

March 5, 2019

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

Ryan Mann New Mexico State Land Office 1001 S. Atkinson Roswell, NM 88230

Closure Report Gettysburg State Com #004H API#: 30-025-41929 RP#: 1RP-5169 DOR: August 20, 2018 GPS: 32.3107987 -103.4721183 ULSTR: B-16-23S-34E Lea County, New Mexico

To Whom It May Concern,

COG Operating, LLC (COG) is pleased to submit the following closure report in response to a release that occurred on a flowline associated with Gettysburg State Com #004H. The release is located in Unit Letter B, Section 16, Township 23 South and Range 34 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.3107987 North and -103.4721183 West.

BACKGROUND

The release was discovered on August 20, 2018. A C-141 initial report was submitted to the New Mexico Oil Conservation Division (NMOCD) and the New Mexico State Land Office (NMSLO). The initial C-141 is presented in Appendix A. A third party inadvertently cut COG's poly-flowline resulting in the release of approximately eight (8) barrels (bbls) of produced water. The fluid impacted the pasture adjacent to the lease road.

GROUNDWATER AND REGULATORY FRAMEWORK

According to the United States Geological Survey (USGS) the nearest active water well (321734103290001) indicates that groundwater in the project vicinity is approximately three-hundred and forty-five (345) feet below ground surface (BGS). The water well information is shown in Appendix B.

A risk based evaluation and site determinations were performed in accordance to the New Mexico Oil Conservation Division (NMOCD) Rule (Title 19 Chapter 15 Part 29) for releases on oil and gas development and production in New Mexico (effective August 14, 2018). According to the site characterization evaluation, no other receptors (water wells, playas, karst, water course, lake beds or ordinance boundaries) were located within each specific boundaries or distance from the site. The groundwater data and the site characterization evaluation data is summarized in Appendix B. The delineation and closure criteria are listed below:

GENERAL SITE CHARACTERIZATION AND GROUNDWATER:

Site Characterization	Average Groundwater Depth (ft.)
None Located	>100 feet

DELINEATION AND CLOSURE CRITERIA:

Recommended Remedial Action Levels (RRALs)					
Chlorides	20,000 mg/kg				
TPH (GRO and DRO and MRO)	2,500 mg/kg				
TPH (GRO and DRO)	1,000 mg/kg				
Benzene	10 mg/kg				
Total BTEX	50 mg/kg				

REMEDIATION PLAN

All soil samples were below Table 1 closure criteria and thus no remediation will occur. COG has conducted reclamation of the impacted pasture area per New Mexico Oil Conservation Division (NMOCD) Rule (Title 19 Chapter 15 Part 29).

SITE RECLAMATION AND RESTORATION

Per NMED 19.15.29.13 reclamation of the pasture area has been performed by removing the impacted soil containing chloride concentrations greater than 600 mg/kg within the first four (4) feet BGS. Approximately one-hundred and thirty-one (131) cubic yards of material was removed and hauled to an NMOCD approved solid waste disposal facility. Once excavated, soil samples were collected from the bottom and sidewalls of the excavation to confirm the removal of impacted soil greater than 600 mg/kg of chlorides. The excavation was backfilled with soil that was non-contaminated with concentrations below 600 mg/kg of chlorides. The surface was left in a rough condition to approximate natural surface deviations. The site will be mechanically seeded with a landowner preferred seed mixture once correct season conditions exist.

CLOSURE REQUEST

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the New Mexico State Land Office grant closure approval for the Gettysburg State Com #004H incident that occurred on August 20, 2018.

Should you have any questions or concerns please do not hesitate to contact me.

Sincerely,

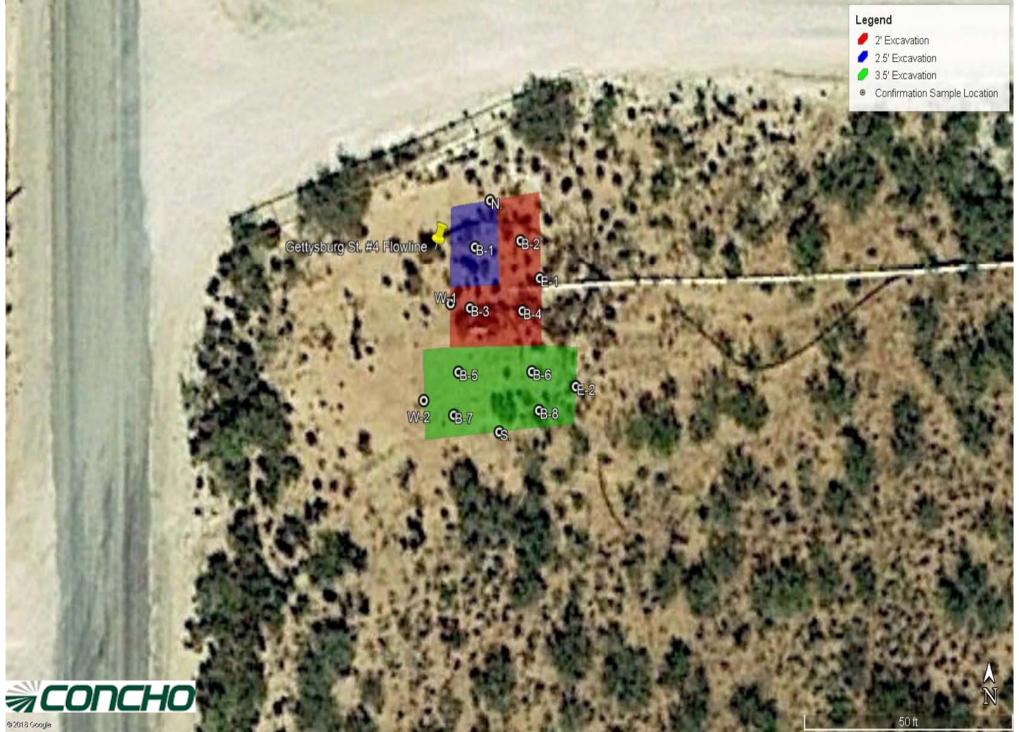
Sheldon Jutan

Sheldon L. Hitchcock HSE Coordinator slhitchcock@concho.com

FIGURES

August 20, 2018

Gettysburg State Com #004H



TABLES

Table 1COG Operating LLC.Gettysburg State Com #004H (8-20-2018)Lea County, New Mexico

On multiple	Sample	Original a Data	Soil	Status		TPH (mg/kg)					Benzene Total BTEX		Chloride	
Sample ID	Depth (ft)	Sample Date	In-Situ	Removed	GRO	DRO	MRO	Total	GRO	DRO	Total	(mg/kg)	(mg/kg)	(mg/kg)
NMOCD RRAL L	imits (mg/kg)				-	-	-	2,500	-	-	1,000	10	50	20,000
S.	N/A	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	96
W-1	N/A	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	208
N.	N/A	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	96
E-1	N/A	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	32
B-1	2	1/23/2019		Х	<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	608
B-2	2	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	464
B-3	2	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	528
B-4	2	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	112
B-5	3.5	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	400
B-6	3.5	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	160
B-7	3.5	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	272
B-8	3.5	1/23/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	480
B-1	1/2/1900	1/28/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	48
E-2	N/A	1/28/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	80
W-2	N/A	1/28/2019	Х		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.005	<0.005	<16.0

APPENDIX A

*

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

		OPERATO	R	\boxtimes	Initial Report		Final Report
Name of Company: COG Operating LLC (OGR	Contact:	Robert McNeill					
Address: 600 West Illinois Avenue, Midland	Telephone No.	432-683-7443					
Facility Name: Gettysburg State Com #004H	Facility Type:	Flowline					
Surface Owner: Private	Mineral Owner	: State		Α	PI No. 30-025-4	1929	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
В	16	23S	34E					Lea

Latitude 32.3107987 Longitude -103.4721183 NAD83

NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Recovered:
Produced Water	8 bbl.	0 bbl.
Source of Release:	Date and Hour of Occurrence:	Date and Hour of Discovery:
3 rd Party	August 20, 2018 12:30pm	August 20, 2018 12:30pm
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🛛 No 🖾 Not Required		
By Whom?	Date and Hour:	
Was a Watercourse Reached?	If YES, Volume Impacting the Water	rc011#50
$\Box \text{Yes} \boxtimes \text{No}$	If TES, Volume impacting the Water	icourse.
	DECENTED	
If a Watercourse was Impacted, Describe Fully.*	RECEIVED	
	By CHernandez at 7:24 a	m Aug 22 2018
	By Chernanuez at 7.24 a	ani, Aug 22, 2010
Describe Cause of Problem and Remedial Action Taken.*		
The release was caused by a 3 rd party cutting the flowline. Flowline has	been repaired.	
Describe Area Affected and Cleanup Action Taken.*		
The release was in the pasture. A vacuum truck was dispatched to remov		
possible impact from the release and we will present a remediation work		
I hereby certify that the information given above is true and complete to		
regulations all operators are required to report and/or file certain release		
public health or the environment. The acceptance of a C-141 report by the		
should their operations have failed to adequately investigate and remedia		
or the environment. In addition, NMOCD acceptance of a C-141 report	does not relieve the operator of responsib	bility for compliance with any other
federal, state, or local laws and/or regulations.		
	OIL CONSERV.	<u>ATION DIVISION</u>
Dann Crowk		\mathbf{v}
Signature: Dellinn Organet		<i>μ</i>
	Approved by Environmental Specialist:	\sim (
Printed Name: DeAnn Grant		
Titles USE A durinistration Assistant	Approval Date: 8/22/2018	animation Datas
Title: HSE Administrative Assistant	Approval Date: E	expiration Date:
E mail Addresse agreent@conche.com	Conditions of Annaoval	
E-mail Address: agrant@concho.com	Conditions of Approval:	Attached
Date: August 21, 2018 Phone: 432-253-4513	NMAC 19.15.29 effective Aug	ust 14,
Date. August 21, 2018 Filone. 452-255-4515	2018. Complete release	
Attach Additional Sheets If Necessary	· · · · · · · · · · · · · · · · · · ·	pCH1823428146
111-5103	characterization before any si	grinicant r
	remediation.	nCH1823427905
		10071823427905

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 Department

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

)

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		
Cause of Release		

Page 2

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
Yes No	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name:	Title:
Signature: Sheldon Jutan	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🗌 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🗌 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🗌 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🗌 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🗌 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🗌 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🗌 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🗌 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🗌 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🗌 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🗌 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🗌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
Field data
Data table of soil contaminant concentration data
Depth to water determination
Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
Boring or excavation logs
Photographs including date and GIS information

- **Topographic**/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141	State of New Mexico	Incident ID
Page 4	Oil Conservation Division	District RP
		Facility ID
		Application ID
regulations all operators are r public health or the environm failed to adequately investiga addition, OCD acceptance of and/or regulations. Printed Name: Signature:	required to report and/or file certain release notific nent. The acceptance of a C-141 report by the OC ate and remediate contamination that pose a threat a C-141 report does not relieve the operator of re	st of my knowledge and understand that pursuant to OCD rules and cations and perform corrective actions for releases which may endanger D does not relieve the operator of liability should their operations have to groundwater, surface water, human health or the environment. In sponsibility for compliance with any other federal, state, or local laws Title: Date: Felephone:
OCD Only Received by:		Date:

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

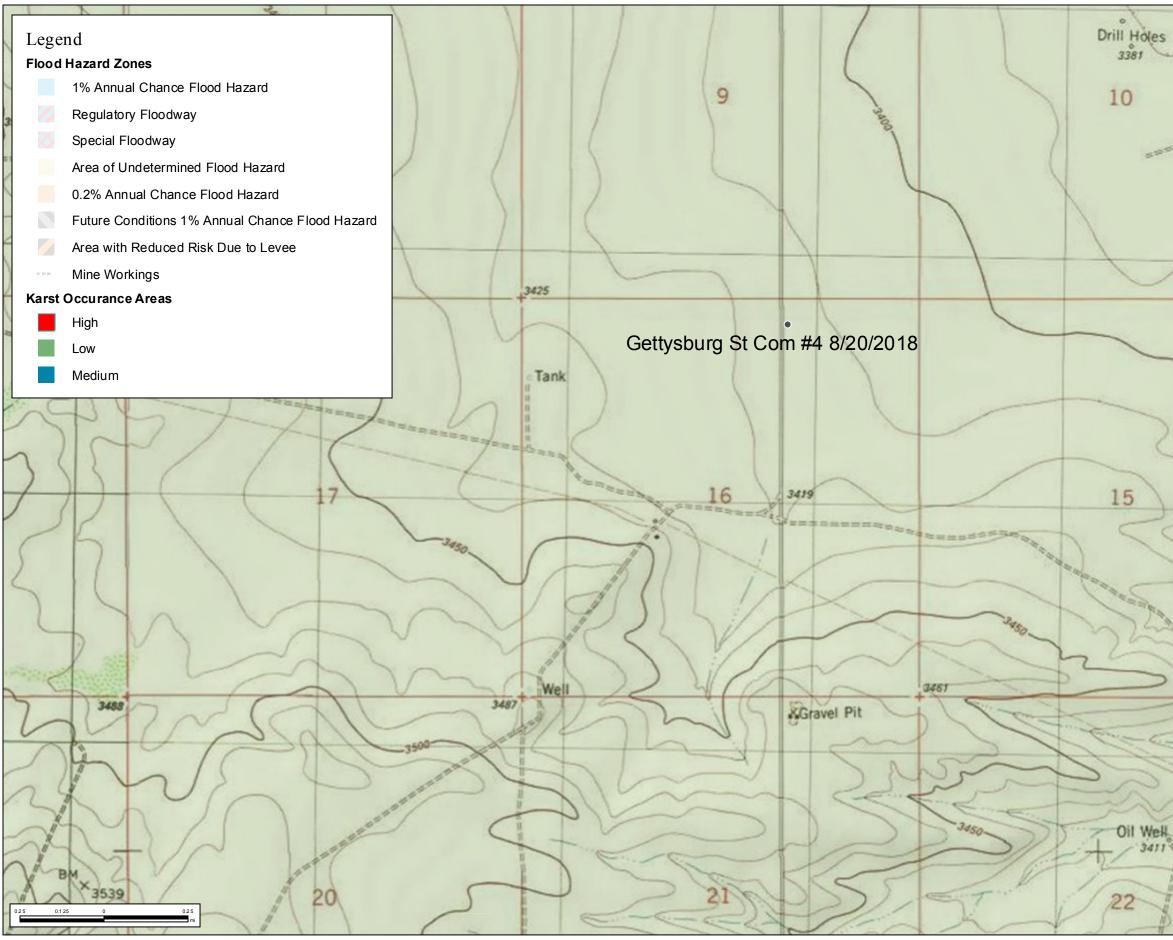
Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

 A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
must be notified 2 days prior to liner inspection)
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
Description of 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 OCD rule 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.
Printed Name: Title:
Signature: Sheldon guitan Date:
email: Telephone:
OCD Only
Received by: Date:
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: Date:
Printed Name:

APPENDIX B

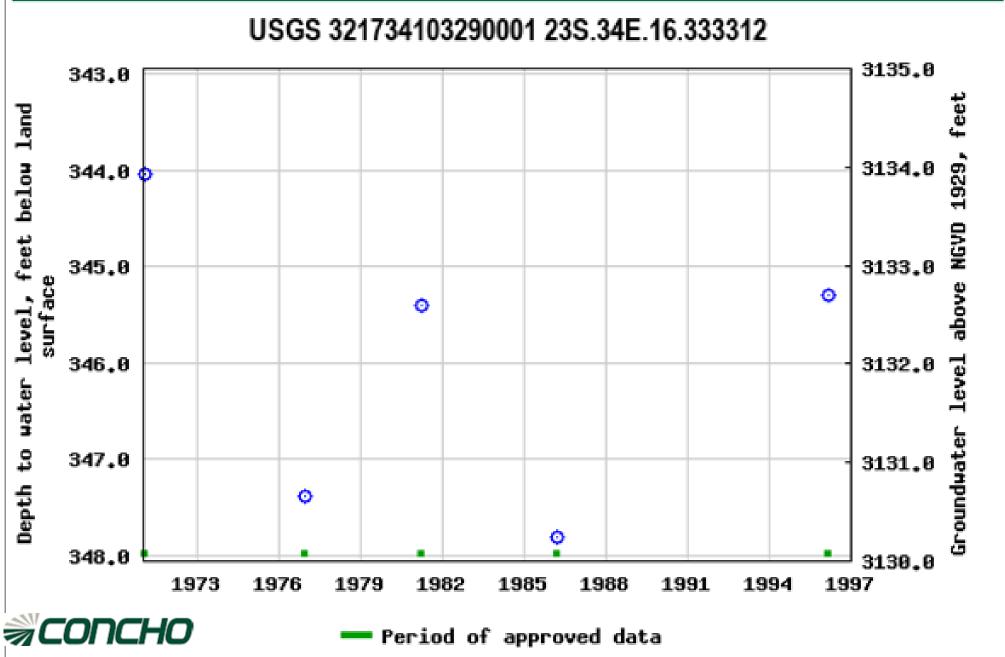




ArcGIS Web Map N 11 3372 1300-14 3421

Gettysburg State Com #004H

≊USGS



APPENDIX C



January 29, 2019

LUPE CARRASCO MMX 2737 PECOS HWY CARLSBAD, NM 88220

RE: GETTYSBURG STATE COM #4

Enclosed are the results of analyses for samples received by the laboratory on 01/23/19 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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/ga/lab_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.

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. Keine

Celey D. Keene Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: S (H900239-01)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	89.1	% 41-142							
Surrogate: 1-Chlorooctadecane	92.2	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: W1 (H900239-02)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	92.1	% 41-142	,						
Surrogate: 1-Chlorooctadecane	89.9	% 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: N (H900239-03)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	85.9	% 41-142	,						
Surrogate: 1-Chlorooctadecane	83.5	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: E1 (H900239-04)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	91.2	% 41-142	,						
Surrogate: 1-Chlorooctadecane	91.5	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B1 (H900239-05)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	89.9	% 41-142							
Surrogate: 1-Chlorooctadecane	89.1	% 37.6-14	7						

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MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B2 (H900239-06)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	92.6	% 41-142	,						
Surrogate: 1-Chlorooctadecane	91.0	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B3 (H900239-07)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 73.3-12	9						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	91.5	% 41-142	,						
Surrogate: 1-Chlorooctadecane	89.0	% 37.6-14	7						

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MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B4 (H900239-08)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	92.5	% 41-142	,						
Surrogate: 1-Chlorooctadecane	91.8	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B5 (H900239-09)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/25/2019	ND	1.65	82.4	2.00	0.819	
Toluene*	<0.050	0.050	01/25/2019	ND	1.65	82.5	2.00	1.99	
Ethylbenzene*	<0.050	0.050	01/25/2019	ND	1.62	80.8	2.00	0.430	
Total Xylenes*	<0.150	0.150	01/25/2019	ND	5.03	83.8	6.00	0.904	
Total BTEX	<0.300	0.300	01/25/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	86.2	% 41-142							
Surrogate: 1-Chlorooctadecane	85.7	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B6 (H900239-10)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	90.1	% 73.3-12	9						
Chloride, SM4500Cl-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	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	87.5	% 41-142							
Surrogate: 1-Chlorooctadecane	88.9	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B7 (H900239-11)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.8	% 73.3-12	9						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	94.5	% 41-142	,						
Surrogate: 1-Chlorooctadecane	93.6	% 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/23/2019	Sampling Date:	01/23/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B8 (H900239-12)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.6	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	01/24/2019	ND	432	108	400	0.00	
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	01/25/2019	ND	218	109	200	0.332	
DRO >C10-C28*	<10.0	10.0	01/25/2019	ND	229	114	200	8.22	
EXT DRO >C28-C36	<10.0	10.0	01/25/2019	ND					
Surrogate: 1-Chlorooctane	86.2	% 41-142	2						
Surrogate: 1-Chlorooctadecane	83.8	% 37.6-14	7						

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Notes and Definitions

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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	NUM VV		BILL TO	ANALYSIS REQUEST
Project Manager:	Cape Carrased		P.O. #:	
Address:	7		Company: COC	
City:	State:	Zip:	Attn: Sheldon H.	9
Phone #:	Fax #:		Address:	
Project #:	Project Owner:	er:	City:	12.
Project Name:	Gettesburg State Co	on the	State: Zip:	
Project Location:			Phone #:	d 91
Sampler Name:			Fax #:	
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER : ACID/BASE: ICE / COOL OTHER : DATE	BJEX Ja TPH
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ís.	BI			
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PLEASE NOTE: Liability and (analyses. All claims including t service. In no event shall Card	PLEASE NOTE: Liability and Damages. Cardina's liability and client's exclusive remedy for any cleim 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 demonstrated waved unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be lable for incident or consequental damages, including without imitation, business intervent by cardinal within 50 days after completion of the applicable service. In no event shall Cardinal be lable for incident of consequental damages, including without imitation, business intervent by cardinal without by client, test service. In no event shall cardinal be done to consequental damages, including without imitation, business intervent by client the chine in the	or any claim arising whether based in contract be deemed waived unless made in writing an ling without limitation, business interruptions, in contract and in the second second second second second second second second second second second s	t or tort, shall be limited to the amount paid by the clie of received by Cardinal within 30 days after completion loss of use, or loss of profits incurred by client, its su- is become use of the state of the state state of the state of the is become used with the state state of the state of the state of the state is become used with the state state of the state of the state of the state is become used with the state of the state	nr for the C no f the applicable social
Relinquished By:		Received By:	Phone Result: Fax Result: REMARKS:	Phone Result: Ves No Add'I Phone #: Fax Result: Yes No Add'I Fax #: REMARKS:
Refinquished By:	Date: Time:	Received By:		
Delivered By: (Circle One)	(Circle One)		tion CHECKED BY:	
Sampler - UPS -	Bus - Other: 20,1% #9			
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	NIMIN		BILL TO		ANALYSIS R	REQUEST
Project Manager:	Cupi Carrasco		P.O. #:			
Address:	/		Company: COG		6	
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Phone #:	Fax #:		Address:	,	.41 24	
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Project Location:			Phone #:	5	de N	
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FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	22103	> 6	
Lab I.D. H900239	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER : ACID/BASE: ICE / COOL OTHER : DATE	TIME Chlor,	BJEX N TPHBOIS	
11	40		1/23/8	X	VV	
7						
PLEASE NOTE: Liability and analyses. All claims including service. In no event shall Car	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 sorvice. In or event shall Cardinal be liable for indential or consequential damages, including whother thanks business interruptors, loss of track, or loss of profits incurred by client, its subsidiaries, artistate or encoester service or in or related to an of consequential damages, houring without limitation, usiness interruptors, loss of use, or loss of profits incurred by client, its subsidiaries, artistate or encoester service or in or related to an of consequential damages, houring without limitation, usiness interruptors, loss of used upon any of the above stated ranks or to the avoid and the advisor of the above stated ranks or to the above attract resonance of convices to heavings.	ry claim arising whether based in contrac leemed waived unless made in writing an without limitation, business interruptions, rutin-t according of whether such claim	t or tort, shall be limited to the amount paid t or tort, shall be limited to the amount paid in received by Cardinal within 30 days after loss of use, or loss of profits incurred by cil- loss of use, or loss of profits incurred by cil- is toroad more any of the above stated reas	by the client for the completion of the applicable ent, its subsidiaries, ions or otherwise	-	
Relinquished By:	Date: 1/23/15 Time: 2:1/5	Received By:	Anson	S:	Yes INO Add'I Phone #: Yes INO Add'I Fax #:	
Refinquished By:		Received By:				
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282



January 29, 2019

LUPE CARRASCO MMX 2737 PECOS HWY CARLSBAD, NM 88220

RE: GETTYSBURG STATE COM #4

Enclosed are the results of analyses for samples received by the laboratory on 01/28/19 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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/ga/lab_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.

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. Keine

Celey D. Keene Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/28/2019	Sampling Date:	01/28/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: B1 (H900286-01)

BTEX 8021B	mg,	′kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2019	ND	1.92	96.2	2.00	1.75	
Toluene*	<0.050	0.050	01/29/2019	ND	1.98	98.8	2.00	1.01	
Ethylbenzene*	<0.050	0.050	01/29/2019	ND	2.00	100	2.00	0.497	
Total Xylenes*	<0.150	0.150	01/29/2019	ND	6.11	102	6.00	0.426	
Total BTEX	<0.300	0.300	01/29/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/28/2019	ND	432	108	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	01/29/2019	ND	222	111	200	3.58	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	244	122	200	16.4	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					
Surrogate: 1-Chlorooctane	88.3	% 41-142	2						
Surrogate: 1-Chlorooctadecane	83.9	% 37.6-14	7						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

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

Cardinal Laboratories

*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Project Manager:	XUANA		PO #:		ANALYSIS REQUEST	
Address:	Color allowed		Company:			
City:	State:	Zip:	don			
Phone #:	Fax #:		Address:			
Project #:	Project Owner:	ä	City:			
Project Name:	rettysburg State Co	on #4	State: Zip:			
Project Location:	1		Phone #:	5		
Sampler Name:			Fax #:	17		
FOR LAB USE ONLY		MATRIX	PRESERV. SAMPLING	c 'd		
Lab I.D.	Sample I.D.	G)RAB OR (C)OMP. CONTAINERS GROUNDWATER VASTEWATER GOIL DIL GLUDGE	DTHER : CID/BASE: CE / COOL DTHER :	BTEX TPH Chlori		
1	01	R	b/g2//	RRX		
analyses. All claims including tho service. In no event shall Cardina affiliates or successors arising out	T-C+C-F UPUMP and UPUMP and UPUMP and UPUMP and UPUMP and UPUMP and UPUMP analyses. All claims ansing whether based in contract or tons, shall be limited to the amount paid by the fealt 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 whith 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 uses of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	any claim ansing whether based in contract deemed waived unless made in writing and g without limitation, business interruptions, Cardinal, regardless of whether such claim i	. or fort, shall be limited to the amount paid by t i received by Cardinal within 30 days after com- loss of use, or loss of profits incurred by client, is based upon any of the above stated reasons	ne client for the pletion of the applicable its subsidiaries, or otherwise.		
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January 29, 2019

LUPE CARRASCO MMX 2737 PECOS HWY CARLSBAD, NM 88220

RE: GETTYSBURG STATE COM #4H

Enclosed are the results of analyses for samples received by the laboratory on 01/28/19 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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/ga/lab_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.

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. Keine

Celey D. Keene Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/28/2019	Sampling Date:	01/28/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: E2 (H900287-01)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2019	ND	1.92	96.2	2.00	1.75	
Toluene*	<0.050	0.050	01/29/2019	ND	1.98	98.8	2.00	1.01	
Ethylbenzene*	<0.050	0.050	01/29/2019	ND	2.00	100	2.00	0.497	
Total Xylenes*	<0.150	0.150	01/29/2019	ND	6.11	102	6.00	0.426	
Total BTEX	<0.300	0.300	01/29/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/28/2019	ND	432	108	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	01/29/2019	ND	222	111	200	3.58	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	244	122	200	16.4	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					
Surrogate: 1-Chlorooctane	91.0	% 41-142	,						
Surrogate: 1-Chlorooctadecane	85.9	% 37.6-14	7						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



MMX LUPE CARRASCO 2737 PECOS HWY CARLSBAD NM, 88220 Fax To: (575) 236-6201

Received:	01/28/2019	Sampling Date:	01/28/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #4H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG		

Sample ID: W2 (H900287-02)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2019	ND	1.92	96.2	2.00	1.75	
Toluene*	<0.050	0.050	01/29/2019	ND	1.98	98.8	2.00	1.01	
Ethylbenzene*	<0.050	0.050	01/29/2019	ND	2.00	100	2.00	0.497	
Total Xylenes*	<0.150	0.150	01/29/2019	ND	6.11	102	6.00	0.426	
Total BTEX	<0.300	0.300	01/29/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.6	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/28/2019	ND	432	108	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	01/29/2019	ND	222	111	200	3.58	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	244	122	200	16.4	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					
Surrogate: 1-Chlorooctane	92.5	% 41-142	,						
Surrogate: 1-Chlorooctadecane	87.4	% 37.6-14	7						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

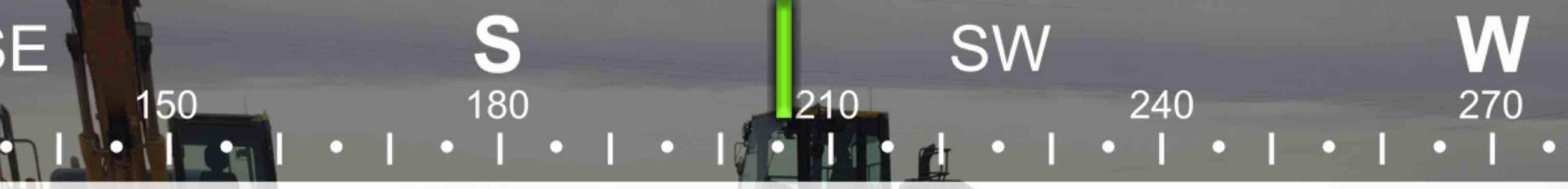
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analyses. All claims including these for medigence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal with 00 days after completion of the applicable services. In one went shall Cardinal be liable for indeemal or consequented tarrages, including whoul imitation, usainess interruptions, less of uses of profits incurred by cardinals entities of whether such claims interruptions, less of uses of profits incurred by cardinals. Relinquished By: Date: Received By: Received By: Phone Result: Imme: No Add'I Phone #: Delivered By: Date: Reperved By: Reperved By: Reperved By: Phone Result: Imme: No Add'I Fax #: Delivered By: Circle One) Time: No Sample Condition CHECKED BY: Fax Result: Imple: Add'I Fax #: Sampler - UPS - Bus - Other: U.S.J.J.W.Y. Sample Condition CHECKED BY: Mittaget Structure in Condition CHECKED BY:	182/1		CID/BASE: PRESERV.	Fax #:	Settigsburg State Com #44 State: Zip: Phone #:	Project Owner: City:	Address:	State: Zip: Attn: Sie Gon H.	buft land sed	XIMINI	101 East Marland, Hobbs, NM 88240 575) 393-2326 FAX (575) 393-2476	A BORATORIES <u>CHAIN-OF-CUSTODY AND ANALYSIS REQUEST</u>

APPENDIX D





29 Jan 2019, 11:42:25





29 Jan 2019, 11:41:28