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 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

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.

| 1152 |
|------|
| 1    |

| Pit, Closed-Loop System, Belo<br>Proposed Alternative Method Permit on  | <del></del>   |
|---|---|
| ☐ Permit of a pit, closed-loop system, below ☐ Closure of a pit, closed-loop system, below ☐ Modification to an existing permit   | v-grade tank, or proposed alternative method ow-grade tank, or proposed alternative method ag permitted or non-permitted pit, closed-loop system, |
| Instructions: Please submit one application (Form C-144) per individual pit, of   | 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 on invironment. Nor does approval relieve the operator of its responsibility to comply with any ot  | operations result in pollution of surface water, ground water or the ther applicable governmental authority's rules, regulations or ordinances.   |
| Operator: Energen Resources   | OGRID #· 162928   |
| Address: 2010 Afton Place, Farmington, New Mexico 87401   |   |
| Facility or well name: Jicarilla 89 4   |   |
| API Number: 3003907117 OCD Permit Number:   |   |
| U/L or Qtr/Qtr M Section 11 Township 27N Range 0  |   |
| Center of Proposed Design: Latitude 36.58335 Longitude -107.1   |   |
| Surface Owner:   Federal State Private Tribal Trust or Indian Allotment   | 11.5.   |
|   |   |
| 2   |   |
| Pit: Subsection F or G of 19.15.17.11 NMAC  Temporary: ☐ Drilling ☐ Workover ☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A   | RCVD APR 11 '13<br>OIL CONS. DIV.<br>DIST. 3  |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE HDPE  | OIL CONS. DIV.<br>DIST. 3   |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thicknessmil LLDPE HDPE  String-Reinforced  | OIL CONS. DIV. DIST. 3  |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE HDPE  | OIL CONS. DIV. DIST. 3  |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thicknessmil LLDPE HDPE  String-Reinforced  | OIL CONS. DIV. DIST. 3  PVC Other bbl Dimensions: L x W x D to activities which require prior approval of a permit or notice of                   |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE HDPE  String-Reinforced  Liner Seams: Welded Factory Other Volume:  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 intent)  Drying Pad Above Ground Steel Tanks Haul-off Bins Other  Lined Unlined Liner type: Thickness mil LLDPE HD  Liner Seams: Welded Factory Other  | OIL CONS. DIV. DIST. 3  PVC Other bbl Dimensions: L x W x D to activities which require prior approval of a permit or notice of                   |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE HDPE  String-Reinforced  Liner Seams: Welded Factory Other Volume:  Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drilling (Applies intent)  Drying Pad Above Ground Steel Tanks Haul-off Bins Other  Lined Unlined Liner type: Thickness mil LLDPE HD  Liner Seams: Welded Factory Other  4.  Below-grade tank: Subsection I of 19.15.17.11 NMAC  | OIL CONS. DIV. DIST. 3  PVC Other   |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE HDPE  String-Reinforced  Liner Seams: Welded Factory Other Volume:  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 intent)  Drying Pad Above Ground Steel Tanks Haul-off Bins Other  Lined Unlined Liner type: Thickness mil LLDPE HD  Liner Seams: Welded Factory Other  4.  Below-grade tank: Subsection I of 19.15.17.11 NMAC  Volume: bbl Type of fluid: Produced Water | OIL CONS. DIV. DIST. 3  PVC Other   |
| Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE HDPE  String-Reinforced  Liner Seams: Welded Factory Other Volume:  Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drilling (Applies intent)  Drying Pad Above Ground Steel Tanks Haul-off Bins Other  Lined Unlined Liner type: Thickness mil LLDPE HD  Liner Seams: Welded Factory Other  4.  Below-grade tank: Subsection I of 19.15.17.11 NMAC  | OIL CONS. DIV. DIST. 3  PVC Other   |

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

Liner type: Thickness

☐ Visible sidewalls and liner ※ Visible sidewalls only ☐ Other \_\_\_

| 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, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify  | hospital,                   |
|---|-----------------------------|
| 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)  |                             |
| 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  |                             |
| 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 consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.   | office for                  |
| 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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system. | priate district<br>pproval. |
| 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<br>☐ 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<br>☐ 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                  |

| 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:  |  |  |  |  |  |
| 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 19.15.17.12 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   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   Cilosure Plan - based upon the appropriate requirements of 19.15.17.13 NMAC |  |  |  |  |  |
| 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)   |  |  |  |  |  |
| 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 G of 19.15.17.13 NMAC  |  |  |  |  |  |

| 16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids  |   |                       |
|--|---|-----------------------|
| facilities are required.   | Discoul Partie Day 19 Novel of  |                       |
| 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 of Yes (If yes, please provide the information below) ☐ No  | occur on or in areas that will not be used for future serv  | vice and operations?  |
| Required for impacted areas which will not be used for future service and operation Soil Backfill and Cover Design Specifications based upon the appropriation Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection  | te requirements of Subsection H of 19.15.17.13 NMA(<br>n I of 19.15.17.13 NMAC  | C                     |
| 17. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in th provided below. Requests regarding changes to certain siting criteria may requ considered an exception which must be submitted to the Santa Fe Environment demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC   | ire administrative approval from the appropriate dist<br>al Bureau office for consideration of approval. Justi  | rict office or may be |
| Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Database search; USG | ata obtained from nearby wells  | ☐ Yes ☐ No<br>☐ 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; Da   | ata obtained from nearby wells  | ☐ Yes ☐ No<br>☐ 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; Database search; US | ata obtained from nearby wells  | ☐ Yes ☐ No<br>☐ NA    |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other stake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site   | gnificant watercourse or lakebed, sinkhole, or playa  | Yes No                |
| Within 300 feet from a permanent residence, school, hospital, institution, or churce - Visual inspection (certification) of the proposed site; Aerial photo; Satellia  |   | ☐ Yes ☐ No            |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that le watering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database; Visual inspection  | spring, in existence at the time of initial application.  | Yes No                |
| Within incorporated municipal boundaries or within a defined municipal fresh wa adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approximately  |   | ☐ Yes ☐ No            |
| Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Vis   | ual 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-Minir  | ng and Mineral Division   | ☐ Yes ☐ No            |
| <ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geolo Society; Topographic map</li> </ul>   | gy & Mineral Resources; USGS; NM Geological   | Yes No                |
| Within a 100-year floodplain FEMA map  |   | ☐ Yes ☐ No            |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the state  | quirements of 19.15.17.10 NMAC of Subsection F of 19.15.17.13 NMAC appropriate requirements of 19.15.17.11 NMAC pad) - based upon the appropriate requirements of 19. 15.17.13 NMAC quirements of Subsection F of 19.15.17.13 NMAC of Subsection F of 19.15.17.13 NMAC drill cuttings or in case on-site closure standards cann of H of 19.15.17.13 NMAC on I of 19.15.17.13 NMAC | 15.17.11 NMAC         |

| Operator Application Certification:  |  |
|--|--|
| I hereby certify that the information submitted with this application is true, accur   | rate and complete to the best of my knowledge and belief.  |
| Name (Print): Tit  | le:  |
| Signature:   | Date:  |
| e-mail address: Telephone:   | <del>-</del>   |
| 20.  |  |
| OCD Approval: Permit Application (including closure plan) Closure R  |  |
| OCD Representative Signature:  | Approval Date: 4/17/2013   |
| Title: Compliance Office   | OCD Permit Number:   |
| Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior the closure report is required to be submitted to the division within 60 days of t section of the form until an approved closure plan has been obtained and the closure | to implementing any closure activities and submitting the closure report.<br>The completion of the closure activities. Please do not complete this |
|  |  |
| 22.  Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative If different from approved plan, please explain.   | ative Closure Method   Waste Removal (Closed-loop systems only)  |
| Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, dril   |  |
| two facilities were utilized.  | may frame and arm cannings were an possess over an account of more man   |
| 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<br>Yes (If yes, please demonstrate compliance to the items below) No  | r in areas that will not be used for future service and operations?  |
| Required for impacted areas which will not be used for future service and operated Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  | ions:  |
| 24.  |  |
| Closure Report Attachment Checklist: Instructions: Each of the following it mark in the box, that the documents are attached.  | ems must be attached to the closure report. Please indicate, by a check  |
| □ 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)  |  |
| ☐ Flot Flan (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   |  |
| <ul> <li>Soil Backfilling and Cover Installation</li> <li>Re-vegetation Application Rates and Seeding Technique</li> </ul>   |  |
| Site Reclamation (Photo Documentation)   |  |
| On-site Closure Location: LatitudeLonging  | tude NAD:  |
| 25. Operator Closure Certification:  |  |
| I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requirements.   | report is true, accurate and complete to the best of my knowledge and nents and conditions specified in the approved closure plan.                 |
| Name (Print): Ed Hasely  | Title: Sr. Environmental Engineer .  |
| Signature: Staseh  | Date: 4/8/13   |
| e-mail address: ed.hasely@energen.com  | Telephone:(505) 324-4131   |

## BELOW-GRADE TANK CLOSURE REPORT

## ENERGEN RESOURCES Jicarilla 89 #4

#### **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; Composite sample was 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           | ND                     |
| Total BTEX  | 50.0          | ND                     |
| TPH (418.1) | 100           | 43.6                   |
| Chlorides   | 250           | ND                     |

(7) <u>IF the soil analyses show that the soils meet the concentrations specified in (6) above</u>, 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.

Excavation was backfilled w/ non-waste containing, earthen material in a manner that will prevent ponding and erosion, including one foot on top soil.

(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.

Not applicable.

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.

District 1 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 <u>District IV</u>

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

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

Revised October 10, 2003

Form C-141

## **Release Notification and Corrective Action**

|  |  |                 |             |                                 |      | <b>OPERATOR</b>  | ₹                | Initial I     | Report     | $\boxtimes$          | Final Report |
|--|--|-----------------|-------------|---------------------------------|------|------------------|------------------|---------------|------------|----------------------|--------------|
| Name of Cor  | npany: En  | ergen Resou     | rces, Inc.  |                                 |      | Contact: E       | d Hasely         |               |            |                      |              |
| Address: 20  | 10 Afton Pl  | ace, Farming    | gton, NM    | 87401                           |      | Felephone No: 50 | 05-324-4131      |               |            |                      |              |
| Facility Nan   | e: Jicarilla   | 89 #4           |             |                                 | ] ]  | Facility Type: O | il/Gas Well Site |               |            |                      |              |
| Surface Owi  | ner: Jicarill  | a               |             | Mineral Ow                      | ner: | Jicarilla        |                  | Lease No.     |            |                      |              |
|  |  |                 |             | LOCAT                           | ION  | OF RELEAS        | SE               |               |            |                      |              |
| Unit Letter<br>M   | Section<br>11  | Township<br>27N | Range<br>3W | Feet from the                   | No   | rth/South Line   | Feet from the    | East/West Lin | 4          | <b>nty</b><br>Arriba | a            |
|  |  |                 | Lati        | tude_36.58335_                  |      | Longitude_       | -107.11917_      |               | •          |                      |              |
|  |  |                 |             | NATU                            | RE   | OF RELEAS        | E                |               |            |                      |              |
| Type of Relea  | se: NO REL   | EASE            |             |                                 |      | Volume of Relea  | ise:             | Volume Reco   | overed:    |                      |              |
| Source of Rel  | ease:  |                 |             |                                 |      | Date and Hour o  | of Occurrence:   | Date and Ho   | ur of Disc | cover                | y:           |
| Was Immedia  | te Notice G  |                 | 'es 🗌 N     | No  Not Requi                   | red  | If YES, To Who   | m?               | J             |            |                      |              |
| By Whom?   |  |                 |             |                                 |      | Date and Hour:   |                  |               |            |                      |              |
| Was a Watero   | ourse Reac   |                 | Yes □ N     | lo                              |      | If YES, Volume   | Impacting the W  | atercourse.   |            |                      |              |
| If a Watercou  | rse was Imi  |                 |             |                                 |      |                  |                  |               |            | —                    |              |
|  |  |                 |             |                                 |      |                  |                  |               |            |                      |              |
| THERE WAS  | Describe Cause of Problem and Remedial Action Taken.*  THERE WAS NO PROBLEM OR REMEDIAL ACTION TAKEN. THIS FORM IS FILLED OUT TO SERVE AS A COVER FOR LAB ANALYSES - ONLY TO SATISFY 19.15.17.13.E(4). |                 |             |                                 |      |                  |                  |               |            |                      |              |
| Describe Area  | Affected a   | nd Cleanup A    | etion Tak   | cen.*                           |      |                  |                  |               |            |                      |              |
| 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:   | SIH  | self            |             |                                 |      | <u>O</u>         | IL CONSER        | VATION DI     | VISIO      | <u>N</u>             |              |
| Printed Name:  | Approved by District Supervisor:   |                 |             |                                 |      |                  |                  |               |            |                      |              |
| Title: Sr. Environmental Engineer App  |  |                 |             | Approval Date: Expiration Date: |      | ð:               |                  |               |            |                      |              |
| E-mail Address: ed.hasely@energen.com  Conditions of Approval:  Attached   |  |                 |             |                                 |      |                  |                  |               |            |                      |              |
| Date: 4/8/13   | Ph   | one: 505-324-   | 4131 / 505  | 5-330-3584(cell)                |      |                  |                  |               |            |                      |              |

<sup>\*</sup> Attach Additional Sheets If Necessary



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

| Client:            | Energen Resources | Project#:           | 03022-0001 |
|--------------------|-------------------|---------------------|------------|
| Sample ID:         | Jic 89 #4         | Date Reported:      | 10-30-12   |
| Laboratory Number: | 63563             | Date Sampled:       | 10-26-12   |
| Chain of Custody:  | 14609             | Date Received:      | 10-29-12   |
| Sample Matrix:     | Soil              | Date Analyzed:      | 10-30-12   |
| Preservative:      | Cool              | Date Extracted:     | 10-30-12   |
| Condition:         | Intact            | Analysis Requested: | BTEX       |
|                    |                   | Dilution:           | 50         |

|              | Silution:       | 00      |
|--------------|-----------------|---------|
|              |                 | Det.    |
|              | Concentration   | Limit   |
| Parameter    | (ug/Kg)         | (ug/Kg) |
|              |                 |         |
| Benzene      | ND              | 10.0    |
| Toluene      | ND              | 10.0    |
| Ethylbenzene | ND <sup>®</sup> | 10.0    |
| p,m-Xylene   | ND              | 10.0    |
| o-Xylene     | ND              | 10.0    |
| Total BTEX   | ND              |         |

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 98.5 %           |
|                       | 1,4-difluorobenzene | 98.3 %           |
|                       | Bromochlorobenzene  | 98.2 %           |

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

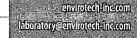
December 1996.

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

USEPA, December 1996.

Comments:

Jicarilla BGTs





## EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

| Client:              | Energen Resources | Project #:       | 03022-0001 |
|----------------------|-------------------|------------------|------------|
| Sample ID:           | Jic.89 #4         | Date Reported:   | 10-31-12   |
| Laboratory Number:   | 63563             | Date Sampled:    | 10-26-12   |
| Chain of Custody No: | 14609             | Date Received:   | 10-29-12   |
| Sample Matrix:       | Soil              | Date Extracted:  | 10-30-12   |
| Preservative:        | Cool              | Date Analyzed:   | 10-30-12   |
| Condition:           | Intact            | Analysis Needed: | TPH-418.1  |

|           |               | Det.    |
|-----------|---------------|---------|
|           | Concentration | Limit   |
| Parameter | (mg/kg)       | (mg/kg) |

**Total Petroleum Hydrocarbons** 

43.6

6.6

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla BGTs





#### Chloride

03022-0001

10-31-12

10-26-12

Client: Energen Resouces Project #:
Sample ID: Jic 89 #4 Date Reported:
Lab ID#: 63563 Date Sampled:
Sample Matrix: Soil Date Received:

Sample Matrix: Soil Date Received: 10-29-12
Preservative: Cool Date Analyzed: 10-29-12
Condition: Intact Chain of Custody: 14609

Parameter Concentration (mg/Kg)

Total Chloride ND

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 BGTs



October 17, 2012

Jicarilla Apache Nation **Environmental Protection Office** P.O. Box 507 Dulce, NM 87528

Attn: Mr. Hobson Sandoval, Environmental Specialist

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 89 #4 - Unit Letter M, Section 11, Township 27N, Range 3W Jicarilla 94 #5 - Unit Letter M, Section 23, Township 27N, Range 3W Jicarilla 95 #2 - Unit Letter A, Section 25, Township 27N, Range 3W

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

Sincerely,

Ed Hasely

**Energen Resources** 

Well Files Cc: Correspondence

| D. COMPL |  |
|----------|--|

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Sr. Environmental Engineer: 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 maliplece, or on the front if space permits.

Jicanilla Apracha No. EPÒ POBLA SO7 Delice, NM 87528

COMPLETE THIS SECTION ON DELIVERY

|    |         | +1 |    |    | _  | _    | <br>_ |        |
|----|---------|----|----|----|----|------|-------|--------|
| V. | Signatu | re | 4  |    |    | . '7 | ,     | 7      |
|    |         |    |    | A  | 1  | ř _  |       | A:     |
| (  | Chi     | O  | מל | γV | 01 | 18   | u     | آباً ' |

□ Addressee C. Date of Delivery Received by ( Printed Name

D. Is delivery address different from item 1? If YES, enter delivery address below:

Service Type

U.S. Postal Service™

Certified Fee

Return Receipt Fee (Endorsement Required)

Restricted Delivery Fee (Endorsement Required)

Total Postage & Fees

1207

5000

0240

701

Sent To

or PO Box No.

City, State, ZIP+4

CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

**Postmark** 

Here

Certified Mail Express Mail ☐ Return Receipt for Merchandise ☐ Registered

☐ Insured Mail. ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

0470 0002 1207 6281 7012

Energen Resources Corporation, an Ene 2: Article Number

(Transfer, from service labe NOOT STATE OF SOM

Domestic Return Receipt

...102595-02-M-154

☐ Yes

☐ Agent

#### **Ed Hasely**

From:

Ed Hasely

Sent:

Tuesday, October 16, 2012 10:24 AM

To:

'Kelly, Jonathan, EMNRD'; 'Hobson Sandoval'

Cc:

Jason Peace

Subject:

**BGT Closure Notifications** 

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

Jica rilla 89 #4 - Unit Letter M, Section 11, Township 27N, Range 3W

Jicarilla 94 #5 - Unit Letter M, Section 23, Township 27N, Range 3W

Jicarilla 95 #2 - Unit Letter A, Section 25, Township 27N, Range 3W

## **Ed Hasely**

#### **Energen Resources Corporation**

Sr. Environmental Engineer ed.hasely@energen.com Office: (505) 324-4131

Cell: (505) 330-3584

