

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

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

Form C-144
Revised August 1, 2011

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.

10100
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: EnerVest Operating, LLC OGRID #: 143199
Address: 1001 Fannin St. Ste 800 Houston, TX 77002-6707
Facility or well name: Jicarilla 102 # 7N
API Number: 30-039-30068 OCD Permit Number: _____
U/L or Qtr/Qtr C Section 3 Township 26N Range 04W County: Rio Arriba
Center of Proposed Design: Latitude 36.520306 N, Longitude 107.240722 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
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: 11000 bbl Dimensions: L 125' x W 75' x D 10'
RCVD MAY 24 '12
OIL CONS. DIV.
DIST. 3

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 ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

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

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

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

☒ Alternate. Please specify 4' high hogwire fence with barbed wire on top

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 19.15.16.8 NMAC

9.

Administrative Approvals and Exceptions:

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

Please check a box if one or more of the following is requested, if not leave blank:

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

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

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

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

☐ Yes ☒ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (*Applies to temporary, emergency, or cavitation pits and below-grade tanks*)

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

☐ Yes ☒ No
☐ NA

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (*Applies to permanent pits*)

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

☐ Yes ☐ No
☒ NA

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

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

☐ Yes ☒ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

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

☐ Yes ☒ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within the area overlying a subsurface mine.

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

☐ Yes ☒ No

Within an unstable area.

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

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map **NOTE: (No FEMA floodplain data found for this area)**

☐ Yes ☒ No

11.

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

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

12.

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

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Previously Approved Design (attach copy of design) API Number: _____
☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Climatological Factors Assessment
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Quality Control/Quality Assurance Construction and Installation Plan
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Nuisance or Hazardous Odors, including 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): Loren Djade Title: Contract Agent

Signature:  Date: 5-24-2012

e-mail address: lddcsi@yahoo.com Telephone: 505 334 8867

20.

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

OCD Representative Signature:  Approval Date: 5/25/2012

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: _____

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

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

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

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

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

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

- ☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

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

25.

Operator Closure Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

Siting Criteria Compliance Demonstration and Hydro Geologic Analysis

The JICARILLA 102 # 7N is not located in an unstable area

The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map.

The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map.

The location is not within a 100-year floodplain area as indicated on the FEMA Map.

There is no iWATERS data points available in Sec 3 near the JICARILLA 102 # 7N. The Office of the State Engineer has a record of ground water found at 750 ft depth in Unit P of Sec 34 T27N, R4W. It is believed that any ground water encountered at the JICARILLA 102 # 7N will be below 100'.

The estimated depth to groundwater and the surface San Jose formation will create a stable area for this well site location.

ENERVEST OPERATING, LLC (EV)

TEMPORARY PIT Design and Construction Specifications

Rule 19.15.17.11 NMAC

In accordance with the above mentioned rule, EV submits this design and construction program for all EV locations where a temporary pit (reserve pit) is required. This will be our plan for all temporary pits unless a special condition warrants. In that case another plan will be submitted for that particular temporary pit.

1. EV will design and construct an approved temporary pit to fit the particular well it is designed to accommodate. The pit will contain liquids and solids from the drilling of that particular well only and should prevent contamination of fresh water and protect public health, and the environment.
2. Any topsoil disturbed in the building of the location pad will be stockpiled on location for later use in restoring the site.
3. All temporary pits will be located on pad sites for drilling wells and EV will insure signage on location is in full compliance with 19.15.3 103 NMAC.
4. EV is requesting permission to use a 4' hog wire fence in lieu of the required 4 strand barbed-wire fence. This will be supported by iron posting at the corners and 10 – 12 feet apart. The pits will be fenced at all times excluding drilling or completion operations, during the drilling and completion phases of the well the side adjacent to the rig will be temporarily removed for operational purposes. This portion of the fence will be replaced when the rig is removed.
5. EV will construct the temporary pit to insure the foundation and interior slopes are firm and free of rocks, debris, sharp objects to prevent liner failure.
6. EV will construct the temporary pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V).
7. The walls of the temporary pit will be walked down by a crawler type tractor following construction to insure proper solidity.

8. All temporary pits will be lined with a 20-mil, reinforced LLDPE liner, or equivalent liner material that the division district office approves, complying with EPA SW-846 method 9090A requirements. The liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions, and shall be resistant to ultraviolet light.
9. Geotextile will be installed beneath the liner where rocks, debris, sharp objects cannot be avoided.
10. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
11. EV will minimize liner seams and orient them up and down, not across a slope. EV will use factory welded seams where possible, but where field seaming is required we shall overlap liners four to six inches and orient seams parallel to the liner of maximum slope and use qualified personnel to perform field seaming. EV will minimize the number of field seams in corners and irregularly shaped areas.
12. The liner shall be protected from any direct fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
13. The temporary pit shall be protected from run-off by constructing and maintaining diversion ditches or berms around the location or around the perimeter of the pit, if necessary.
14. The volume of the temporary pit shall not exceed 10-acre-feet, including freeboard.
15. Temporary blow pits will be constructed to allow gravity flow to discharge into the lined reserve pit.
16. The lower half of the blow pit (nearest lined pit) will be lined with a 20-mil, string reinforced, LLDPE liner. The upper half of the blow pit will remain unlined as owed in Rule 19.15.17.11.F.11.
17. EV will not allow freestanding liquids to remain on the unlined portion of a temporary pit used to vent or flare gas.

ENERVEST OPERATING, LLC (EV)

TEMPORARY PIT Maintenance and Operation Specifications Rule 19.15.17.12 NMAC

In accordance with the above mentioned rule, EV submits this maintenance and operation program for all EV locations where a temporary pit (reserve pit) is required. This will be our plan for all temporary pits unless a special condition warrants. In that case another plan will be submitted for that particular temporary pit.

1. EV will operate and maintain a temporary pit to contain liquids and solids and maintain the integrity of the liner and liner system to prevent contamination of fresh water and protect public health and the environment.
2. EV will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed of at:
TNT Land Farm Permit #NM-01-0008
EnviroTech Permit #NM-01-0011
3. EV will not discharge or store any hazardous waste in any temporary pit.
4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquids surface, EV will notify the appropriate division district office by phone or e-mail within 48 hours of the discovery. EV will repair the damage or replace the liner.
5. If a leak develops below the liquid level, EV shall remove all liquids above said leak within 48 hours and repair the damage or replace the liner. EV shall notify the appropriate district office by phone or e-mail within 48 hours of the discovery for leaks less than 25 barrels. EV shall notify the appropriate district office as required as per Subsection B of 19.15.3.116 NMAC shall be reported within 24 hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification as per 19.15.3.116 B (1)d) shall be reported to the division's Environmental Bureau Chief.
6. The liner shall be protected from any direct fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
7. The temporary pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.

8. EV will immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be stored on-site until closure of temporary pit for this purpose.
9. Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
10. EV will maintain the temporary pit free of miscellaneous solid waste or debris.
11. EV shall inspect the temporary pit at least daily while the drilling or completion rig is on site. Thereafter, EV shall inspect the temporary pit weekly, so long as liquids remain in the temporary pit. EV shall maintain a log of all inspections and file a copy of this log with the appropriate division district office when the temporary pit is closed.
12. EV will maintain at least two feet of freeboard for a temporary pit.
13. EV shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling rig. EV may request additional time to remove liquids from the appropriate division district office if it is not feasible to remove liquids within 48 hours.

ENERVEST OPERATING, LLC (EV)

TEMPORARY PIT Closure Specifications

Rule 19.15.17.13 NMAC

In accordance with the above mentioned rule, EV submits this closure program for all EV locations where a temporary pit (reserve pit) is required. This will be our plan for all temporary pits unless a special condition warrants. In that case another plan will be submitted for that particular temporary pit.

All closure activities will include proper documentation and be available for review upon request and will be submitted to the appropriate division district office within 60 days of closure of all temporary pits. A closure report will be filed on OCD Form C-144 and will include the following:

- Details on Capping and Covering, where applicable
 - Plat Plan (Pit Diagram)
 - Inspection Reports
 - Sampling Results
 - OCD Form C-105
 - Copy of Deed Notice filed with County Clerk, where applicable
1. EV shall notify the surface owner by certified mail, return receipt requested that we plan to close a temporary pit.
 2. EV shall notify the appropriate division district office verbally or by other means at least 72 hours, but not more than one week, prior to closing a temporary pit. Such notice will include the location to be closed by unit letter, section, township and range, well name and number, and appropriate API number of the well on which the temporary pit exists.
 3. EV shall remove all free standing liquids at the start of the closure process for all division approved Temporary pits. Such liquids will be disposed of in an approved facility or be reclaimed in a manner that the appropriate division office approves. The facilities to be used will be:

TnT LandFarm	Permit #NM-01-0008
EnviroTech	Permit #NM-01-0011
 4. Within 6 months of the date the rig is released, EV will ensure that the associated temporary pit is closed, re-contoured, and reseeded. If weather or seasonal conditions prevent the reclamation within 6 months, EV will request an extension from the regulatory agencies involved.

5. Liner of temporary pits shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove all of liner, all, if any, excessive liner will be disposed of at:

San Juan Regional Landfill Permit #SWM052426

6. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
7. A five point composite sample will be taken of the pit using sampling tools and all samples tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met, all contents will be handled per 19.15.17.13 (B)(1)(a).

Sample	Determined By:	Maximum Limit
Benzene	EPA SW-846 method 8021B or 8260B	0.2 mg/kg
BTEX	EPA SW-846 method 8021B or 8260B	50 mg/kg
TPH	EPA SW-846 method 418.1 *	2500mg/kg
GRO & DRO combined	EPA SW-846 method 8015M	500 mg/kg
chlorides	EPA method 300.1	1000 mg/kg **

* or other EPA method that the division approves

** or the background concentration, whichever is greater

8. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of fill at the site to include one foot of topsoil, or the background thickness of topsoil, whichever is greater. If standard testing fails, EV will dig and haul all contents as per 19.15.17.13. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.
9. During the stabilization process, if the liner is ripped by equipment the appropriate district office will be notified within 48 hours and the liner will be repaired if possible. If the liner cannot be repaired, then all contents will be excavated and removed.

10. Dig and Haul Material will be transported to:

TNT Land Farm Permit #NM-01-0008
Environtech Land Farm Permit# NM-01-0011

11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
12. Notification will be sent to OCD when the reclaimed area is seeded.
13. EV shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (unimpacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be contoured until successful vegetative growth occurs.

TYPE	VARIETY OR CULTIVATOR	PLS/A
Western Wheatgrass	Arriba	3.0
Indian Ricegrass	Paloma or Rimrock	3.0
Slender Wheatgrass	San Luis	2.0
Crested Wheatgrass	Hy-Crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	0.25

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS) = Purity x Germination/100

Two lots of seed can be compared on the basis of PLS:

	Source 1	Source 2
	(poor quality)	(better quality)
Purity	50%	80%
Germination	40%	63%
Percent PLS	20%	50%

14. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pad. The plate will be easily removed and, a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operators information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name, and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

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

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

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 July, 16, 2010
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30068	² Pool Code 72319/71599	³ Pool Name BLANCO MESAVERDE / BASIN DAKOTA
⁴ Property Code 33455	⁵ Property Name JICARILLA 102	⁶ Well Number 7N
⁷ GRID No. 222374	⁸ Operator Name ENERVEST OPERATING, LLC	⁹ Elevation 7203'

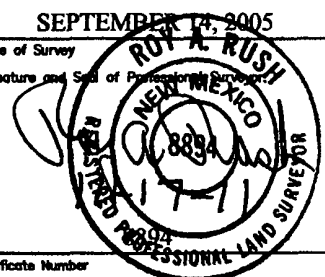
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	3	26-N	4-W	3	845	NORTH	1980	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
¹² Dedicated Acres MV - W/321.68 DK - N/322.82					¹³ Joint or Infill Y		¹⁴ Consolidation Code		¹⁵ Order No.

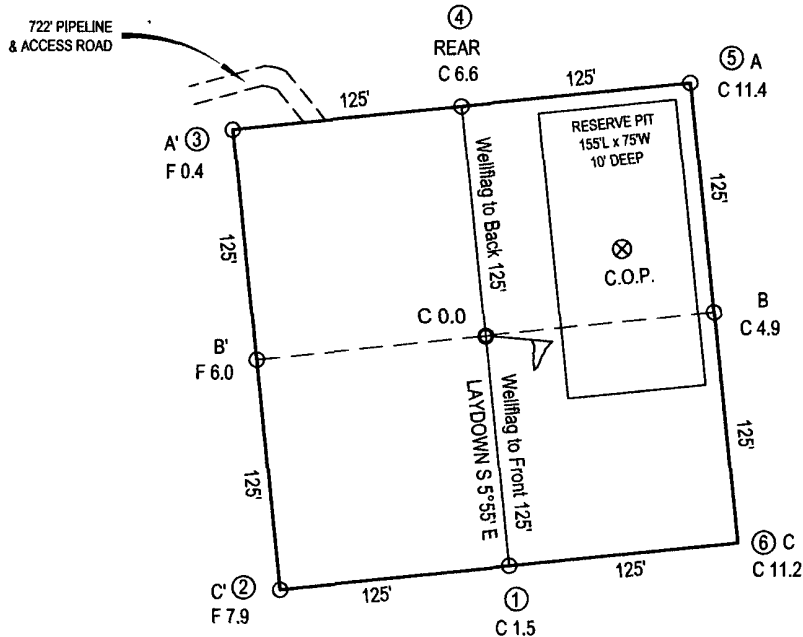
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

FD. 2 1/2" BC. 1916 USGLO		N 89°49'01" E 5239.48' (C)	CALCD. COR. BY SGL. PROP.	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 _____ Date _____ Printed Name _____ E-mail Address _____
1980'	LOT 4	LOT 3	LOT 2	LOT 1
SURFACE: LAT: 36°31'13.1" N. (NAD 83) LONG: 107°14'26.6" W. (NAD 83) LAT: 36°31'13.02818" N. (NAD 27) LONG: 107°14'24.44866" W. (NAD 27)				
3				
S 00°31'35" E 5296.95' (C)				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. SEPTEMBER 14, 2005 Date of Survey Signature and Seal of Professional Surveyor  Certificate Number _____
CALCD. COR. BY DBL. PROP.				

ENERVEST OPERATING, LLC
 JICARILLA 102 No. 7N, 845 FNL 1980 FWL
 SECTION 3, T26N, R4W, N.M.P.M., RIO ARriba COUNTY, N.M.
 GROUND ELEVATION: 7203', DATE: SEPTEMBER 14, 2005

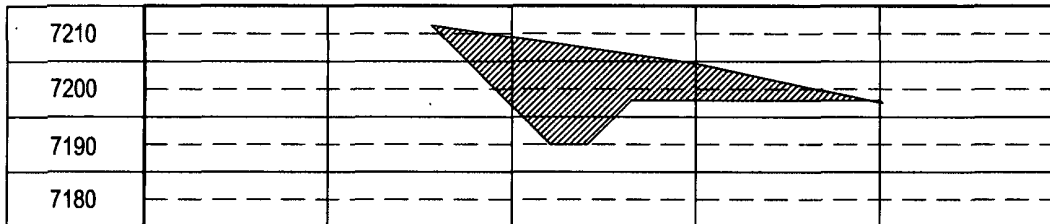
WELL FLAG
 NAD 83
 LAT. = 36°31'13.1" N.
 LONG. = 107°14'26.6" W.
 NAD 27
 LAT. = 36°31'13.02818" N.
 LONG. = 107°14'24.44866" W.

CENTER OF PIT
 NAD 83
 LAT. = 36.52041° N.
 LONG. = 107.24050° W.
 NAD 27
 LAT. = 36°31'13.44218" N.
 LONG. = 107°14'23.63872" W.

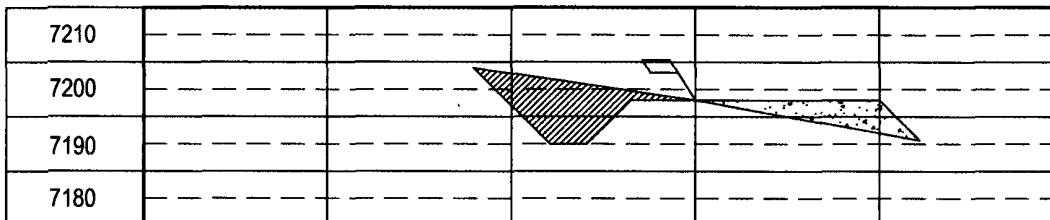


NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

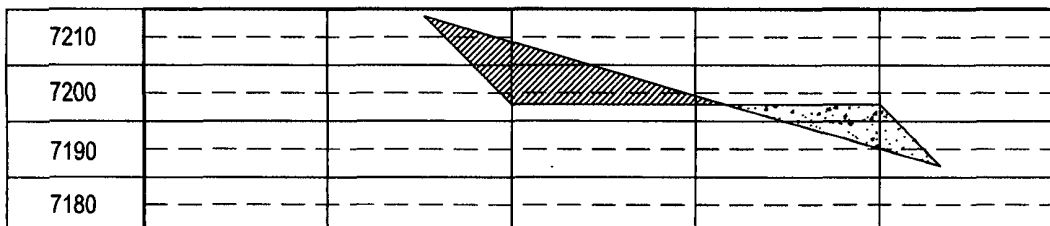
ELEV. A - A' C/L



ELEV. B - B' C/L



ELEV. C - C' C/L



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

REVISION:	DATE:	REVISED BY:
CORRECTED LOCATION OF ACCESS	4/27/12	G.V.
OPERATOR NAME CHANGE &	11/01/11	G.V.
CAD FILE NAME CHANGE		

Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P.O. Box 510 Farmington, NM 87499
 Phone (505) 326-1772 Fax (505) 326-6019
 NEW MEXICO L.S. No. 8894

DRAWN BY: G.V.
 DATE: 9/29/05
 CAD FILE: EV081_CFB
 ROW#: EV081

107°15'00" W

107°14'00" W

WGS84 107°13'00" W

ENERVEST OPERATING, LLC

JICARILLA 102 No. 7N

NE/4 NW/4, SEC. 3, T-26-N, R-4-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

845 FNL 1980 FWL

722 FT. NEW ACCESS

JICARILLA 102 No. 7N

LAT: 36-31-13.1 N (NAD 83)

LONG: 107-14-26.6 W (NAD 83)

LAT: 36-31-13.02818 N (NAD 27)

LONG: 107-14-24.44366 W (NAD 27)

722 FT. NEW ACCESS

THIS MAP IS FOR ESTIMATING PURPOSES.

CONSTRUCTION FOOTAGES ARE APPROXIMATE.

NATIONAL
GEOGRAPHIC0.0 0.5 miles
0.0 0.5 1.0 km

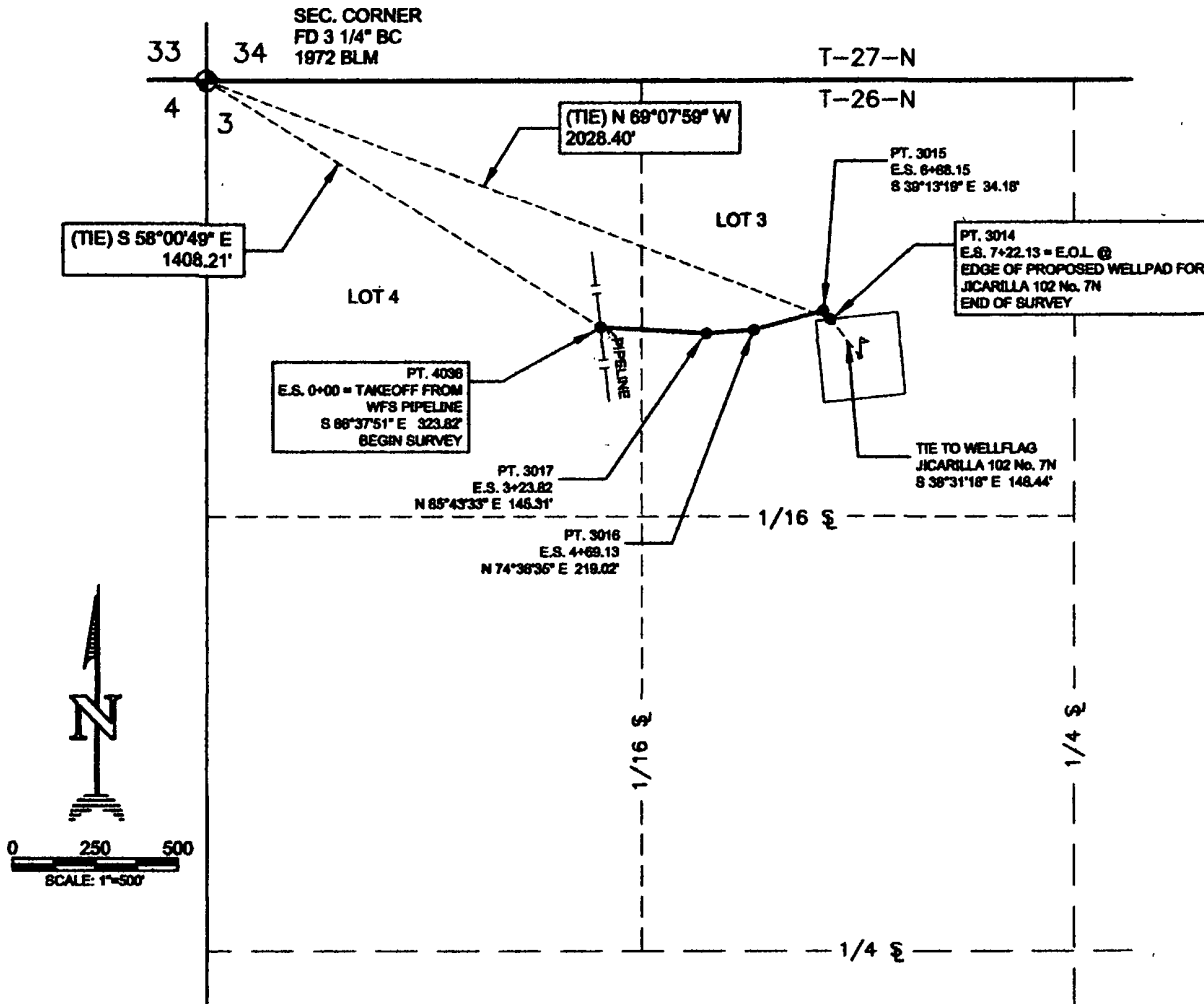
WGS84 107°13'00" W

TN MN

10°

04/27/12

A PRELIMINARY SURVEY OF A 40' EASEMENT CROSSING JICARILLA APACHE LANDS FOR
ENERVEST OPERATING, LLC
PROPOSED JICARILLA 102 No. 7N PIPELINE & ACCESS ROAD
 LOT 4 & LOT 3 OF SEC. 3, TOWNSHIP 26 NORTH, RANGE 4 WEST, N.M.P.M.
 RIO ARriba COUNTY, NEW MEXICO



NOTES:

- 1) BASIS OF BEARING : G.P.S. OBSERVATIONS
- 2) DATE OF SURVEY : 9/14/05 & 12/01/05
- 3) DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

OWNER	STATION	FT./RODS
JICARILLA APACHE	E.S. 0+00 TO E.S. 7+22.13	722.13/43.77
	TOTAL	722.13/43.77

REVISION	REV. BY	DATE
OPERATION NAME CHANGE &	G.V.	11/10/11
CHFILE NAME CHANGE		
LOCATION RESUME	G.V.	12/07/08



Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 510 Farmington, NM 87499
 Phone (505) 326-1772 Fax (505) 326-6019
 REGISTERED LAND SURVEYOR
 NEW MEXICO No. 8894

I, ROY A. ROSS, A NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR CERTIFY THAT THIS PLAT WAS PREPARED FROM AN ACTUAL SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

I FURTHER CERTIFY THAT THIS IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT.

**Directions from the intersection of Highway 550 and Highway 537 New Mexico, to
the
Enervest Operating, LLC.**

Jicarilla 102 #7N well location

**845' FNL, 1980' FWL Section 3, T26N R4W, NMPM, in Rio Arriba County,
New Mexico**

From the intersection of Highway 550 and Highway 537 (Lat. 36° 08' 46.92"N, Long. 107° 15' 51.59" W)

Travel North and Northeasterly 28.1 miles to J-64 intersection (Lat. 36° 29' 56.40"N, Long. 107° 11' 36.61" W)

Turn Left on J-64 and travel West and Southwesterly 2.6 miles to intersection of J-63 & J-64 (Lat. 36° 29' 53.00"N, Long. 107° 14' 15.77" W)

Turn right and travel Northerly then Northwesterly 0.7 mile to intersection (Lat. 36° 30' 21.53"N, Long. 107° 14' 35.90" W)

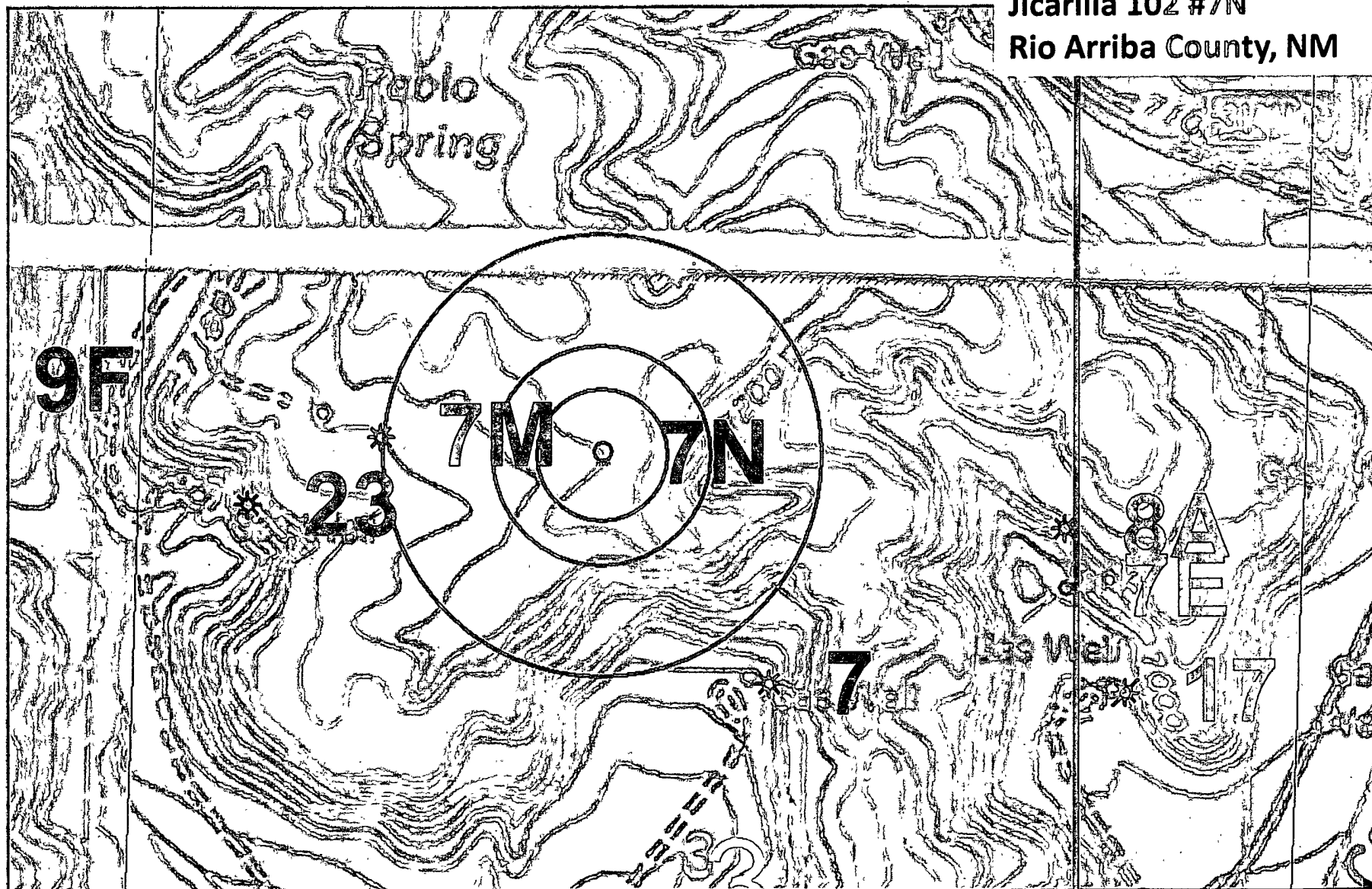
Turn right and travel Northerly, and Southeasterly 1.5 miles to edge of well location and take off of new access (Lat. 36° 31' 13.85"N, Long. 107° 14' 36.11" W)

Follow new access survey for 722' to new well location (Lat. 36° 31' 13.07"N, Long. 107° 14' 26.60" W)

EnerVest

Jicarilla 102 #7N

Rio Arriba County, NM



300, 500 & 1000 ft. distances

EnerVest

Jicarilla 102 #7N

Rio Arriba County, NM

007N
007N

Imagery © 2012 Google
USDA Farm Service Agency

Google earth

Imagery Date: 7/24/2011 1997

lat 36.520441 lon -107.239932 elev 7232 ft

Eye alt: 8626 ft

Loren

From: Loren [lorendiede@mvci.biz]
Sent: Wednesday, May 23, 2012 1:24 PM
To: Cascindra Harrison (cascindrawillie@jicarillaoga.com)
Subject: EnerVest 2012 well program

Cascindra,

This is to clarify the previous notification that EnerVest intends to use reserve pits in the drilling of three of the six wells. We have determined that the Jicarilla A # 4M will be drilled using a closed loop system rather than a reserve pit.

The wells that will have reserve pits are now the following: Jicarilla 102 # 7N, Jicarilla 155 # 16M and the Jicarilla C # 2M.

EnerVest will close these pits on-site as per 19.15.17.13 NMAC and in accordance with any Conditions of Approval attached to the approved APDs for those wells.

Please contact me with any concerns or questions.

Thank you, Loren Diede

505-334-8867



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has
been replaced,
O=orphaned,
C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)
closed) (quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD	Q	Q	Q	Code	Subbasin	County	64	16	4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<u>SJ 01205</u>					RA			4	4	4	34	27N	04W	300255	4044335*	3054	750	2304
																Average Depth to Water: 750 feet		
																Minimum Depth: 750 feet		
																Maximum Depth: 750 feet		

Record Count: 1

PLSS Search:

Section(s): 33, 34, 35 Township: 27N Range: 04W

*UTM location was derived from PLSS - see Help

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



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

No records found.

PLSS Search:

Section(s): 2, 3, 4

Township: 26N

Range: 04W

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

5/23/12 8:50 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

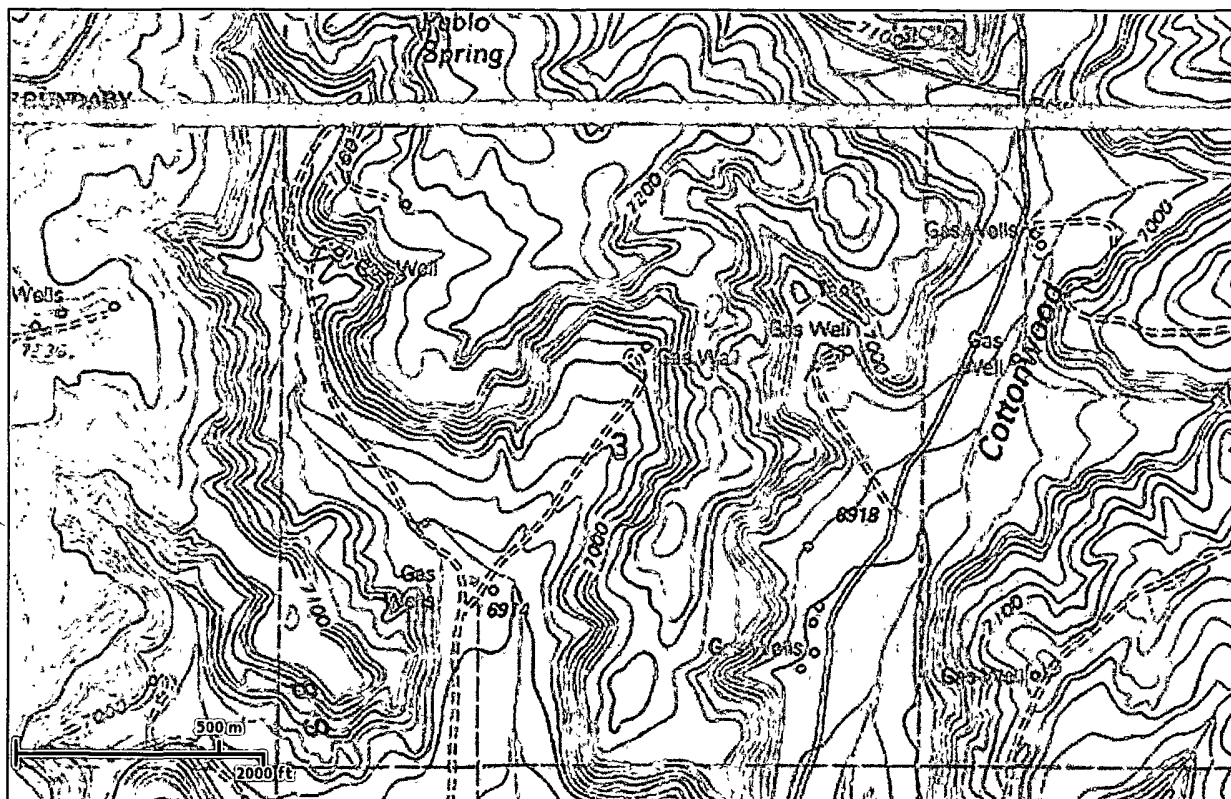


U.S. Fish and Wildlife Service

National Wetlands Inventory

Jicarilla 102 # 7N

May 23, 2012



Wetlands

- ☐ Freshwater Emergent
- ☐ Freshwater Forested/Shrub
- ☐ Estuarine and Marine Deepwater
- ☐ Estuarine and Marine
- ☐ Freshwater Pond
- ☒ Lake
- ☐ Riverine
- ☐ Other

Status

- ☐ Digital
- ☐ Scan
- ☐ Non-Digital
- ☐ No Data

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

Unit C, Sec 3, T26N, R4W

New Mexico Active Mines, Feb 2012

#####							
Name	County	Commodities	Quads	LatitudeD DNAD83	LongitudeD DNAD83	CoordMeasureMethod	OperatorName
Abiquiu Sand & Gravel Pit	Rio Arriba	Aggregate	Abiquiu	36.21	106.34	GPS	Abiquiu Sand & Gravel
Arriba Concrete Pit	Rio Arriba	Aggregate	Martin Draw	36.91	106.62	Conversion from US PLSS (Twnshp, Rnge, Sect, Qtr)	Arriba Concrete & Construction, Inc.
Bobby Garcia Pit	Rio Arriba	Aggregate	Velarde	36.14	105.99	Aerial Photography	Bobby Garcia Trucking
CR Minerals Mill	Rio Arriba	Pumice		36.02	106.09	Aerial Photography	CR Minerals Company, LLC
El Guique Pit	Rio Arriba	Aggregate	San Juan Pueblo	36.11	106.07	Aerial Photography	Espanola Transit Mix Co.
Lowdermilk Mine	Rio Arriba	Aggregate	San Juan Pueblo	36.01	106.07	Aerial Photography	Espanola Transit Mix Co.
Lumberton Pit	Rio Arriba	Aggregate	Tierra Amarilla	36.75	106.51	Conversion from US PLSS (Twnshp, Rnge, Sect, Qtr)	James Hamilton Construction
Lumberton Roadway	Rio Arriba	Aggregate	Monero	36.90	106.85	Conversion from US PLSS (Twnshp, Rnge, Sect, Qtr)	James Hamilton Construction
Martinez Mine	Rio Arriba	Aggregate		36.05	105.80	Conversion from US PLSS (Twnshp, Rnge, Sect, Qtr)	David Montoya Construction, Inc.
Red Hill Mine	Rio Arriba	Scoria	San Antonio Mountain	36.77	106.01	Aerial Photography	Colorado Lava, Inc.
Rocky Mountain Mine	Rio Arriba	Pumice	Chili	36.00	106.19	Aerial Photography	CR Minerals Company, LLC