

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 June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.  
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

1053 Type of action: ☒ Below grade tank registration  
☐ Permit of a pit or proposed alternative method  
☒ Closure of a pit, below-grade tank, or proposed alternative method  
☐ Modification to an existing permit/or registration  
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, 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, L.L.C. OGRID #: 143199  
Address: 1001 FANNIN ST., SUITE 800 HOUSTON, TX 77002  
Facility or well name: JICAMILLA CONTRACT 147 #1  
API Number: 30-039-06121 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr A Section 8 Township 25N Range 5W County: RIO ARriba  
Center of Proposed Design: Latitude 36.41918 Longitude -107.37715 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

2. ☐ Pit: Subsection F, G or J of 19.15.17.11 NMAC  
Temporary: ☐ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

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DIST. 3

3. ☒ Below-grade tank: Subsection I of 19.15.17.11 NMAC  
Volume: 95 bbl Type of fluid: PRODUCED WATER  
Tank Construction material: STEEL  
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☒ Other SEE CLOSURE PLAN  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☒ Other BGT TO BE CLOSED PER NEW RULE

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

5. **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' HOB WIRE

6.

**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)

7.

**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

8.

**Variances 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:***

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

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

9.

**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. Siting criteria does not apply to drying pads or above-grade tanks.***

**General siting**

**Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

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

☐ Yes ☒ No  
☐ NA

**Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.**

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

☐ Yes ☐ No  
☐ NA

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. **(Does not apply to below grade tanks)**

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

☐ Yes ☐ No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

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

☐ Yes ☐ No

Within an unstable area. **(Does not apply to below grade tanks)**

- 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. **(Does not apply to below grade tanks)**

- FEMA map

☐ Yes ☐ No

**Below Grade Tanks**

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

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

☐ Yes ☒ No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

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

☐ Yes ☒ No

**Temporary Pit using Low Chloride Drilling Fluid** (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

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

☐ Yes ☐ No

Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300 feet of any other fresh water well or spring, in existence at the time of the initial application.

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

☐ Yes ☐ No

Within 100 feet of a wetland.

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

☐ Yes ☐ No

### **Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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 spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

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

☐ Yes ☐ No

Within 300 feet of a wetland.

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

☐ Yes ☐ No

### **Permanent Pit or Multi-Well Fluid Management Pit**

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 1000 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 spring or a fresh water well used for domestic or stock watering purposes, 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 500 feet of a wetland.

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

☐ Yes ☐ No

10.

#### **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: \_\_\_\_\_

11.

#### **Multi-Well Fluid Management Pit 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.

- ☐ 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
- ☐ A List of wells with approved application for permit to drill associated with the pit.
- ☐ 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
- ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12.

**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

13.

**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 ☐ Multi-well Fluid Management Pit  
☐ 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

14.

**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 C 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 H of 19.15.17.13 NMAC  
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

**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 require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, 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 type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 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 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

☐ 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

16.

**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 E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K 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 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements 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 H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

OIL CONS. DIV DIST. 3

SEP 09 2013

17.

**Operator Application Certification:**

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

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 9/10/2013

Title: Compliance Officer OCD Permit Number: \_\_\_\_\_

19.

**Closure Report (required within 60 days of closure completion):** 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: 8/13/13

20.

**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.

21.


**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 for private land only)
- ☐ 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

**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): BART TREVINO Title: REGULATORY ANALYST  
Signature:  Date: 9/9/13  
e-mail address: BTREVINO@ENERVEST.NET Telephone: 713-659-3500

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

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

RCVD AUG 21 '13  
OIL CONS. DIV.

DIST. 3

1053  
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 CDX Gas LLC OGRID # 222374  
Address 2700 Farmington Ave, Building K, Suite #1  
Facility or well name Jicarilla Contract 147 #001  
API Number 30-039-06121 OCD Permit Number \_\_\_\_\_  
U/L or Qtr/Qtr A Section 8 Township 25N Range 5W County: Rio Arriba  
Center of Proposed Design Latitude 36.41918 Longitude 107.37715 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: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

RCVD SEP 12 '08  
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 95 barrels \_\_\_\_\_ bbl Type of fluid \_\_\_\_\_ Produced water \_\_\_\_\_  
Tank Construction material Steel FRP  
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☒ Visible sidewalls only ☒ Other See closure plan  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☒ Other Below grade tank to be closed per new rule \_\_\_\_\_

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 Four foot hog wire \_\_\_\_\_

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  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - NM Office of the State Engineer - iWATERS database search, USGS; Data obtained from nearby wells   |   |
| 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)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Topographic map, Visual inspection (certification) of the proposed site  |   |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application ( <i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i> )  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image  | <input type="checkbox"/> NA   |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application ( <i>Applies to permanent pits</i> )   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image  | <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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - NM Office of the State Engineer - iWATERS database search, Visual inspection (certification) of the proposed site  |   |
| 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  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Written confirmation or verification from the municipality, Written approval obtained from the municipality  |   |
| Within 500 feet of a wetland   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (certification) of the proposed site   |   |
| Within the area overlying a subsurface mine  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division  |   |
| Within an unstable area  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - Engineering measures incorporated into the design, NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society, Topographic map  |   |
| Within a 100-year floodplain   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| - FEMA map   |   |

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

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**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 identify 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

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**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

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**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) Lee Gardner Title HSE Coordinator

Signature: Lee Gardner Date: 8-24-08

e-mail address: lee.gardner@cdxgas.com Telephone 505-324-5427

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

OCD Representative Signature: Jonathan Kelly Approval Date: 4/05/2012

Title: Compliance Officer OCD Permit Number: \_\_\_\_\_

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**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: 8-13-2013

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**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 \_\_\_\_\_

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

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

Disposal Facility Name \_\_\_\_\_ 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

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**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

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**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 JR HSE SPECIALIST

Signature: WLB Gardner Date 8-14-13

e-mail address: WGARDNER@ENERVEST.NET Telephone: 505-325-0318

**EnerVest Operating, LLC (EV)**

**BELOW-GRADE TANK  
CLOSURE PLAN**

**Rule 19.15.17.13**

**Well Name – Jicarilla Contract 147-1**

**API # 30-039-06121**

**Location UL- A, Sec 8, T-25N, R-5W**

**Lat: N 36.41918 Lat W -107. 37715**

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 August 13, 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

**E-mail notice with Read Receipt request was sent to the NMOCD and the Jicarilla Tribal Environmental Officer On August 7 2013. The NMOCD read thenotice on August 7, 2013. No Read Receipt was received from the Jicarilla Tribal Environmental Protection Officer. The Environmental Protection Officer did contact the Enervest Sr. HSE Specialist the day of the closure August 13, 2013, and request directions to the 147-1 well site. The Environmental Protection Officer did not visit the well site during the closure operation.**

- 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 fiberglass reinforced tank disintegrated into numerous small pieces when removed from the excavation. As a result picture of the tank bottom are unavailable.**

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	<b>90.8 mg/kg</b>
TPH	EPA SW-846 Method 418.1	2,500 mg/kg	<b>36 mg/kg</b>
BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg	<b>0.24 mg/kg</b>
Benzene	EPA -SW-846 Method 8021B or 8015M	10 mg/kg	<b>Non Detect</b>
GRO/DRO	EPA SW-846 Method 8015B	1,000 mg/kg	<b>28.8 mg/kg</b>

**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.

## Gardner, Wilbert

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**From:** Gardner, Wilbert  
**Sent:** Wednesday, August 07, 2013 11:20 AM  
**To:** 'hsandoval\_99@yahoo.com'; 'Kelly, Jonathan, EMNRD'  
**Cc:** Greene, Roy; 'costillaoilfields@yahoo.com'  
**Subject:** Enervest Operating 72 Hour Notice of Closure of Below Grade Tank Excavation  
**Attachments:** Soil Test Results 147-1.pdf

**Expires:** Friday, November 15, 2013 12:00 AM

Tracking:	Recipient	Read
	'hsandoval_99@yahoo.com'	
	'Kelly, Jonathan, EMNRD'	
	Greene, Roy	Read: 8/7/2013 2:35 PM
	'costillaoilfields@yahoo.com'	

Gentlemen:

Enervest Operating is planning on closing the below grade tank excavation on the Jicarilla Contract 147 - #1 (API# 30-039-06121) located at UL-A, Sec 8, T-25N, R-5W, N.M.P.M on August 13, 2013. The work will start at 9:00 AM - weather permitting.

Attached is a copy of the soil sampling results for your examination.

Thank you.

Lee Gardner CHMM, CSP  
Sr. HSE Specialist  
Enervest Operating LLC  
2700 Farmington, Bldg K, Suite #1  
Farmington, NM 87401  
Office 505-325-0318 Ext 13  
Mobile 505-320-7924  
[Wgardner@enervest.net](mailto:Wgardner@enervest.net)

## **Gardner, Wilbert**

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**From:** Kelly, Jonathan, EMNRD [Jonathan.Kelly@state.nm.us]  
**To:** Gardner, Wilbert  
**Sent:** Wednesday, August 07, 2013 11:25 AM  
**Subject:** Read: Enervest Operating 72 Hour Notice of Closure of Below Grade Tank Excavation

Your message was read on Wednesday, August 07, 2013 12:24:34 PM (GMT-06:00) Central Time (US & Canada).

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

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

Form C-141  
Revised August 8, 2011

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 Contract 147-1	Facility Type Oil & Gas Production	
Surface Owner Jicarilla Tribe	Mineral Owner Jicarilla Tribe	API No. 30-039-06121

#### LOCATION OF RELEASE

Unit Letter A	Section 8	Township 25N	Range 5W	Feet from the	North/South Line	Feet from the	East/West Line	County Rio Arriba
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Latitude N. 36.41918 Longitude W -107.37715

#### 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 to Envirotech Analytical Laboratory for analysis.

The results are:

Benzene - Non Detect (EPA Method 8021)

BTEX - 0.24 mg/kg (EPA Method 8021)

GRO/DRO - 28.8 mg/kg (EPA 8015)

Total Petroleum Hydrocarbons - 36.0 mg/kg (EPA Method 418.1)

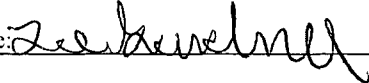
Chloride - 90.8 mg/kg (EPA Method 300.0)

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.

#### OIL CONSERVATION DIVISION

Signature: 

Printed Name: Lee Gardner

Title: Senior HSE Specialist

E-mail Address: wgardner@enervest.net

Date: 8-14-2013

Phone: 505-325-0318

Approved by Environmental Specialist:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐



## Analytical Report

### Report Summary

Client: Enervest Operating  
Chain Of Custody Number: 15425  
Samples Received: 6/27/2013 3:12:00PM  
Job Number: 05123-0002  
Work Order: P306134  
Project Name/Location: Jic 147-1 Pit

Entire Report Reviewed By:

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

Tim Cain, Laboratory Manager

Date: 7/1/13

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Enervest Operating  
2700 Farmington Ave.  
Farmington NM, 87401

Project Name: Jic 147-1 Pit  
Project Number: 05123-0002  
Project Manager: W Gardner

**Reported:**  
01-Jul-13 15:38

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
147-01 Pit	P306134-01A	Soil	06/27/13	06/27/13	Glass Jar, 4 oz.

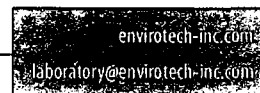
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 Farmington NM, 87401

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 Project Number: 05123-0002  
 Project Manager: W Gardner

**Reported:**  
 01-Jul-13 15:38

**147-01 Pit**  
**P306134-01 (Solid)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
p,m-Xylene	0.19	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
o-Xylene	0.05	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Total Xylenes	0.24	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Total BTEX	0.24	0.05	mg/kg	1	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Surrogate: Bromochlorobenzene		103 %		80-120	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		105 %		80-120	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Surrogate: Fluorobenzene		104 %		80-120	1326037	28-Jun-13	28-Jun-13	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	8.03	4.99	mg/kg	1	1326038	28-Jun-13	28-Jun-13	EPA 8015D	
Diesel Range Organics (C10-C28)	20.8	4.99	mg/kg	1	1326038	28-Jun-13	28-Jun-13	EPA 8015D	
GRO and DRO Combined Fractions	28.8	4.99	mg/kg	1	1326038	28-Jun-13	28-Jun-13	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	36.0	20.0	mg/kg	1	1326042	28-Jun-13	01-Jul-13	EPA 418.1	
Cation/Anion Analysis									
Chloride	90.8	9.99	mg/kg	1	1326040	28-Jun-13	28-Jun-13	EPA 300.0	

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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jic 147-1 Pit Project Number: 05123-0002 Project Manager: W Gardner	Reported: 01-Jul-13 15:38
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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 1326037 - Purge and Trap EPA 5030A

##### Blank (1326037-BLK1)

Prepared & Analyzed: 28-Jun-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	49.8		ug/L	50.0		99.6	80-120			
Surrogate: 1,4-Difluorobenzene	53.9		"	50.0		108	80-120			
Surrogate: Fluorobenzene	53.1		"	50.0		106	80-120			

##### Duplicate (1326037-DUP1)

Source: P306134-01

Prepared & Analyzed: 28-Jun-13

Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	0.16	0.05	"		0.19			17.2	30	
o-Xylene	0.05	0.05	"		0.05			1.09	30	
Surrogate: Bromochlorobenzene	51.4		ug/L	50.0		103	80-120			
Surrogate: 1,4-Difluorobenzene	52.7		"	50.0		105	80-120			
Surrogate: Fluorobenzene	52.0		"	50.0		104	80-120			

##### Matrix Spike (1326037-MS1)

Source: P306134-01

Prepared & Analyzed: 28-Jun-13

Benzene	51.1		ug/L	50.0	0.32	102	39-150			
Toluene	51.9		"	50.0	0.68	102	46-148			
Ethylbenzene	51.7		"	50.0	0.54	102	32-160			
p,m-Xylene	106		"	100	3.74	102	46-148			
o-Xylene	51.6		"	50.0	1.05	101	46-148			
Surrogate: Bromochlorobenzene	52.9		"	50.0		106	80-120			
Surrogate: 1,4-Difluorobenzene	52.6		"	50.0		105	80-120			
Surrogate: Fluorobenzene	52.2		"	50.0		104	80-120			

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Enervest Operating	Project Name:	Jic 147-1 Pit	<b>Reported:</b> 01-Jul-13 15:38
2700 Farmington Ave.	Project Number:	05123-0002	
Farmington NM, 87401	Project Manager:	W Gardner	

### 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 1326038 - GRO/DRO Extraction EPA 3550C

##### Blank (1326038-BLK1)

Prepared & Analyzed: 28-Jun-13

Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg
Diesel Range Organics (C10-C28)	ND	5.00	"
GRO and DRO Combined Fractions	ND	5.00	"

##### Duplicate (1326038-DUP1)

Source: P306134-01

Prepared & Analyzed: 28-Jun-13

Gasoline Range Organics (C6-C10)	7.14	5.00	mg/kg	8.03	11.6	30
Diesel Range Organics (C10-C28)	22.0	5.00	"	20.8	5.82	30

##### Matrix Spike (1326038-MS1)

Source: P306134-01

Prepared & Analyzed: 28-Jun-13

Gasoline Range Organics (C6-C10)	267	5.26	mg/kg	263	8.03	98.5	75-125
Diesel Range Organics (C10-C28)	285	5.26	"	263	20.8	101	75-125

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Enervest Operating  
 2700 Farmington Ave.  
 Farmington NM, 87401

 Project Name: Jic 147-1 Pit  
 Project Number: 05123-0002  
 Project Manager: W Gardner

**Reported:**  
 01-Jul-13 15:38

**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 1326042 - 418 Freon Extraction**
**Blank (1326042-BLK1)**

Prepared: 28-Jun-13 Analyzed: 01-Jul-13

Total Petroleum Hydrocarbons ND 20.0 mg/kg

**Duplicate (1326042-DUP1)**
**Source: P306134-01**

Prepared: 28-Jun-13 Analyzed: 01-Jul-13

Total Petroleum Hydrocarbons 32.0 20.0 mg/kg 36.0 11.8 30

**Matrix Spike (1326042-MS1)**
**Source: P306134-01**

Prepared: 28-Jun-13 Analyzed: 01-Jul-13

Total Petroleum Hydrocarbons 1820 20.0 mg/kg 2000 36.0 89.4 80-120

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Enervest Operating  
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Project Name: Jic 147-1 Pit  
Project Number: 05123-0002  
Project Manager: W Gardner

**Reported:**  
01-Jul-13 15:38

**Cation/Anion Analysis - 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 1326040 - Anion Extraction EPA 300.0**

**Blank (1326040-BLK1)**

Prepared & Analyzed: 28-Jun-13

Chloride	ND	9.99	mg/kg
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**Duplicate (1326040-DUP1)**

**Source: P306134-01**

Prepared & Analyzed: 28-Jun-13

Chloride	87.0	9.99	mg/kg	90.8	4.30	30
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Enervest Operating  
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Farmington NM, 87401

Project Name: Jic 147-1 Pit  
Project Number: 05123-0002  
Project Manager: W Gardner

**Reported:**  
01-Jul-13 15:38

#### Notes and Definitions

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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# CHAIN OF CUSTODY RECORD

15425

Page 9 of 9

Client: <b>ENERVEST</b>			Project Name / Location: <b>JIC 147-1 PTT</b>			ANALYSIS / PARAMETERS														
Email results to: <b>NET</b> <b>WGARDNER@ENERVEST</b>			Sampler Name: <b>L. GARDNER</b>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact	
Client Phone No.: <b>505-320-7924</b>			Client No.: <b>05123-0002</b>																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative															
					HgCl <sub>2</sub>	HCl														
147-1 PTT	6/27/13	10:00	P306134-01	1 / 4 oz				X	X											
Relinquished by: (Signature) <i>[Signature]</i>					Date 6/27/13	Time 15:12	Received by: (Signature) <i>[Signature]</i>					Date 6/27/13	Time 15:12							
Relinquished by: (Signature)							Received by: (Signature) <i>[Signature]</i>													
Sample Matrix Soil <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																				
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																				



