

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.

5345

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

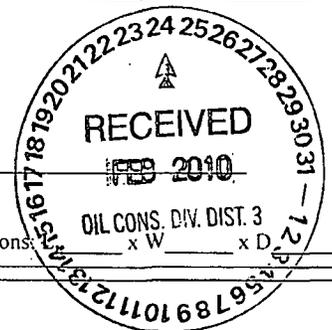
Type of action: Permit of a pit; closed-loop system, below-grade tank, or proposed alternative method  
 Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  
 Modification to an existing permit  
 Closure plan only submitted for an existing permitted or non-permitted 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, Texas 77002  
Facility or well name: Jicarilla A #1  
API Number: 30-039-06481 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr L Section 18 Township 26N Range 05W County: Rio Arriba  
Center of Proposed Design: Latitude 36.484756 Longitude -107.406267 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 \_\_\_\_\_ mil  LLDPE  HDPE  PVC  Other \_\_\_\_\_  
 String-Reinforced  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_



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

OIL CONS. DIV. DIST. 3  
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4.  
 **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 95 bbl Type of fluid: Primarily produced water w/ compressor skid precipitation & incidental lubricating oil  
Tank Construction material: Steel w/ expanded metal cover  
 Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
 Visible sidewalls and liner  Visible sidewalls only  Other \_\_\_\_\_ electronic monitoring \_\_\_\_\_  
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 \_\_\_\_\_ 42" Hog-wire fence with 2 strands 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 19.15.3.103 NMAC

9.  
**Administrative Approvals and Exceptions:**  
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  
**Please check a box if one or more of the following is requested, if not leave blank:**  
 Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.  
 Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.  
**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC  
**Instructions:** *The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

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

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

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_

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

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

Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  
 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
 Climatological Factors Assessment  
 Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  
 Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  
 Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  
 Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  
 Quality Control/Quality Assurance Construction and Installation Plan  
 Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
 Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
 Nuisance or Hazardous Odors, including H<sub>2</sub>S, 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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> 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).<br>- Topographic map; Visual inspection (certification) of the proposed site  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input type="checkbox"/> 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.<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> 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.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within a 100-year floodplain.<br>- FEMA map   | <input type="checkbox"/> Yes <input type="checkbox"/> 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): Ronnie L. Young Title: Compliance Supervisor

Signature: *Ronnie L. Young* Date: 2.21.10

e-mail address: ryoung@enervest.net Telephone: 713-495-6530

20. **OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

OCD Representative Signature: *[Signature]* Approval Date: 3/4/11

Title: Compliance Officer *[Signature]* 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: 8/7/2013

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): WILBERT L GARDNER Title: Sr HSE SPECIALIST

Signature: *Wilbert Gardner* Date: 8/7/2013

e-mail address: WGARDNER@ENERVEST.NET Telephone: 505-320-7924

**EnerVest Operating, LLC (EV)**

**BELOW-GRADE TANK  
CLOSURE PLAN**

**Rule 19.15.17.13**

**Well Name – Jicarilla A-1**

**API # 30-039-06481**

**Location UL- L, Sec 18, T-26N, R-5W**

**Lat: N 36.484756 Lat W -107. 406267**

Before June 15, 2013, EV shall close, retrofit, or replace an existing below-grade tank that has not demonstrated integrity.

EV shall close a below-grade tank within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.

- A. EV shall close an existing below-grade tank that does not meet the requirements of Subsection I, paragraphs (1) through (4), of 19.15.17.11 NMAC if not retrofitted to comply with said requirements prior to any sale or change of operator to 19.15.9.9 NMAC.

Any below-grade tank installed prior to June 16, 2008 that is single walled and where any portion of the tank sidewall is below the ground surface and not visible shall equip or retrofit the below-grade tank to comply with paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, or close it, within 5 years after June 16, 2008.

Within 60 days of cessation of the permitted below-grade tanks operation or as required by Subsection B of 19.15.17.17 NMAC, EV shall close the below-grade tank in accordance with a closure plan that the appropriate division district office approves.

**Below grade tank was removed on or about July 29, 2013**

- B. Prior to implementing any closure operations EV shall research county tax records to determine the name and address of the surface owner of the properties involved. EV shall notify this surface owner via Certified U.S. Mail, return receipt requested, of their intent to close said below-grade tank.

Upon determination, EV will notify the appropriate district office verbally and in writing at least 72 hours but not more than one week prior to beginning work. Such notice shall contain at a minimum the following:

Operators Name

Unit letter, Section, Township, & Range of well

Well name and well number

API Number of well

**Enervest Operating failed to give the required notification to the State of New Mexico due to an internal communication breakdown. The Jicarilla Tribal Environmental Protection Officer had conducted a pre-job inspection of the location several days before but was not notified at least 72 hours in advance of the work. Corrective action has been taken to prevent further occurrences. See attached letter of explanation.**

C. Within 60 days of completion of closure operations, EV will file Form C-144, with attachments, outlining the detailed operations of the closing operations. Such attachments shall include, but not limited to, proof of surface owner and division notifications, confirmation of sampling analysis, disposal facility names and permit numbers, soil backfilling and cover installation, re-vegetation application rates and seeding techniques, and photo documentations.

D. All free standing liquids and sludge will be removed at the start of the below-grade tank closure process from the below-grade tank and disposed of in one of the below division-approved facility as indicated below:

TNT Land Farm	Permit # NM-01-0008	Liquids & Sludge
Environtech Land Farm	Permit # NM-01-0011	Solids
AguaMoss	Permit # 247130	Liquids

EV will obtain prior approval from the division to dispose, recycle, reuse, or reclaim the below-grade tanks and provide documentation of the final disposition of the below-grade tank in the closure report.

**All material in the below grade tank was removed and disposed of at the T-N-T Land Farm (#NM-01-008). The interior of the tank was steam cleaned prior to removal. The tank was transported to the Enervest Jicarilla yard where it was inspected and recoated. The tank will be utilized at another location in the future.**

Existing liners that are removed as a result of closure will be wiped cleaned and disposed of at a solid waste facility listed below in compliance with Subparagraph (M) of Paragraph (I) of Subsection C 19.15.35.8 NMAC..

San Juan Regional Landfill	Permit # SWM 052426 or
“	Special Waster Permit # SWM052433 “sp”

If there is any on-site equipment associated with a below grade tank, EV shall remove the equipment, unless the equipment is required for some other purpose.

Upon removal of the below-grade tank, EV will take, at a minimum, a five point composite sample from where the tank was sitting. EV shall collect individual grab samples will be taken from any area that is wet, discolored or showing other evidence of a release. All samples will be analyzed for the following:

Constituent	Method	Groundwater 51-100 FT	Test Results
Chloride	EPA 300.0	10,000 mg/kg	14.9 mg/kg
TPH	EPA SW-846 Method 418.1	2,500 mg/kg	92.0 mg/kg
BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg	Non Detect
Benzene	EPA -SW-846 Method 8021B or 8015M	10 mg/kg	Non Detect
GRO/DRO	EPA SW-846 Method 8015B	1,000 mg/kg	Non Detect

**The sample was analyzed by Envirotech Analytical Laboratory in Aztec NM. See attached laboratory report.**

EV will insure that the results of all sampling shall be reported to the division on approved form C-141. EV understands that the division may require additional delineation upon review of the results.

If sampling demonstrates that concentrations specified above have NOT been exceeded, or that a release has NOT occurred, EV will backfill the excavation with compacted, non-waste containing, earthen material, construct a division prescribed soil cover, and recontour and re-vegetate the site. The division prescribed soil cover, recontouring, and re-vegetation shall comply with 19.15.17.13.

**The excavation was back filled by Costilla Oil Field Services utilizing soil that was already on location. The location was contoured to match the existing terrain.**

If EV or the division determines that a release has occurred, EV shall fully comply with 19.15.29 NMAC and 19.15.30 NMAC as appropriate.

**No release was observed. See the attached C-141 for details**

- E. Once EV has closed a below-grade tank, we shall reclaim the site to a safe and stable condition that blends with the surrounding undisturbed area. When possible, EV will restore the impacted surface area to the condition that existed prior to oil and gas operations by the placement of soil cover.

If the closed area is within the confines of the pad location EV will blend the site to match the pad location as much as possible. Such activities shall prevent erosion, protect fresh water, human health and the environment. EV will obtain written agreement from the surface owner for any alternate re-vegetation proposals and submit to the division for final approval.

The soil cover design will be consistent with the requirements of 19.15.17.13(H)(1) and (3). The soil cover will consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil cover will be constructed to the site's existing grade and prevent ponding of water and erosion of the cover material.

EV will seed the disturbed areas the first growing season after closing the below grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) 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 continued until successful vegetative growth occurs. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

EV shall notify the division when it has seeded or planted and when it successfully achieves re-vegetation.



**ENERVEST**

On or about July 29, 2013, Enervest Operating closed the below grade tank excavation on the Lease # 110 Jicarilla A-1 well pad (API# 30-039-06481) located at UL-L, Section 18, Township- 26 North, Range 5 West N.M.P.M . without the required 72 hour notice to the State of New Mexico .

This over site was due to a communication breakdown within Enervest. To prevent this error from occurring in the future Enervest, has established an internal tracking system for below grade tank excavation work. In addition, no back filling of an excavation can occur until the Senior HSE Specialist assigned to the Farmington NM office has given written authorization to the field coordinator oversee contractor operations.

Prior to closure a five point composite sample was submit for laboratory analysis. The sample did meet the criteria for closure. Attached is a copy of the sample results.

Thank you.

  
\_\_\_\_\_  
Wilbert L Gardner CHMM, CSP  
Sr HSE Specialist

**ENERVEST OPERATING, LLC.**

2700 Farmington Ave. Bldg K., Ste 1 • Farmington, New Mexico 87401 • 505-325-0318 • Fax 505-325-0328

## Gardner, Wilbert

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**From:** Hobson Sandoval [hsandoval\_99@yahoo.com]  
**Sent:** Monday, June 24, 2013 12:57 PM  
**To:** Gardner, Wilbert  
**Subject:** Re: Review of Below Grade Tank Pit Closures

I will be available July 1, 2013. I am on a trip out of town.

"Gardner, Wilbert" <[wgardner@EnerVest.net](mailto:wgardner@EnerVest.net)> wrote:

Hobson:

I would like to schedule a time where we could do a field review of the closure for the following below grade tank pits. Specifically I would like to determine where we can obtain some dirt to back fill the excavations.

Jicarilla A-1, API -30-039-06481 UL-L, Sec 18, T-26N, R-5W

155 Jicarilla Gas Com C-#1E, API 30-039-22089, UL-F, Sec 32, T-26N, R-5W

Jicarilla Contract 155 #22E API 30-039-22088, UL-K, Sec 31, T-26N, R-5W

Jicarilla Contract 148-37 API 30-039-23786, UL-C, Sec 13, T-25N, R-5W

I am available to fit your schedule.

Thank you.

Lee Gardner CHMM, CSP

Sr. HSE Specialist

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

Form C-141  
Revised August 8, 2011

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

Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company Enervest Operating	Contact Lee Gardner
Address 2700 Farmington Ave Building K, Suite #1	Telephone No. 505-325-0318
Facility Name Jicarilla A-1	Facility Type Oil & Gas Production

Surface Owner Jicarilla Tribe	Mineral Owner Jicarilla Tribe	API No. 30-039-06481
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**LOCATION OF RELEASE**

Unit Letter L	Section 18	Township 26N	Range 5W	Feet from the	North/South Line	Feet from the	East/West Line	County Rio Arriba
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Latitude N. 36.484756 Longitude W -107.406267

**NATURE OF RELEASE**

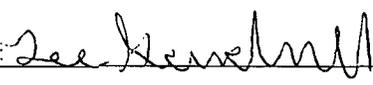
Type of Release None	Volume of Release None	Volume Recovered none
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
Below grade tank excavation closure A five point composite sample was collect from the excavation and submitted analysis, the results are  
Benzene – Non Detect ( EPA Method 8021)  
BTEX – Non Detect (EPA Method 8021)  
GRO/DRO - Non Detect (EPA 8015)  
Total Petroleum Hydrocarbons 92.0 mg/kg ( EPA Method 418.1)  
Chloride 14.9 mg/kg (EPA Method 300.0)

Describe Area Affected and Cleanup Action Taken.\*  
No release was detected by analysis

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

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Lee Gardner	Approved by Environmental Specialist:	
Title: Senior HSE Specialist	Approval Date:	Expiration Date:
E-mail Address: wgardner@enervest.net	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8-7-2013	Phone: 505-325-0318	



## Analytical Report

### Report Summary

Client: Enervest Operating  
Chain Of Custody Number: 15806  
Samples Received: 7/30/2013 1:30:00PM  
Job Number: 05123-0002  
Work Order: P307093  
Project Name/Location: A-1 PIT

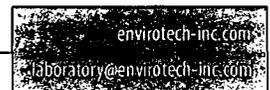
Entire Report Reviewed By:

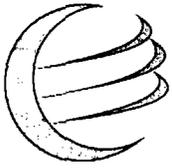
A handwritten signature in black ink, appearing to read "Tim Cain", is written over a horizontal line.

Date: 8/1/13

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.





# envirotech

Analytical Laboratory

Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	Reported: 01-Aug-13 14:57
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## Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
A-1 Pit	P307093-01A	Soil	07/30/13	07/30/13	Glass Jar, 4 oz.

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Ph (970) 259-0615 Fr (800) 362-1879



Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	Reported: 01-Aug-13 14:57
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**A-1 Pit**  
**P307093-01 (Solid)**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Volatile Organics by EPA 8021</b>										
Benzene	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
Toluene	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
Ethylbenzene	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
p,m-Xylene	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
o-Xylene	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
Total Xylenes	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
Total BTEX	ND	0.05	mg/kg	1	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
<i>Surrogate: Bromochlorobenzene</i>		104 %		80-120	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
<i>Surrogate: 1,4-Difluorobenzene</i>		92.2 %		80-120	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
<i>Surrogate: Fluorobenzene</i>		90.1 %		80-120	1331006	31-Jul-13	31-Jul-13	EPA 8021B		
<b>Nonhalogenated Organics by 8015</b>										
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1331007	31-Jul-13	31-Jul-13	EPA 8015D		
Diesel Range Organics (C10-C28)	ND	4.99	mg/kg	1	1331007	31-Jul-13	31-Jul-13	EPA 8015D		
GRO and DRO Combined Fractions	ND	4.99	mg/kg	1	1331007	31-Jul-13	31-Jul-13	EPA 8015D		
<b>Total Petroleum Hydrocarbons by 418.1</b>										
Total Petroleum Hydrocarbons	92.0	20.0	mg/kg	1	1331017	31-Jul-13	31-Jul-13	EPA 418.1		
<b>Cation/Anion Analysis</b>										
Chloride	14.9	9.99	mg/kg	1	1331010	30-Jul-13	30-Jul-13	EPA 300.0		

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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	Reported: 01-Aug-13 14:57
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**Volatile Organics by EPA 8021 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1331006 - Purge and Trap EPA 5030A**

<b>Blank (1331006-BLK1)</b>		Prepared: 30-Jul-13 Analyzed: 31-Jul-13								
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: Bromochlorobenzene	45.4		ug/L	50.0		90.7	80-120			
Surrogate: 1,4-Difluorobenzene	48.7		"	50.0		97.4	80-120			
Surrogate: Fluorobenzene	48.3		"	50.0		96.6	80-120			

<b>Duplicate (1331006-DUP1)</b>		Source: P307087-01		Prepared: 30-Jul-13 Analyzed: 31-Jul-13						
Benzene	0.05	0.05	mg/kg	0.05				0.115	30	
Toluene	0.96	0.05	"	1.33				31.8	30	D1
Ethylbenzene	2.11	0.05	"	2.39				12.2	30	
p,m-Xylene	9.35	0.05	"	10.1				7.55	30	
o-Xylene	2.68	0.05	"	3.23				18.9	30	
Surrogate: Bromochlorobenzene	50.3		ug/L	50.0		101	80-120			
Surrogate: 1,4-Difluorobenzene	48.0		"	50.0		96.0	80-120			
Surrogate: Fluorobenzene	48.7		"	50.0		97.4	80-120			

<b>Matrix Spike (1331006-MS1)</b>		Source: P307087-01		Prepared: 30-Jul-13 Analyzed: 31-Jul-13						
Benzene	51.5		ug/L	50.0	1.05	101	39-150			
Toluene	71.0		"	50.0	26.6	89.0	46-148			
Ethylbenzene	96.7		"	50.0	47.8	97.8	32-160			
p,m-Xylene	294		"	100	202	91.9	46-148			
o-Xylene	112		"	50.0	64.8	94.8	46-148			
Surrogate: Bromochlorobenzene	53.4		"	50.0		107	80-120			
Surrogate: 1,4-Difluorobenzene	50.5		"	50.0		101	80-120			
Surrogate: Fluorobenzene	50.9		"	50.0		102	80-120			

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Enverest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	Reported: 01-Aug-13 14:57
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**Nonhalogenated Organics by 8015 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1331007 - GRO/DRO Extraction EPA 3550C**

<b>Blank (1331007-BLK1)</b>		Prepared: 30-Jul-13 Analyzed: 31-Jul-13								
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg							
Diesel Range Organics (C10-C28)	ND	4.99	"							
GRO and DRO Combined Fractions	ND	4.99	"							
<b>Duplicate (1331007-DUP1)</b>		<b>Source: P307087-01</b>		Prepared: 30-Jul-13 Analyzed: 31-Jul-13						
Gasoline Range Organics (C6-C10)	166	5.00	mg/kg		170			2.54	30	
Diesel Range Organics (C10-C28)	21.7	5.00	"		43.6			66.9	30	DI
<b>Matrix Spike (1331007-MS1)</b>		<b>Source: P307087-01</b>		Prepared: 30-Jul-13 Analyzed: 31-Jul-13						
Gasoline Range Organics (C6-C10)	466	5.26	mg/kg	263	170	113	75-125			
Diesel Range Organics (C10-C28)	282	5.26	"	263	43.6	90.8	75-125			

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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	Reported: 01-Aug-13 14:57
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**Total Petroleum Hydrocarbons by 418.1 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1331017 - 418 Freon Extraction**

<b>Blank (1331017-BLK1)</b>		Prepared & Analyzed: 31-Jul-13								
Total Petroleum Hydrocarbons	ND	20.0	mg/kg							
<b>Duplicate (1331017-DUP1)</b>		<b>Source: P307093-01</b>		Prepared & Analyzed: 31-Jul-13						
Total Petroleum Hydrocarbons	108	20.0	mg/kg		92.0			16.0	30	
<b>Matrix Spike (1331017-MS1)</b>		<b>Source: P307093-01</b>		Prepared & Analyzed: 31-Jul-13						
Total Petroleum Hydrocarbons	2080	19.9	mg/kg	1990	92.0	99.6	80-120			

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Ph (970) 259-0615 Fr (800) 362-1879





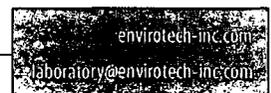
Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	<b>Reported:</b> 01-Aug-13 14:57
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**Cation/Anion Analysis - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1331010 - Anion Extraction EPA 300.0</b>										
<b>Blank (1331010-BLK1)</b>										
Prepared & Analyzed: 30-Jul-13										
Chloride	ND	10.0	mg/kg							
<b>Duplicate (1331010-DUP1)</b>										
Source: P307091-01										
Prepared & Analyzed: 30-Jul-13										
Chloride	816	10.0	mg/kg		796			2.51	30	

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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: A-1 PIT Project Number: 05123-0002 Project Manager: W Gardner	<b>Reported:</b> 01-Aug-13 14:57
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**Notes and Definitions**

- D1 Duplicates or Matrix Spike Duplicates Relative Percent Difference exceeds 30%.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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# ENERVEST OPERATING, LLC

JICARILLA A 001-MV

API# 3003906481

FEDERAL LEASE# JIC110

NW/4 SW/4 (L) S.18-T26N-R5W

Rio Arriba County (ELEV. 6,590)

**ENERVEST OPERATING, LLC** COMPANY

LAT 36.48462 LONG 107.40647

5/13/2013



5/13/2013

