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

State of New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

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

10239

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

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

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

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

1
Operator Energen Resources Corporation OGRID #: 162928
Address: 2010 Afton Place, Farmington, NM 87401
Facility or well name: Carracas 14A #16H
API Number: 30-039-30842 OCD Permit Number:
U/L or Qtr/Qtr N Section 13 Township 32N Range 05W County: Rio Arriba
Center of Proposed Design: Latitude 36.97505 N Longitude 107.31669 W NAD: ☐1927 ☒1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2
☒ **Pit**: Subsection F or G of 19.15.17.11 NMAC
RCVD JUN 27'12
OIL CONS. DIV.
DIST. 3
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☐ Welded ☒ Factory ☐ Other Volume: 1500 bbl Dimensions: L 155 x W 85 x D 10

3
☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☒ Above Ground Steel Tanks ☒ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: ☐ Welded ☐ Factory ☐ Other

4
☐ **Below-grade tank**: Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ 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.

24

6

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

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

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

☐ Alternate. Please specify _____

7

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

☐ Screen ☐ Netting ☐ Other

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

8

Signs: Subsection C of 19.15.17.11 NMAC

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

☐ Signed in compliance with 19.15.3.103 NMAC

9

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

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

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

10

Siting Criteria (regarding permitting): 19.15.17.10 NMAC
***Instructions:** The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

12

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

☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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

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

13

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

☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Climatological Factors Assessment
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Liner Specifications and Compatibility Assessment - based upon
☐ 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

14

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

Type: ☒ Drilling ☒ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System Alternative

Proposed Closure Method. ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
☒ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15

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

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

16

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

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

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

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

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

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17

Siting Criteria (regarding on-site closure methods only: 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

18

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

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19 15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19

Operator Application Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20

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

OCD Representative Signature: Jonathan D. Kelly **Approval Date:** 6/29/2012

Title: Compliance Officer **OCD Permit Number:** _____

21

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

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

☒ **Closure Completion Date:** 4/27/12

22

Closure Method:

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

☐ If different from approved plan, please explain.

23

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

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

Disposal Facility Name: IEI/JFJ Landfarm Disposal Facility Permit Number: NM-01-0010B

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

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

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

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

24

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

☒ Proof of Closure Notice (surface owner and division)

☐ Proof of Deed Notice (required for on-site closure)

☒ Plot Plan (for on-site closures and temporary pits)

☐ Confirmation Sampling Analytical Results (if applicable)

☒ Waste Material Sampling Analytical Results (required for on-site closure)

☒ Disposal Facility Name and Permit Number

☒ Soil Backfilling and Cover Installation

☒ Re-vegetation Application Rates and Seeding Technique

☒ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

25

Operator Closure Certification:

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

Name (Print): Anna Stotts Title: Regulatory Analyst

Signature: Anna Stotts Date: 6/20/12

e-mail address: astotts@energen Telephone: 505-324-4154

Well Name: Carracas 14A #16H

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.

1) 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.

   The pit contents were solidified by mixing the contents with soil at a mixing ratio of less than 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 (mg/Kg)	Results (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2	ND
BTEX	EPA SW-846 8021B or 8260B	50	.343
TPH	EPA SW-846 418.1	2500	121
GRO/DRO	EPA SW-846 8015M	500	ND
Chlorides	EPA 300.1	~~500~~/1000	320

   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 # NMNM 29760 – Carracas 14A #16H Unit N Sec. 13, T32N, R05W – Pit Burial Site.

Submit to Appropriate District Office
Five Copies
District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd , Aztec, NM 87410
District IV
1220 S St. Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
July 17, 2008

1. WELL API NO. 30-039-30842
2. Type Of Lease ☐ STATE ☐ FEE ☒ FED/INDIAN
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)

5. Lease Name or Unit Agreement Name: Carracas 14A
6. Well Number: #16H

9. Type of Completion
☐ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☒ OTHER pit closure

8. Name of Operator: Energen Resources Corporation
9. OGRID Number: 162928
10. Address of Operator: 2010 Afton Place, Farmington, NM 87401
11. Pool name or Wildcat: Basin Fruitland Coal

12 Location	Unit Letter	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:										
BH:										

13 Date Spudded	14. Date T.D. Reached	15. Date Rig Released	16 Date Completed (Ready to Produce)	17. Elevations (DF & RKB, RT, GR, etc.)
		9/13/11		

18. Total Measured Depth of Well	19. Plug Back Measured Depth	20 Was Directional Survey Made	21 Type Electric and 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	AMOUNT PULLED

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number)

27. ACID, SHOT, FRACTURE, CEMENT, SQEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28. **PRODUCTION**

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod or Shut-in)*

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl	Gas - Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API -*(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 Longitude NAD: 1927 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 Anna Stotts Printed Name Anna Stotts Title Regulatory Analyst Date 6/20/12

E-mail address astotts@energen.com

District I
1625 N French Dr , Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St , Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr , Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT
"AS DRILLED"

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-30842	71629	Basin Fruitland Coal

[4] Property Code	[5] Property Name	[6] Well Number
35653	Carracas 14A	16H

[7] OGRID No.	[8] Operator Name	[9] Elevation
162928	Energen Resources Corporation	7408' GL

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	32N	5W		762	South	1718	West	Rio Arriba

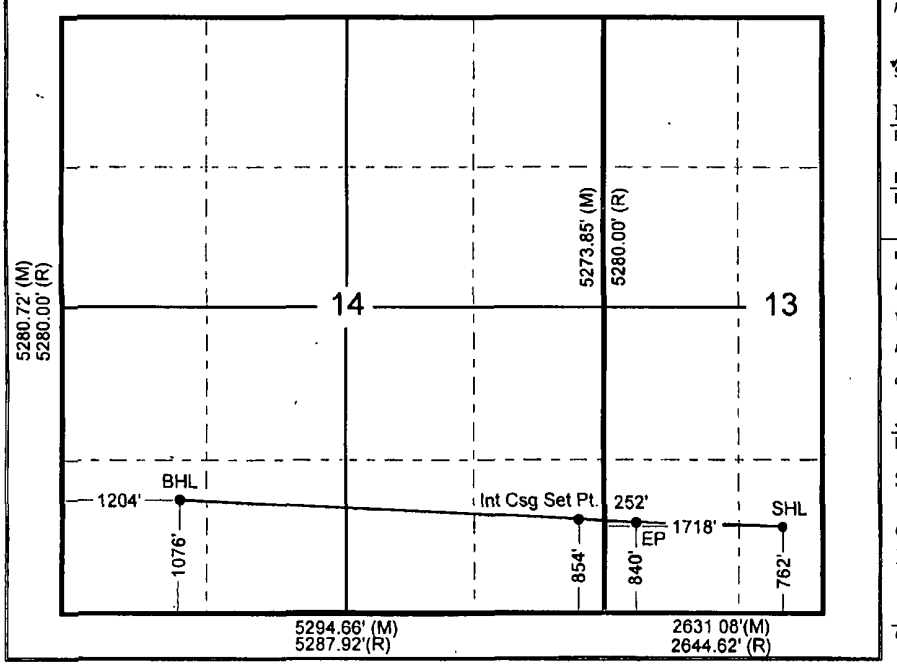
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	14	32N	5W		1076	South	1204	West	Rio Arriba

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
S/2 320 (S14)			R-13119

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.

16



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — 11/2/2011 Date

Nathan Smith
Printed Name

nsmith@energen.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief

June 11, 2009
Date of Survey

Signature and Seal of Professional Surveyor:

Original survey conducted and recorded by:
David R. Russell

10201
Certificate Number

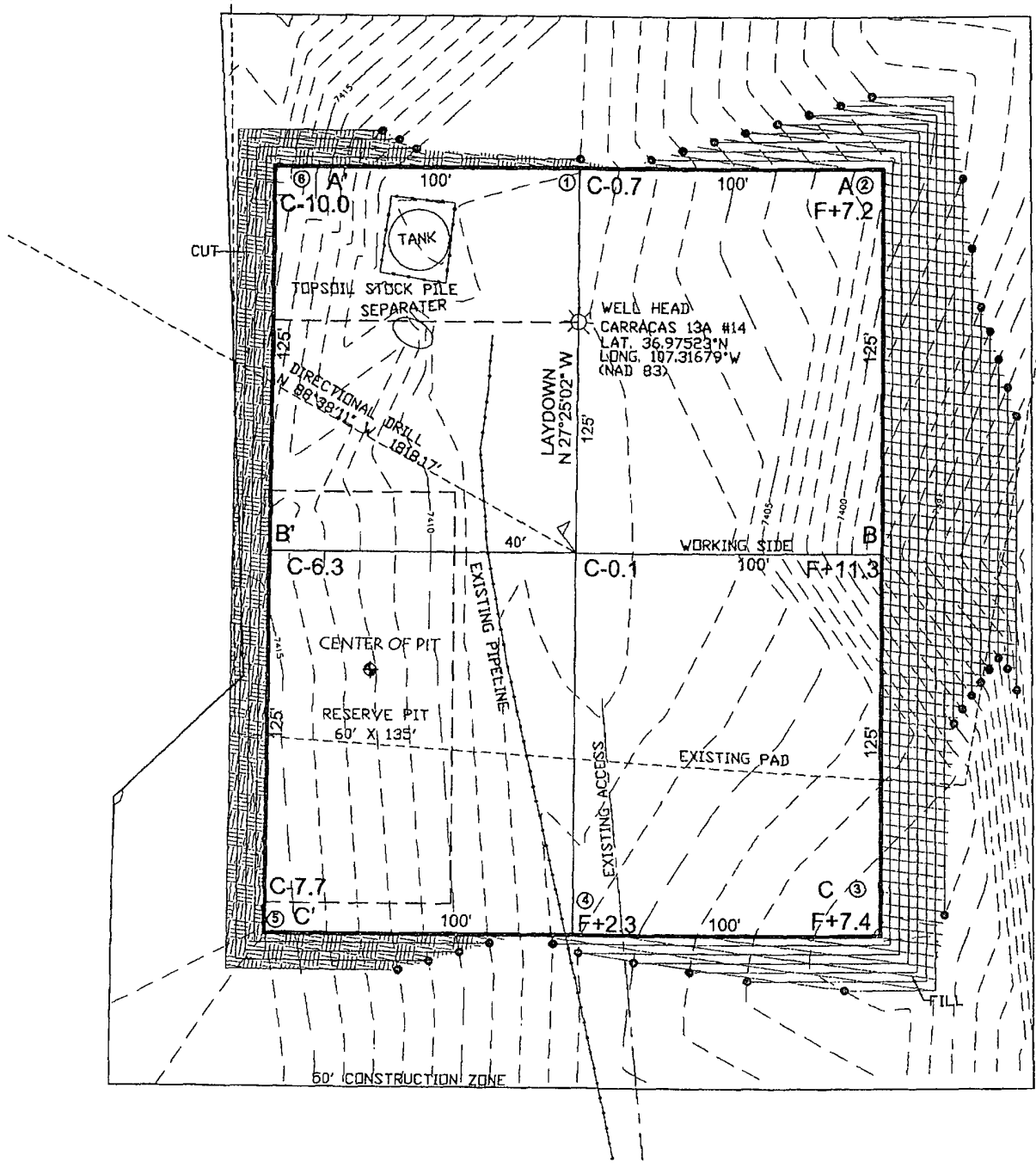
RECEIVED
NOV 2011
OIL CONS. DIV. DIST. 3

WELL FLAG
LATITUDE: 36.97505° N
LONGITUDE: 107.31669° W
DATUM: NAD 83
CENTER OF PIT
LATITUDE: 36.97493° N
LONGITUDE: 107.31676° W
ELEVATION: 7496.3'
NAD83 & NAVD88

ERGEN RESOURCES CORPORAT.

CARRACAS 14 A #16
762' FSL & 1718' FWL
LOCATED IN THE SE/4 SW/4 OF SECTION 13,
T32N, R5W, N.M.P.M.,
RIO ARRIBA COUNTY, NEW MEXICO
GROUND ELEVATION: 7408', NAVD 88
FINISHED PAD ELEVATION: 7408.3', NAVD 88

25' 0 25' 50'
SCALE = 50'

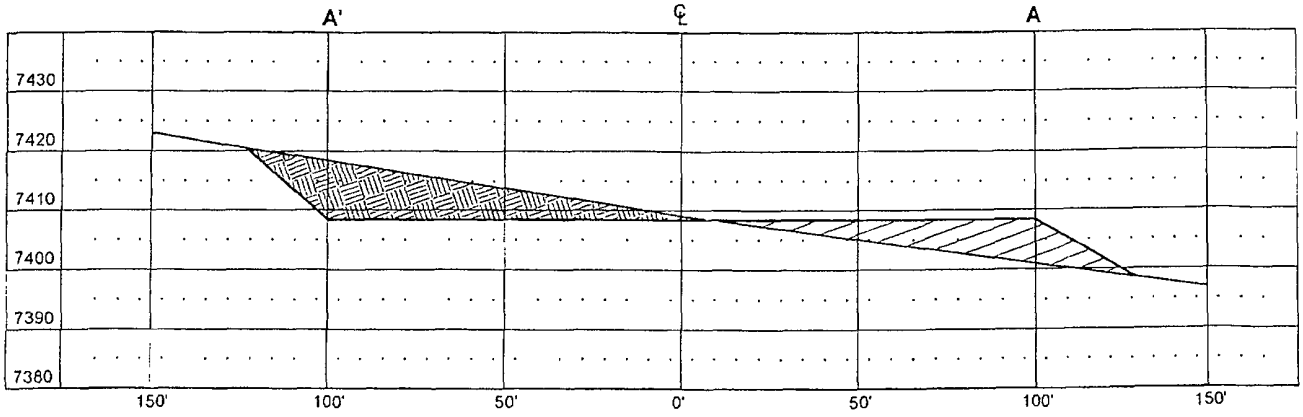


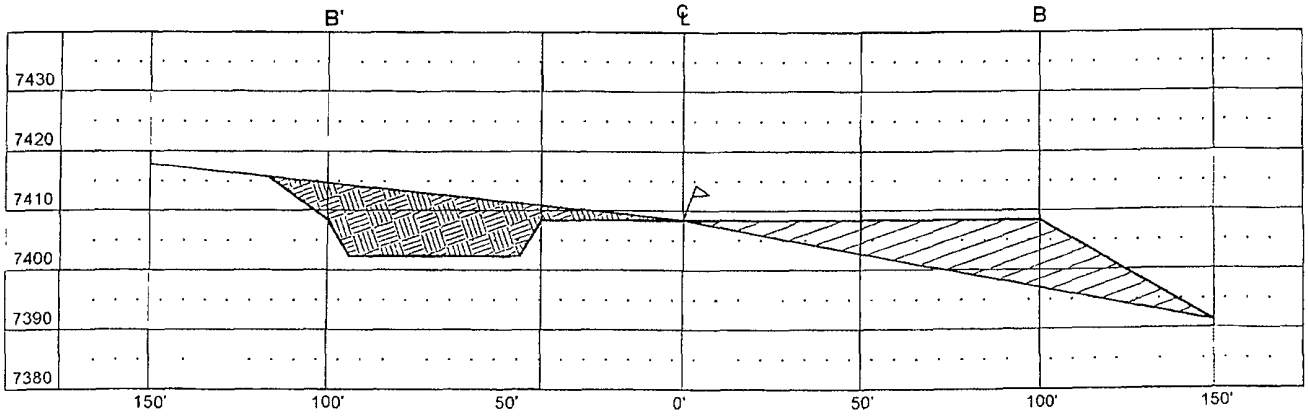
1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 50'
JOB No.: ERG230_REV3
DATE: 06/15/09

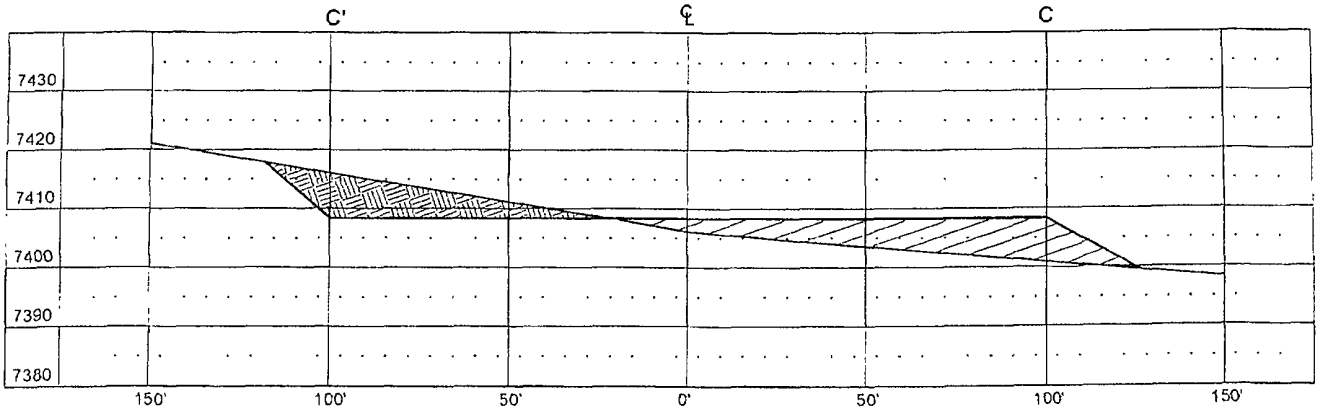
Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637

ERGEN RESOURCES CORPORATION

CARRACAS 14 A #16H
762' FSL & 1718' FWL
LOCATED IN THE SE/4 SW/4 OF SECTION 13,
T32N, R5W, N M.P.M.,
RIO ARRIBA COUNTY, NEW MEXICO
GROUND ELEVATION: 7408', NAVD 88
FINISHED PAD ELEVATION: 7408.5', NAVD 88







VERT. SCALE: 1" = 30'
HORZ. SCALE: 1" = 50'
JOB No.: ERG230_REV3
DATE: 06/15/09

CUT
FILL

Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637

Anna Stotts

From: Rocky Hocker [rocky@hockerconstruction.biz]
Sent: Monday, April 16, 2012 10:25 AM
To: Doug Thomas; Ed Hasely; Robert Schmidt; Brandon.Powell@state.nm.us; jjmiller@fs.fed.us; Michael Dean; Anna Stotts; Aaron Burleson; Kellie Campbell
Subject: FW: Carracus 14 A #16

Follow Up Flag: Follow up
Flag Status: Flagged

This is a notice that Hocker Construction will be mobing onto the Carracus 14 A # 16 to do well sight reclamation.
If any one has any questions please call me at (970-749-0391).
Thank you,
Rocky Hocker

ROCKY HOCKER
(970) 749-0391 CELL
(970) 563-9533 OFFICE
HOCKER@GOBRAINSTORM.NET
ROCKY@HOCKERCONSTRUCTION.BIZ

envirotech
Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Energen	Project #:	03022-0001
Sample ID:	04041201	Date Reported:	04-05-12
Laboratory Number:	61607	Date Sampled:	04-04-12
Chain of Custody:	13688	Date Received:	04-04-12
Sample Matrix:	Soil	Date Analyzed:	04-05-12
Preservative:	Cool	Date Extracted:	04-04-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**10.0**
Toluene	**98.1**	**10.0**
Ethylbenzene	**23.7**	**10.0**
p,m-Xylene	**173**	**10.0**
o-Xylene	**48.1**	**10.0**
Total BTEX	**343**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**91.9 %**
	1,4-difluorobenzene	**100 %**
	Bromochlorobenzene	**97.0 %**

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: **Carracas 14A #16H**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Energen	Project #:	03022-0001
Sample ID:	04041201	Date Reported:	04-05-12
Laboratory Number:	61607	Date Sampled:	04-04-12
Chain of Custody No:	13688	Date Received:	04-04-12
Sample Matrix:	Soil	Date Extracted:	04-04-12
Preservative:	Cool	Date Analyzed:	04-04-12
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**121**	**7.4**

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: **Carracas 14A #16H**

Analyst

Review

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

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Energen	Project #:	03022-0001
Sample ID:	04041201	Date Reported:	04-05-12
Laboratory Number:	61607	Date Sampled:	04-04-12
Chain of Custody No:	13688	Date Received:	04-04-12
Sample Matrix:	Soil	Date Extracted:	04-04-12
Preservative:	Cool	Date Analyzed:	04-05-12
Condition:	Intact	Analysis Requested:	8015 TPH

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

ND - Parameter not detected at the stated detection limit.

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

Comments: **Carracas 14A #16H**

Analyst

Review

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

envirotech
Analytical Laboratory

Chloride

Client:	Energen	Project #:	03022-0001
Sample ID:	04041201	Date Reported:	04-05-12
Lab ID#:	61607	Date Sampled:	04-04-12
Sample Matrix:	Soil	Date Received:	04-04-12
Preservative:	Cool	Date Analyzed:	04-05-12
Condition:	Intact	Chain of Custody:	13688

Parameter	Concentration (mg/Kg)
Total Chloride	**320**

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: **Carracas 14A #16H**

Analyst

Review

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

ENERGEN RESOURCES

Pit Inspection Log Sheet

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

Well Name: Carracas 14A #16 **API:**

Name (Print): B.M Vaeke Signature: [signature] Date: 8-9-11
Note Any Deficiencies: none

Name (Print): B.M Vaeke Signature: [signature] Date: 8-10-11
Note Any Deficiencies: none

Name (Print): B.M Vaeke Signature: [signature] Date: 8-11-11
Note Any Deficiencies: none

Name (Print): B.M Vaeke Signature: [signature] Date: 8-12-11
Note Any Deficiencies: none

Name (Print): B.M Vaeke Signature: [signature] Date: 8-13-11
Note Any Deficiencies: none

Name (Print): B.M Vaeke Signature: [signature] Date: 8-14-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-15-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-16-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-17-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-18-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-19-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-20-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-21-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-22-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-23-11
Note Any Deficiencies: —

Name (Print): B.M Vaeke Signature: [signature] Date: 8-24-11
Note Any Deficiencies: —

ENERGEN
RESOURCES

Pit Inspection Log Sheet

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

Well Name: Carracas 14A #16 **API:**

Name (Print):	Bill Vocke	Signature:		Date: 8-25-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 8-26-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 8-27-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 8-28-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 8-29-11
Note Any Deficiencies:	none			
Name (Print):	Bill vocke	Signature:		Date: 8-30-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 8-31-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-1-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-2-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-3-11
Note Any Deficiencies:	none			
Name (Print):	Bill vocke	Signature:		Date: 9-4-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-5-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-6-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-7-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-8-11
Note Any Deficiencies:	None			
Name (Print):	Bill vocke	Signature:		Date: 9-9-11
Note Any Deficiencies:	NONE			

ENERGEN RESOURCES

Pit Inspection Log Sheet

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

Well Name: Carracas 14A #16 **API:**

Name (Print):	Bill vocke	Signature:	Date: 9-10-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 9-11-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 9-12-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 9-13-11
Note Any Deficiencies:	drilling rig moving / none		
Name (Print):	Bill vocke	Signature:	Date: 9-20-11
Note Any Deficiencies:	none weekly Insp		
Name (Print):	Bill vocke	Signature:	Date: 9-26-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-3-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-10-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-13-11
Note Any Deficiencies:	Compl Rig on site		
Name (Print):	Bill vocke	Signature:	Date: 10-14-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-15-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-16-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-17-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-18-11
Note Any Deficiencies:	None		
Name (Print):	Bill vocke	Signature:	Date: 10-19-11
Note Any Deficiencies:	None		
Name (Print).	Bill vocke	Signature:	Date: 10-20-11
Note Any Deficiencies:	none		

ENERGEN RESOURCES

Pit Inspection Log Sheet

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

Well Name: Carracas 14A #16 **API:**

Name (Print): Bill Voelke Signature: [signature] Date: 10-21-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-22-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-23-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-24-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-25-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-26-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-27-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 10-28-11
Note Any Deficiencies: Compl Rig Moving off Pad

Name (Print): Bill Voelke Signature: [signature] Date: 11-01-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 11-11-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 11-18-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 11-25-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 12-2-11
Note Any Deficiencies: None

Name (Print): Bill Voelke Signature: [signature] Date: 12-9-11
Note Any Deficiencies: Snow covered

Name (Print): Bill Voelke Signature: [signature] Date: 3-12-12
Note Any Deficiencies: Need to weld. Called / Done 3-13-12

Name (Print): Bill Voelke Signature: [signature] Date: 3-19-12
Note Any Deficiencies: None

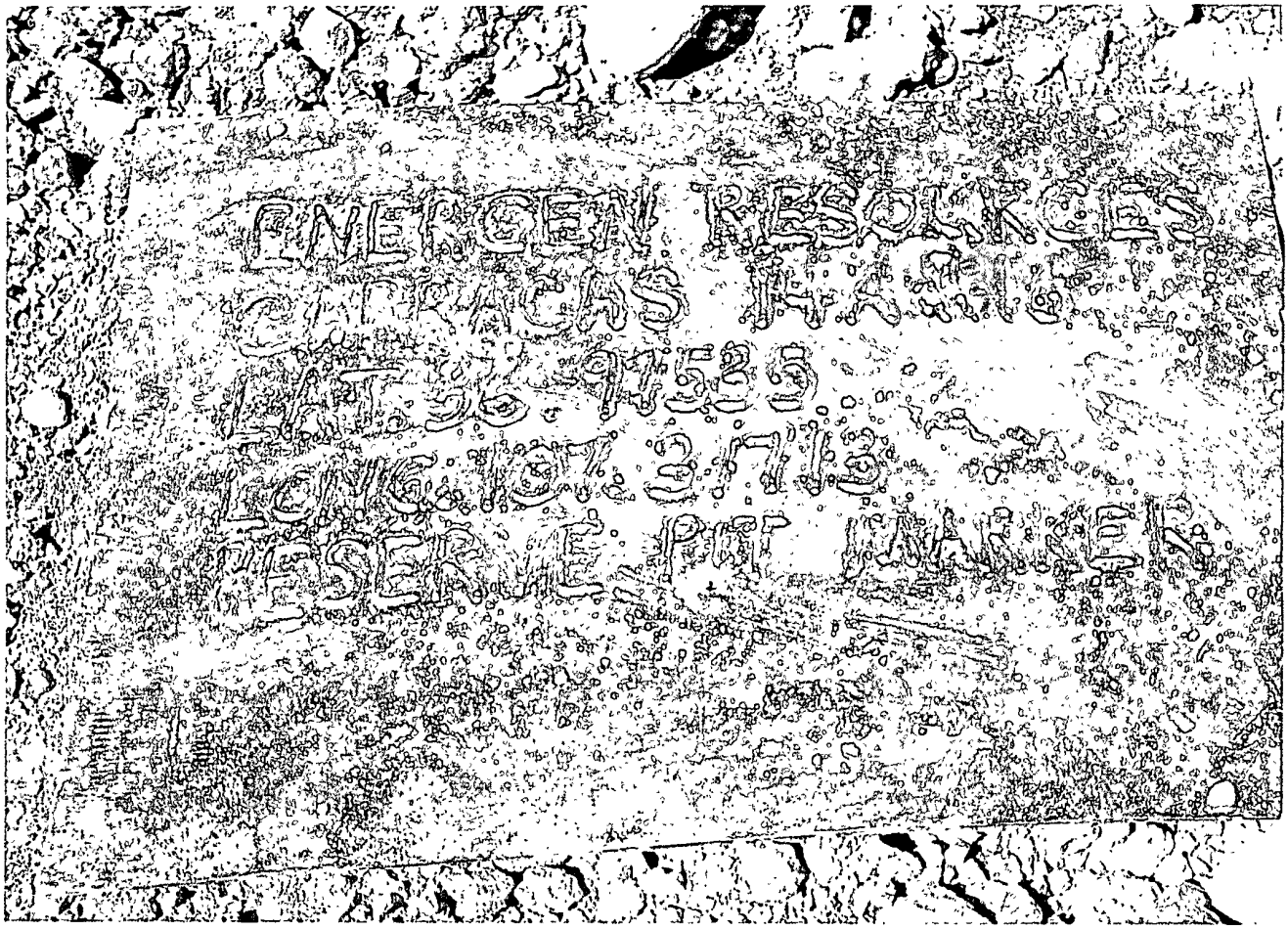
ENERGEN RESOURCES

Pit Inspection Log Sheet

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

Well Name: Carracas 14A #16 **API:**

Name (Print)	Signature	Date	Note Any Deficiencies
Bill vocke	[signature]	3-26-12	none
Bill vocke	[signature]	4-2-12	None
Bill vocke	[signature]	4-9 12	none
Bill vocke	[signature]	4-16-12	None
Bill vocke	[signature]	4-23-12	none
Bill vocke		4-27-12	Pit Closed
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			
Bill vocke			



ENERGEN
RESOURCES
CORPORATION

CARRACAS 14A #16
762' FSL 1718' FWL
UNIT N SEC 13 T32N R05W
LATITUDE 36.97505°
LONGITUDE -107.31669°
API # 30-039-30842 ELEV. 7408'
LEASE # NMNM 059704
RIO ARRIBA COUNTY, NEW MEXICO
BASIN FRUITLAND COAL

CARRACAS 14A #16 6-20-12