District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, 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
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

10151

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

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

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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 Energen Resources OGRID # 162928

Address 2010 Afton Place, Farmington, New Mexico 87401

Facility or well name Jicarilla 98 2A

API Number 3003921284 OCD Permit Number

U/L or Qtr/Qtr O Section 19 Township 26N Range 03W County Rio Arriba

Center of Proposed Design Latitude 36 46455 Longitude -107 17968 NAD ☐1927 ☒ 1983

Surface Owner ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

2

☐ **Pit:** Subsection F or G of 19 15 17 11 NMAC

RCVD JUN 1 '12
OIL CONS. DIV.
DIST. 3

Temporary ☐ Drilling ☐ Workover

☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A

☐ 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

☐ **Closed-loop System:** Subsection H of 19 15 17 11 NMAC

Type of Operation ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)

☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____

☐ Lined ☐ Unlined Liner type Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

Liner Seams ☐ Welded ☐ Factory ☐ Other _____

4

☒ **Below-grade tank:** Subsection I of 19 15 17 11 NMAC

Volume _____bbl Type of fluid Produced Water

Tank Construction material _____

☐ 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 _____

5

☐ **Alternative Method:**

Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval

6

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_____

7

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)

8

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 3 103 NMAC

9

Administrative Approvals 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:

☐ Administrative approval(s). Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval

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

10

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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	☐ Yes ☐ No
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 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo, Satellite image	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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 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 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (certification) of the proposed site	☐ 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

11.
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 _____

12
Closed-loop Systems 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.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19 15 17 9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - 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 _____

☐ Previously Approved Operating and Maintenance Plan API Number _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
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

14
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 ☐ Closed-loop System ☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15
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 F 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 I of 19 15.17 13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC

16

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17 13 D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name _____ Disposal Facility Permit Number _____

Disposal Facility Name _____ Disposal Facility Permit Number _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations

☐ 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 I of 19 15 17 13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17.13 NMAC

17

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 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 between 50 and 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
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 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 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 private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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
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 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (certification) of the proposed site	☐ 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

18

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 F of 19 15 17 13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19 15 17 13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19 15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15.17.13 NMAC

19

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 _____

20

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

OCD Representative Signature: Jonathan D. Kelly **Approval Date:** 6/04/2012

Title: Deputy Oil & Gas Inspector, District #3 **OCD Permit Number:** _____

21

Closure Report (required within 60 days of closure completion): Subsection K of 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** 5/2/12

22

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

23

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name. _____ Disposal Facility Permit Number _____

Disposal Facility Name _____ Disposal Facility Permit Number _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

24

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)

☐ 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 _____ Longitude _____ NAD ☐ 1927 ☐ 1983

25.

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) Ed Hasely Title Sr Environmental Engineer

Signature Ed Hasely Date 5/31/12

e-mail address: ed hasely@energen com Telephone (505) 324-4131

BELOW-GRADE TANK CLOSURE REPORT

ENERGEN RESOURCES
Jicarilla 98 #2A

CLOSURE STEPS: (Closure Report information is in **bold**)

(1) Notify the surface owner by certified mail, return receipt requested, of the plans to close the below-grade tank.
Attached

(2) Notify the Aztec OCD office (Brandon Powell – 334-6178, Ext 15) verbally or by other means at least 72 hours, but not more than one week, prior to the planned closure operation.
Attached

(3) Remove liquids from the below-grade tank Dispose of the liquids and sludge in a division-approved facility.
No disposal of liquids was required.

(4) Remove the below-grade tank for re-use in an above-ground setup or for disposal in a division-approved manner.
Tank removed.

(5) Unless the equipment is required for some other purpose, remove any on-site equipment associated with the below-grade tank.
All remaining equipment is required for operations.

(6) Test the soils beneath the below-grade tank to determine whether a release has occurred.

- Collect, at a minimum, a five point, composite sample,
  Soils were visually impacted. No samples collected.
- Collect individual grab samples from any area that is wet, discolored or showing other evidence of a release;
  No additional sampling was necessary.

Analyze for BTEX, TPH and chlorides to demonstrate·

- Benzene concentration does not exceed 0.2 mg/kg, as determined by EPA SW-846 methods 8021B or 8260B
- Total BTEX concentration does not exceed 50 mg/kg, as determined by EPA SW-846 methods 8021B or 8260B
- TPH concentration does not exceed 100 mg/kg, as determined by EPA method 418.1
- Chloride concentration does not exceed 250 mg/kg, as determined by EPA method 300.1 or the background concentration, whichever is greater

Constituent	Limit (mg/kg)	Actual Results (mg/kg)
Benzene	0.2	NA
Total BTEX	50.0	NA
TPH (418.1)	100	NA
Chlorides	250	NA

(7) IF the soil analyses show that the soils meet the concentrations specified in (6) above, backfill the excavation with compacted, non-waste containing, earthen material in a manner that will prevent ponding or erosion. If the area will not be needed for operations, reclaim the area as described in the "RECLAMATION" section.

Not applicable.

(8) IF the soil analyses show that the soils exceed one or more of the concentrations specified in (6) above, notify the Aztec OCD office (Brandon Powell – 334-6178, Ext 15) and proceed per 19.15.3.116 NMAC.

Proceeded per 19.15.29 and 19.15.30.

NOTE. If groundwater is encountered at any time during the closure process, the OCD office will be notified and a specific closure plan will be submitted to the Aztec and Santa Fe OCD offices for approval.

Not applicable.

FINAL CLOSURE REPORT:

Within 60 days of closure completion, submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results

This submittal is the closure report.

RECLAMATION:

If the area is not needed for operations, reclaim the area to a safe and stable condition that blends with the surrounding undisturbed area Restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover, recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate

(A) Construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material. The soil cover shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

(B) Seed or plant the disturbed areas the first growing season after closing the below-grade tank. Drill on the contour whenever practical or by other division-approved methods. The goal is to obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons During the two successive growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

(C) Repeat seeding or planting until it successfully achieves the required vegetative cover

(D) If conditions are not favorable for the establishment of vegetation, such as periods of drought, contact the Aztec OCD office to discuss possibly delaying seeding or planting until soil moisture conditions become favorable or using additional techniques such as mulching, fertilizing, irrigating, fencing or other practices.

(E) Notify the Aztec OCD office (Brandon Powell – 334-6178, Ext 15) when the area has been seeded or planted and when it successfully achieves re-vegetation.

Area is needed for operations. Upon abandonment, seeding will be deferred to the BLM / Tribal requirements per the BLM / OCD MOU.

ENERGEN
RESOURCES

March 28, 2012

Cc:

Jicarilla Apache Nation
Environmental Protection Office
P.O. Box 507
Dulce, NM 87528
Attn: Mr. Hobson Sandoval, Environmental Specialist

U.S. Postal Service™
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Restricted Delivery Fee (Endorsement Required)	
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Sent To
Street, Apt No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

7009 2820 0000 5801 7920

Re: Below Grade Tank Closures
Multiple Wells

Dear Sirs:

Energen Resources plans to close the below grade tanks located on the well locations listed below. You are on record as the surface owner where these wells are located. New Mexico Oil Conservation Division (NMOCD) rules require notification to the surface owner of our plans to close the below grade tanks. NMOCD rules and guidelines will be followed. The wells are all located in Rio Arriba County, New Mexico.

Jicarilla 98 #2A - Unit Letter O, Section 19, Township 26N, Range 3W
Jicarilla 98 #10 - Unit Letter M, Section 17, Township 26N, Range 3W
Jicarilla 98 #12 - Unit Letter J, Section 18, Township 26N, Range 3W

If there are any questions or concerns, please contact me at 505-324-4131.

Sincerely,

Ed Hasely
Sr. Environmental Engineer
Energen Resources

Cc: Well Files
Correspondence

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Jicarilla Apache Nation
EPO
Post Office Box 507
Dulce NM 87528
Attn: Hobson Sandoval

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Ulinda Natsinneh C. Date of Delivery 4-2-12

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7009 2820 0000 5801 7920

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Ed Hasely

From: Ed Hasely
Sent: Wednesday, March 28, 2012 7 36 AM
To: 'Kelly, Jonathan, EMNRD'
Cc: 'Hobson Sandoval'
Subject: BGT Closure Notifications - Jicarilla

Jonathan – Energen plans to close the below listed BGT's in the near future. Let me know if you have questions. Thanks.

Jica rilla 98 #2A - Unit Letter O, Section 19, Township 26N, Range 3W
Jicarilla 98 #10 - Unit Letter M, Section 17, Township 26N, Range 3W
Jicarilla 98 #12 - Unit Letter J, Section 18, Township 26N, Range 3W

Ed Hasely
Energen Resources Corporation
Sr Environmental Engineer
ed hasely@energen com
Office (505) 324-4131
Cell· (505) 330-3584


ENERGEN
RESOURCES CORPORATION
Jicarilla 98 Lse. Tribal Well No. 2A
1149' FSL 1391' FEL Sec. 19-26N-3W
Rio Arriba NM Contr. 09-000098

ENERGEN
RESOURCES

May 31, 2012

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410
Attn: Brandon Powell

Re: **Jicarilla 98 #2A**
Below Grade Tank Closure

Dear Mr. Powell:

Enclosed is the final C-144 Form for the Below-Grade Tank closure on the subject well location.

If there are any questions or concerns with this submittal, please contact me at 505-324-4131.

Sincerely,

Ed Hasely
Sr. Environmental Engineer
Energen Resources

Attachments: Final C-144
Closure Report
Proof of Closure Notice
Photo Documentation

Cc: HSE File
Jicarilla Oil and Gas
Jicarilla EPO
Facility File
Correspondence

District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Energen Resources, Inc.	**Contact:** Ed Hasely
Address: 2010 Afton Place, Farmington, NM 87401	**Telephone No:** 505-324-4131
Facility Name: Jicarilla 98 #2A (API 3003921284)	**Facility Type:** Oil/Gas Well Site

Surface Owner: Jicarilla	**Mineral Owner:** Jicarilla	**Lease No.** Jicarilla 98

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	19	26N	3W	1149	South	1391	East	Rio Arriba

Latitude 36.46455 **Longitude** -107.17968

NATURE OF RELEASE

Type of Release: Produced Fluids	**Volume of Release:** Unknown	**Volume Recovered:** 0 bbls
Source of Release: Production Pit Tank	**Date and Hour of Occurrence:** Unknown	**Date and Hour of Discovery:** 4/5/12
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** Jonathan Kelly – OCD Hobson Sandoval - Jicarilla	
By Whom? Ed Hasely	**Date and Hour:** 4/5/12, 4 45 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse.** NA	

If a Watercourse was Impacted, Describe Fully.* NA

RCVD JUN 1 '12
OIL CONS. DIV.
DIST. 3

Describe Cause of Problem and Remedial Action Taken.*

Soils underneath the tank during the below-grade tank closure were visually impacted According to the Pit Rule, this is an indication of a past release

Describe Area Affected and Cleanup Action Taken.*

Approximately 240 cy of impacted soils were excavated and samples were collected from the sides and bottom of the excavation The impacted soils hauled to a commercial disposal facility Lab analyses are attached. The excavation was backfilled with clean soils The area is needed for operations Upon abandonment, seeding will be deferred to the BLM / Tribal requirements per the BLM / OCD MOU

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

Signature: Ed Hasely	OIL CONSERVATION DIVISION
Printed Name Ed Hasely	Approved by District Supervisor
Title Sr Environmental Engineer	Approval Date / Expiration Date
E-mail Address ed.hasely@energen.com	Conditions of Approval / Attached ☐
Date 5/31/12 Phone 505-324-4131 / 505-330-3584(cell)	

* Attach Additional Sheets If Necessary

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Sides	Date Reported:	04-23-12
Laboratory Number:	61787	Date Sampled:	04-17-12
Chain of Custody No:	13854	Date Received:	04-17-12
Sample Matrix:	Soil	Date Extracted:	04-19-12
Preservative:	Cool	Date Analyzed:	04-20-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Jicarilla 98 #2A BGT**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

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Preservative:	Cool	Date Analyzed:	04-20-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Jicarilla 98 #2A BGT**

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Sides	Date Reported:	04-25-12
Laboratory Number:	61787	Date Sampled:	04-17-12
Chain of Custody:	13854	Date Received:	04-17-12
Sample Matrix:	Soil	Date Analyzed:	04-25-12
Preservative:	Cool	Date Extracted:	04-19-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**10.0**
Toluene	**ND**	**10.0**
Ethylbenzene	**ND**	**10.0**
p,m-Xylene	**13.6**	**10.0**
o-Xylene	**11.3**	**10.0**
Total BTEX	**24.9**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**96.3 %**
	1,4-difluorobenzene	**102 %**
	Bromochlorobenzene	**104 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846 USEPA, December 1996

Comments: **Jicarilla 98 #2A BGT**

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Laboratory Number:	61788	Date Sampled:	04-17-12
Chain of Custody:	13854	Date Received:	04-17-12
Sample Matrix.	Soil	Date Analyzed:	04-25-12
Preservative:	Cool	Date Extracted:	04-19-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**10.0**
Toluene	**10.7**	**10.0**
Ethylbenzene	**ND**	**10.0**
p,m-Xylene	**25.9**	**10.0**
o-Xylene	**15.0**	**10.0**
Total BTEX	**51.6**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**102 %**
	1,4-difluorobenzene	**101 %**
	Bromochlorobenzene	**101 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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Comments: **Jicarilla 98 #2A BGT**

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Chloride

Client:	Energen Resources	Project #.	03022-0001
Sample ID:	Sides	Date Reported:	04-19-12
Lab ID#:	61787	Date Sampled:	04-17-12
Sample Matrix:	Soil	Date Received:	04-17-12
Preservative:	Cool	Date Analyzed:	04-19-12
Condition:	Intact	Chain of Custody:	13854

Parameter	Concentration (mg/Kg)
Total Chloride	**80.0**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed , 1992.

Comments: **Jicarilla 98 #2A BGT**

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Chloride

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Bottom	Date Reported:	04-19-12
Lab ID#:	61788	Date Sampled:	04-17-12
Sample Matrix:	Soil	Date Received:	04-17-12
Preservative:	Cool	Date Analyzed:	04-19-12
Condition:	Intact	Chain of Custody:	13854

Parameter	Concentration (mg/Kg)
Total Chloride	**140**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Jicarilla 98 #2A BGT**

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Ed Hasely

From: Ed Hasely
Sent: Thursday, April 05, 2012 4.45 PM
To: 'Kelly, Jonathan, EMNRD'
Cc: 'Hobson Sandoval'; Billy Stalcup
Subject: RE. BGT Closure Notifications - Jicarilla

During the closure process on the BGT on the Jicarilla 98 #2A, visually impacted soils were observed, which according to the Pit Rule is an indication of a past release. Energen will proceed w/ 19.15.29 and 19.15.30.

Ed Hasely
Energen Resources Corporation

From: Ed Hasely
Sent: Wednesday, March 28, 2012 7:36 AM
To: 'Kelly, Jonathan, EMNRD'
Cc: 'Hobson Sandoval'
Subject: BGT Closure Notifications - Jicarilla

Jonathan – Energen plans to close the below listed BGT's in the near future. Let me know if you have questions. Thanks.

Jica rilla 98 #2A - Unit Letter O, Section 19, Township 26N, Range 3W
Jicarilla 98 #10 - Unit Letter M, Section 17, Township 26N, Range 3W
Jicarilla 98 #12 - Unit Letter J, Section 18, Township 26N, Range 3W

Ed Hasely
Energen Resources Corporation
Sr Environmental Engineer
ed hasely@energen com
Office (505) 324-4131
Cell (505) 330-3584