AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pSAD1402253840

1RP - 3005

CIMAREX ENERGY CO. OF COLORADO

4/13/2016

DUPE ALSO

HOBBS OCD

JAN 28 2014

RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

Initial Report X Final Report

Name of Company: Cimarex Energy Company	Contact: Johnny Titsworth
Address: 600 N. Marienfield, Suite 600, Midland, TX 79701	Telephone No. (432)250-2059
Facility Name: Red Hills 28 SWD	Facility Type: Battery

Surface Owner: Federal	Mineral Owner:	API No. 30-025-35598

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	32	25	33	660	RSL	660	FWL	Lea

Latitude:32.09631 Longitude:-103.58338

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 35	Volume Recovered: 0
Source of Release:	Date & Hour of Occurrence: 7/14/13 1700	Date & Hour of Discovery: 7/15/13 1000
Was Immediate Notice Given? x Yes ☐ No ☐ Not Required	If YES, To Whom? John Osborne	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes x No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Injection line spurn a leak between injection pump and the well.

Describe Area Affected and Cleanup Action Taken.*
40' x 50' area on pad with no standing fluid, and approximately 10' x 15' area off location on Northeast side of pad. Location will be assessed and a work plan will be submitted for approval.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION
Printed Name: Johnny Titsworth	Approved by Environmental Specialist: Chad Hensley
Title: Environmental Compliance Coordinator	Approval Date: 03/08/2022 Expiration Date:
E-mail Address: jtitsworth@cimarex.com	Conditions of Approval: None Attached ☐
Date: 1/22/14 Phone: (432)-250-2059	

* Attach Additional Sheets If Necessary

Original

19 PAGES OF 137

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CONESTOGA-ROVERS & ASSOCIATES

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DUPE C-141 AT END

Final Report

SITE CLOSURE REPORT
RED HILLS 28 SWD

Section 28 (Unit M), Township 25 South, Range 33 East
Lea County, New Mexico

Prepared for: CIMAREX ENERGY COMPANY

Conestoga-Rovers & Associates
2135 South Loop, 250 West
Midland, Texas 79703

January 2014 • 084703 • Report No. 1

Partners in Sustainability

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Section 1.0 Introduction

This Site Closure Report provides documentation associated with corrective actions at the Red Hills 28 SWD injection line leak in Lea County, New Mexico. Corrective actions were managed and documented via written field notes and photographs by Conestoga-Rovers & Associates (CRA) under the direction of Cimarex Energy Company (Cimarex). A remediation permit number, 1RP-01-14-3005 was assigned to this project by the New Mexico Oil Conservation Division (NMOCD) District 1, Hobbs, New Mexico office. This report is an attachment to the C-141 Form Final Report submitted for 1RP-01-14-3005.

Section 2.0 Background

The Red Hills 28 SWD (hereafter referred to as the "Site"), is located in Section 28 (Unit M), Township 25 South, Range 33 East, Lea County, New Mexico. Figure 1 (Topographic Map) and Figure 2 (Aerial Image) depict the Site's location. The Site's topography is flat to gently rolling, covered with windblown sand, sparse vegetation and mesquite trees.

On July 15, 2013, Cimarex submitted a Release Notification and Corrective Action C-141 Initial Report to the NMOCD that approximately 35 barrels (bbls) of produced water were released from a leak in an injection line between the injection pump and the well. The C-141 Form Initial Report is attached as Appendix A.

Section 3.0 Scope of Work

The scope of work for the Site's corrective actions and corresponding activities were developed between Cimarex, NMOCD, Bureau of Land Management (BLM) and CRA personnel. CRA was responsible for project management, general management of the remediation and reclamation activities and documentation of the field work. The agreed upon scope of services included:

- Conduct initial site assessment to map, photo document and collect delineation soil samples within identified fluid release area;
- Obtaining appropriate stakeholders involvement needed to conclude scope of work;
- Monitor removal of impacted soils from release area using a backhoe;
- Collect confirmation soil samples from excavation bottom and walls;

- Request and obtain approval to backfill excavation from regulatory agencies based on Site remedial activities and analytical results;
- Monitor backfilling, grading, contouring and seeding of remediated area of the Site; and
- Prepare Site Closure Letter Summary for submittal to the BLM-Carlsbad, New Mexico office and Site Closure Report with the Final C-141 Release Notification and Corrective Action Form to the NMOCD-Hobbs, New Mexico office requesting closure of the site.

Section 4.0 Site Assessment and Remediation Activities

Initial site assessment and soil sampling activities were completed in accordance to the New Mexico Oil Conservation Division's (NMOCD's) guidance document *Guidelines for Remediation of Leaks, Spills and Releases,* dated August 13, 1993. Section III of the guidance document provides three general characteristics (Depth to groundwater, Wellhead Protection Area, Distance to Nearest Surface Water Body) to "evaluate a Site's potential risk, the need for remedial action, and the level of cleanup, if necessary, required at the Site." Section IV provides ranking criteria for each Site-specific characteristic to determine their relative threat to the public, fresh waters, and the environment. The sum of each individual characteristic equals the total ranking score. The total ranking score determines the recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) in soil. In addition, NMOCD's draft guidance document *OCD's Guidance for Release Reporting and Corrective Actions,* dated September 30, 2011 was used to determine the RRAL for chlorides.

According to the Petroleum Recovery Research Center (PRRC) database and the New Mexico Office of the State Engineer (NMOSE), the average depth to groundwater in the immediate area of the Site is approximately 190 feet below ground surface (bgs). Attached is Figure 3, a topographic map, depicting the average depths to groundwater, distance to surface water bodies, and any wellheads within a 1.25 mile radius of the Site. Based on average depth to groundwater (>100 feet below ground surface), Wellhead Protection (water source <1,000 feet & <200 feet private) and surface body of water (>1000 feet) for the Site, the RRALs were determined to be 10 ppm for benzene, 50 ppm for BTEX, 5000 ppm for TPH. The NMOCD's September 30, 2011 draft guidance document recommends a RRAL of 1,000 mg/kg for chlorides based on the vertical separation from groundwater of more than 100 feet. The risk ranking for the site is as follows:

New Mexico Oil Conservation Division Spill Guidelines	
Ranking Criteria	Score
Depth to Ground Water (> 100 ft.)	0
Wellhead Protection Area (<1000 ft. (water source) or <200 ft. (private domestic water source))	0
Distance to Surface Body Water (>1000 ft.)	0
Ranking Criteria Total Score	**0***
*Because the ranking criteria total score is 0, NMOCD established limits are 10 ppm for Benzene, 50 ppm for BTEX, 5000 ppm for total TPH, and 1000 mg/kg for (2011 Guidance Document) for chlorides.	

On August 7, 2013, CRA mobilized to the Site to perform site assessment activities. Site assessment activities included: mapping, photo documenting and collecting delineation soil samples within the release area. Photographic documentation of the release area is attached as Appendix B. Based on reported release information and site observations, CRA field personnel collected soil samples for benzene, toluene, ethylbenzene, and xylene (BTEX), total petroleum hydrocarbons (TPH), and chloride analysis. Six (6) hand auger borings were selectively placed within the release area to collect delineation soil samples. One (1) hand auger boring was selectively placed outside the release area to collect as a background sample. Attached is Figure 4, a site map detailing the release area and collected sample locations, depths, and analytical results. Collected samples were placed into laboratory provided sample containers, placed on ice and submitted under chain-of-custody control to Trace Analysis, Inc., in Midland, Texas. Analytical results indicated hydrocarbon concentrations were below the regulatory RRALs established for the Site; however, chloride concentrations exhibited elevated concentrations well above RRALS. The chloride concentrations for delineation samples 1, 2 and 3 at the 0 – 1.0 foot interval were 10,000, 5090, and 4280 mg/kg respectively. The chloride concentrations for delineation samples 1, 2, 3 and 5 at the 1.0 - 2.0 foot interval were 4200, 5220, 4830 and 3730 mg/kg respectively. Sample analytical results are summarized in Table 1.

Site corrective action activities consisted of multiple excavating events accompanied by soil sample analysis. All excavating activities were performed by H&R Enterprises, LLC, (H&R). Soil samples were collected by CRA and analyzed by Trace Analysis, Inc. in Midland, Texas.

On September 9, 2013, excavating activity at the Site commenced and continued through September 11, 2013. Excavating activity began at the eastern boundary of the release area located in the adjacent pasture land to the east of the Site's caliche pad. Field screening of soils for chlorides was performed to guide excavating activities.

On September 12, 2013, chloride field screening indicated concentrations in the remaining soil were either below or at the established RRALs for chlorides. Confirmation grab soil samples were collected from the excavation's bottom and walls for laboratory analysis. Collected samples were placed into laboratory provided sample containers, placed on ice and at the request of Cimarex were placed in a refrigerated freezer and not submitted to the lab pending a meeting with CRA, Cimarex and the NMOCD at the District 1 Hobbs, New Mexico office the following Monday.

On Monday, September 16, 2013, CRA and Cimarex met with Geoffrey Leking, Environmental Engineer Specialist, of the NMOCD District 1 Hobbs, New Mexico office to discuss the protocols and procedures required for Site closure. Meeting discussion included the following:

- Review of analytical data of previously collected delineation soil samples;
- Request by CRA and Cimarex for approval by the NMOCD to limit soil excavated from the identified release area located on the Site's caliche pad and the adjacent pasture land to the east of the caliche pad to approximately 3 feet below ground surface (bgs);
- Request by the NMOCD to collect grab bottom samples from the area excavated on the caliche pad at the west end (BS-2) and near previously collected delineation sample DS-3 (BS-4);
- Request by the NMOCD to vertically excavate soil near previously collected delineation samples DS-2 (BS-3), DS-4 (BS-5), and DS-5 (BS-6), field screen soils for chlorides to show a decreasing trend in concentrations towards the Site's RRAL for chlorides, and collect grab bottoms samples;
- Request by the NMOCD to collect composite samples (ENW, WNW, WWS, WSW, ESW, and EWS) from the walls of the excavation;
- Procedures for backfilling and cover design specifications which included installation of a 20 mil woven liner over the excavated area, backfilling with imported clean materials (caliche and topsoil);
- Procedures for re-vegetation plan which included the excavated affected areas off the Site's caliche pad to be graded to match surface contours and seeded using mixtures requested by the BLM; and

- Submittal of a Site Closure Report to the NMOCD District 1 Hobbs, New Mexico office as attachment to NMOCD C-141 Form Final Report and Site Closure Letter Summary to the BLM Carlsbad, New Mexico office.

On September 17, 2013, excavating activities resumed at the Site. Excavating activities followed the agreed upon requests from the meeting between CRA, Cimarex and the NMOCD. Soil was excavated from the Site's caliche pad and the adjacent pasture land to approximately 3 feet bgs. Chloride field screening was performed to guide excavating activities. Upon completion, confirmation composite wall and grab bottom samples were collected from the excavation. To comply with the NMOCD's corrective action requirement to vertically delineate decreasing chloride concentrations, soil was excavated to 10 feet bgs near former DS-2 location, 20 feet bgs near former DS-4 location and 15 feet bgs near former DS-5 location. Confirmation grab samples were collected from the bottom of each vertical excavation. Attached is Figure 4, a site map detailing the excavated area and collected sample locations, depths and analytical results. Collected samples were placed into laboratory provided sample containers, placed on ice and submitted under chain-of-custody control to Trace Analysis, Inc., in Midland, Texas. Analytical results indicated hydrocarbon concentrations were below the Site's established regulatory RRALs, chloride concentrations in bottom samples collected at 3 feet bgs were above the RRALs, chloride concentrations in wall samples at the eastern end of excavation were slightly above the RRALs and chloride concentrations in samples taken for vertical delineation were below the Site's RRALs. Sample analytical results are summarized in Table 1.

On September 24, 2013, further soil excavating activity occurred along the south wall's eastern half to reduce chloride concentrations. Approximately 1 foot of soil was scraped from the wall down to 3 feet bgs and a composite sample was collected for laboratory analysis. Analytical results indicated the chloride concentrations were below the Site's RRALs. Sample analytical results are summarized in Table 1.

Upon review of analytical data and results indicated that hydrocarbon and chloride impacted soil had been effectively removed and corrective action activities complied with the NMOCD's delineation and remediation requirements, a request for approval to line and backfill the excavated area and reclaim the adjacent pasture land to the east of the Site's caliche pad was submitted to the NMOCD District 1 Hobbs, New Mexico office via electronic mail on October 1, 2013. Approval to line and backfill the excavated area and reclaim the excavated area of pasture land was granted by the NMOCD in a reply email dated October 2, 2013. Verbal approval by the BLM was provided to Cimarex via cellular phone call. Electronic mail documents are attached as Appendix C.

Section 5.0 Site Restoration Activities

On October 3, 2013, Site restoration activities began. A 20 mil woven liner was installed over the Site's excavated area prior to backfilling. Backfilling activity of the excavated caliche pad area began with clean caliche and base course fill imported from Wallach Concrete Inc., in Hobbs, New Mexico. Approximately 730 cubic yards (cy) of clean caliche was used to backfill and 125 cubic yards (cy) of base course was used to cap the excavated area. Backfilling of the excavated area in the adjacent pasture land to the east of the caliche pad began with clean topsoil imported from the nearby Cascade 29 Fed #2 well location operated by Cimarex. Approximately 120 cubic yards (cy) of clean top soil was used to backfill the excavated area. Subsequent to backfilling each area was compacted and graded to match surface contour. In addition, unused caliche and base course fill was used to construct a berm along the eastern edge of the caliche pad to prevent runoff of fluids into the adjacent pasture land. Photographic documentation of the backfilled excavation and constructed berm is attached as Appendix B.

On October 7, 2013, seeding activities of at the Site concluded site restoration activities. BLM #2 native grass seed was administered to the reclaimed area in the adjacent pasture land to help minimize erosion. Photographic documentation of the restored area is attached as Appendix B.

Section 6.0 Waste Management

H&R was responsible for managing waste associated with the project activities. Excavated soil was temporarily stored on a lined area at the Site. Sundance Services, Inc. Landfill was utilized as the disposal facility for impacted soils. Sundance Services, Inc. Landfill is a NMOCD and Cimarex Energy approved facility. A total of 932 cubic yards (cy) of materials were disposed of at the facility. Impacted soil was loaded into trucks provided by H&R. Each truck leaving the Site was provided with a uniquely numbered non-hazardous waste manifest to accompany each load. Copies of the waste manifest documents are available upon request.

Section 7.0 Summary

Site assessment, remediation and restoration activities were performed on behalf of Cimarex and in coordination with the NMOCD and BLM regulatory personnel.

On August 7, 2013, delineation soil samples were collected from the Site's caliche pad and adjacent pasture land to the east of the Site's caliche pad. Analytical results indicated hydrocarbon concentrations were below and chloride concentrations were above the Site's

established regulatory RRALs. The laboratory analytical reports for submitted samples are attached as Appendix D.

On September 8, 2013, excavating the release area on the Site's caliche pad and adjacent pasture land began. On September 12, 2013, chloride field screening indicated the excavated release area was effectively delineated. Confirmation grab soil samples were collected from the bottom and walls of the excavation for laboratory analysis.

On September 13, 2013, Cimarex requested collected confirmation samples be held and stored in refrigerated freezer pending meeting scheduled for the following Monday between CRA, Cimarex, and NMOCD at the Hobbs, New Mexico office.

On Monday, September 16, 2013, CRA and Cimarex met with Geoffrey Leking, Environmental Engineer Specialist, of the NMOCD District 1 Hobbs, New Mexico office to discuss the protocols and procedures required for Site closure.

On September 17, 2013, excavating activities resumed at the site. Excavating activities followed the agreed upon Site closure requests from the meeting between CRA, Cimarex and the NMOCD. Soil was excavated from the Site's caliche pad and the adjacent pasture land to approximately 3 feet bgs. Confirmation composite wall and grab bottom samples were collected. Subsequent vertical delineation followed by excavating soils to 10 feet bgs near former DS-2 location, 20 feet bgs near former DS-4 location and 15 feet bgs near former DS-5 location. Confirmation grab samples were collected from the bottom of each vertical excavation. Analytical results indicated the following: hydrocarbon concentrations remained below the Site's established regulatory RRALs; chloride concentrations in bottom samples collected at 3 feet bgs from the excavation were above the RRALs; chloride concentrations in wall samples at the eastern end of excavation were slightly above the RRALs; and chloride concentrations in samples taken at depth were below the RRALs. The laboratory analytical reports for submitted samples are attached as Appendix D.

On September 24, 2013, further soil excavating activity took place along the eastern half of the south wall. A follow-up confirmation composite sample was collected from the area for laboratory analysis. Analytical results indicated the chloride concentrations were below the RRALs. The laboratory analytical reports for submitted samples are attached as Appendix D.

Upon review of analytical data and results indicated that impacted soil had been effectively removed and corrective action activities complied with the NMOCD's remediation and

delineation requests. A request for approval to line and backfill the excavated caliche pad area and line, backfill and reclaim the excavated area of adjacent pasture land was submitted to the NMOCD District 1 Hobbs, New Mexico office via electronic mail on October 1, 2013. Approval was granted by the NMOCD in a reply email dated October 2, 2013. Verbal approval by the BLM via cellular phone call was provided to Cimarex. Submitted and reply electronic mail documents are attached as Appendix C.

On October 3, 2013, restoration activities at the Site began. A 20 mil woven liner was installed within the Site's excavation prior to backfilling. Approximately 730 cubic yards (cy) of clean caliche was used to backfill and 125 cubic yards (cy) of base course was used to cap the excavated caliche pad area. Backfilling and reclamation of the excavated area in the adjacent pasture land began with approximately 120 cubic yards (cy) of clean top soil used to backfill the area. Each area was compacted and graded to match surface contour. Unused caliche and base course fill was used to construct a berm along the eastern edge of the caliche pad to prevent runoff of fluids into the adjacent pasture land. Photographic documentation of the backfilled excavation and constructed berm is attached as Appendix B.

On October 7, 2013, seeding activities of at the Site concluded site restoration activities. BLM #2 native grass seed was administered to the reclaimed area in the adjacent pasture land to help minimize erosion. Photographic documentation of the restored area is attached as Appendix B.

H&R was responsible for managing waste associated with the project activities. Excavated soil was temporarily stored on a lined area at the Site. Sundance Services, Inc. Landfill was utilized as the disposal facility for impacted soils. A total of 932 cubic yards (cy) of materials were disposed of at the landfill facility. Impacted soil was loaded into trucks provided by H&R. Each truck leaving the Site was provided with a uniquely numbered non-hazardous waste manifest to accompany each load.

Section 8.0 Site Closure Request

This Site Closure Report provides documentation of the Red Hills 28 SWD site assessment, remedial corrective actions and restoration activities performed in accordance to 1RP-01-14-3005. This report is an attachment to the C-141 Form Final Report submitted for

1RP-01-14-3005. Based on NMOCD and BLM communications and corrective actions performed, CRA, on behalf of Cimarex, respectfully requests the NMOCD to rule that no further action of the Site's remediated and restored areas is required and closure is granted. Please feel free to contact the CRA Midland office if there are any questions or additional information is required.

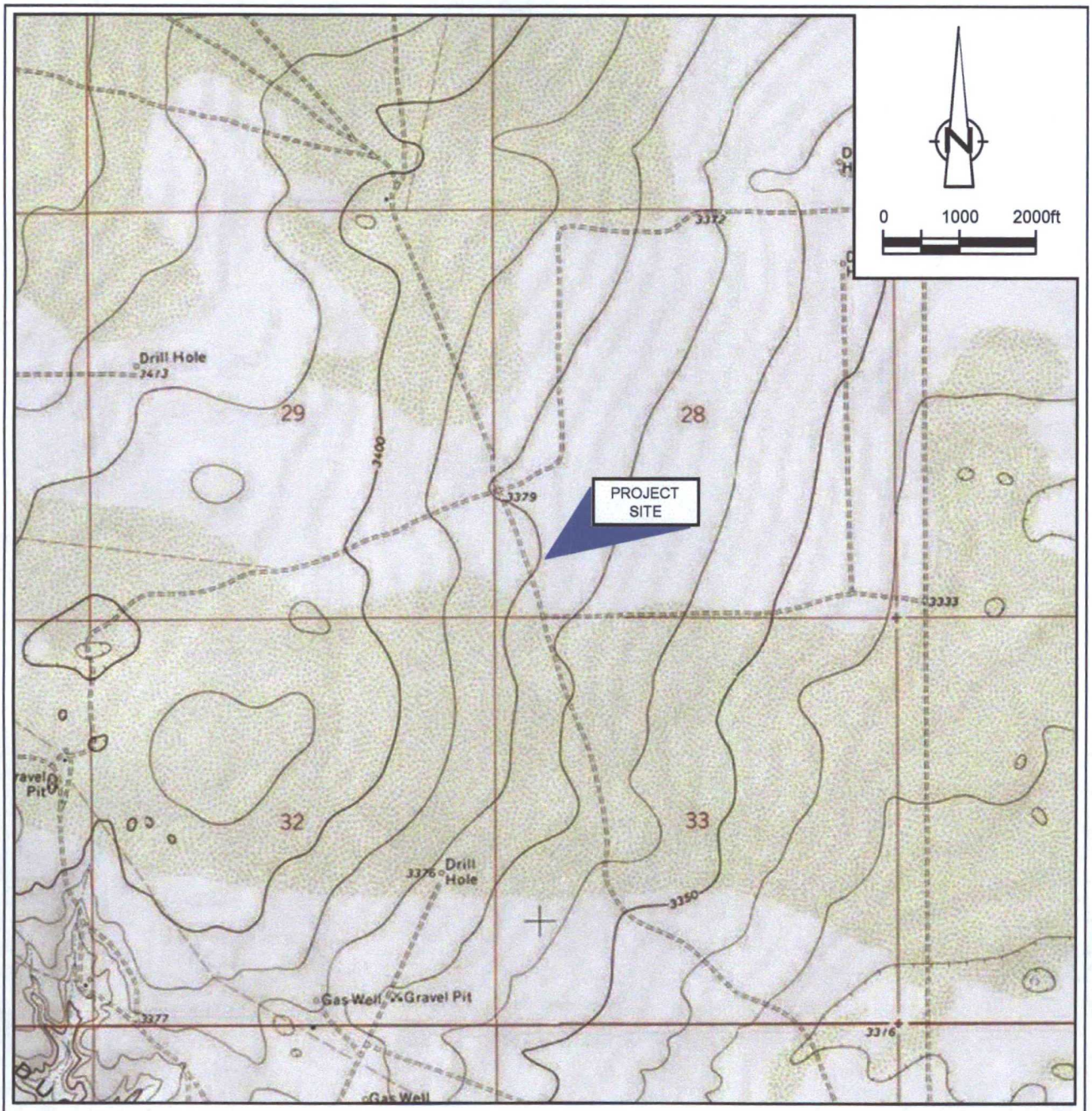
All of which is Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES

John Fergerson
Senior Project Manager

Thomas C. Larson
Principal, Midland Operations Manager

Figures



SOURCE: USGS 7.5 MINUTE QUAD
"PADUCA BREAKS EAST, NEW MEXICO"

LAT/LONG: 32.0964° NORTH, 103.5835° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP
RED HILLS 28 SWD
LEA COUNTY, NEW MEXICO
Cimarex

084703-00(000)GN-DL001 AUG 15/2013

LAT/LONG: 32.0964° NORTH, 103.5835° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 2

AERIAL PHOTOGRAPH
RED HILLS 28 SWD
LEA COUNTY, NEW MEXICO
Cimarex

084703-00(000)GN-DL001 AUG 15/2013

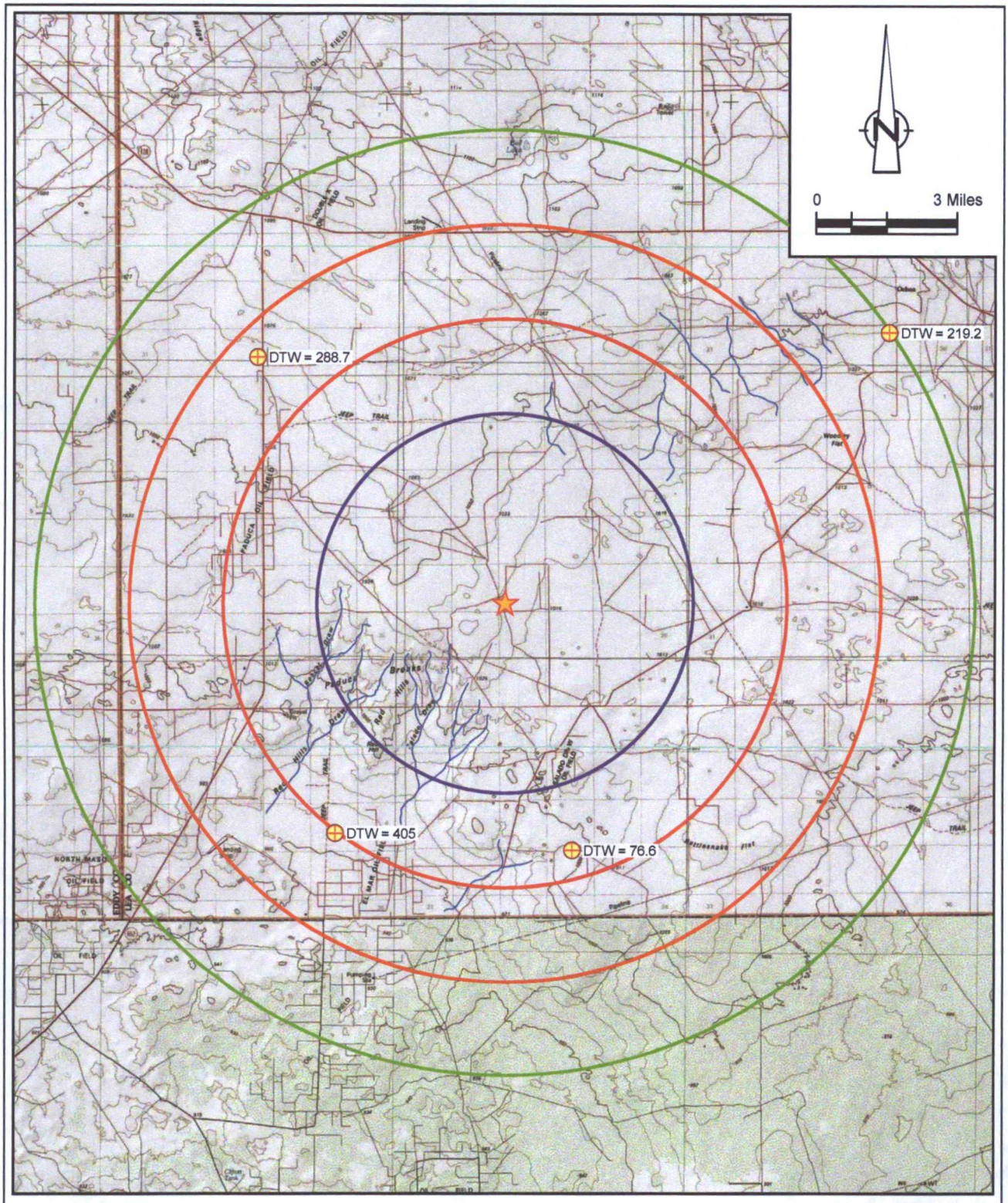


Figure 3

WATER SOURCE WITHIN 10 MILES
RED HILLS 28 SWD
LEA COUNTY, NEW MEXICO
Cimarex

084703-00(000)GN-DL001 AUG 15/2013

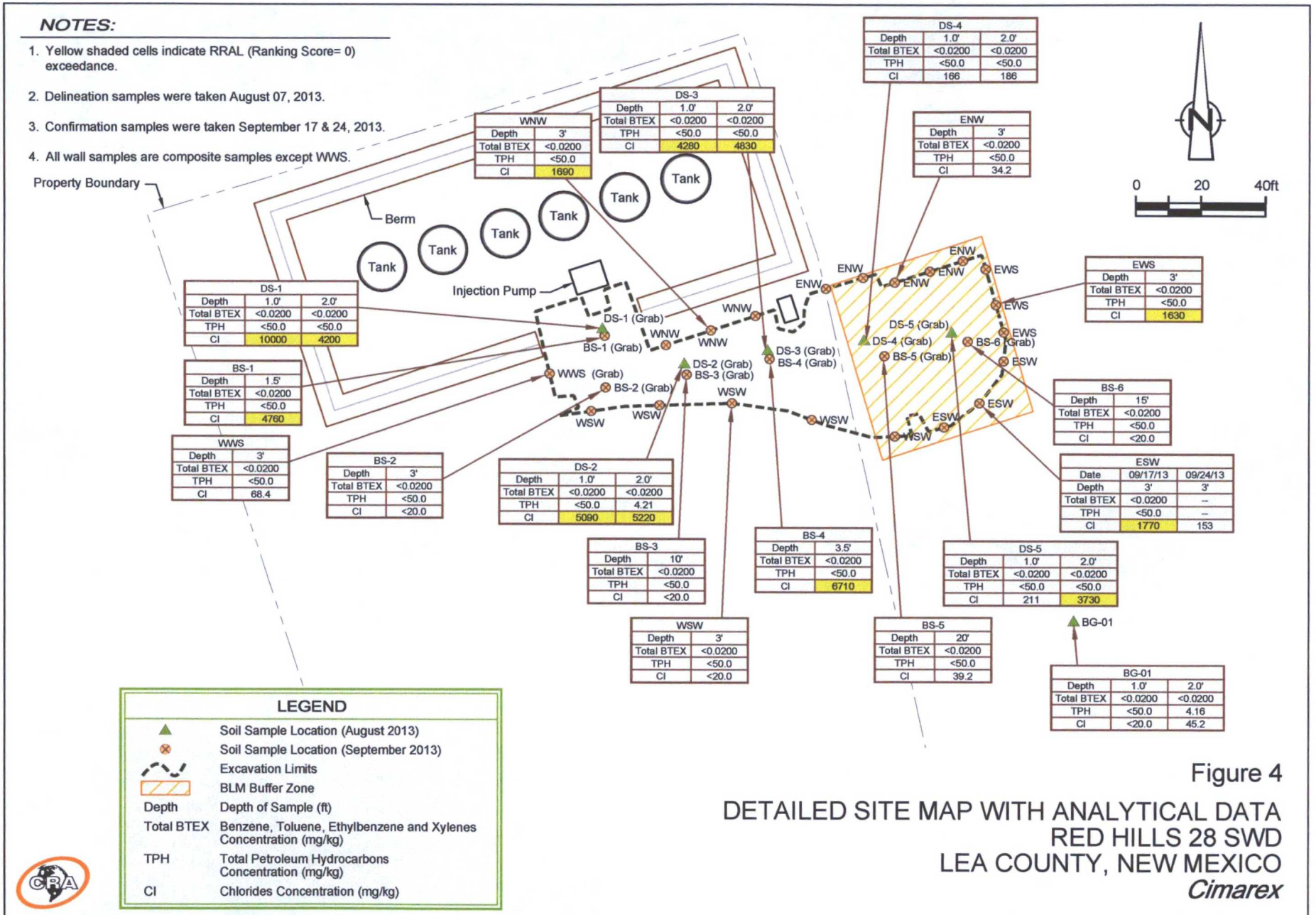


Figure 4

DETAILED SITE MAP WITH ANALYTICAL DATA
RED HILLS 28 SWD
LEA COUNTY, NEW MEXICO
Cimarex

084703-00(000)GN-DL001 SEP 30/2013

Tables

TABLE I
CIMAREX ENERGY
RED HILLS 28 SWD
SOIL ANALYTICAL SUMMARY
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethyl-Benzene	Xylenes	BTEX	TPH				Chloride
								GRO(C6-C10)	DRO(C10-C28)	ORO (C28-C35)	Total (GRO/DRO/ORO)	
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
			NMOCD Soil Delineation & Remediation Action Levels (Ranking Score = <10)									
			10 mg/Kg	---	---	---	50 mg/Kg	---	---	---	5000 mg/Kg	1000 mg/Kg
DELINEATION SOIL SAMPLE RESULTS												
S-084703-080713-JF-DS-1	08/07/13	1.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	10000
S-084703-080713-JF-DS-1	08/07/13	2.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	4200
S-084703-080713-JF-DS-2	08/07/13	1.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	5090
S-084703-080713-JF-DS-2	08/07/13	2.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	4.21	<50.0	---	4.21	5220
S-084703-080713-JF-DS-3	08/07/13	1.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	4280
S-084703-080713-JF-DS-3	08/07/13	2.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	4830
S-084703-080713-JF-DS-4	08/07/13	1.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	166
S-084703-080713-JF-DS-4	08/07/13	2.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	186
S-084703-080713-JF-DS-5	08/07/13	1.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	211
S-084703-080713-JF-DS-5	08/07/13	2.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	3730
BACKGROUND SAMPLE RESULTS												
S-084703-080713-JF-BG-1	08/07/13	1.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	<20.0
S-084703-080713-JF-BG-1	08/07/13	2.0'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	4.16	<50.0	---	4.16	45.2
CONFIRMATION SAMPLE RESULTS												
S-084703-091713-JF-ENW	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	34.2
S-084703-091713-JF-WNW	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	1690
S-084703-091713-JF-BS-1	9/17/13	1.5'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	4760
S-084703-091713-JF-WWS	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	68.4
S-084703-091713-JF-BS-2	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	<20.0
S-084703-091713-JF-WSW	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	<20.0
S-084703-091713-JF-BS-3	9/17/13	10'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	<20.0
S-084703-091713-JF-BS-4	9/17/13	3.5'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	6710
S-084703-091713-JF-ESW	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	1770
	9/24/13	3'	---	---	---	---	---	---	---	---	---	153
S-084703-091713-JF-EWS	9/17/13	3'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	1630
S-084703-091713-JF-BS-5	9/17/13	20'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	39.2
S-084703-091713-JF-BS-6	9/17/13	15'	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<4.00	<50.0	---	<50.0	<20.0

1. Values reported in mg/Kg.
2. < = Value Less than Reporting Limit (RL).
3. Bold Indicates Analyte Detected.
4. **Bold & Highlighted Exceedes NMOCD Remediation Action Levels.**
5. BTEX analyses by EPA Method SW 8021B.
6. TPH analyses by EPA Method SW 8015B Mod.
7. Chloride analyses by EPA Method E300.0/300.1.
8. GRO/DRO/ORO = Gasoline/Diesel/Oil.