District L 1625 N. French Dr., Hobbs, NM 88240 District IL 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.  |
|--------|----------------------|---|
| ang5   | Propo                | Pit, Closed-Loop System, Below-Grade Tank, or sed Alternative Method Permit or Closure Plan Application   |
| Ψ,     | 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 |
| Instru | ictions: Please subn | nit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request  |

| 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 |
| Operator: Energen Resources Corporation OGRID #:162928   |
| Address: 2010 Afton Place, Farmington, NM 87401  |
| Facility or well name:   |
| API Number:         30-039-31040         OCD Permit Number:  |
| U/L or Qtr/Qtr F Section 03 Township 26N Range 03W County: Rio Arriba  |
| Center of Proposed Design: Latitude 36.51756 N Longitude 107.13512 W NAD: 1927 🗵 1983  |
| Surface Owner:  Federal State Private X Tribal Trust or Indian Allotment   |
| 2  |
| Example 2 Pit: Subsection F or G of 19.15.17.11 NMAC RCUD DEC 15'11  |
| Temporary: Drilling Workover  OIL CONS. DIV.   |
| Permanent  |
| Malante Land type. Internet Land type.   |
| String-Reinforced  |
| Liner Seams: Welded X Factory Other Volume: 1500 bbl Dimensions: L 135 x W 60 x D 10   |
| 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 Other  |
| 4  |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC   |
| Volume: bbl Type of fluid:   |
| 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: Thicknessmil _ LLDPE _ 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.

| <b>Fencing:</b> 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)   |                                    |  |  |  |  |  |  |
| Signature Control of C |                                    |  |  |  |  |  |  |
| 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.  |                                    |  |  |  |  |  |  |
| Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Burconsideration of approval.  | reau office for                    |  |  |  |  |  |  |
| 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 ac material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the application of the santa of t | propriate district<br>of approval. |  |  |  |  |  |  |
| 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                         |  |  |  |  |  |  |
| 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:  |
|--|
| Treviously Approved Design (attach copy of design) 7411 (attach copy of de |
| 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:   |
| 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 the appropriate requirements of 19.15.17.11 NMAC 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 H2S, 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  |
| 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) Con-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   |

| 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:  | pisposal Facility Permit Number:   |                    |  |  |  |  |  |  |
| Disposal Facility Name: D  |  |                    |  |  |  |  |  |  |
| 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  |  |                    |  |  |  |  |  |  |
| Siting Criteria (regarding on-site closure methods only: 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may required be considered an exception which must be submitted to the Santa Fe Environm and/or demonstrations of equivalency are required. Please refer to 19.15.17.16   | ire administrative approval from the appropriate distential Bureau office for consideration of approval. J   | rict office or may |  |  |  |  |  |  |
| Ground water is less than 50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; I  | Data obtained from nearby wells  | Yes X No           |  |  |  |  |  |  |
| 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; E  | Data 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; I   | Data obtained from nearby wells  | ☐ Yes 👿 No<br>☐ NA |  |  |  |  |  |  |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other s lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  | ignificant watercourse or lakebed, sinkhole, or playa  | Yes No             |  |  |  |  |  |  |
| Within 300 feet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site; Aerial photo; Satel   |  | Yes 🗷 No           |  |  |  |  |  |  |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that low 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 X No           |  |  |  |  |  |  |
| Within incorporated municipal boundaries or within a defined municipal fresh was adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality, Written appropri  | ·  | Yes X No           |  |  |  |  |  |  |
| Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map; Topographic map; Vi  | sual 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-Min  | ing and Mineral Division   | Yes X No           |  |  |  |  |  |  |
| Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geol Society; Topographic map  | ogy & 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 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 Surface Owner Notice - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15 Construction/Design Plan of Temporary Pit (for in-place burial of a drying part Protocols and Procedures - based upon the appropriate requirements of 19.15 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15 Disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal Facility Name and Permit Number (for liquids, drilling fluids and disposal facility Name and Permit Number (for liquids, drilling fluids and disposal facility Name and Permit Nu | Subsection F of 19.15.17.13 NMAC propriate requirements of 19.15.17.11 NMAC ad) - based upon the appropriate requirements of 19.15.17.13 NMAC airements of Subsection F of 19.15.17.13 NMAC Subsection F of 19.15.17.13 NMAC rill cuttings or in case on-site closure standards cannot 1 of 19.15.17.13 NMAC to f 19.15.17.13 NMAC |                    |  |  |  |  |  |  |

| Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate an   | d complete to the best of my knowledge and belief.   |
|---|--|
| Name (Print):   | Title:   |
| Signature:  | Date:  |
| e-mail address:   | Telephone:   |
| OCD Approval: Permit Application (including closure plan) Closure   |  |
| OCD Representative Signature:   | Approval Date: 1/17/2012   |
| Title: Compliance (HTCe) OCD  | Permit Number:   |
| Closure Report (required within 60 days of closure completion): Subsection K of Instructions: Operators are required to obtain an approved closure plan prior to impreport. The closure report is required to be submitted to the division within 60 days a complete this section of the form until an approved closure plan has been obtained as   | lementing any closure activities and submitting the closure f the completion of the closure activities. Please do not ad the closure activities have been completed. |
|   | Closure Completion Date: 8/2/11  |
| Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure If different from approved plan, please explain.   | ure Method Waste Removal (Closed-loop systems only)  |
| Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Instructions: Please indentify the facility or facilities for where the liquids, drilling for than two facilities were utilized.  Disposal Facility Name:   | uids and drill cuttings were disposed. Use attachment if more  |
| Disposal Facility Name: Disposa   | l Facility Permit Number:  |
| Were the closed-loop system operations and associated activities performed on or in are Yes (If yes, please demonstrate compliance to the items below) No   | as that will not be used for future service and operations?  |
| 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 mu 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 | -107.08100 ₩ NAD: ☐ 1927 🗷 1983  |
| 25.   |  |
| Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report belief. I also certify that the closure complies with all applicable closure requirements a  |  |
| Name (Print): Anna Stotts   | Title: Regulatory Analyst  |
| Signature:  | Date: <u>astotts@energen</u>   |
| e-mail address: 505–324–4154  | Telephone:11/25/11   |

## Well Name: Jicarilla 115E #13A

## Reserve Pit – Final Closure Report

The pit will be closed with in place burial. If the pit is located on private surface, the surface owner will be notified prior to closure by certified mail and the return receipt will be included in the closure packet. The OCD will be verbally or by other means notified at least 72 hours and not more then one week prior to the pit closing. The following process will be used to close the pit:

Notification to the OCD is included in this closure report package. Surface owner notification not required.

 At time of closure, all free standing fluids will be removed and reused or disposed with Agua Moss LLC in the Pretty Lady #1 (Disposal API Number # 30-048-30922) or an Energen operated permitted disposal well. The contents will be solidified to a bearing capacity sufficient to support the final cover. This will be accomplished by mixing the contents with soil at a mixing ratio no greater then 3:1 soil to contents.

Fluids were removed and properly disposed in the Aqua Miss Pretty Lady #1. The pit contents were solidified by mixing the contents with soil at a mixing ratio of approximately 3:1.

2) The liner will be cut off at the mud line of the stabilized contents.

The liner was cut off at the mud line of the stabilized contents.

3) Sampling will be done by collecting a minimum of a five-point composite sample of the contents after stabilization. The sample will be analyzed for the following components (if the groundwater is less than 100 feet below the pit but greater than 50 feet, testing for chlorides will be done to the lower limit);

| Components | Tests Method              | Limit<br>(mg/Kg)     | Results<br>(mg/Kg) |
|------------|---------------------------|----------------------|--------------------|
| Benzene    | EPA SW-846 8021B or 8260B | 0.2                  | .002               |
| BTEX       | EPA SW-846 8021B or 8260B | 50                   | .102               |
| TPH        | EPA SW-846 418.1          | 2500                 | 212                |
| GRO/DRO    | EPA SW-846 8015M          | 500                  | 6.7                |
| Chlorides  | EPA 300.1                 | <del>500</del> /1000 | 690                |

Sampling results are listed in the above table.

4) After demonstrating that the stabilized contents are under the limits listed above, the contents will be covered with compacted non-waste containing earthen material to a minimum of three feet. If stabilized contents exceed a volume that can be covered with three feet of earth and a foot of topsoil the excess contents will be removed and sent to Envirotech (Permit NM-01-0011) or IEI Landfarm (Permit NM-01-0010B). If the stabilized contents do no meet the above stated limits the stabilized contents will all be hauled to Envirotech pursuant to excavation and removal guidelines (19.15.17.13 B1).

The contents were covered with three feet of compacted non-waste containing material.

5) After the stabilized contents have been covered, the stockpiled topsoil will be replaced to a minimum depth of one foot. Topsoil cover will be graded to prevent ponding of water and erosion of the cover material. This will be accomplished within six months of rig release.

The stockpiled topsoil was replaced to a depth of one foot and graded to prevent ponding and erosion.

6) The exact location of the on-site burial will be reported to the Aztec field office on the C-105 form. A deed notice identifying the exact location of the on-site burial will be filed with the county clerk if the pit is on private surface.

The C-105 form is attached. This pit is located on public surface. Proof of Deed notice not required unless pit is located on private surface (per NMOCD FAQ dated 10/30/09).

7) The final closure report (C-144) will be filed within 60 days of closure completion and include sampling results, plot plan, details on backfilling, covering and inspections during the life of the pit.

This closure report includes sampling results, plot plan, closure details, inspections, and photos.

8) If the pit is located on federal or tribal surface, seeding will be deferred to BLM requirements per the BLM / OCD MOU. Otherwise, the disturbed area will be seeded or planted the first growing season after closing the pit. Seed will be drilled on the contour whenever practical or by other division-approved methods. The goal is to obtain vegetative cover that equals 70% of the native 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. Cover will be maintained through two successive growing seasons. During the two growing seasons that prove viability there shall be no artificial irrigation of the vegetation. Seeding or planting will continue until the required cover is reached. If conditions are not favorable to establishment of vegetation due to periods of drought or similar problems then the Aztec office of the OCD will be notified. The Aztec office of the OCD will also be notified when the disturbed ground successfully achieves re-vegetation.

# The pit is located on Federal or Tribal surface, seeding is deferred to BLM requirements per the BLM / OCD MOU.

9) Until the abandonment of the wells on the pad where the pit is located, a steel marker no less then four inches in diameter will be cemented in a hole three feet deep in the center of the onsite burial. The top of this marker will be flush with the ground. Once all wells on the pad are abandoned, a four foot tall riser will be welded on top of the marker with; operator name, lease number, well name and number, unit number, section, township and range, and a designation that it is an onsite burial location.

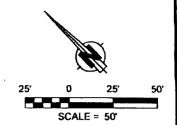
The marker was installed in the center of the closed pit. The marker is set flush to the ground until final abandonment. At the time of abandonment, a four foot riser will be installed and marked as follows: Energen Resources – Lease # Jicarilla Apache 115 – Jicarilla 115E #13A – Unit F – Sec. 03, T26N, R03W – Pit Burial Site.

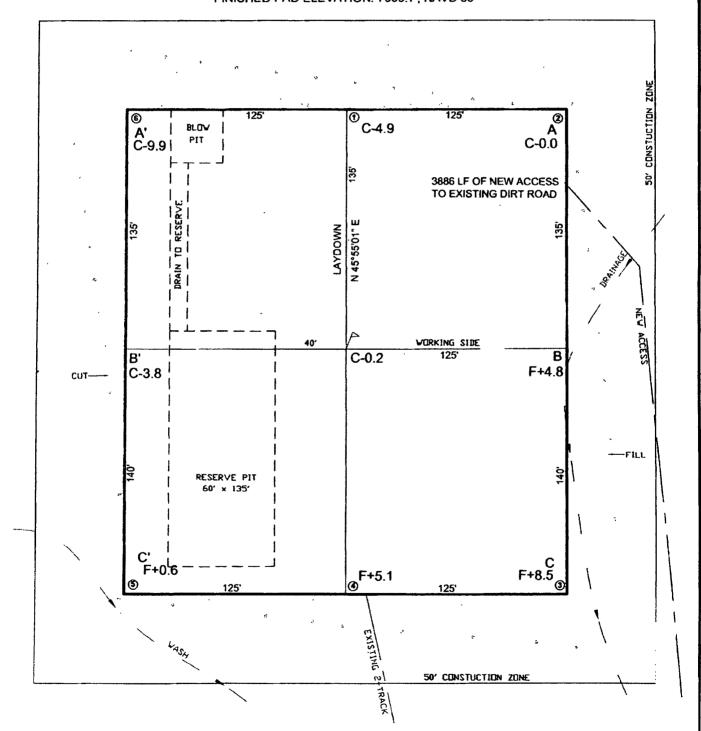
| 3. State Oil & Gas Lease No  WELL COMPLETION OR RECOMPLETION REPORT AND LOG  4. Reason for filing.  COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)  C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13.K NMAC)  3. State Oil & Gas Lease No  Jicarilla 115E  6. Well Number  #13A | ame              |  |  |  |  |  |  |  |  |
|--|------------------|--|--|--|--|--|--|--|--|
| 4. Reason for filing.  COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)  C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13.K NMAC)  5. Lease Name or Unit Agreement N  Jicarilla 115E  6. Well Number  #13A  | ame              |  |  |  |  |  |  |  |  |
| 4. Reason for filing.  COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)  C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13.K NMAC)  5. Lease Name or Unit Agreement N  Jicarilla 115E  6. Well Number  #13A  | ame              |  |  |  |  |  |  |  |  |
| C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13.K NMAC)  6. Well Number #13A  | ne               |  |  |  |  |  |  |  |  |
| #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13.K NMAC)  #13A   | æ                |  |  |  |  |  |  |  |  |
|  | re               |  |  |  |  |  |  |  |  |
| 9. Type of Completion  New Well Workover Deepening Plugback Different reservoir X Other pit closu  |                  |  |  |  |  |  |  |  |  |
| 8. Name of Operator 9 OGRID Number   |                  |  |  |  |  |  |  |  |  |
| Energen Resources Corporation 162928 10 Address of Operator 11 Pool name or Wildcat  |                  |  |  |  |  |  |  |  |  |
| 2010 Afton Place, Farmington, NM 87401 Blanco Mesa Verde   | _                |  |  |  |  |  |  |  |  |
| 12 Location Unit Letter Section Township Range Lot Feet from the N/S Line Feet from the E/W Line   | County           |  |  |  |  |  |  |  |  |
| Surface F 03 26 N 03W  |                  |  |  |  |  |  |  |  |  |
| 13 Date Spudded 14. Date T D. Reached 15. Date Rig Released 6/23/11 16. Date Completed (Ready to Produce) 17 Elevation RT, GR, etc.)   | (DF & RKB,       |  |  |  |  |  |  |  |  |
| 18. Total Measured Depth of Well 19. Plug Back Measured Depth 20 Was Directional Survey Made 21 Type Electric au   | d Other Logs Run |  |  |  |  |  |  |  |  |
| 22 Producing Interval(s), of this completion - Top, Bottom, Name   |                  |  |  |  |  |  |  |  |  |
| 23. CASING RECORD (Report all strings set in well)   |                  |  |  |  |  |  |  |  |  |
| CASING SIZE WEIGHT LB./FT. DEPTH SET HOLE SIZE CEMENTING RECORD AN   | OUNT PULLED      |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
| 24.     LINER RECORD     25.     TUBING RECORD       SIZE     TOP     BOTTOM     SACKS CEMENT     SCREEN     SIZE     DEPTH SET  | PACKER SET       |  |  |  |  |  |  |  |  |
| SIZE TOP BOTTOM SACKS CEMENT SCREEN SIZE DEFTH SET   | PACKER SET       |  |  |  |  |  |  |  |  |
|  | _                |  |  |  |  |  |  |  |  |
| 26. Perforation record (interval, size, and number)  27. ACID, SHOT, FRACTURE, CEMENT, SQEEZE,   | TC.              |  |  |  |  |  |  |  |  |
| DEPTH INTERVAL AMOUNT AND KIND MATER   | AL USED          |  |  |  |  |  |  |  |  |
|  | ****             |  |  |  |  |  |  |  |  |
|  |                  |  |  |  |  |  |  |  |  |
| 28. PRODUCTION   |                  |  |  |  |  |  |  |  |  |
| Date First Production Production Method (Flowing, gas lift, pumping - Size and type pump) Well Status (Production Method (Flowing, gas lift, pumping - Size and type pump)   | or snut-inj      |  |  |  |  |  |  |  |  |
| Date of Test Hours Tested Choke Size Prod'n For Test Period Gas - MCF Water - Bbl Gas - Test Period  | Oil Ratio        |  |  |  |  |  |  |  |  |
| Flow Tubing Pressure Calculated 24- Oil - Bbl Gas - MCF Water - Bbl. Oil Gravity - API Hour Rate   | (Corr.)          |  |  |  |  |  |  |  |  |
| 29 Disposition of Gas (Sold, used for fuel, vented, etc.)  30. Test Witnessed By   |                  |  |  |  |  |  |  |  |  |
| 31. List Attachments   |                  |  |  |  |  |  |  |  |  |
| 32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.   |                  |  |  |  |  |  |  |  |  |
| 33. If an on-site burial was used at the well, report the exact location of the on-site burial  Latitude 36.31068 Longitude -107.08100 NAD 1927 X 1983   |                  |  |  |  |  |  |  |  |  |
| I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief  Signature  Printed Name  Anna Stotts  Title Regulatory Analyst Date  11/25/11  E-mail address  |                  |  |  |  |  |  |  |  |  |

LATITUDE: 36.51756°N LONGITUDE: 107.13512°W DATUM: NAD 83

#### **ENERGEN RESOURCES CORPORATION**

JICARILLA 115E #13A 1835' FNL & 1760' FWL LOCATED IN THE SE/4 NW/4 OF SECTION 3, T26N, R3W, N.M.P.M., RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 7070', NAVD 88 FINISHED PAD ELEVATION: 7069.7', NAVD 88





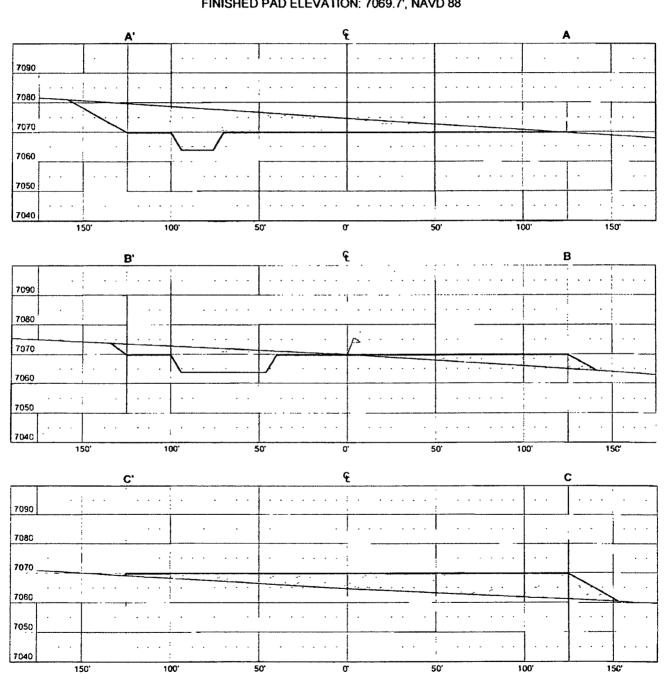
1 FOOT CONTOUR INTERVAL SHOWN

SCALE: 1" = 50"

Russell Surveying
1409 W. Aztec Blvd. #5
Aztec New Mayico 97410

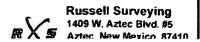
#### **ENERGEN RESOURCES CORPORATION**

JICARILLA 115E #13A 1835' FNL & 1760' FWL LOCATED IN THE SE/4 NW/4 OF SECTION 3, T26N, R3W, N.M.P.M., RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 7070', NAVD 88 FINISHED PAD ELEVATION: 7069.7', NAVD 88



VERT. SCALE: 1" = 30' HORZ. SCALE: 1" = 50' JOB No.: ERG150





DISTRICT | 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT II 1301 W. Grand Avenue, Artesia, N.M. 88210

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT\_III 1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV 1220 S. St. Prancis Dr., Santa Fe, NM 87505 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number           | Pool Code                     | SAVERDE       |  |  |  |  |  |
|----------------------|-------------------------------|---------------|--|--|--|--|--|
| <u> 30-039-31040</u> |                               | JAVERUE       |  |  |  |  |  |
| *Property Code       | *Prope                        | • Vell Number |  |  |  |  |  |
| ,                    | JICARIL                       | 13A           |  |  |  |  |  |
| OGRID No.            | * Elevation                   |               |  |  |  |  |  |
|                      | ENERGEN RESOURCES CORPORATION |               |  |  |  |  |  |

10 Surface Location

| UL or lot no.                                     | Section | Township | Range | Lot Idn | Peet from the | North/South line | Feet from the | East/West line | County     |
|---|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| F   | 3       | 26N      | 3W    |         | 1835'         | NORTH            | 1760'         | WEST           | RIO ARRIBA |
| 11 Bottom Hole Location If Different From Surface |         |          |       |         |               |                  |               |                |            |
|   |         |          |       |         |               |                  |               |                |            |
| UL or lot no.                                     | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County     |

|   | UL or lot no. | Section | Township | Range                  | Lot Idn | Feet from the     | North/South line | Feet from the           | East/West line | County |
|---|---------------|---------|----------|------------------------|---------|-------------------|------------------|-------------------------|----------------|--------|
| Ē |               |         |          | <sup>13</sup> Joint or | Infill  | * Consolidation ( | ode              | <sup>15</sup> Order No. |                |        |
|   | 315.76        | (W/2)   |          |                        |         |                   |                  |                         |                |        |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| 10         |                                       | <u> </u>                 |                             |                         |   |
|------------|---------------------------------------|--------------------------|-----------------------------|-------------------------|---|
| 9          | 0 2° BC N 89°53'                      |                          | 5286.77' (M)                | FNO 2" BC               | OPERATOR CERTIFICATION  |
| ä          | 60 2° 80° N 89°53°<br>0 1817 N 90°00° | The second of the second | 5280.00' (R)                | GLO 1917                | I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this erganization either owns a working interest or unlessed mineral belowest in the |
| ( <u>F</u> | 4                                     | 3                        | 2                           | 1                       | land traclading the proposed bottom hale location or has<br>a right to drill this well at this location pursuant to a<br>contract with an owner or a compulsory pooling order                                     |
| 207.02     |                                       | 80                       |                             |                         | borretofore relevant by the dissisten.  |
| 52         |                                       |                          |                             |                         | Signature Date  |
|            | 1760 —                                |                          |                             | f. (R)                  | Printed Name  |
|            |                                       | LAT. 36.51756 N          |                             | 94.4                    | 18 SURVEYOR CERTIFICATION   |
|            |                                       | LONG. 107.13512" W   I   | !<br>!                      | ្ត                      | I hereby certify that the well location shown on this plat<br>was plotted from field notes of actual surveys made by  |
|            | عنيتن بسند                            |                          | !<br>ス・                     |                         | me or under my supervision, and that the same is true<br>and correct to the best of my belief.  |
| i          |                                       |                          | ]                           |                         | NOVEMBER 30, 2006   |
| .6         |                                       |                          | •                           | !<br>!                  | Date of Survey  |
| 0.08,4     |                                       |                          | 1                           | 0.08,58                 | Signature and Seal of Professional Surveyor.  |
| I Z        |                                       |                          | 1                           | z                       | OF YIO R. RUSSELL   |
| + -        |                                       |                          |                             |                         | A CONTROL OF WOAR   |
|            |                                       |                          | NOTE: T-26-N<br>UN-SURVEYED | I, R-3-W IS AN TOWNSHIP |   |
|            |                                       |                          |                             |                         | ARORESSIONAL LINE   |
| CAL        |                                       | S 89'58'27" W            | 5285.79' (R)                |                         | DAVID RUSSELL Certificate Number 10201  |



## **Proof of Closure Notice**

The notification on this closure was inadvertently missed by the contractor. Energen Resources notified the contractor that the notification is mandatory and must be made.



## **Pit Inspection Log Sheet**

(daily while rig is on-site, then weekly as long as liquids remain in the pit)

| Well Name: Jicarilla 115E    | # 13-A API: 30-039        | -31040           |
|------------------------------|---------------------------|------------------|
| Name (Print): William Bugay  | Signature: All Bo         | Date: 5-25-11    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Keyin Hacket   | Signature: K. Hachett     | Date: 5-26-1/    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Kavin Hackeft  | Signature: 1 - Hashill    | Date: 5-27-//    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Kevin Hackett  | Signature: K- Hacht       | Date: 5-28-11    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Kevin Hackett  | Signature: The Hachtelt   | Date: 5-29-11    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Kaun Hackett   | Signature: The Agree 1    | Date: 5-30-11    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Kevin Hackett  | Signature: 2 Hochill      | Date: 5-31-11    |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): Kerin Hackett  | Signature: The Higher The | Date: 6 ~/ - / / |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): William Begas  | Signature: Sille By       | Date: 6 - 2 - 11 |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): William Begay  | Signature: Willer By      | Date: 6-3-11     |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): William Begay  | Signature:                | Date: 6-4-11     |
| Note Any Deficiencies:       | <i>p</i>                  |                  |
| Name (Print): William Bragay | Signature: Sille By       | Date: 6-5-//     |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): William Begay  | Signature: Little By      | Date: 6 - 6 - // |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): William Began  | Signature:                | Date: 6-7-//     |
| Note Any Deficiencies:       |                           |                  |
| Name (Print): William Began  | Signature: 11 the English | Date: 6 = 8-//   |
| Note Any Deficiencies:       | <i>y</i> -                |                  |
| Name (Print): William Begay  | Signature: Stallon By     | Date: 6-9-11     |
| Note Any Deficiencies:       |                           |                  |



## Pit Inspection Log Sheet

(daily while rig is on-site, then weekly as long as liquids remain in the pit)

| Well Name: Jicavilla 115E#13 | API: 36-039              | -31040               |
|------------------------------|--------------------------|----------------------|
| Name (Print): Nathansott     | Signature: Northan Scott | Date: 6-10-11        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): Nathan Scott   | Signature: Wattan Scott  | Date: 6-11-11        |
| Note Any Deficiencies: N     |                          |                      |
| Name (Print): Nathan Scott   | Signature: Uchan Scott   | Date: 6-12-11        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): Kevin Hackett  | Signature: The Hackett   | Date: 6-13-//        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): Kevin Hackett  | Signature: 7h- Hachett   | Date: 6-14-11        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): Kevin Hackett  | Signature: K- Hackett    | Date: <u>6~15-1/</u> |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): William Begay  | Signature: By            | Date: 6-16-11        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): William Begay  | Signature:               | Date: 6-/7-//        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): William Begay  | Signature: // By         | Date: 6-/8-//        |
| Note Any Deficiencies:       | · W                      |                      |
| Name (Print): William Begay  | Signature: Mille Bay     | Date: 6-19-11        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): William Begay  | Signature: Walle By      | Date: 6-20-//        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): William Begay  | Signature:               | Date: 6-21-11        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print): William Begay  | Signature: Walle Byg     | Date: 6-22-1/        |
| Note Any Deficiencies:       | <i></i>                  |                      |
| Name (Print): William Begay  | Signature:               | Date: 6-23-1/        |
| Note Any Deficiencies:       |                          |                      |
| Name (Print):                | Signature:               | Date:                |
| Note Any Deficiencies:       | <u> </u>                 |                      |
| Name (Print):                | Signature:               | Date:                |
| Note Any Deficiencies:       |                          |                      |
|                              |                          |                      |



## **Pit Inspection Log Sheet**

(daily while rig is on-site, then weekly as long as liquids remain in the pit)

| Well Name:                                  | API:                     |
|---|--------------------------|
| Name (Print): MICHAGE L DEAN Signature:     | Michaltan Date: 7-6-11   |
| Note Any Deficiencies:                      |                          |
| Name (Print): Michael L. Dean Signature:    | micha for Date: 7-13-11  |
| Note Any Deficiencies:                      |                          |
| Name (Print): MICHAEL L DEAN Signature:     | Mishal The Date: 7-20-11 |
| Note Any Deficiencies: STARTED TO COVER     | THE PIT NEED STOI SAMPLE |
| Name (Print): MICHAGE L. DEAN Signature:    | Micha & Date: 7-29-11    |
| Note Any Deficiencies: Took 3701 MIX SAMPLE |                          |
| Name (Print): MICHIGEL L. DEN Signature:    | Migha Las Date: 8-2-1/   |
| Note Any Deficiencies: FINISHED COVER PIT   |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |
| Name (Print): Signature:                    | Date:                    |
| Note Any Deficiencies:                      |                          |

OIL CONS. DIV.

# **COVER PAGE**

DIST. 3

ATTENTION: JONATHON

ENERGEN RESOURCES 2010 AFTON PLACE FARMINGTON NM 87401

OGRID # 162928

| WELL NAME | Jeanlla 115E BA |             |
|-----------|-----------------|-------------|
| API _     | 30-039-31040    | <del></del> |
| PERMIT _  | 9335            |             |
| missing   | labs/phoras     |             |
|           |                 |             |
| Please    | see altached    |             |



## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

| Client:            | Energen | Project #:          | 03022-0168 |
|--------------------|---------|---------------------|------------|
| Sample ID:         | 713011  | Date Reported:      | 07-14-11   |
| Laboratory Number: | 58923   | Date Sampled:       | 07-12-11   |
| Chain of Custody:  | 12170   | Date Received:      | 07-13-11   |
| Sample Matrix:     | Soil    | Date Analyzed:      | 07-14-11   |
| Preservative:      | Cool    | Date Extracted:     | 07-13-11   |
| Condition:         | Intact  | Analysis Requested: | BTEX       |
|                    |         | Dilution:           | 10         |

|           |               | Det.    |
|-----------|---------------|---------|
|           | Concentration | Limit   |
| Parameter | (ug/Kg)       | (ug/Kg) |
|           |               |         |

|      | 0.9         |
|------|-------------|
| 33.3 | 1.0         |
| 7.3  | 1.0         |
| 40.6 | 1.2         |
| 18.4 | 0.9         |
|      | 7.3<br>40.6 |

Total BTEX 102

ND - Parameter not detected at the stated detection limit.

| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 89.4 %           |
|                       | 1,4-difluorobenzene | <b>102 %</b> .   |
|                       | Bromochlorobenzene  | 82.2 %           |

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:

Jic. 115E #13A

Analysi C

Review



## **EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS**

Client: Energen Project #: 03022-0168 Sample ID: 713011 Date Reported: 07/14/11 07/12/11 Laboratory Number: 58923 Date Sampled: Chain of Custody No: 12170 Date Received: 07/13/11 Sample Matrix: Soil Date Extracted: 07/14/11 Preservative: Cool Date Analyzed: 07/14/11 Condition: Analysis Needed: TPH-418.1 Intact

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

**Total Petroleum Hydrocarbons** 

212

5.0

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:

Jic. 115E #13A

Review

5796 US Highway 84, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

| Client:              | Energen | Project #:          | 03022-0168 |
|----------------------|---------|---------------------|------------|
| Sample ID:           | 713011  | Date Reported:      | 07-15-11   |
| Laboratory Number:   | 58923   | Sampled:            | 07-12-11   |
| Chain of Custody No: | 12170   | Date Received:      | 07-13-11   |
| Sample Matrix:       | Soil    | Date Extracted:     | 07-13-11   |
| Preservative:        | Cool    | Date Analyzed:      | 07-14-11   |
| Condition:           | Intact  | Analysis Requested: | 8015 TPH   |

| Parameter                    | Concentration (mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|-----------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 5.8                   | 0.2                      |
| Diesel Range (C10 - C28)     | 0.9                   | 0.1                      |
| Total Petroleum Hydrocarbons | 6.7                   |                          |

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:

Jic. 115E #13A

Review

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



#### Chloride

Client: Energen
Sample ID: 713011
Lab ID#: 58923
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

 Project #:
 03022-0168

 Date Reported:
 07/14/11

 Date Sampled:
 07/12/11

 Date Received:
 07/13/11

 Date Analyzed:
 07/14/11

12170

Parameter

Concentration (mg/Kg)

Chain of Custody:

**Total Chloride** 

690

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:

Jic. 115E #13A

5796 US riighway 64, Farmington, NM 87401

Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



JICARILLA 115E #13A
1835' FNL 1760' FWL
SHL UNIT F SEC 3 T26N RO3W
LATITUDE 36.51756°
LONGITUDE -107.13512°
API # 30-039-31040 ELEV. 7070'
LEASE # JICARILLA CONTRACT 115
RIO ARRIBA COUNTY, NEW MEXICO
BLANCO MESAVERDE

