/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 %	6 73.6-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	01/20/2017	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/20/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	<10.0	10.0	01/20/2017	ND	197	98.5	200	2.76	
Surrogate: 1-Chlorooctane	81.9 %	6 35-147							
Surrogate: 1-Chlorooctadecane	96.1 %	6 28-171							

Analyzed By CV

### Sample ID: T1 - 8' (H700131-07)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1310	16.0	01/20/2017	ND	416	104	400	3.77	

### 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 -



COG OPERATING
AARON LIEB
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:

01/19/2017

Reported:

04/24/2047

01/24/2017

Project Name:

YELLOWSTONE 3 FEDERAL #003

Project Number:

Project Location:

NONE GIVEN

Sampling Date:

01/10/2017

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Angela Cabrera

Sample ID: T1 - 10' (H700131-08)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AC

Analyte

Result

Reporting Limit

Reporting Limit

Analyzed

Method Blank

BS

% Recovery True

True Value QC

Qualifier

Chloride

Chloride

640

16.0

01/20/2017

Analyzed

ND

416

104

400

Qua

Sample ID: T1 - 11' (H700131-09)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AC

Analyte Result
464

16.0 01/20/2017

Method Blank ND BS 416 % Recovery 104 True Value QC 400 RPD 3.77

RPD

3.77

Qualifier QM-07

Cardinal Laboratories

\*=Accredited Analyte

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.

Celeg & Keene



### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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 SM4500CI-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

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 walved 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.

Celeg D. Keene



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

Company Name:	COG Operating LLC					8//	BILL 70					Ą	ALY	ANALYSIS REQUEST	EQU	EST				_
Project Manager:	Aaron Lieb			-	P.O. #:						4	$\dashv$	$\dashv$	$\dashv$	$\dashv$	$\dashv$	$\dashv$	$\dashv$	$\exists$	_
Address: 2407	2407 Pecos Avenue				omp	Company: C	COG Operating LLC	ting LLC												
City: Artesia	State: NM		Zip	88210	Attn:	_	Robert McNeill	Veill												_
Phone #:	575-748-1553 Fax #:				Address:	:886	600 W Illinois	inois								-				
Project #:	Project Owner:	7.		0	city:		Midland										-			
Project Name: Y	YELLOWSTONE 3 FEDERAL #003			(0)	State: TX		Zip: 79701	The state of the s												_
Project Location:				-	hon	Phone #: (432) 221-0388	221-0388													
Sampler Name:	Aaron Lieb			-	Fax #:	••														_
FOR LAB USE ONLY				MATRIX	P	PRESERV.	SAMPLING	NG												-
Lab I.D.	Sample I.D.	B OR (C)OMP	TAINERS		BASE:	Account for the contract of the contract of					de									The second secon
H700131		-	_	WAST SOIL OIL SLUD	OTHE ACID/	OTHE	DATE	TIME	BTEX	ТРН	Chlori		$\vdash$	_						_
-	T1-1'					×	1/10/17	10:30AM	×	×	×									-
7	T1-2'					×	1/10/17	10:30AM	×	×	×									-
W	T1-3'				-	×	1/10/17	10:30AM	×	×	×									THE REAL PROPERTY.
Ç	T1-4'				_	×	1/10/17	10:30AM	×	×	×									-
S	T1-5'					×	1/10/17	10:30AM	×	×	×									-
5	T1-6'				-	×	1/10/17	10:30AM	×	×	×									-
7	T1-8'					×	1/10/17	10:30AM			×									_
8	T1-10'					×	1/10/17	10:30AM			×		-							-
٩	T1-11'				-	×	1/10/17	10:30AM			×		_							-
												_	_							_

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 the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Caydinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors againg out of or related, to the performance of services hereunder by Cardinal, repardless of whether such claim is based upon any of the above stated reasons or otherwise. Refinquished By: Relinquished By: Sampler - UPS - Bus - Other: Delivered By: (Circle One) #75 Time: /0.' Time: Date: / -/9- /1 1.50 A 60 eived By: Sample Condition
Cool Intact
Li Yes Li Yes
No No Phone Result: □ Yes □ □ No No Add'I Fax #: Add'l Phone #:



March 16, 2017

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: YELLOWSTONE 3 FEDERAL #003

Enclosed are the results of analyses for samples received by the laboratory on 03/09/17 11:40.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keene

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



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

Received:

03/09/2017

Reported:

03/16/2017

Project Name:

YELLOWSTONE 3 FEDERAL #003

Project Number: Project Location: NONE GIVEN

NONE GIVEN

Sampling Date:

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

03/07/2017

Sample ID: T2 - 12' (H700624-01)

Chloride, SM4500CI-B

Chloride

Chloride

mg/kg

Analyzed By: AC

Analyte

Result 352

Reporting Limit 16.0

Reporting Limit

Analyzed 03/14/2017

Analyzed

Method Blank ND

Method Blank

ND

BS 448 % Recovery 112

% Recovery

True Value QC 400

Qualifier

3.64

RPD

Sample ID: T2 - 14' (H700624-02)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AC

Analyte

Result 288

16.0 03/14/2017

BS

448

112

True Value QC 400

RPD 3.64 Qualifier

Sample ID: T2 - 16' (H700624-03)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	03/14/2017	ND	448	112	400	3.64	

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether be 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.

Celeg to treens



### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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

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.

Celeg & Keens



Company Name:	COG Operating LLC		B)/1/8				ANALYSIS REQUEST	T
Project Manager:	Dakota Neel		P.O. #:				- 1	
Address: 2208 \	2208 West Main		Company: COG Ope	COG Operating LLC				
City: Artesia	State: NM	Zip 88210		cNeill				
Phone #:	432-215-2783 Fax #:		ess:	Illinois				
Project #:	Project Owner:	ner:		<u>a</u>				
Project Name: Ye	Yellowstone 3 Federal #3		: TX Zip	2				
Project Location:			(43)	80				
Sampler Name:	Dakota Neel		Fax #:	The second secon				
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	ING				
Lab I.D.	Sample I.D.	G)RAB OR (C)OMP. CONTAINERS ROUNDWATER //ASTEWATER OIL IL LUDGE	THER: CID/BASE: E / COOL THER:	TEX	PH	nloride		
	T2-12'			3	+	× (		
0	T2-14'					,		
Us	T2-16'					†		
LEASE NOTE: Liability and Dai nalyses. All claims including the ervice. In no event shall Cardina	**************************************	r any claim arising whether based in contract be deemed waived unless made in writing an ling without limitation, business interruptions,	tor tort, shall be limited to the amount pa d received by Cardinal within 30 days att loss of use, or loss of profits incurred by	aid by the client for the er completion of the application, its subsidiaries,	able			
Relinquished By:	Relinquished By:  Date:  3 - 9 - 17  Time:  11 + 3 5 A^*  Received By:  Remarks:	Received By:	is based upon any of the above stated n	Phone Result: Fax Result: REMARKS:	□ Yes	N N	Add'l Phone #: Add'l Fax #:	
Relinquished By:		Date: 9, 17 Received By:	llaky	en e		dnee	dneel2@concho.com alieb@concho.com	
Delivered By: (Circle One)		2	3			rhask	rhaskell@concho.com	
Sampler - UPS - Bus - Other:		A Gres Tres	24 1 1 1 S					

s. Please fax written changes to 575-393-2476

101

District !
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.

			Rele	ease Notific	atio	n and Co	rrective A	ctio	n			
DABI	16124	292/01				OPERAT	ror			l Report	☐ Fir	al Repor
Name of Co	ompany: C	OG Operati		22913	7		bert McNeill					
		inois Avenu					lo. 432-230-007	77				
Facility Na	me: YELL	OWSTONE	3 FEDE	RAL #003		Facility Typ	e: Battery					
Surface Ow	ner: Feder	al		Mineral C	wner:	Federal			API No	. 30-015-3	9823	
				LOCA	TIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	Enst	West Line		County	
<u> </u>	03	268	25E	1980'		South	660'	<u> </u>	West		Eddy	<u></u>
						-	-104.3898697					
Type of Rele	ace.	<del></del>		MAI	UKE	OF RELI			Volume R	annuared:		
Produced Wa						15 bbls PW			12 bbls PV		`	
Source of Re Load line	lease:						our of Occurrence	e:		Hour of Dis	covery:	
Was Immedi	ate Notice C	Jiven?				4/12/2016 If YES, To			4/12/2016	12:00 pm	***************************************	
			Yes 🗀	No 🛭 Not Re	quired							
By Whom?						Date and H						
Was a Water	course Reac		Yes 🛭	No		If YES, Vo	lume Impacting th	he Wai	lercourse.			
If a Watercou	irse was Im	pacted, Descri	be Fully.			<u> </u>			NW C	IL CON	SERVAT	
										ARTESIA D	ISTRICT	ION
										APR 28	2016	
Describe Cause of Problem and Remedial Action Taken.*  This release was caused by a hole in the load line. Vacuum trucks were dispatched to recover canding fluid.												
Timb release	#W C003C0	by a note in a	1000 1111	c. vacaum nacks	Well II	ispatched to th	scover standing in	uid.		RECEIV	/ED	
Describe Are	a Affected :	and Cleanup A	ction Tak	en *								
		_										
The majority	of this relea	ise occurred o manipulian fi	n pad how	ever a streamer ra	orecent	eation to the s	southeast for 140' work plan to the	. Conc	ho will have	the spill sit	e sampled t	O
remediation v	vork.	iimiibiidilan t	om bic ic	icase una we will	present	a reinculation	work plan to the	IAIAIO	CD for appro	ovat prior te	any signiti	Cam
I hereby certi	fy that the in	nformation gi	ven above	is true and compl	cte to th	ie best of my	knowledge and un	idersta	nd that pursi	ant to NM	CD rules t	ınd
regulations at	I operators :	are required to	report an	d/or file certain re	dease no	otifications on	d perform correct rked as "Final Re	ive act	lions for rele	ases which	may endang	ger Him
should their o	perations hi	ave failed to a	dequately	investigate and re	mediate	contamination	n that pose a thre	at to e	round water.	surface wa	ter, buman l	health
or the environ	iment. In ac	ddition, NMO vs and/or regu	CD accept	ance of a C-141 r	eport de	oes not relieve	the operator of re	espons	ibility for co	mpliance w	ith any othe	ıc
reactor, state,	or rocal raw	s and or regu	iativits.				OIL CONS	FRV	ATION I	DIVISIO	N	
Signature:							<u> </u>	2	1		<del>†</del>	
	Zee	- Ham	L			A	r		. 11		/	
Printed Name		/		_		approved by i	Environmental Sp	ecialis	Hu	<i>√</i>	1_	
Title: Senior I	Environmen	ital Coordinate	or			Approval Date	: 5/2/110	,	Expiration D	ate: N	A	
E-mail Addre	cc. tonibbe	Doonaha -a-				Canditions of	A ======!:					
a-nan Agure	33. 1 <u>gru</u> 005(	ajeoneno.com	***************************************		— À	Conditions of Ro <b>mediatio</b>	Approval: in per O.C.D.	Rule	s & Guld	Attached		
Date: April 2				one: 432-683-744	3 5	UBMIT RE	MEDIATION	PRO	POSAL N	Ω		
Attach Addit	ional Shee	ts If Necessa	гу.			ATER THA		3/1		ZR	P-30	108

### Patterson, Heather, EMNRD

From:

Robert Grubbs < RGrubbs@concho.com>

Sent:

Thursday, April 28, 2016 4:34 PM

To:

Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD; 'stucker@blm.gov';

'james\_amos@blm.gov' (james\_amos@blm.gov)

Subject:

(Notification/C-141 Initial/3160-5/ARC) YELLOWSTONE 3 FEDERAL #003 (30-015-39823)

Attachments:

Form\_3160-5 30-015-39823 4-12-2016.pdf; Yellowstone Site Map.jpg; 4-12-2016

Yellowstone 3Federal #003 TB Initial.pdf

### MR. BRATCHER,

COG OPERATING LLC IS REPORTING A RELEASE ON THE YELLOWSTONE 3 FEDERAL #003 (30-015-39823)

SECTION 3 TOWNSHIP 26S RANGE 25E

THE RELEASE OCCURRED AT 12:00 PM ON 4/12/2016

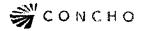
RELEASED: 15 BBLS PW RECOVERED: 12 BBLS PW

THIS RELEASE WAS CAUSED BY A HOLE IN THE LOAD LINE. ATTACHED ARE A C-141, BLM FORM 3160-5, AND A MAP OF THE AREA FOR YOUR CONSIDERATION. I'D LIKE TO ALSO REQUEST ARC CLEARANCE FOR THIS LOCATION AT THIS TIME AS WELL. IF YOU HAVE ANY ADDITIONAL QUESTIONS PLEASE FEEL FREE TO CONTACT ME.

### THANK YOU,

ROBERT GRUBBS JR.
SR. ENVIRONMENTAL COORDINATOR
432.683.7443 (MAIN)
432.818.2369 (DIRECT)
432.661.6601 (CELL)
432.221.0892 (FAX)
RGRUBBS@CONCHO.COM
MAILING ADDRESS:
ONE CONCHO CENTER
600 W. ILLINOIS AVENUE
MIDLAND, TEXAS 79701

CONFIDENTIALITY NOTICE: THE INFORMATION IN THIS EMAIL MAY BE CONFIDENTIAL AND/OR PRIVILEGED. IF YOU ARE NOT THE INTENDED RECIPIENT OR AN AUTHORIZED REPRESENTATIVE OF THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY REVIEW, DISSEMINATION OR COPYING OF THIS EMAIL AND ITS ATTACHMENTS, IF ANY, OR THE INFORMATION HEREIN, IS PROHIBITED. IF YOU RECEIVED THIS EMAIL IN ERROR, PLEASE IMMEDIATELY NOTIFY THE SENDER BY RETURN EMAIL AND DELETE THIS EMAIL FROM YOUR SYSTEM. THANK YOU.



CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

Form 3160-5 (September 2001)

### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OM B No. 1004-0135 Expires: January 31, 2004

SHNDRY	NOTICES AND REI	W NO STRON	FIIC	NM-108	
Do not use th	nis form for proposals t eli. Use Form 3160-3 (.	o drill or to re	-enter an	6. If Indian,	Allonee or Tribe Name
	IPLICATE- Other inst	ructions on revi	erse side.	7. If Unit or	CA/Agreement, Name and/or No.
1. Type of Well Oil Well IS	Gas Well 123 Other			8. Well Nam	so and No
2. Name of Operator COG Operat	See 11.C			YELLO	WSTONE 3 FEDERAL #003
3a Address		1.2h Mara Na Gade	4	9. API Wel	
600 West Illinois Avenue, Midi	and TX 79701	3b. Phone No. (inclu 432-230-0077	ac area code)		Pool, or Exploratory Area
4. Location of Well (Footoge, Sec.,	T., R., M., or Survey Description)				
L-03-265-25E 1980 FSL Lat/Long: 32,0699768,-104,389	660 FWL 98697 NAD83			Eddy	r Parish, State
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NATU	TRE OF NOTICE, I	REPORT, OR	OTHER DATA
TYPE OF SUBMISSION		T	YPE OF ACTION		
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production (S	art/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	, , , , , , , , , , , , , , , , , , ,	bandon	Other
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposa		
testing has been completed. Fit determined that the site is ready  The apill site will be access	rolved operations. If the operation nal Abandonment Notices shall be for final inspection.)  sed via lease road to pad and fase review for Arch concerns,	filed only after all requi from the pad to the p	rements, including reclar asture. Please see attr	nation, have been	completed, and the operator has
14. Thereby certify that the fore Name (Printed/Typed)	going is true and correct	1			
Robert Grubbs	1	Title	Scalor Environments	i Coardinator	ł
Signature 72.4.4	X-L	Date	4-28-10	·	
	THIS SPACE FOR	FEDERAL OR	STATE OFFICE	USE	
Approved by			Title	D:	ale
Conditions of approval, if any, are a certify that the applicant holds legal which would emitle the applicant to	or equitable title to those rights in conduct operations thereon.	n the subject lease	ОПісе		
Title 18 U.S.C. Section 1001 and Title	e 43 U.S.C. Section 1212, make it a	crime for any person	knowingly and willfully	to make to any	department or agency of the United

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this

form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

### SPECIFIC INSTRUCTIONS

tiem 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or

present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

### NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

### **BURDEN HOURS STATEMENT**

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Lahd Management (1004-0135), Bureau Information Collection Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240