

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 EOG Resources	OGRID 7377
Contact Name James Kennedy	Contact Telephone (432) 258-4346
Contact email James_Kennedy@eogresources.com	Incident # (assigned by OCD) nTO1428133621
Contact mailing address 5509 Champions Drive Midland, TX 79706	

Location of Release Source

Latitude 32.1876° Longitude -103.528411°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Madera Pipeline	Site Type Pipeline off pad and along the haul road
Date Release Discovered Unknown	API# (if applicable)

Unit Letter	Section	Township	Range	County
K	25	T24S	R33E	Lea

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 checked="" type="checkbox"/> Produced Water	Volume Released (bbls) unknown	Volume Recovered (bbls) unknown
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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: According to our limited records, There was a small produced water leak from a poly line. CRA went out and collected soil samples and the north wall near a pipeline ROW had elevated chlorides concentrations. Area is on north side of lease road between Madera Ridge 25 # 1 and Vaca Lane.

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 checked="" 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 checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" 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: <u>James Kennedy</u>	Title: <u>Environmental Specialist</u>
Signature: <u>James F Kennedy</u>	Date: <u>03/01/2022</u>
email: <u>James_Kennedy@eogresources.com</u>	Telephone: <u>(432) 848-9146</u>
<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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" 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: _____ James F. Kennedy _____ Title: _____ Env. Specialist _____

Signature: _____ *James F Kennedy* _____ Date: _____ 03/01/2022 _____

email: _____ james_kennedy@eogresources.com _____ Telephone: _____ 432-258-4346 _____

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: _____ 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: James F. Kennedy Title: Env. Specialist
Signature: James F Kennedy Date: 03/01/2022
email: james_kennedy@eogresources.com Telephone: 432-258-4346

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: Brittany Hall Date: 1/24/2023

Printed Name: Brittany Hall Title: Environmental Specialist



**CONESTOGA-ROVERS
& ASSOCIATES**

6121 Indian School Road NE, Suite 200
Albuquerque, New Mexico 87110
Telephone: (505) 884-0672 Fax: (505) 884-4932
www.CRAworld.com

November 6, 2014

Reference No. 088210/02

Tomáš 'Doc' Oberding, PhD
Environmental Specialist – New Mexico Oil Conservation Division
Energy, Minerals and Natural Resources Department
1625 N. French Dr.
Hobbs, NM 88240

Dear Dr. Oberding:

Re: Summary of Soil Sampling
Madera Pipeline
1RP-3368-0
Lea County, New Mexico

On behalf of EOG Resources, Inc. (EOG), Conestoga Rovers and Associates (CRA), performed a subsurface assessment at the above referenced location on July 29, 2014 and October 13, 2014. The Site is located at coordinates 32.1876 N, 103.528411 W and is west of Jal, New Mexico, in Lea County (see Figure 1). The case number is 1RP-3368-0. This report is being submitted on behalf of EOG.

The site is currently an active polyline located alongside a haul road. The Site's topography is relatively flat, covered with windblown sand, sparse vegetation, and mesquite trees. A release occurred when a polyline leaked produced water. Based on the C-141 form, the release was estimated to be an unknown volume, with an unknown volume recovered. Contaminates of concern are chlorides, BTEX, and TPH.

Most of the impacted soil had been excavated at the time that CRA performed the initial sampling event (July 2014). The soil stockpile was placed on plastic sheeting. The excavation has yet to be backfilled with clean soil at the time of CRA's assessment. Presented below is a summary of the July and October 2014 sampling events.

Equal
Employment Opportunity
Employer



**CONESTOGA-ROVERS
& ASSOCIATES**

November 6, 2014

Reference No. 088210/02

- 2 -

1.0 Site Risk Ranking

The New Mexico Oil Conservation Division (NMOCD) has a risk ranking system to establish the regulatory limits for petroleum hydrocarbons. The risk ranking system is based on the depth to groundwater, the presence of wellhead protection areas, and the distance of the site to surface water bodies.

According to Tomáš 'Doc' Oberding, PhD with NMOCD, the depth to groundwater in the vicinity of the site is estimated to be approximately 50'-100' feet (ft) below ground surface (bgs). There are no well head protection areas in the vicinity of the site. There are no surface water bodies within a 1000'. Based on this, the NMOCD Risk Ranking score for the site is 10. The Recommended Remediation Action Levels (RRALs) for the site are 1000 parts per million (ppm) for TPH, 10 ppm for benzene, 50 ppm for total BTEX. The recommended concentration for chlorides is 500 ppm (see table below).

New Mexico Oil Conservation Division Spill Guidelines	
Ranking Criteria	Score
Depth to Ground Water (less than 50 ft)	10
Wellhead Protection Area	0
Distance to Surface Body Water	10
Ranking Criteria Total Score	10
*Because the ranking criteria total score is 10, NMOCD RRALs are 10 ppm for benzene, 50 ppm for BTEX, 1000 ppm for total TPH, and 500 ppm for chlorides.	

2.0 Sampling Activities

The sampling activities performed at the Site consisted of hand-shovel digging, hand auguring, and backhoe excavation to depths of 3-5 feet (ft) below ground surface (BGS).



**CONESTOGA-ROVERS
& ASSOCIATES**

November 6, 2014

Reference No. 088210/02

- 3 -

Sampling tools were cleaned with an Alconox wash solution and clean water rinse prior to collecting each soil sample. Field screening was performed for chlorides using Hach Chloride Test strips and total petroleum hydrocarbons (TPH) using a Petroflag Hydrocarbon analysis kit.

Following field screening, soil samples were collected for laboratory analysis of chlorides by EPA Method 300.0, TPH by EPA Method 8015, and benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8021. Soil samples were submitted under chain of custody documentation via overnight delivery to Trace Analysis Laboratories of Midland, Texas and Xenco Laboratories of Odessa, Texas

Initial soil sampling performed on July 29, 2014, indicated that soil concentrations of chlorides, BTEX and TPH were below regulatory limits with the exception of the sample collected from the north wall. This sample indicated a chloride concentration of 1110 ppm (see Figure 2). Due to this, additional soil excavation and sampling was performed on October 13, 2013. A soil sample was collected from the newly excavated north wall and analyzed for chlorides by EPA Method 300.0. The result of the laboratory analyses was 3.42 ppm (see Figure 2).



**CONESTOGA-ROVERS
& ASSOCIATES**

November 6, 2014

Reference No. 088210/02

- 4 -

Based on the results of the laboratory analyses, CRA requests No Further Action be required for this site. If you have any questions or comments with regards to this request for closure, please do not hesitate to contact our Albuquerque office at (505) 884-0672.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Reviewed by:

Steven Perez
Staff Scientist

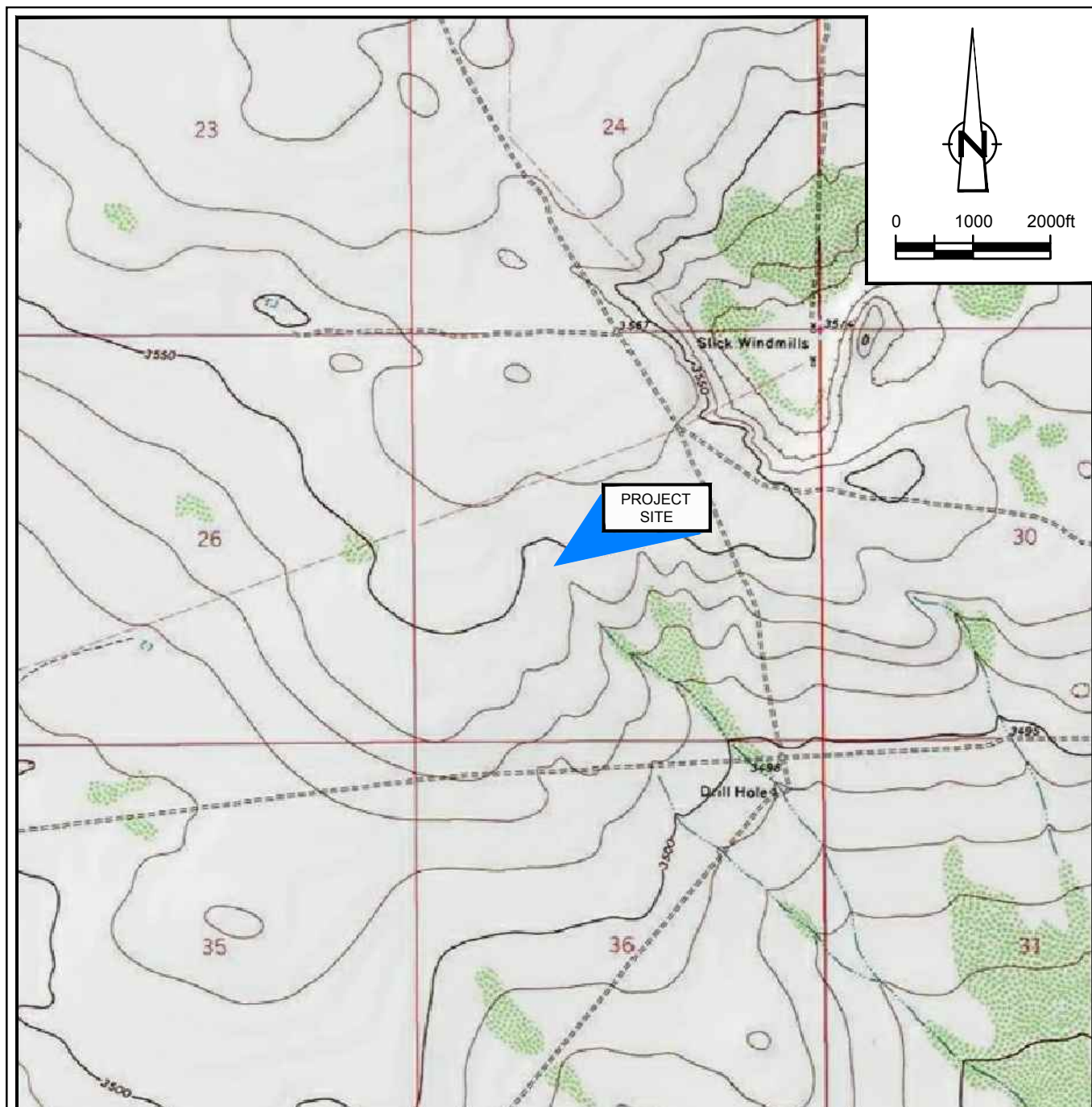
Bernard Bockisch, PMP
Senior Project Manager

BB/mc/1
Encl. (5)

Attachments:

Figure 1. Site Location Map
Figure 2. Site Detail Map
Appendix A. Laboratory Analytical Results

Figures



SOURCE: USGS 7.5 MINUTE QUAD
"BELL LAKE AND WOODLEY FLAT, NEW MEXICO"

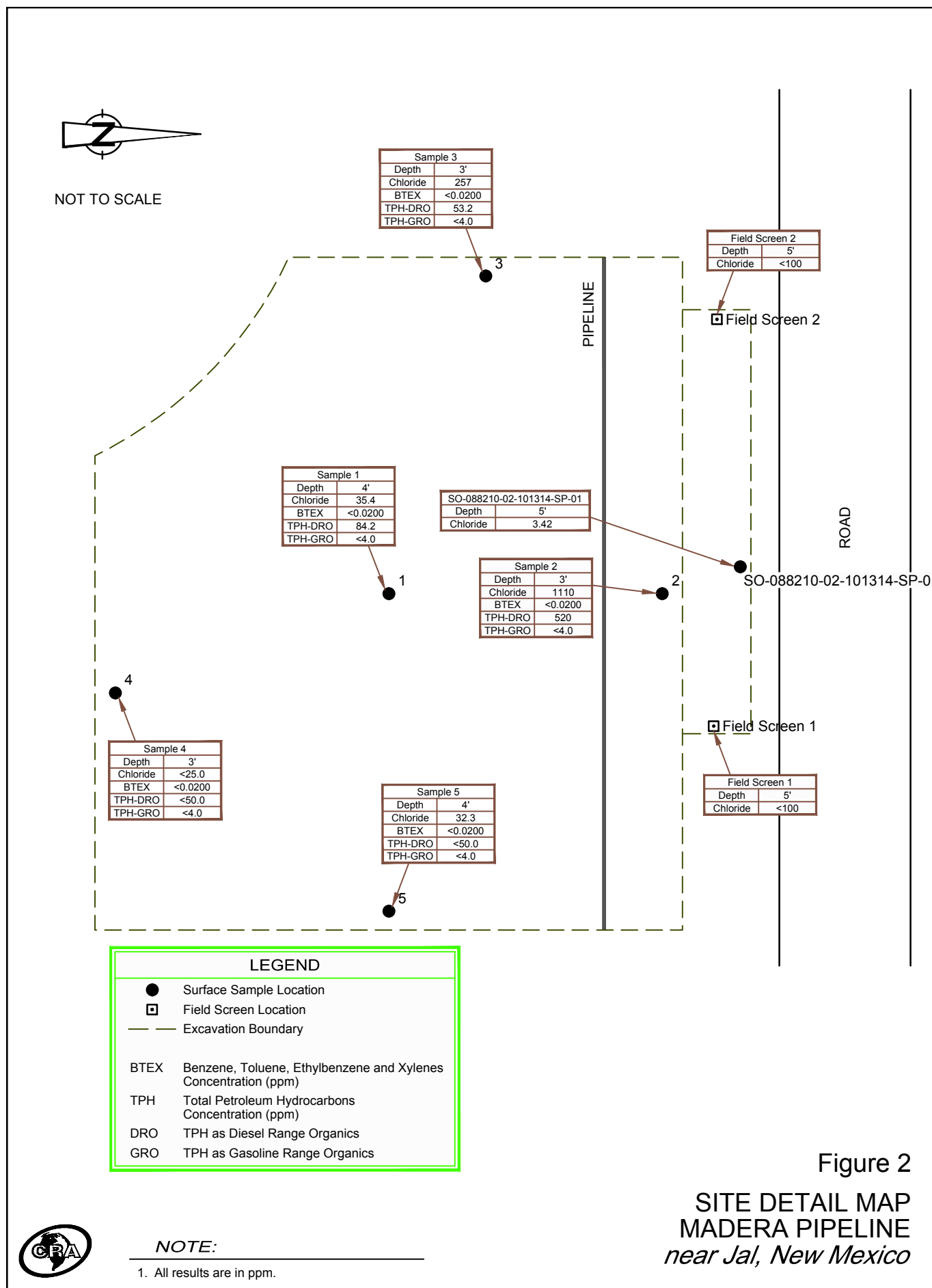
LAT/LONG: 32.1875° NORTH, 103.5286° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP
MADERA PIPELINE
near Jal, New Mexico



088210-02(PRES000)GN-DL001 NOV 3/2014



Appendix A

Laboratory Analytical Results

Report Date: August 5, 2014

Work Order: 14073103

Page Number: 1 of 2

Summary Report

Steven Perez
CRA-Midland
2135 South Loop 250 West
Midland, TX 79703

Report Date: August 5, 2014

Work Order: 14073103



Project Location: Jal, NM
Project Name: EOG-Madera Pipeline
Project Number: 088210/02

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
369991	088210-MPL-N Wall 3'	soil	2014-07-29	12:15	2014-07-31
369992	088210-MPL-Center Hole 4'	soil	2014-07-29	12:10	2014-07-31
369993	088210-MPL-W Wall 3'	soil	2014-07-29	12:25	2014-07-31
369994	088210-MPL-S Wall 3'	soil	2014-07-29	12:35	2014-07-31
369995	088210-MPL-E Wall 4'	soil	2014-07-29	12:50	2014-07-31

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
369991 - 088210-MPL-N Wall 3'	<0.200 ¹	<0.200	<0.200	<0.200	520 Qr, Qs	<40.0 ²
369992 - 088210-MPL-Center Hole 4'	<0.0200	<0.0200	<0.0200	<0.0200	84.2 Qr, Qs	<4.00
369993 - 088210-MPL-W Wall 3'	<0.0200	<0.0200	<0.0200	<0.0200	63.2 Qr, Qs	<4.00
369994 - 088210-MPL-S Wall 3'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0 Qr, Qs	<4.00
369995 - 088210-MPL-E Wall 4'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0 Qr, Qs	<4.00

Sample: 369991 - 088210-MPL-N Wall 3'

Param	Flag	Result	Units	RL
Chloride		1110	mg/Kg	25

Sample: 369992 - 088210-MPL-Center Hole 4'

Param	Flag	Result	Units	RL
Chloride		35.4	mg/Kg	25

¹Dilution due to turbidity.

²Dilution due to turbidity.

Report Date: August 5, 2014

Work Order: 14073103

Page Number: 2 of 2

Sample: 369993 - 088210-MPL-W Wall 3'

Param	Flag	Result	Units	RL
Chloride		257	mg/Kg	25

Sample: 369994 - 088210-MPL-S Wall 3'

Param	Flag	Result	Units	RL
Chloride		<25.0	mg/Kg	25

Sample: 369995 - 088210-MPL-E Wall 4'

Param	Flag	Result	Units	RL
Chloride		32.3	mg/Kg	25

Analytical Report 495086

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch
EOG Remediation Sites-Madrea Pipeline

20-OCT-14

Collected By: Client



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



20-OCT-14

Project Manager: **Bernie Bockisch**
Conestoga-Rovers & Associates-Albuquerque, NM
6121 Indian School Rd. NE Suite 200

Albuquerque, NM 87110

Reference: XENCO Report No(s): **495086**
EOG Remediation Sites-Madrea Pipeline
Project Address: Jal,NM

Bernie Bockisch:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 495086. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 495086 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America



Sample Cross Reference 495086



Conestoga-Rovers & Associates-Albuquerque, NM, Albuquerque

EOG Remediation Sites-Madrea Pipeline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-08210-02-101314-SP-01	S	10-13-14 12:45		495086-001



CASE NARRATIVE



Client Name: *Conestoga-Rovers & Associates-Albuquerque, NM*

Project Name: *EOG Remediation Sites-Madrea Pipeline*

Project ID:

Work Order Number(s): 495086

Report Date: 20-OCT-14

Date Received: 10/14/2014

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 495086

Conestoga-Rovers & Associates-Albuquerque, NM, Albuquerque, NM



Project Id:

Contact: Bernie Bockisch

Project Location: Jal,NM

Project Name: EOG Remediation Sites-Madrea Pipeline

Date Received in Lab: Tue Oct-14-14 10:19 am

Report Date: 20-OCT-14

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id: 495086-001 Field Id: SO-08210-02-101314-SP-01 Depth: Matrix: SOIL Sampled: Oct-13-14 12:45					
Inorganic Anions by EPA 300/300.1 SUB: E871002	Extracted: Oct-16-14 11:57 Analyzed: Oct-16-14 17:45 Units/RL: mg/kg RL					
Chloride	3.42 2.27					
Percent Moisture	Extracted: Analyzed: Oct-14-14 17:00 Units/RL: % RL					
Percent Moisture	12.2 1.00					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
 The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
 XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
 Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **SQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

4143 Greenbriar Dr, Stafford, TX 77477
 9701 Harry Hines Blvd, Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Blank Spike Recovery



Project Name: EOG Remediation Sites-Madrea Pipelin

Work Order #: 495086

Project ID:

Lab Batch #: 953149

Sample: 663057-1-BKS

Matrix: Solid

Date Analyzed: 10/16/2014

Date Prepared: 10/16/2014

Analyst: DEP

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<2.00	20.0	19.5	98	80-120	

Blank Spike Recovery [D] = $100 * [C] / [B]$

All results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: EOG Remediation Sites-Madrea Pipeline

Work Order # : 495086

Project ID:

Lab Batch ID: 953149

QC- Sample ID: 495023-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 10/16/2014

Date Prepared: 10/16/2014

Analyst: DEP

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.08	20.8	22.5	108	20.8	22.5	108	0	80-120	20	

Matrix Spike Percent Recovery $[D] = 100 * (C - A) / B$
 Relative Percent Difference $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery



Project Name: EOG Remediation Sites-Madrea Pipeline

Work Order #: 495086

Lab Batch #: 952934

Project ID:

Date Analyzed: 10/14/2014 17:00

Date Prepared: 10/14/2014

Analyst: WRU

QC- Sample ID: 495086-001 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	12.2	12.0	2	20	

Lab Batch #: 952934

Date Analyzed: 10/14/2014 17:00

Date Prepared: 10/14/2014

Analyst: WRU

QC- Sample ID: 495120-011 D

Batch #: 1

Matrix: Soil

Reporting Units: %

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	27.4	28.2	3	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$

All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit



CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

COC NO.: **32770**

Address: 6121 Indian School Rd NE, Albuquerque, NM, 87110

Phone: (505) 280-0572 Fax: _____

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 088210/02

Project Name: ETS Hendrix Sites - Madena Pipeline

Project Location: New Del, NM

Chemistry Contact: Agnie Boekisch

Sampler(s): Steve Perez sperez@conestoga.com

Laboratory Name: Xenco Labs

Lab Location: Las Alamos, TX

SSOW ID: _____

Cooler No: _____

Lab Contact: _____

Lab Quote No: _____

Carrier: _____

SAMPLE TYPE

CONTAINER QUANTITY & PRESERVATION

ANALYSIS REQUESTED (See Back of COC for Definitions)

Matrix Code (see back of COC)

Grab (G) or Comp (C)

Unpreserved

Hydrochloric Acid (HCl)

Nitric Acid (HNO₃)

Sulfuric Acid (H₂SO₄)

Sodium Hydroxide (NaOH)

Methanol/Water (Soil VOC)

EnCores 3x5-g, 1x25-g

Other: ICE

Total Containers/Sample

Chloride 300.0

MS/MSD Request

Airbill No: 297154834

Date Shipped: 10/13/14

COMMENTS/ SPECIAL INSTRUCTIONS: 495086-001

Item

SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)

DATE (mm/dd/yyyy)

TIME (hh:mm)

1 50-088210-02-101314-SR-01 10/13/14 12:45 50 G

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 10/14/2014 10:19:43 AM

Work Order #: 495086

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist**Comments**

#1 *Temperature of cooler(s)?	4.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	No
#5 Custody Seals intact on sample bottles?	No
#6 *Custody Seals Signed and dated?	No
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO ₃ , HCL, H ₂ SO ₄ ?	N/A
#22 >10 for all samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Kelsey Brooks

Date: 10/14/2014

Checklist reviewed by:

Kelsey Brooks

Date: 10/14/2014

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 85928

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 85928
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	1/24/2023