

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 RCVD 8/1/19

77

- 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: DJR Operating, LLC OGRID #: 371838  
 Address: PO BOX 156 Bloomfield, NM 87413  
 Facility or well name: Bonanza 008  
 API Number: 30-043-20653 OCD Permit Number: N/A  
 U/L or Qtr/Qtr K: Section 2 Township 22N Range 03W County: San Juan  
 Center of Proposed Design: Latitude 36.164038 Longitude -107.128877 NAD83  
 Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

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 \_\_\_\_\_

3.

☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
 Volume: 67 bbl Type of fluid: Produced water  
 Tank Construction material: Fiber Glass  
☐ 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 \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_

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.

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 \_\_\_\_\_

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)**

☐ Yes ☐ No

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

☐ Yes ☐ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Within an unstable area. **(Does not apply to below grade tanks)**

☐ Yes ☐ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

☐ Yes ☐ No

- FEMA map

**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).

☐ Yes ☒ No

- Topographic map; Visual inspection (certification) of the proposed site

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

**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.)

☐ Yes ☐ No

- Topographic map; Visual inspection (certification) of the proposed site

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☐ No

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

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.

☐ Yes ☐ No

NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

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<sub>2</sub>S, 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> 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: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18.

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

**OCD Representative Signature:**  **Approval Date:** 8/12/19

**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:** 04-24-2019

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 36.164038 Longitude -107.128877 NAD: ☐ 1927 ☒ 1983

**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): Amy Archuleta Title: Regulatory

Signature:  Date: 07-25-19

e-mail address: aarchuleta@dirllc.com Telephone: 505-632-3476 x201

**Scope of Closure Activities:**

The purpose of this closure plan is to provide the details of the activities involved in the closure of the BGT at the Leeson #1 well site. The following scope of closure activities has been designed to meet this objective:

- 1) DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will close all of the BGTs currently in service within the five (5) years allotted. DJR Operating, LLC does not operate any BGTs which would qualify to be upgraded or retrofitted; as such, they will be closing all their current BGT's and replacing them with above ground storage if necessary.
- 2) DJR Operating, LLC will close BGT's deemed to be an imminent danger to fresh water, public health, or the environment by an earlier date that the division requires as specified in subsection A of 19.15.17.13 NMAC
- 3) DJR Operating will close any BGT which demonstrates a compromise of integrity before the five (5) years allotted by the division per Paragraph (6) of subsection I of 19.15.17.11 NMAC. **This deadline was missed.**
- 4) DJR Operating, LLC will close any BGT within 60 days of cessation of the BGTs operation per Subsection A of 19.15.17.13 NMAC. **BGT Closure started 06-08-2019**
- 5) No less than 72 hours and no greater than on (1) week prior to BGT removal DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will provide written notification to the appropriate division district office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (2) NMAC. Written notification will include the name of the well operator, the well's API number, the wells name and number, and the well's unit letter, section, township and range. **An email was sent to Cory Smith and at NMOCD on 06-08-2019**
- 6) No less than 24 hours and no greater than one week prior to beginning BGT closure activities DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will provide written notification to the appropriate surface owner, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. DJR Operating, or a contractor acting on behalf of DJR

Operating, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close a BGT. The return receipt will be used to ensure that the surface owner has received written notification no less than 25 hrs. and no greater than one week prior to the beginning of BGT closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement. Closure activities that will take place on tribal land will have notification sent by certified mail, return receipt requested, to the appropriate tribal office. DJR Operating, or a contractor acting on behalf of DJR Operating, will notify the BLM of closure activities for wells located on federal land per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. All notices will be sent in such a way that the surface owner received notice at least 24 hours prior to the beginning of the closure activities. **An email was sent to Jicarilla EPO, JOGA, Jicarilla BIA, and the Bureau of Land Management on 6-08-2019.**

- 7) DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will remove all liquids, and/or sludge, if applicable, prior to closure. Material will be disposed of at Industrial Ecosystems, Inc. (IEI) Landfarm, Permit #NM-01-0010B or Basin Disposal, Permit # NM-01-0005, depending on the consistence of the material removed, as in accordance with 19.15.17.13 Subsection E Paragraph (1) NMAC. **All liquids were removed and taken to Envirotech's landfarm.**
- 8) DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will remove all on site equipment associated with this BGT that is no longer required for some other purpose, as in accordance with 19.15.17.13 Subsection E Paragraphs (3) NMAC. **All equipment was removed, this site will still be in use. We plan to conduct reclamation when the well is plugged and abandoned.**
- 9) If applicable, any liners or leak detection system removed from a BGT closure will be cleaned off and disposed of at San Juan County Regional Landfill in accordance with Subparagraph (m) of Paragraph (1) of subsection D of 19.15.9.712 NMAC **N/A**
- 10) DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will obtain prior approval from the OCD to dispose, recycle, reuse, or reclaim the BGT. DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will provide the OCD with documentation



concerning the final disposition of the BGT with the closure report. **This BGT was crushed and disposed of at the Bondad landfill.**

- 11) Once the BGT is removed, a five (5)-point composite sample will be collected from directly below the tank or below the leak detection system if present. Grab samples will be collected from any areas that are wet, discolored, or showing other evidence of release. All samples being collected will be analyzed for benzene and total BTEX via USEAP Method 8021B, TPH via USEPA method 8015B, and chlorides, via USEPA 300.1, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC. **Samples were collected on 6-25-2019 in the area adjacent to the BGT and on 7-11-2019 in the BGT area. Samples are attached.**
- 12) Depending on soil sample results, the area will be either backfilled or the area will be excavated.
  - a. If soil samples do not exceed the regulatory standards of .02 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 250 mg/kg or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
    - i. DJR Operating, or a contractor acting on behalf of DJR Operating, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (5) of subsection E of 19.15.17.13 NMAC.
    - ii. DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will backfill the excavation or impacted area with nonwasted containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC. A soil cover shall be installed for all backfilled excavation consisting of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater in accordance with Subsection H of 19.15.17.13 NMAC. The operator shall construct soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
    - iii. All areas of the well site that are no longer utilized on a day to day basis for the production of oil and/or gas, DJR Operating,

- or a contractor acting on behalf of DJR Operating, will substantially restore, recontour, and revegetate the areas, in accordance with 19.15.17.13 Subsections G and I NMAC. The operator shall notify the division when it has been re-seeded and when it has achieved successful re-vegetation. For re-vegetation methods, please see attached re-vegetation plan.
- b. If soil samples exceed the regulatory standards stated above.
    - i. DJR Operating will submit a Release Notification by Form C-141 with the appropriate analytical laboratory results to the appropriate division district office, in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
    - ii. In accordance with Paragraph (5) of Subsection E of 19.15.17.13 NMAC, once the operator or the OCD has determined that the release has occurred, DJR Operating, LLC, or a contractor acting on behalf of DJR Operating, will comply with rule 19.15.3.116 NMAC and 19.15.1.19 NMAC as appropriate.

### **Reporting**

DJR Operating, LLC will submit a closure report within 60 days following the BGT closure. The closure report will consist of a form C-144 with all supporting ☒ data and a form C-141 with all supporting data ☒. The supporting data will include proof of closure notice to the surface owner and the OCD ☒, confirmation of sampling analytical results ☒, a site diagram ☒, soil backfilling and cover installation ☒, revegetation rates ☐, re-seeding techniques ☐, and a site reclamation photo documentation ☐, if applicable, along with all other information related to onsite activities ☐.

**Amy Archuleta**  
**Regulatory**  
**DJR Operating, LLC**



Legend

- - BSC 1
- - BSC 2
- - BSC 3
- - BSC 4
- - Excavation

All samples representative  
of 5-point composites



MAP DRAWN BY:

BAH

7/19/2019

REVISIONS BY:

BAH

7/29/2019

APPROVED BY:

FRA

7/29/2019



## Figure 2

### Site Map

DJR Operating, LLC.

Bonanza 008 Well Site

API: 30-043-20653

Section 2, Township 22N, Range 3W

36.163660, -107.128720

Sandoval County, New Mexico

Project #17035-0103



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615





MANIFEST # 64525  
GENERATOR 1072

POINT OF ORIGIN B00020 #8

TRANSPORTER 401 5400

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 6-21-19 JOB # 17035-0082

[illegible]

Generator Onsite Contact

Phone

**Signatures required prior to distribution of the legal document.**

**DISTRIBUTION:**

**White - Company Records,**

**Yellow - Billing,**

### Pink - Customer,

Goldenrod - LF Copy



MANIFEST # 64544  
GENERATOR DTR  
POINT OF ORIGIN Boraza #8  
TRANSPORTER TFM  
DATE 6-25-19 JOB # 17035-00882

DATE 6-25-19 JOB # 17035-0082

JOB # 17035-0082

☐ Soil w/ Debris   ☐ After Hours/Weekend Receipt   ☐ Scrape Out   ☐ Wash Out

**By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.**

Phone

Goldenrod - LF Copy





MANIFEST # 64559  
GENERATOR DJR  
POINT OF ORIGIN Boca Raton #8  
TRANSPORTER T & M  
DATE 6-26-18  
JOB # 17235-000-

DATE 6-26-19 JOB # 17035-0082

TRANSPORTING COMPANY

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.

## Phone

**DISTRIBUTION:** **White** - Company Records **Yellow** - Billing **Pink** - Customer **Gold** - Sales

WCA Bonded Landfill  
 PO Box 215  
 Bloomfield, NM 87413  
 (505) 247-3295

000189  
 DJR OPERATING LLC UPSTREAM  
 PO Box 156  
 BLOOMFIELD, NM 87413  
 GROSS WEIGHT 38,740.00  
 TARE WEIGHT 34,880.00  
 NET WEIGHT 1,860.00

SITE		TICKET		SCALE OR INJECTION		ORIGIN	
01		211784		000400		Colorado	
DATE IN		DATE OUT		TIME IN		TIME OUT	
7/16/19		7/16/19		11:51 am		11:51 am	
REFERENCE		VOLUME		ROLL OFF			
Chevron Arroyos 101		DJR OPERATING I					

381491

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
5.00	YD	SW Special Waste	\$19.95	\$99.25	\$2.25	\$101.50
1.00		Energy Recovery Charge	\$5.96	\$5.96	\$0.00	\$5.92
1.00		ENVIRONMENTAL CHARGE	\$13.00	\$12.90	\$0.00	\$12.90

Charge to:

Location Name & #:

Hauled by:

Truck #:

Signature

1500 East CR 318, Durango, CO 81301

Date:

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecutions.

NET AMOUNT	\$120.32
TAX	\$17.68
TOTAL	\$138.00
CHECK NO	





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	DJR Operating, LLC	OGRID	371838
Contact Name	Amy Archuleta	Contact Telephone	505-632-3476
Contact email	aarchuleta@djrlc.com	Incident # (assigned by OCD)	
Contact mailing address	1 Road 3263 Aztec, NM 87410		

### Location of Release Source

Latitude 36.16366 Longitude -107.12872  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Bonanza 008	Site Type	Well
Date Release Discovered	06/07/2019	API# (if applicable)	30-043-20653 Lease: Jicarilla 360

Unit Letter	Section	Township	Range	County
K	2	22N	03W	Sandoval

Surface Owner: ☐ State ☐ Federal ☒ Tribal ☐ Private (Name: Jicarilla Apache )

### 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)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

While inspecting sites for BGT removal, this pit was observed to be tipped over and storm water mixed with produced water ran into the hole the pit was located.

Incident ID	
District RP	
Facility ID	
Application ID	

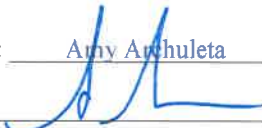
## Closure

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: Amy Archuleta Title: Regulatory  
Signature:  Date: 07-25-2019  
email: aarchuleta@djrlc.com Telephone: 505-632-3476 x 201

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_





---

*Event Summary* **Bonanza 008** 30-043-20653

---

On June 7, 2019 while out inspecting below grade tanks (BGTs) for removal, a tipped over BGT was discovered on the Bonanza 008 (30-043-20653). Notice was sent to Jicarilla EPO, Jicarilla Oil and Gas Administration, Bureau of Land Management, and New Mexico Oil Conservation Division. A crew was dispatched to clean up the location.

While visiting this site with Hobson Sandoval (Jicarilla EPO) and Orson Harrison (Jicarilla Oil and Gas Administration) it was found that what appeared to be hydrocarbon contaminated soil was found to be soil that appeared to have small amounts of asphalt, it was believed this soil was used to build the location. After further discussions, it was decided to stop excavating as this soil was not contaminated. EPO and JOGA did not require DJR to pull confirmation samples, but in the best interest of DJR, confirmation samples were taken with Orson Harrison and Hobson Sandoval present. The samples were pulled to the West of the BGT closest to the production tank on the base of the excavation only. Those samples came back as non-detect.

Further excavation was needed where the BGT was located. The total amount of soil excavated from this site was 215 yards. On July 11<sup>th</sup>, 2018 confirmation samples were pulled for the remaining area. These samples were witnessed by Hobson Sandoval. The final map will not show confirmation samples on the West wall because the wall did not exist.

The backfill soil was taken from an approved EPO and JOGA borrow pit. This location will have an above grade tank placed in the same position; no reclamation is needed at this time.

## NMOCD Thresholds for Contaminated Soils:

Site Name:	Bonanza 008
API #:	30-043-20653
Lat/Long:	36.16366 -107.12872
Legal:	K - 2-T22N-R03W
Surface Owner:	Jicarilla Apache Nation
County:	Sandoval
Date:	6/20/2019

## Depth To Groundwater Determination:

Cathodic Report/Hydrolog	None Available
Elevation Differential	90' higher - 7 miles to the south. Pullting ground water at 390'.
Water Wells	RG 38723
Cathodic Report Nearby W	None Available

Depth to Groundwater:		<50'	50-100'	>100'
		<input type="checkbox"/> Chec	<input checked="" type="checkbox"/> Chec	<input type="checkbox"/> Chec
Table I Action Levels	Benzene (mg/Kg)	10	10	10
	BTEX (mg/Kg)	50	50	50
	418.1 TPH (mg/Kg)	100	2500	2500
	8015 GRO +DRO (mg/Kg)	N/A	1000	1000
	Chlorides (mg/Kg)	600	10000	20000



## New Mexico Office of the State Engineer

# Wells Without Well Log Information

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

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

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

(NAD83 UTM in meters)

POD Number	Code	POD Subbasin	County	Source	64	16	4	Sec	Tws	Rng	X	Y
<a href="#">RG 38723</a>		MRG	SA	Artesian	4	2	1	10	21N	03W	306823	3993707*
<a href="#">RG 80504</a>		PUR	SA		3	3	4	02	21N	03W	308539	3994003
<a href="#">RG 93858 POD1</a>		MRG	SA		2	1	1	23	21N	03W	308039	3990646
<a href="#">SJ 00297 EXPL</a>			SA		2	1	06		21N	03W		

**Record Count:** 4

**PLSS Search:**

**Township:** 21N **Range:** 03W

\*UTM location was derived from PLSS - see Help

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

6/20/19 2:02 PM

WELLS WITHOUT WELL LOG INFORMATION



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	County	Q Q Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<u>RG 38723</u>		MRG	SA	4 2 1	10	21N	03W	306823	3993707*	604	480	124

Average Depth to Water: 480 feet  
Minimum Depth: 480 feet  
Maximum Depth: 480 feet

Record Count: 1

PLSS Search:

Section(s): 10

Township: 21N

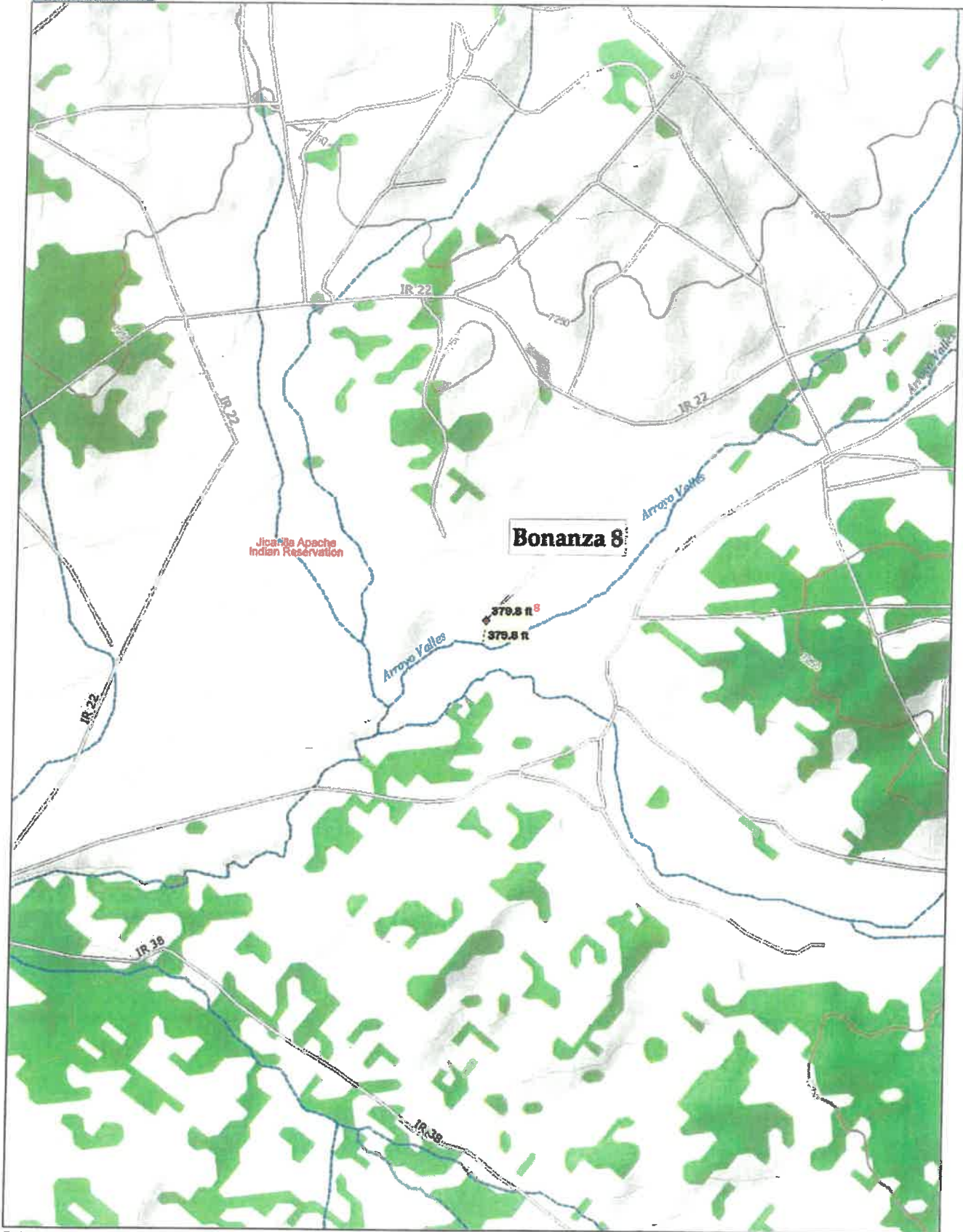
Range: 03W

\*UTM location was derived from PLSS - see Help

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

6/20/19 1:20 PM

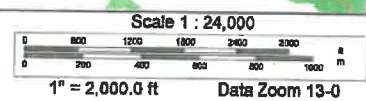
WATER COLUMN/ AVERAGE DEPTH TO  
WATER



Data use subject to license.

© DeLorme, DeLorme Topo USA® 7.0.

www.delorme.com





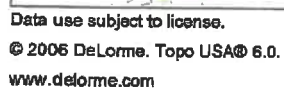


Diagram illustrating the relationship between True North (TN) and Magnetic North (MN). The diagram shows a vertical line representing True North (TN) and a slightly angled line representing Magnetic North (MN). The angle between them is labeled as 3.5°E.

Scale 1 : 25,000

0 600 1200 1800 2400 3000 ft

0 200 400 600 800 1000 ft

1" = 2,083.3 ft

Data Zoom 12-0

# Bonanza 8

API: 3D-043-20853

Location: K 2-22N-09W  
36.183672 -107.128735

## Legend

BONANZA 8

Jicarilla Apache

Release point

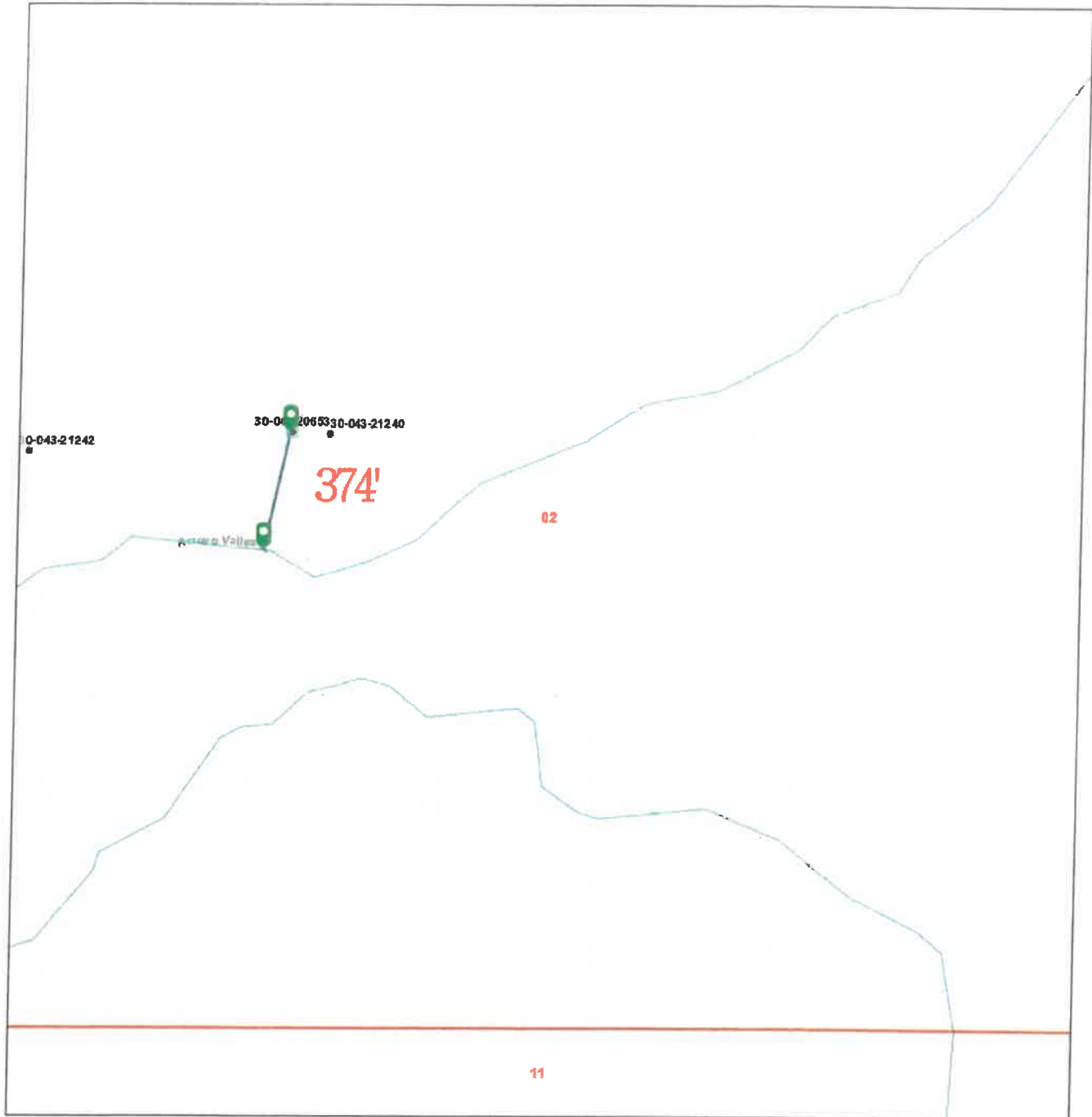
BONANZA 8

Google Earth

150 ft

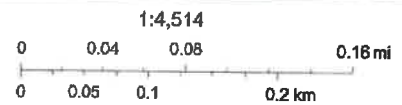
N

# Bonanza 008



6/11/2019, 1:56:54 PM

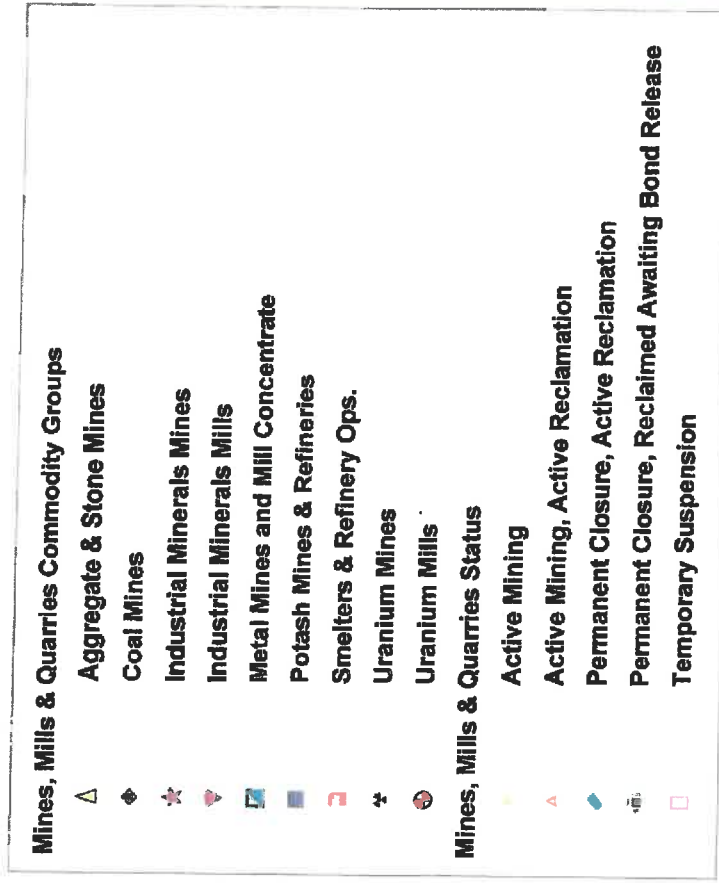
- |   |   |   |
|---|---|---|
| <b>Well Locations - Small Scale</b> <ul style="list-style-type: none"> <li>Active</li> <li>New</li> <li>Plugged</li> <li>Cancelled</li> <li>Temporarily Abandoned</li> </ul>  | <ul style="list-style-type: none"> <li>Gas, Cancelled, Never Drilled</li> <li>Gas, New</li> <li>Gas, Plugged</li> <li>Gas, Temporarily Abandoned</li> <li>Injection, Active</li> <li>Injection, Cancelled</li> <li>Injection, New</li> <li>Injection, Plugged</li> <li>Injection, Temporarily Abandoned</li> <li>Oil, Active</li> <li>Oil, Cancelled</li> <li>Oil, New</li> <li>Oil, Plugged</li> </ul> | <ul style="list-style-type: none"> <li>Oil, Temporarily Abandoned</li> <li>Salt Water Injection, Active</li> <li>Salt Water Injection, Cancelled</li> <li>Salt Water Injection, New</li> <li>Salt Water Injection, Plugged</li> <li>Salt Water Injection Temporarily Abandoned</li> <li>Water, Active</li> <li>Water, Cancelled</li> <li>Water, New</li> <li>Water, Plugged</li> <li>Water, Temporarily Abandoned</li> <li>OCD Districts</li> <li>OCD District Offices</li> </ul> |
| <b>Well Locations - Large Scale</b> <ul style="list-style-type: none"> <li>Miscellaneous</li> <li>CO2 Active</li> <li>CO2 Cancelled</li> <li>CO2 New</li> <li>CO2, Plugged</li> <li>CO2, Temporarily Abandoned</li> <li>Gas Active</li> </ul> |   |   |



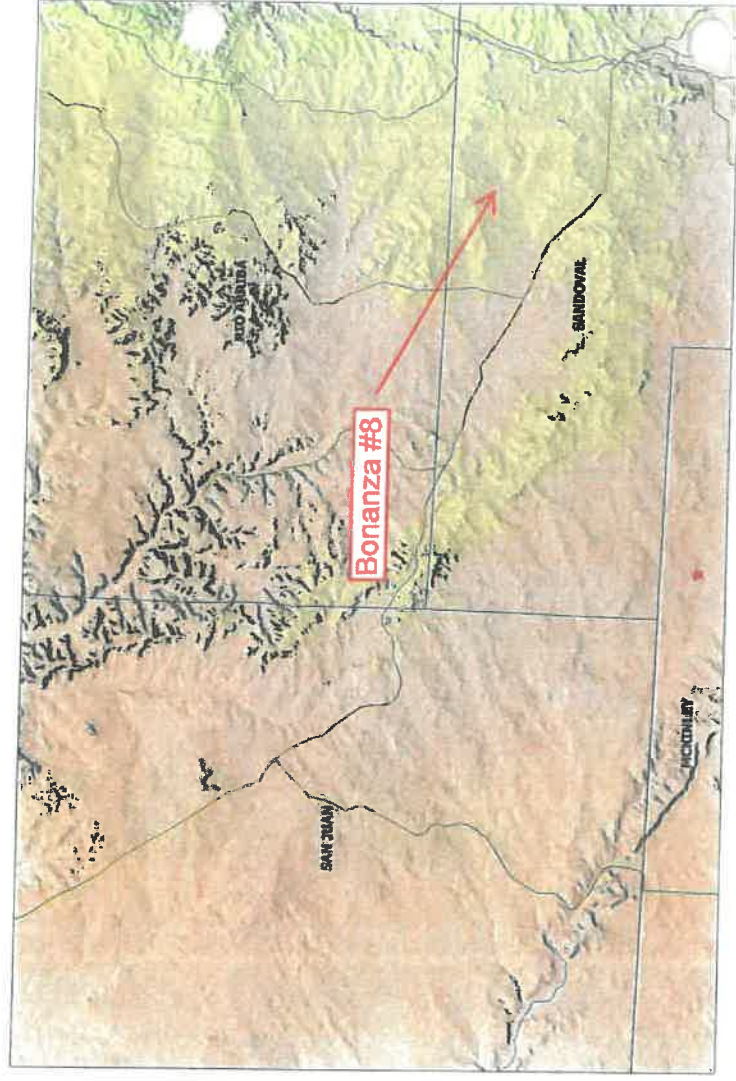
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, OCD,



# DSR Operating, LLC Mine Map



SCALE 1 : 740,905





## *New Mexico Office of the State Engineer* **Point of Diversion With Meter Attached**

**PLSS Search:**

**Q4:** NE    **Section(s):** 2    **Township:** 22N    **Range:** 03W

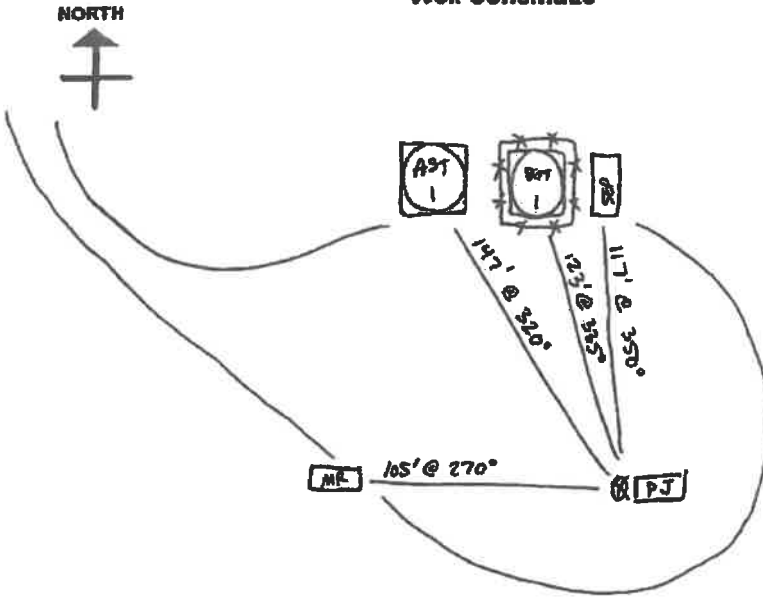
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

6/11/19 2:08 PM

POINT OF DIVERSION WITH METER ATTACHED



# Well Schematic



## Schematic Key:

Separator

SEP

Artificial Lift

AL

Condensate Tank

COND

Compressor

COM

Meter Run

METER RUN

Dehydrator

DEH

Well Head

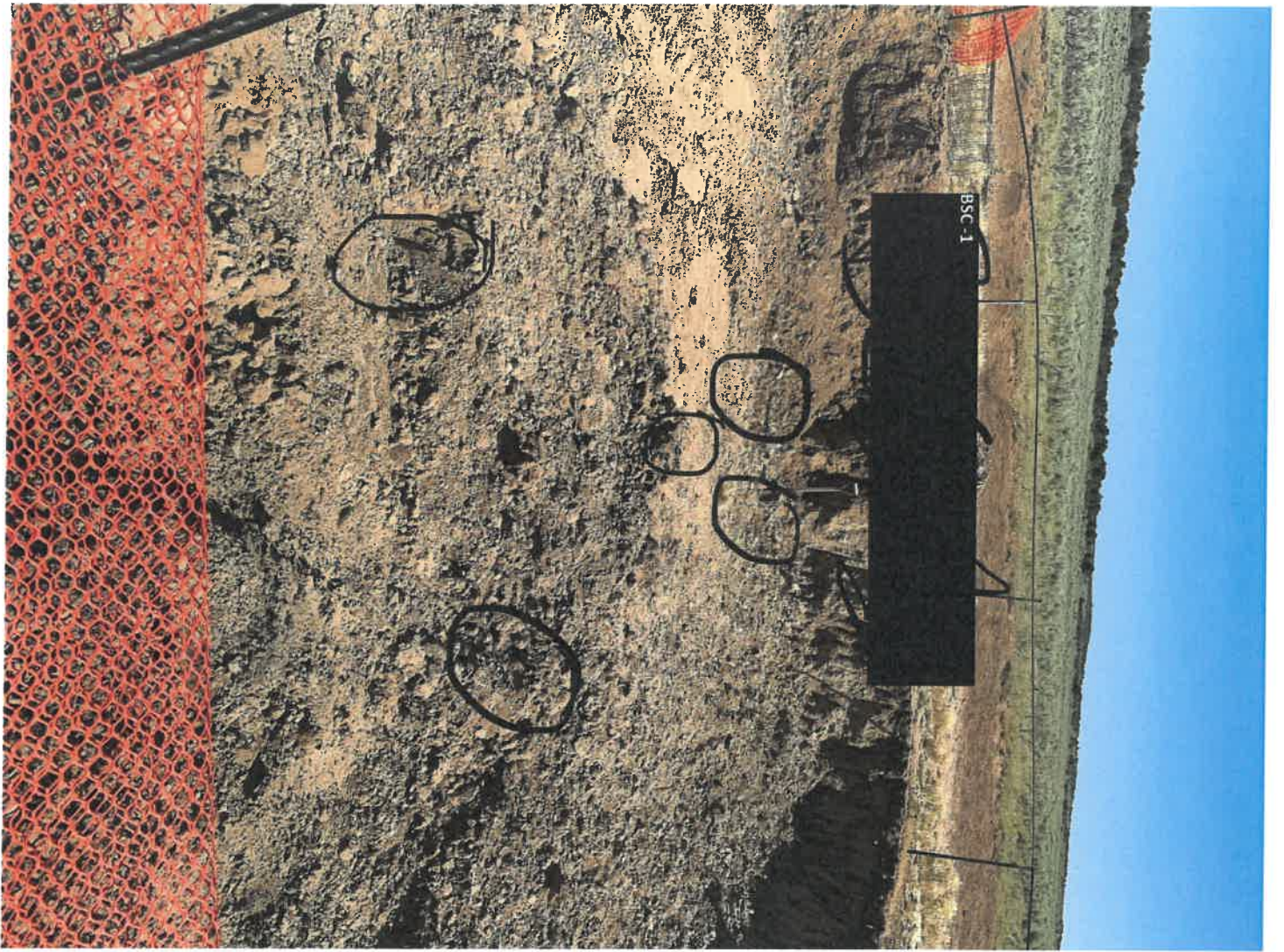
○

Water Tank

WATER

Measure any distance 1000ft or less of the following:

- From wellhead to any continuous flowing or significant water course. NA
- From below-grade tanks to any permanent residence, school, church, hospital, etc. NA









BCS-3











Legend

- - BSC 1
- - BSC 2
- - BSC 3
- - BSC 4
- - Excavation

All samples representative  
of 5-point composites



MAP DRAWN BY:  
BAH  
7/19/2019

REVISIONS BY:  
BAH  
7/29/2019

APPROVED BY:  
FRA  
7/29/2019



## Figure 2

### Site Map

DJR Operating, LLC.  
Bonanza 008 Well Site  
API: 30-043-20653

Section 2, Township 22N, Range 3W  
36.163660, -107.128720  
Sandoval County, New Mexico  
Project #17035-0103



**envirotech**

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615





## Analytical Report

### Report Summary

Client: DJR Operating, LLC

Samples Received: 7/11/2019

Job Number: 17035-0028

Work Order: P907031

Project Name/Location: Bonanza 8

Report Reviewed By:



Date: 7/17/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.

Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.

DJR Operating, LLC  
1 Rd 3263  
Aztec NM, 87410

Project Name: Bonanza 8  
Project Number: 17035-0028  
Project Manager: Amy Archuleta

**Reported:**  
07/17/19 11:39

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BCS-1	P907031-01A	Soil	07/11/19	07/11/19	Glass Jar, 2 oz.
BCS-2	P907031-02A	Soil	07/11/19	07/11/19	Glass Jar, 2 oz.
BCS-3	P907031-03A	Soil	07/11/19	07/11/19	Glass Jar, 2 oz.
BCS-4	P907031-04A	Soil	07/11/19	07/11/19	Glass Jar, 2 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

 Reported:  
 07/17/19 11:39

**BCS-1**  
**P907031-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		98.0 %		50-150	1928041	07/12/19	07/15/19	EPA 8021B	
<b>Nonhalogenated Organics by 8015 - DRO/ORO</b>									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Surrogate: n-Nonane		101 %		50-200	1928040	07/12/19	07/15/19	EPA 8015D	
<b>Nonhalogenated Organics by 8015 - GRO</b>									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1928041	07/12/19	07/15/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		103 %		50-150	1928041	07/12/19	07/15/19	EPA 8015D	
<b>Anions by 300.0/9056A</b>									
Chloride	ND	20.0	mg/kg	1	1928046	07/12/19	07/12/19	EPA 300.0/9056A	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

**Reported:**  
 07/17/19 11:39

**BCS-2**  
**P907031-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.7 %		50-150	1928041	07/12/19	07/16/19	EPA 8021B	
<b>Nonhalogenated Organics by 8015 - DRO/ORO</b>									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Surrogate: n-Nonane		104 %		50-200	1928040	07/12/19	07/15/19	EPA 8015D	
<b>Nonhalogenated Organics by 8015 - GRO</b>									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		102 %		50-150	1928041	07/12/19	07/16/19	EPA 8015D	
<b>Anions by 300.0/9056A</b>									
Chloride	ND	20.0	mg/kg	1	1928046	07/12/19	07/12/19	EPA 300.0/9056A	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

**Reported:**  
 07/17/19 11:39

**BCS-3**  
**P907031-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b><u>Volatile Organics by EPA 8021</u></b>									
Benzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.9 %		50-150	1928041	07/12/19	07/16/19	EPA 8021B	
<b><u>Nonhalogenated Organics by 8015 - DRO/ORO</u></b>									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Surrogate: n-Nonane		102 %		50-200	1928040	07/12/19	07/15/19	EPA 8015D	
<b><u>Nonhalogenated Organics by 8015 - GRO</u></b>									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		103 %		50-150	1928041	07/12/19	07/16/19	EPA 8015D	
<b><u>Anions by 300.0/9056A</u></b>									
Chloride	ND	20.0	mg/kg	1	1928046	07/12/19	07/12/19	EPA 300.0/9056A	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

**Reported:**  
 07/17/19 11:39

**BCS-4**  
**P907031-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.7 %		50-150	1928041	07/12/19	07/16/19	EPA 8021B	
<b>Nonhalogenated Organics by 8015 - DRO/ORO</b>									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1928040	07/12/19	07/15/19	EPA 8015D	
Surrogate: n-Nonane		105 %		50-200	1928040	07/12/19	07/15/19	EPA 8015D	
<b>Nonhalogenated Organics by 8015 - GRO</b>									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1928041	07/12/19	07/16/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		103 %		50-150	1928041	07/12/19	07/16/19	EPA 8015D	
<b>Anions by 300.0/9056A</b>									
Chloride	ND	20.0	mg/kg	1	1928046	07/12/19	07/12/19	EPA 300.0/9056A	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

 Reported:  
 07/17/19 11:39

**Volatile Organics by EPA 8021 - Quality Control**
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1928041 - Purge and Trap EPA 5030A**
**Blank (1928041-BLK1)**

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	7.61		"	8.00		95.1	50-150			

**LCS (1928041-BS1)**

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Benzene	4.49	0.0250	mg/kg	5.00		89.7	70-130			
Toluene	4.86	0.0250	"	5.00		97.2	70-130			
Ethylbenzene	4.83	0.0250	"	5.00		96.6	70-130			
p,m-Xylene	9.95	0.0500	"	10.0		99.5	70-130			
o-Xylene	4.82	0.0250	"	5.00		96.4	70-130			
Total Xylenes	14.8	0.0250	"	15.0		98.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.68		"	8.00		96.0	50-150			

**Matrix Spike (1928041-MS1)**

Source: P907029-01

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Benzene	4.56	0.0250	mg/kg	5.00	ND	91.2	54.3-133			
Toluene	4.93	0.0250	"	5.00	ND	98.7	61.4-130			
Ethylbenzene	4.89	0.0250	"	5.00	ND	97.7	61.4-133			
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131			
o-Xylene	4.86	0.0250	"	5.00	ND	97.2	63.3-131			
Total Xylenes	14.9	0.0250	"	15.0	ND	99.4	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.68		"	8.00		96.0	50-150			

**Matrix Spike Dup (1928041-MSD1)**

Source: P907029-01

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Benzene	4.22	0.0250	mg/kg	5.00	ND	84.4	54.3-133	7.75	20	
Toluene	4.57	0.0250	"	5.00	ND	91.4	61.4-130	7.64	20	
Ethylbenzene	4.55	0.0250	"	5.00	ND	90.9	61.4-133	7.21	20	
p,m-Xylene	9.35	0.0500	"	10.0	ND	93.5	63.3-131	7.09	20	
o-Xylene	4.53	0.0250	"	5.00	ND	90.6	63.3-131	7.09	20	
Total Xylenes	13.9	0.0250	"	15.0	ND	92.6	63.3-131	7.09	20	
Surrogate: 4-Bromochlorobenzene-PID	7.81		"	8.00		97.6	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

 Reported:  
 07/17/19 11:39

**Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control**
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1928040 - DRO Extraction EPA 3570**
**Blank (1928040-BLK1)**

Prepared: 07/12/19 0 Analyzed: 07/15/19 1

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	54.9		"	50.0		110	50-200			

**LCS (1928040-BS1)**

Prepared: 07/12/19 0 Analyzed: 07/15/19 1

Diesel Range Organics (C10-C28)	486	25.0	mg/kg	500		97.3	38-132			
Surrogate: n-Nonane	50.7		"	50.0		101	50-200			

**Matrix Spike (1928040-MS1)**

Source: P907029-01

Prepared: 07/12/19 0 Analyzed: 07/15/19 1

Diesel Range Organics (C10-C28)	530	25.0	mg/kg	500	40.4	98.0	38-132			
Surrogate: n-Nonane	50.5		"	50.0		101	50-200			

**Matrix Spike Dup (1928040-MSD1)**

Source: P907029-01

Prepared: 07/12/19 0 Analyzed: 07/15/19 1

Diesel Range Organics (C10-C28)	534	25.0	mg/kg	500	40.4	98.7	38-132	0.660	20	
Surrogate: n-Nonane	50.7		"	50.0		101	50-200			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

 Reported:  
 07/17/19 11:39

**Nonhalogenated Organics by 8015 - GRO - Quality Control**
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1928041 - Purge and Trap EPA 5030A**
**Blank (1928041-BLK1)**

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.25		"	8.00		103	50-150			

**LCS (1928041-BS2)**

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Gasoline Range Organics (C6-C10)	54.9	20.0	mg/kg	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.25		"	8.00		103	50-150			

**Matrix Spike (1928041-MS2)**

Source: P907029-01

Prepared: 07/12/19 1 Analyzed: 07/15/19 1

Gasoline Range Organics (C6-C10)	56.1	20.0	mg/kg	50.0	ND	112	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.37		"	8.00		105	50-150			

**Matrix Spike Dup (1928041-MSD2)**

Source: P907029-01

Prepared: 07/12/19 1 Analyzed: 07/15/19 2

Gasoline Range Organics (C6-C10)	55.6	20.0	mg/kg	50.0	ND	111	70-130	0.996	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.24		"	8.00		103	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

DJR Operating, LLC  
 1 Rd 3263  
 Aztec NM, 87410

 Project Name: Bonanza 8  
 Project Number: 17035-0028  
 Project Manager: Amy Archuleta

**Reported:**  
 07/17/19 11:39

**Anions by 300.0/9056A - Quality Control**
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1928046 - Anion Extraction EPA 300.0/9056A**
**Blank (1928046-BLK1)**

Prepared &amp; Analyzed: 07/12/19 1

Chloride	ND	20.0	mg/kg
----------	----	------	-------

**LCS (1928046-BS1)**

Prepared &amp; Analyzed: 07/12/19 1

Chloride	267	20.0	mg/kg	250	107	90-110
----------	-----	------	-------	-----	-----	--------

**Matrix Spike (1928046-MS1)**
**Source: P907029-01**

Prepared &amp; Analyzed: 07/12/19 1

Chloride	594	20.0	mg/kg	250	329	106	80-120
----------	-----	------	-------	-----	-----	-----	--------

**Matrix Spike Dup (1928046-MSD1)**
**Source: P907029-01**

Prepared &amp; Analyzed: 07/12/19 1

Chloride	587	20.0	mg/kg	250	329	103	80-120	1.27	20
----------	-----	------	-------	-----	-----	-----	--------	------	----

**QC Summary Report**
**Comment:**

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC  
1 Rd 3263  
Aztec NM, 87410

Project Name: Bonanza 8  
Project Number: 17035-0028  
Project Manager: Amy Archuleta

**Reported:**  
07/17/19 11:39

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
RPD Relative Percent Difference  
\*\* Methods marked with \*\* are non-accredited methods.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

<b>Client:</b> DSC Operating LLC <b>Project:</b> Borealis 8 <b>Project Manager:</b> Amy Archuleta <b>Address:</b> 1 Road 3263 <b>City, State, Zip:</b> Aztec NM 87410 <b>Phone:</b> 505-127-5476 <b>Email:</b> aarchuleta@dscoperating.com				<b>Report Attention</b> <b>Report due by:</b> 7-17-19 <b>Attention:</b> Amy Archuleta <b>Address:</b> <b>City, State, Zip:</b> <b>Phone:</b> <b>Email:</b>				<b>Lab Use Only</b> <b>Lab WO#</b> P907031 <b>Job Number</b> 17035-0028 <b>Analysis and Method</b> VOC by 8260 BTEX by 8021 GRO/DRO by 8015 DRO/ORO by 8015 Metals 6010 Chloride 300.0				<b>TAT</b> <b>1D</b> 3D <b>EPA Program</b> RCRA CWA SDWA			
				<b>State</b> NM CO UT AZ											
				<b>Remarks</b>											

Time Sampled	Date	Matrix	No Containers	Sample ID	Lab Number
10:00	7/11/19	S	1	BCS-1	1
10:00	7/11/19	S	1	BCS-2	2
10:00	7/11/19	S	1	BCS-3	3
10:00	7/11/19	S	1	BCS-4	4

**Additional Instructions:** P.O. AA-EH-L-30028

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Amy Archuleta

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[Signature]	7/11/19	1:00 pm	[Signature]	7/11/19	1:00 pm
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Received on ice: ☒ Y ☐ N  
 T1 T2 T3  
 AVG Temp °C 4

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



*\* Samples not required by EPD or JOGA  
\* No Map Available*

## Analytical Report

### Report Summary

Client: DJR Operating, LLC

Samples Received: 6/25/2019

Job Number: 17035-0028

Work Order: P906110

Project Name/Location: Bonanza 8

Report Reviewed By:

Walter Hinchman, Laboratory Director

Date: 6/28/19



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.  
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.  
Envirotech, Inc, currently holds the appropriate and available Utah TNI certification NM009792018-1 for the data reported.





DJR Operating, LLC  
1 Rd 3263  
Aztec NM, 87410

Project Name: Bonanza 8  
Project Number: 17035-0028  
Project Manager: Amy Archuleta

**Reported:**  
06/28/19 13:20

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Bonanza 8 South	P906110-01A	Soil	06/25/19	06/25/19	Glass Jar, 2 oz.
Bonanza 8 North	P906110-02A	Soil	06/25/19	06/25/19	Glass Jar, 2 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC	Project Name:	Bonanza 8	Reported: 06/28/19 13:20
1 Rd 3263	Project Number:	17035-0028	
Aztec NM, 87410	Project Manager:	Amy Archuleta	

**Bonanza 8 South  
P906110-01 (Solid)**

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-------	-------	----------	-------	----------	----------	--------	-------

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		93.0 %		50-150	1926019	06/26/19	06/27/19	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1926018	06/26/19	06/27/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1926018	06/26/19	06/27/19	EPA 8015D	
Surrogate: n-Nonane		104 %		50-200	1926018	06/26/19	06/27/19	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		99.6 %		50-150	1926019	06/26/19	06/27/19	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
----------	----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC	Project Name:	Bonanza 8	Reported: 06/28/19 13:20
1 Rd 3263	Project Number:	17035-0028	
Aztec NM, 87410	Project Manager:	Amy Archuleta	

**Bonanza 8 North  
P906110-02 (Solid)**

Reporting

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-------	-------	----------	-------	----------	----------	--------	-------

**Volatile Organics by EPA 8021**

Benzene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		93.0 %		50-150	1926019	06/26/19	06/27/19	EPA 8021B	

**Nonhalogenated Organics by 8015 - DRO/ORO**

Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1926018	06/26/19	06/27/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1926018	06/26/19	06/27/19	EPA 8015D	
Surrogate: n-Nonane		111 %		50-200	1926018	06/26/19	06/27/19	EPA 8015D	

**Nonhalogenated Organics by 8015 - GRO**

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1926019	06/26/19	06/27/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		101 %		50-150	1926019	06/26/19	06/27/19	EPA 8015D	

**Anions by 300.0/9056A**

Chloride	ND	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
----------	----	------	-------	---	---------	----------	----------	--------------------	--

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





DJR Operating, LLC	Project Name:	Bonanza 8	Reported: 06/28/19 13:20
1 Rd 3263	Project Number:	17035-0028	
Aztec NM, 87410	Project Manager:	Amy Archuleta	

### Volatile Organics by EPA 8021 - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch 1926019 - Purge and Trap EPA 5030A

##### Blank (1926019-BLK1)

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	7.79		"	8.00		97.3	50-150			

##### LCS (1926019-BS1)

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Benzene	4.58	0.0250	mg/kg	5.00		91.5	70-130			
Toluene	4.94	0.0250	"	5.00		98.7	70-130			
Ethylbenzene	4.87	0.0250	"	5.00		97.3	70-130			
p,m-Xylene	10.0	0.0500	"	10.0		100	70-130			
o-Xylene	4.86	0.0250	"	5.00		97.2	70-130			
Total Xylenes	14.9	0.0250	"	15.0		99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.77		"	8.00		97.1	50-150			

##### Matrix Spike (1926019-MS1)

Source: P906112-01

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Benzene	4.36	0.0250	mg/kg	5.00	ND	87.2	54.3-133			
Toluene	4.74	0.0250	"	5.00	ND	94.9	61.4-130			
Ethylbenzene	4.66	0.0250	"	5.00	ND	93.2	61.4-133			
p,m-Xylene	9.60	0.0500	"	10.0	ND	96.0	63.3-131			
o-Xylene	4.66	0.0250	"	5.00	ND	93.2	63.3-131			
Total Xylenes	14.3	0.0250	"	15.0	ND	95.1	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.54		"	8.00		94.3	50-150			

##### Matrix Spike Dup (1926019-MSD1)

Source: P906112-01

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Benzene	4.39	0.0250	mg/kg	5.00	ND	87.8	54.3-133	0.667	20	
Toluene	4.75	0.0250	"	5.00	ND	95.0	61.4-130	0.147	20	
Ethylbenzene	4.67	0.0250	"	5.00	ND	93.4	61.4-133	0.212	20	
p,m-Xylene	9.61	0.0500	"	10.0	ND	96.1	63.3-131	0.0833	20	
o-Xylene	4.67	0.0250	"	5.00	ND	93.4	63.3-131	0.179	20	
Total Xylenes	14.3	0.0250	"	15.0	ND	95.2	63.3-131	0.115	20	
Surrogate: 4-Bromochlorobenzene-PID	7.53		"	8.00		94.2	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC	Project Name:	Bonanza 8	Reported: 06/28/19 13:20
1 Rd 3263	Project Number:	17035-0028	
Aztec NM, 87410	Project Manager:	Amy Archuleta	

### Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1926018 - DRO Extraction EPA 3570</b>										
<b>Blank (1926018-BLK1)</b>				Prepared: 06/26/19 0 Analyzed: 06/26/19 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	91.5		"	50.0		183	50-200			
<b>LCS (1926018-BS1)</b>				Prepared: 06/26/19 0 Analyzed: 06/26/19 1						
Diesel Range Organics (C10-C28)	510	25.0	mg/kg	500		102	38-132			
Surrogate: n-Nonane	60.1		"	50.0		120	50-200			
<b>Matrix Spike (1926018-MS1)</b>				Source: P906103-01		Prepared: 06/26/19 0 Analyzed: 06/26/19 1				
Diesel Range Organics (C10-C28)	1960	250	mg/kg	500	1160	160	38-132			SPK1
Surrogate: n-Nonane	65.9		"	50.0		132	50-200			
<b>Matrix Spike Dup (1926018-MSD1)</b>				Source: P906103-01		Prepared: 06/26/19 0 Analyzed: 06/26/19 2				
Diesel Range Organics (C10-C28)	1860	250	mg/kg	500	1160	141	38-132	5.06	20	SPK1
Surrogate: n-Nonane	65.9		"	50.0		132	50-200			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC	Project Name:	Bonanza 8	Reported: 06/28/19 13:20
1 Rd 3263	Project Number:	17035-0028	
Aztec NM, 87410	Project Manager:	Amy Archuleta	

### Nonhalogenated Organics by 8015 - GRO - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch 1926019 - Purge and Trap EPA 5030A

##### Blank (1926019-BLK1)

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.93		"	8.00		99.1	50-150			

##### LCS (1926019-BS2)

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Gasoline Range Organics (C6-C10)	50.4	20.0	mg/kg	50.0		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.97		"	8.00		99.7	50-150			

##### Matrix Spike (1926019-MS2)

Source: P906112-01

Prepared: 06/26/19 1 Analyzed: 06/27/19 1

Gasoline Range Organics (C6-C10)	48.9	20.0	mg/kg	50.0	ND	97.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.23		"	8.00		103	50-150			

##### Matrix Spike Dup (1926019-MSD2)

Source: P906112-01

Prepared: 06/26/19 1 Analyzed: 06/27/19 0

Gasoline Range Organics (C6-C10)	48.4	20.0	mg/kg	50.0	ND	96.8	70-130	1.02	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.06		"	8.00		101	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





DJR Operating, LLC	Project Name:	Bonanza 8	Reported: 06/28/19 13:20
1 Rd 3263	Project Number:	17035-0028	
Aztec NM, 87410	Project Manager:	Amy Archuleta	

### Anions by 300.0/9056A - Quality Control

#### Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1926020 - Anion Extraction EPA 300.0/9056A</b>										
<b>Blank (1926020-BLK1)</b>				Prepared & Analyzed: 06/26/19 1						
Chloride	ND	20.0	mg/kg							
<b>LCS (1926020-BS1)</b>				Prepared & Analyzed: 06/26/19 1						
Chloride	255	20.0	mg/kg	250		102	90-110			
<b>Matrix Spike (1926020-MS1)</b>				Source: P906110-01		Prepared & Analyzed: 06/26/19 1				
Chloride	258	20.0	mg/kg	250	ND	103	80-120			
<b>Matrix Spike Dup (1926020-MSD1)</b>				Source: P906110-01		Prepared & Analyzed: 06/26/19 1				
Chloride	264	20.0	mg/kg	250	ND	106	80-120	2.51	20	

#### QC Summary Report

##### Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



DJR Operating, LLC  
1 Rd 3263  
Aztec NM, 87410

Project Name: Bonanza 8  
Project Number: 17035-0028  
Project Manager: Amy Archuleta

**Reported:**  
06/28/19 13:20

#### Notes and Definitions

SPK1 The spike recovery is outside of quality control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

\*\* Methods marked with \*\* are non-accredited methods.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

[illegible]