



**Dakota Neel**  
Environmental Coordinator

March 29, 2017

Oil Conservation Division  
District 1 – Hobbs  
1625 N. French Dr.  
Hobbs, NM 88240

**Re: GC Federal #011  
30-025-38994  
Sec. 19, T17S-R32E  
Lea County, NM**

Ms. Yu/Ms. Price,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated December 12th, 2016 in which 2 bbls oil and 4 bbls produced water were released. 1 bbls of oil and 2 bbls of produced water were recovered.

#### **Background**

This release occurred within the lined facility with a light overspray on the location. The release was caused by a failed gasket on the free water knock out. A vacuum truck was dispatched to recover all standing fluid.

#### **Groundwater Assessment**

Based on the Chevron Trend Maps, the release area would be classified at a site ranking of Zero due to the depth of groundwater greater than 200'.

#### **Analytical Results**

Initial soil samples were taken on January 10th, 2017. Samples indicated Chloride concentrations were elevated at a depth of 1' with no reportable amounts of BTEX and TPH.

---

#### **CORPORATE ADDRESS**

One Concho Center | 600 West Illinois Avenue | Midland, Texas 79701  
**P** 432.683.7443 | **F** 432.683.7441

#### **CARLSBAD OFFICE**

1401 Commerce Drive | Carlsbad, New Mexico 88220  
**P** 575.689.3100 | **F** 575.941.2081

March 29 2017

GC Federal #11	
Site Ranking- Zero	
1/10/2017	
T1	Cl-
1'	8400
2'	96
3'	16
4'	48
5'	32
6'	<16
8'	<16

### Work Plan

COG proposes the excavation of 1' of material from the impacted area outside the lined facility. The area will be backfilled with like material.

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

Sincerely,



Dakota Neel  
Environmental Coordinator

### Enclosed

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

**GC Federal #011**

32.817458° - 103.799484°

**Legend**



AOI

T1

GC Federal #11	
Site Ranking- Zero	
1/10/2017	
T1	CI-
1'	8400
2'	96
3'	16
4'	48
5'	32
6'	<16
8'	<16



200 ft



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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company:	COG Operating LLC	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	GC Federal #011 Battery	Facility Type:	Tank Battery
Surface Owner:	Federal	Mineral Owner:	API No. 30-025-38994

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	19	17S	32E	1550	South	660	East	Lea

Latitude 32.8171158 Longitude 103.7993851

NATURE OF RELEASE

Type of Release:	Oil & Produced Water	Volume of Release:	2bbls Oil & 4bbls PW	Volume Recovered:	1bbls Oil & 2bbls PW
Source of Release:	FWKO	Date and Hour of Occurrence:	December 13, 2016 11:30 am	Date and Hour of Discovery:	December 13, 2016 11:30 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour:				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			
If a Watercourse was Impacted, Describe Fully.*					
Describe Cause of Problem and Remedial Action Taken.*					
Gasket on FWKO failed. The gasket was repaired.					
Describe Area Affected and Cleanup Action Taken.*					
The release occurred within the lined facility with an overspray affecting the adjacent pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.					
Signature:	OIL CONSERVATION DIVISION				
Printed Name:	Rebecca Haskell	Approved by Environmental Specialist:			
Title:	Senior HSE Coordinator	Approval Date:	Expiration Date:		
E-mail Address:	rhaskell@concho.com	Conditions of Approval:			Attached <input type="checkbox"/>
Date:	12/15/16	Phone:	432-683-7443		

\* Attach Additional Sheets If Necessary



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

---

January 24, 2017

AARON LIEB

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: GC FEDERAL #11 TB

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first and last names being clearly legible.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 1' (H700130-01)**

BTX 8021B		mg/kg		Analyzed 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	1.99	99.4	2.00	1.78	
Toluene*	<0.050	0.050	01/20/2017	ND	1.97	98.3	2.00	1.96	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.98	98.9	2.00	1.18	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.62	93.7	6.00	1.28	
Total BTX	<0.300	0.300	01/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	01/20/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/19/2017	ND	190	95.1	200	0.847	
DRO >C10-C28	58.4	10.0	01/19/2017	ND	197	98.5	200	2.76	QM-07

Surrogate: 1-Chlorooctane 90.3 % 35-147

Surrogate: 1-Chlorooctadecane 89.6 % 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 claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 2' (H700130-02)**

BTX 8021B		mg/kg	Analyzed 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	1.99	99.4	2.00	1.78	
Toluene*	<0.050	0.050	01/20/2017	ND	1.97	98.3	2.00	1.96	
Ethylbenzene*	<0.050	0.050	01/20/2017	ND	1.98	98.9	2.00	1.18	
Total Xylenes*	<0.150	0.150	01/20/2017	ND	5.62	93.7	6.00	1.28	
Total BTX	<0.300	0.300	01/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/20/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	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 84.4 % 35-147

Surrogate: 1-Chlorooctadecane 94.0 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 3' (H700130-03)**
**BTEX 8021B**

mg/kg

Analyzed 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 (PID) 100 % 73.6-140

**Chloride, SM4500Cl-B**

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	01/20/2017	ND	416	104	400	3.77	

**TPH 8015M**

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	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 87.4 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

**Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

 Received: 01/19/2017  
 Reported: 01/24/2017  
 Project Name: GC FEDERAL #11 TB  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 01/10/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Angela Cabrera

**Sample ID: T1 - 4' (H700130-04)**

BTEX 8021B		mg/kg		Analyzed 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 (PID) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/20/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	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 83.9 % 35-147

Surrogate: 1-Chlorooctadecane 94.7 % 28-171

**Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 01/19/2017  
 Reported: 01/24/2017  
 Project Name: GC FEDERAL #11 TB  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 01/10/2017  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Angela Cabrera

**Sample ID: T1 - 5' (H700130-05)**

BTEX 8021B		mg/kg		Analyzed 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 (PID) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/20/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	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 84.5 % 35-147

Surrogate: 1-Chlorooctadecane 95.3 % 28-171

**Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/19/2017  
Reported: 01/24/2017  
Project Name: GC FEDERAL #11 TB  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/10/2017  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T1 - 6' (H700130-06)**

BTEX 8021B		mg/kg		Analyzed 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 (PID) 101 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/20/2017	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	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 75.5 % 35-147

Surrogate: 1-Chlorooctadecane 91.8 % 28-171

**Sample ID: T1 - 8' (H700130-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	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, Lab Director/Quality Manager

### 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 SM4500C-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.



---

Celey D. Keene, Lab Director/Quality Manager



## BILL TO

ANALYSIS REQUEST

Page 9 of 9