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: pCS1705256681

144B - 15843

BEELINE GAS SYSTEMS

12/20/2017

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-144
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

16155

Type of action:
- ☐ Below grade tank registration
- ☐ Permit of a pit or proposed alternative method
- ☒ Closure of a pit, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit/or registration
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Elm Ridge Exploration Co. LLC dba Beeline Gas Systems OGRID #: 194503
Address: #20 CR 5060, Bloomfield, NM 87413
Facility or well name: Buena Suerte Compressor Station- North below grade tank
API Number: _____ OCD Permit Number: 15845
U/L or Qtr/Qtr J Section 32 Township 26N Range 11W County: San Juan
Center of Proposed Design: Latitude 36.43347 Longitude 108.016795 NAD: 83
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

DENIED

BY: Vanessa Fields
DATE: 11/22/17 (505) 334-6178 Ext. 119

OIL CONS. DIV DIST. 3
NOV 22 2017

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

* No C-141
* Analytical Results
* Closure Plan
* Surface & OCD Notification

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 85 bbl Type of fluid: compressed liquids (H20 & HC), skid drain liquid
Tank Construction material: Welded Steel
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☒ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness unknown mil ☐ HDPE ☐ PVC ☐ Other unknown

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

19

5.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify: Facility is surrounded by a 6' pro panel fence

6.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☒ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method:
- ☒ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: August 21, 2017

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** 12/20/2017

Title: Environmental Specialist **OCD Permit Number:** _____

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date: 10/30/2017**

20.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ☒ Confirmation Sampling Analytical Results (if applicable)
- ☐ Waste Material Sampling Analytical Results (required for on-site closure)
- ☒ Disposal Facility Name and Permit Number
- ☒ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude 36.43347 Longitude 108.016795 NAD: ☐ 1927 ☒ 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Djanna Hamilton Title: Health Safety & Environmental Specialist

Signature: Djanna Hamilton Date: October 31, 2017

e-mail address: dhamilton@djrllc.com Telephone: (505 634-1144 x205

Green Analytical Laboratories

75 Suttle Street
Durango, CO 81303
970.247.4220 Phone
970.247.4227 Fax
www.greenanalytical.com

29 September 2017

Dianna Hamilton
DJR Operating
#20 CR 5060
Bloomfield, NM 87413

RE: BTEX,TPH, Cl

Enclosed are the results of analyses for samples received by the laboratory on 09/15/17 12:55.
If you need any further assistance, please feel free to contact me.

Sincerely,

Debbie Zufelt

Debbie Zufelt
Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at http://greenanalytical.com/certifications/

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.

dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N. S1	1709124-01	Solid	09/15/17 11:20	09/15/17 12:55
N. S2	1709124-02	Solid	09/15/17 11:20	09/15/17 12:55

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

N. S1

1709124-01 (Solid)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
% Dry Solids	**93.8**			%	1	09/29/17	EPA160.3/1684	H1	LLG
Soluble (DI Water Extraction)									
Chloride	**16.9**	10.7	1.53	mg/kg dry	10	09/28/17	EPA300.0		JDA
Subcontracted -- **Cardinal Laboratories**									
Volatile Organic Compounds by EPA Method 8021									
Benzene*	<0.050	0.050	0.002	mg/kg	50	09/22/17	8021B		MS
Toluene*	<0.050	0.050	0.002	mg/kg	50	09/22/17	8021B		MS
Ethylbenzene*	<0.050	0.050	0.004	mg/kg	50	09/22/17	8021B		MS
Total Xylenes*	<0.150	0.150	0.010	mg/kg	50	09/22/17	8021B		MS
Total BTEX	<0.300	0.300	0.018	mg/kg	50	09/22/17	8021B		MS
Surrogate: 4-Bromofluorobenzene (PID)			*108 %*	*72-148*		*09/22/17*	*8021B*		MS
Petroleum Hydrocarbons by GC FID									
GRO C6-C10	<10.0	10.0	3.53	mg/kg	1	09/21/17	8015B		MS
DRO >C10-C28	<10.0	10.0	2.04	mg/kg	1	09/21/17	8015B		MS
EXT DRO >C28-C36	**47.7**	10.0	2.04	mg/kg	1	09/21/17	8015B		MS
Surrogate: 1-Chlorooctane			*104 %*	*28.3-164*		*09/21/17*	*8015B*		MS
Surrogate: 1-Chlorooctadecane			*109 %*	*34.7-157*		*09/21/17*	*8015B*		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

N. S2

1709124-02 (Solid)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
% Dry Solids	**93.9**			%	1	09/29/17	EPA160.3/1684	H1	LLG
Soluble (DI Water Extraction)									
Chloride	**17.0**	10.6	1.53	mg/kg dry	10	09/28/17	EPA300.0		JDA

Subcontracted -- **Cardinal Laboratories**

Volatile Organic Compounds by EPA Method 8021									
Benzene*	<0.050	0.050	0.002	mg/kg	50	09/22/17	8021B		MS
Toluene*	<0.050	0.050	0.002	mg/kg	50	09/22/17	8021B		MS
Ethylbenzene*	<0.050	0.050	0.004	mg/kg	50	09/22/17	8021B		MS
Total Xylenes*	<0.150	0.150	0.010	mg/kg	50	09/22/17	8021B		MS
Total BTEX	<0.300	0.300	0.018	mg/kg	50	09/22/17	8021B		MS
Surrogate: 4-Bromofluorobenzene (PID)			*108 %*	*72-148*		*09/22/17*	*8021B*		MS
Petroleum Hydrocarbons by GC FID									
GRO C6-C10	<10.0	10.0	3.53	mg/kg	1	09/21/17	8015B		MS
DRO >C10-C28	**11.1**	10.0	2.04	mg/kg	1	09/21/17	8015B		MS
EXT DRO >C28-C36	**61.4**	10.0	2.04	mg/kg	1	09/21/17	8015B		MS
Surrogate: 1-Chlorooctane			*105 %*	*28.3-164*		*09/21/17*	*8015B*		MS
Surrogate: 1-Chlorooctadecane			*113 %*	*34.7-157*		*09/21/17*	*8015B*		MS

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B709234 - General Prep - Wet Chem										
Duplicate (B709234-DUP1)	**Source: 1709124-01**		Prepared: 09/28/17 Analyzed: 09/29/17							
% Dry Solids	93.7		%		93.8			0.0597	20	

Soluble (DI Water Extraction) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B709188 - General Prep - Wet Chem										
Blank (B709188-BLK1)			Prepared: 09/25/17 Analyzed: 09/28/17							
Chloride	ND	1.00	mg/kg wet							
LCS (B709188-BS1)			Prepared: 09/25/17 Analyzed: 09/28/17							
Chloride	244	10.0	mg/kg wet	250		97.4	85-115			
LCS Dup (B709188-BSD1)			Prepared: 09/25/17 Analyzed: 09/28/17							
Chloride	245	10.0	mg/kg wet	250		97.9	85-115	0.467	20	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7092109 - Volatiles										
Blank (7092109-BLK1)			Prepared: 09/21/17 Analyzed: 09/22/17							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0561*		mg/kg	*0.0500*		*112*	*72-148*			
Benzene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
LCS (7092109-BS1)			Prepared: 09/21/17 Analyzed: 09/22/17							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0555*		mg/kg	*0.0500*		*111*	*72-148*			
Benzene	1.97	0.050	mg/kg	2.00		98.3	79.5-124			
Ethylbenzene	1.91	0.050	mg/kg	2.00		95.4	77.7-125			
Toluene	1.82	0.050	mg/kg	2.00		91.1	75.5-127			
Total Xylenes	5.73	0.150	mg/kg	6.00		95.4	70.9-124			
LCS Dup (7092109-BSD1)			Prepared: 09/21/17 Analyzed: 09/22/17							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0550*		mg/kg	*0.0500*		*110*	*72-148*			
Benzene	1.96	0.050	mg/kg	2.00		98.0	79.5-124	0.292	6.5	
Ethylbenzene	1.91	0.050	mg/kg	2.00		95.5	77.7-125	0.0216	7.83	
Toluene	1.81	0.050	mg/kg	2.00		90.6	75.5-127	0.577	7.02	
Total Xylenes	5.72	0.150	mg/kg	6.00		95.4	70.9-124	0.0613	7.78	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

Petroleum Hydrocarbons by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7092010 - General Prep - Organics										
Blank (7092010-BLK1)			Prepared & Analyzed: 09/20/17							
Surrogate: 1-Chlorooctadecane	*52.6*		mg/kg	*50.0*		*105*	*34.7-157*			
Surrogate: 1-Chlorooctane	*49.2*		mg/kg	*50.0*		*98.4*	*28.3-164*			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
LCS (7092010-BS1)			Prepared & Analyzed: 09/20/17							
Surrogate: 1-Chlorooctadecane	*55.9*		mg/kg	*50.0*		*112*	*34.7-157*			
Surrogate: 1-Chlorooctane	*52.5*		mg/kg	*50.0*		*105*	*28.3-164*			
DRO >C10-C28	196	10.0	mg/kg	200		98.0	81.4-124			
GRO C6-C10	183	10.0	mg/kg	200		91.7	76.6-119			
Total TPH C6-C28	379	10.0	mg/kg	400		94.8	79.4-121			
LCS Dup (7092010-BSD1)			Prepared & Analyzed: 09/20/17							
Surrogate: 1-Chlorooctadecane	*56.0*		mg/kg	*50.0*		*112*	*34.7-157*			
Surrogate: 1-Chlorooctane	*53.0*		mg/kg	*50.0*		*106*	*28.3-164*			
DRO >C10-C28	196	10.0	mg/kg	200		98.1	81.4-124	0.105	9.83	
GRO C6-C10	184	10.0	mg/kg	200		92.0	76.6-119	0.349	7.94	
Total TPH C6-C28	380	10.0	mg/kg	400		95.0	79.4-121	0.223	8.57	

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

DJR Operating	Project: BTEX,TPH, Cl	
#20 CR 5060	Project Name / Number: [none]	**Reported:**
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/29/17 13:43

Notes and Definitions

H1	Sample was received several days after collected and subsequently analyzed past hold time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
	*Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

GAL Green Analytical Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(970) 247-4220
Fax: (970) 247-4227
service@greenanalytical.com or dzufelt@greenanalytical.com
75 Suttle St Durango, CO 81303

Company or Client:	DJR Operating
Address:	#20 CR 5060
City:	Bloomfield
State:	NM
Zip:	87413
Phone #:	634-1144 or 330-2736
Contact Person:	Dianna Hamilton
Email Report to:	dhamilton@djrllc.com
Project Name(optional):	Buena Suerte Pits
Sampler Name (Print):	Dianna Hamilton

Bill to (if different):	
P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Email:	

Matrix (check one): GROUNDWATER, SURFACEWATER, WASTEWATER, PRODUCEDWATER, SOIL, DRINKING WATER, OTHER:

# of containers: No preservation (general), HNO_3, HCl, H_2SO_4, Other:, Other:

ANALYSIS REQUEST: TPH DRO/GRO/MRO/ORO; BTEX 8021; Chlorides 300/300-1

For Lab Use	Sample Name or Location	Date	Time	GROUNDWATER	SURFACEWATER	WASTEWATER	PRODUCEDWATER	SOIL	DRINKING WATER	OTHER:	No preservation (general)	HNO_3	HCl	H_2SO_4	Other:	Other:	TPH DRO/GRO/MRO/ORO	BTEX 8021	Chlorides 300/300-1
1709-124-01	N. S1	9/15/17	11:20a					X											
02	N. S2	9/15/17	11:20a					X											

PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by GAL within 30 days after completion. In no event shall GAL 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 services hereunder by GAL, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date / Time	Received By:
Dianna Hamilton	Date: 9/18/17 Time: 1255	Christine Clark
Christine Clark	Date: 9/18/17 Time: ~~1600~~ 1600	~~Kangaroo~~ Fed Ex
	Date: Time:	
	Date: Time:	

ADDITIONAL REMARKS:

Report to State? (Circle) Yes No

Temperature at receipt: 5.5C Chic

CHECKED BY: cc

† GAL cannot always accept verbal changes. Please fax or email written change requests.

* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

Just Click Printing Form #17-0301