



December 18, 2020

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

Kelsey Wade
Bureau of Land Management, CFO
620 E. Green Street
Carlsbad, NM 88220

Closure Report

SL East 30 Federal COM #002H

Incident #: NRM2017839486

DOR: June 5, 2020

GPS: 32.640139 -103.798660

**Unit Letter P, Section 19, Township 19 South, Range 32 East
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 due to a vessel rupture at the SL East 30 Federal COM #002H tank battery. The release is located in Unit Letter P, Section 19, Township 19 South and Range 32 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.640139 North and -103.798660 West.

BACKGROUND

The release was discovered on June 5, 2020. A C-141 initial report was submitted to the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management (BLM). The C-141 is presented in Appendix A. A vessel rupture resulted in the release of approximately ten (10) barrels (bbls) of produced water and thirty (30) bbls of oil. A vacuum truck was utilized to recover twenty-five (25) bbls of produced water and nine (9) bbls of oil.

GROUNDWATER AND REGULATORY FRAMEWORK

According to the New Mexico Office of the State Engineer (NMOSE) groundwater in the project vicinity is approximately three-hundred and forty-five (345) feet below ground surface (BGS). According to the United State Geological Survey (USGS) groundwater in the project vicinity is approximately six-hundred and fifty (650) feet 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

PROPOSED WORK PLAN

- The impacted area was excavated to depths from 0.5 (one-half) to 2 (two) feet BGS.
- All of the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- Confirmation soil samples were taken from the bottom and sidewalls of the excavated areas per NMED 19.15.29.13.
- The excavation will be backfilled with clean “like” material and contoured to match the surrounding terrain.

SITE RECLAMATION AND RESTORATION

All of the fluid remained on the well pad. No reclamation activities will be required at this site.

CLOSURE REQUEST

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the SL East 30 Federal COM #002H incident that occurred on June 5, 2020.

Should you have any questions or concerns on the proposed remediation activities, please do not hesitate to contact me.

Sincerely,

Sincerely,

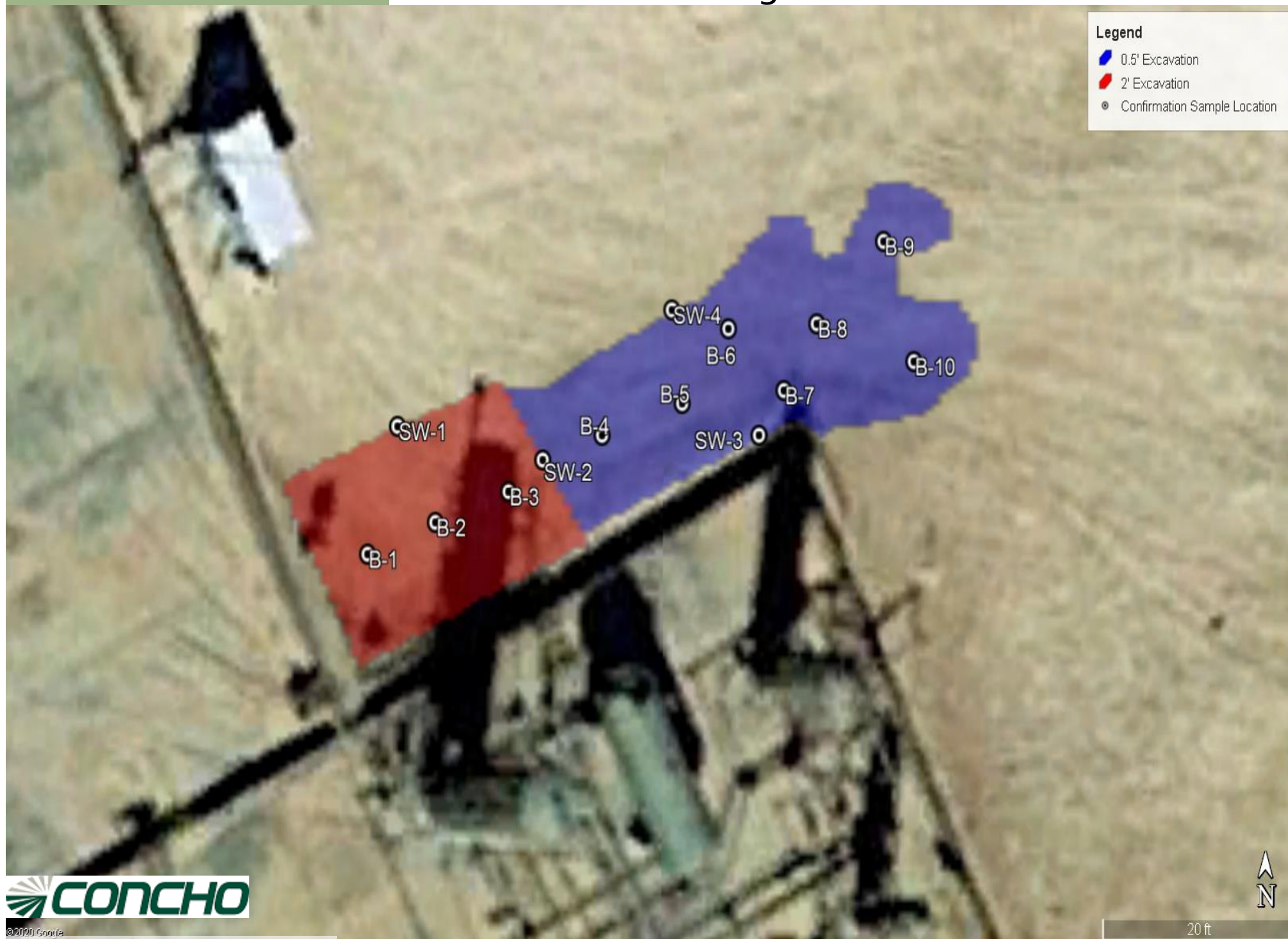


Sheldon L. Hitchcock
HSE Coordinator
shitchcock@concho.com

FIGURES

June 5, 2020

SL East 30 Federal #002H



TABLES

Table 1
COG Operating LLC.
SL East 30 Federal #002H
Lea County, New Mexico

Sample ID	Sample Depth (ft)	Sample Date	Soil Status		TPH (mg/kg)							Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total	GRO	DRO	Total			
NMOCD RRAL Limits (mg/kg)					-	-	-	2,500	-	-	1,000	10	50	20,000
B-1	2	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	192
B-2	2	12/17/2020	X		<10.0	184	49.1	233.1	<10.0	184	184.0	<0.050	<0.300	368
B-3	2	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	96
B-4	0.5	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	144
B-5	0.5	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	176
B-6	0.5	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	160
B-7	0.5	12/17/2020	X		<10.0	141	26.9	167.9	<10.0	141	141.0	<0.050	<0.300	176
B-8	0.5	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	208
B-9	0.5	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	272
B-10	0.5	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	208
SW-1	N/A	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	64
SW-2	N/A	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	96
SW-3	N/A	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	176
SW-4	N/A	12/17/2020	X		<10.0	<10.0	<10.0	0.0	<10.0	<10.0	0.0	<0.050	<0.300	48

APPENDIX A

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

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

Latitude _____ Longitude _____
(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)

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

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? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice 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

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: <u>Sheldon Nitan</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: _____	Date: _____

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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> 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 ½-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.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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 Nitan Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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 Nitan Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

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.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☐ 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)
- ☐ 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 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. 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 Hittman 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: Jennifer Nobui Date: _____

Printed Name: _____ Title: _____

APPENDIX B



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00639 POD1	CP	LE		3	1	20	19S	32E		613029	3612880*	897	350	345	5

Average Depth to Water: **345 feet**

Minimum Depth: **345 feet**

Maximum Depth: **345 feet**

Record Count: 1

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 612637

Northing (Y): 3612073

Radius: 1000

*UTM location was derived from PLSS - see Help

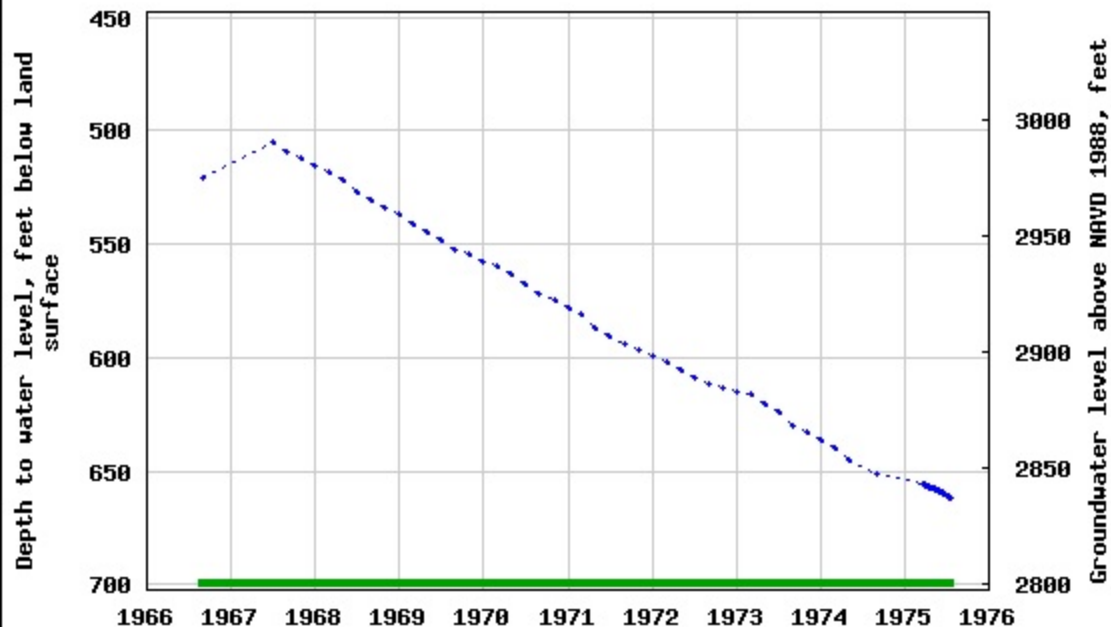
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/18/20 1:02 PM

Page 1 of 1

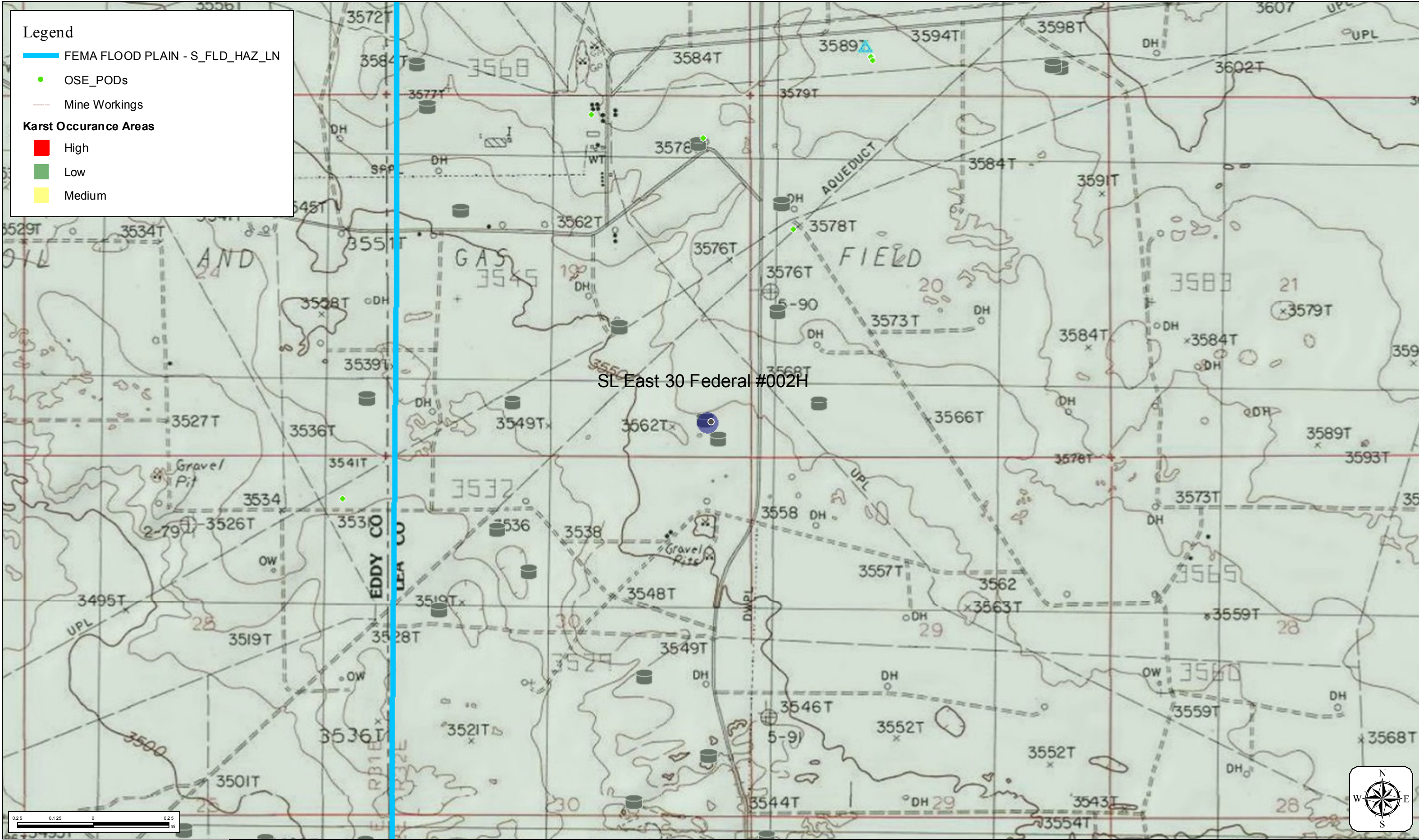
WATER COLUMN/ AVERAGE
DEPTH TO WATER

USGS 323712103491001 19S.32E.31.114





SL East 30 Federal #002H



APPENDIX C



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

December 18, 2020

SHELDON HITCHCOCK

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: SL EAST 30 FED #1

Enclosed are the results of analyses for samples received by the laboratory on 12/17/20 13:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 1 2' (H003302-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTX	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	12/18/2020	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 91.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.5 % 42.2-156

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



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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 2 2' (H003302-02)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	12/18/2020	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/17/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	184	10.0	12/17/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	49.1	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 94.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 101 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 3 2' (H003302-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	12/18/2020	ND	400	100	400	0.00	

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	12/17/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 88.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.0 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 4 0.5' (H003302-04)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	12/18/2020	ND	400	100	400	0.00	

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	12/18/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/18/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/18/2020	ND					

Surrogate: 1-Chlorooctane 85.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.8 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 5 0.5' (H003302-05)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEX	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	12/18/2020	ND	400	100	400	0.00	

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	12/18/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/18/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/18/2020	ND					

Surrogate: 1-Chlorooctane 91.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 6 0.5' (H003302-06)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792		
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468		
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885		
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387		
Total BTEx	<0.300	0.300	12/17/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	12/18/2020	ND	400	100	400	0.00	

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	12/18/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/18/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/18/2020	ND					

Surrogate: 1-Chlorooctane 79.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 7 0.5' (H003302-07)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792		
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468		
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885		
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387		
Total BTEx	<0.300	0.300	12/17/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	12/18/2020	ND	400	100	400	0.00		

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	12/18/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	141	10.0	12/18/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	26.9	10.0	12/18/2020	ND					

Surrogate: 1-Chlorooctane 86.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.8 % 42.2-156

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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 8 0.5' (H003302-08)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	12/18/2020	ND	400	100	400	0.00	

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	12/18/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/18/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/18/2020	ND					

Surrogate: 1-Chlorooctane 92.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 9 0.5' (H003302-09)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	12/18/2020	ND	400	100	400	0.00		

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	12/18/2020	ND	182	91.2	200	2.71	
DRO >C10-C28*	<10.0	10.0	12/18/2020	ND	180	89.8	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	12/18/2020	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-144

Surrogate: 1-Chlorooctadecane 101 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: B - 10 0.5' (H003302-10)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	12/18/2020	ND	400	100	400	0.00		

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	12/17/2020	ND	226	113	200	0.983	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	220	110	200	2.79	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 94.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SW - 1 (H003302-11)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/18/2020	ND	400	100	400	0.00		

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	12/17/2020	ND	226	113	200	0.983	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	220	110	200	2.79	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 113 % 44.3-144

Surrogate: 1-Chlorooctadecane 114 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SW - 2 (H003302-12)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTX	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	12/18/2020	ND	400	100	400	0.00		

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	12/17/2020	ND	226	113	200	0.983	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	220	110	200	2.79	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 117 % 44.3-144

Surrogate: 1-Chlorooctadecane 117 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SW - 3 (H003302-13)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTEx	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	12/18/2020	ND	400	100	400	0.00		

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	12/17/2020	ND	226	113	200	0.983	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	220	110	200	2.79	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-144

Surrogate: 1-Chlorooctadecane 104 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 12/17/2020
Reported: 12/18/2020
Project Name: SL EAST 30 FED #1
Project Number: NONE GIVEN
Project Location: LEA CO NM

Sampling Date: 12/17/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SW - 4 (H003302-14)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/17/2020	ND	1.99	99.7	2.00	0.0792	
Toluene*	<0.050	0.050	12/17/2020	ND	1.90	95.1	2.00	0.468	
Ethylbenzene*	<0.050	0.050	12/17/2020	ND	1.99	99.4	2.00	0.0885	
Total Xylenes*	<0.150	0.150	12/17/2020	ND	5.68	94.7	6.00	0.387	
Total BTX	<0.300	0.300	12/17/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/18/2020	ND	400	100	400	0.00	

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	12/17/2020	ND	226	113	200	0.983	
DRO >C10-C28*	<10.0	10.0	12/17/2020	ND	220	110	200	2.79	
EXT DRO >C28-C36	<10.0	10.0	12/17/2020	ND					

Surrogate: 1-Chlorooctane 96.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



One Concho Center/600 Illinois Avenue/Midland, Texas Tel (432) 683-7443

Analysis Request of Chain of Custody Record

Client Name:		COG-Artesia		Site Manager:		Sheldon Hitchcock	
Project Name:		51 East 30 Fed #1					
Project Location: (county, state)		Lea, NM		Project #:			
Invoice to:		Sheldon Hitchcock					
Receiving Laboratory:		Cardinal		Sampler Name:		Sheldon Hitchcock	
Comments:							

LAB #	LAB USE ONLY	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	(C)omposite/(G)rab	ANALYSIS REQUEST (Circle or Specify Method No.)
			YEAR	DATE	TIME	WATER	SOIL	HCL			
1		B-1 2'	2020	12/17	11:20		X			1	X
2		B-2 2'			11:25			X		1	X
3		B-3 2'			11:30					1	X
4		B-4 0.5'			11:35					1	X
5		B-5 0.5'			11:40					1	X
6		B-6 0.5'			11:45					1	X
7		B-7 0.5'			11:50					1	X
8		B-8 0.5'			11:55					1	X
9		B-9 0.5'			12:05					1	X
10		B-10 0.5'			12:10					1	X

Requisitioned by:	Date:	Time:	Received by:	Date:	Time:
Sheldon Hitchcock			Sheldon Hitchcock	12-17-20	1355
Requisitioned by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	LAB USE ONLY
Sample Temperature	1.1°C
#113 TO	

REMARKS:
<input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr
<input type="checkbox"/> Rush Charges Authorized
<input type="checkbox"/> Special Report Limits or TRRP Report

Hand DELIVERED - FEDEX UPS Tracking # _____

ORIGINAL COPY



One Concho Center 800 Illinois
Avenue Midland, Texas
Tel (432) 683-7443

Analysis Request of Chain of Custody Record

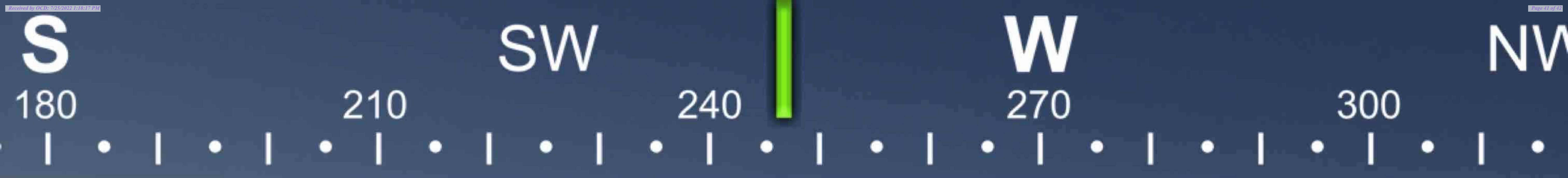
Client Name: COG-Artesia		Site Manager: Sheldon Hitchcock	
Project Name: SL East 30 Fed #1		Project #:	
Project Location: (county, state) Lee, NM		Project #:	
Invoice to: Sheldon Hitchcock		Sampler Name: Sheldon Hitchcock	
Receiving Laboratory: Carlin		Comments:	
LAB # H00332		LAB USE ONLY	
SAMPLE IDENTIFICATION		SAMPLING	
LAB USE ONLY		YEAR: 2020	
DATE		TIME	
11 50-1		12:17 12:15	
12 50-2		12:20 12:20	
13 50-3		12:25 12:25	
14 50-4		12:30 12:30	
WATER		SOIL	
HCL		HNO ₃	
ICE		PRESERVATIVE METHOD	
# CONTAINERS		(C)omposite/(G)rab	
TPH 8015M (GRO - DRO - MRO)		BTX 8021B	
Chloride			
LAB USE ONLY		LAB USE ONLY	
Sample Temperature		Sample Temperature	
1.1°C		1.1°C	
#11370		#11370	
REMARKS:		REMARKS:	
RUSH: Same Day 24 hr 48 hr 72 hr		RUSH: Same Day 24 hr 48 hr 72 hr	
Rush Charges Authorized		Rush Charges Authorized	
Special Report Limits or TRRP Report		Special Report Limits or TRRP Report	
Relinquished by: [Signature]		Relinquished by: [Signature]	
Date: Time:		Date: Time:	
Received by: [Signature]		Received by: [Signature]	
Date: Time:		Date: Time:	
Relinquished by: [Signature]		Relinquished by: [Signature]	
Date: Time:		Date: Time:	

ORIGINAL COPY

APPENDIX D

COG OPERATING LLC
SL EAST 30 FEDERAL COM #2H
UL P SEC.19-T19S-R32E
520' FSL & 530' FEL
LEA COUNTY, NM
API #30-025-42524
SHL: NMNM-025566 BHL: NMNM-59045
UL "H": NMNM-0107698 UL "A": NMNM-01218
COM #





☀ 247°SW (T) ● 32.639887°, -103.798856° ±32ft ▲ 3657ft



17 Dec 2020, 12:20:39

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 128474

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 128474
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved. However, please note that the depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old. Two exceedances (>100 mg/kg TPH) were detected from confirmation soil samples. Please make sure 19.15.29.13 NMAC is implemented when completing P&A at this site.	7/27/2022