

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 OIL CONS. DIV DIST. 3

- 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

NOV 22 2017

16251

**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 LLC OGRID #: \_\_\_\_\_  
Address: 2700 Farmington Ave, Building K, Suite #1 Farmington, NM 87042  
Facility or well name: Jicarilla Contract 148 #36  
API Number: 30-039-23680 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr H Section 23 Township 25N Range 5W County: Rio Arriba  
Center of Proposed Design: Latitude 36.40453 Longitude 107.31505 NAD:  1927 X 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  
 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 \_\_\_\_\_

*\* Provide Size Criteria Duplicate Copy*  
Low Chloride Drilling Fluid  Yes  No

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 electronic monitoring  
Liner type: Thickness \_\_\_\_\_ mil  HDPE  PVC  Other Below Grade Tank 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 Four foot hog-wire

6.

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

X 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

X Signed in compliance with 19.15.16.8 NMAC

8.

**Variations 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 X 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 X 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 X 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 X 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 300feet 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: 30-039-23680 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 X 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	<input type="checkbox"/> Yes <input type="checkbox"/> No

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 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 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 type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> 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

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): Michael Dame Title: HSE Associate

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

e-mail address: mdame@enervest.net Telephone: 505-325-0318

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

OCD Representative Signature: [Signature] Approval Date: 2/22/2018

Title: Environmental Specialist 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.*

X Closure Completion Date: June 1<sup>st</sup> 2017

20. **Closure Method:**

X 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)

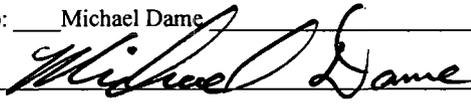
On-site Closure Location: Latitude 36.40453 Longitude 107.31505 NAD:  1927 X 1983

22.

**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): Michael Dame Title: HSE Associate

Signature:  Date: 6-26-2017

e-mail address: mdame@enervest.net Telephone: 505-325-0318

District I  
1625 N. French Dr., Hobbs, NM 88240  
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811 S. First St., Artesia, NM 88210  
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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 Michael Dame
Address 2700 Farmington Ave Building K, Suite #1	Telephone No. 505-325-0318
Facility Name Jicarilla Contract 148 #36	Facility Type Oil & Gas Production

Surface Owner Jicarilla Tribe	Mineral Owner Jicarilla Tribe	API No. 30-039-23680
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	23	25N	5W					Rio Arriba

Latitude N. 36.40453 Longitude W -107.31505

**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 - Non Detect mg/kg (EPA Method 8021)  
GRO/DRO -140 /kg (EPA 8015)  
Total Petroleum Hydrocarbons - 472 mg/kg (EPA Method 418.1)  
Chloride -Non Detect (EPA Method 300.0)

Describe Area Affected and Cleanup Action Taken.\*

Not sure if or when a release had occurred for the soil to have elevated levels of DRO and Total Petroleum Hydrocarbons

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: Michael Dame	Approved by Environmental Specialist:	
Title: HSE Associate	Approval Date:	Expiration Date:
E-mail Address: mdame@enervest.net	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 7-19-2017 Phone: 505-325-0318		

\* Attach Additional Sheets If Necessary

JICARILLA CONTRACT 148 #36 - DK

API# 30-039-23680

FEDERAL LEASE# JIC 148

SE/4 NE/4 (H) S.23-T25N-R5W

RIO ARRIBA COUNTY ELEV 6,831

**ENERVEST OPERATING, LLC** ↓ COMPANY

LAT 36.38631 LONG 107.32265



**Dame, Michael**

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**From:** Dame, Michael  
**Sent:** Friday, May 26, 2017 3:27 PM  
**To:** Jonathan.Kelly@state.nm.us; hssandoval@yahoo.com  
**Subject:** 72 hour notice Jicarilla Contract 148 #36

Good Afternoon,

Enervest Operating LLC is notifying for 72 hour notice to remove below grade tank. We will take a 5 point soil sample, which will be analyzed at Envirotech Laboratory. The location is Jicarilla Contract 148#36 (API# 30-039-23680), located in Rio Arriba County, New Mexico- U/L- H, 23, 25N, 05W. Once the soil test has passed NMOCD standards the below grade pit will be closed and re-contoured to Jicarilla Tribe/NMOCD Standards.

Thank you,  
Michael Dame  
HSE Associate Enervest Operating  
(505)-325-0318  
[mdame@enervest.net](mailto:mdame@enervest.net)  
Sent from my iPhone



## Analytical Report

### Report Summary

Client: Enervest Operating

Chain Of Custody Number:

Samples Received: 6/1/2017 1:50:00PM

Job Number: 05123-0002

Work Order: P706003

Project Name/Location: Jicarilla Contract 148 #36

Report Reviewed By:

Date: 6/6/17

Walter Hinchman, Laboratory Director

Date: 6/6/17

Tim Cain, Quality Assurance Officer

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.

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

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

envirotech-inc.com  
laboratory@envirotech-inc.com



<b>Enervest Operating</b> 2700 Farmington Ave. Farmington NM, 87401	<b>Project Name:</b> Jicarilla Contract 148 #36 <b>Project Number:</b> 05123-0002 <b>Project Manager:</b> Mike Dame	<b>Reported:</b> 06-Jun-17 12:48
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**Analytical Report for Samples**

<b>Client Sample ID</b>	<b>Lab Sample ID</b>	<b>Matrix</b>	<b>Sampled</b>	<b>Received</b>	<b>Container</b>
Jicarilla Contract 148 #36	P706003-01A	Soil	06/01/17	06/01/17	Glass Jar, 4 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

5796 US Highway 64, Farmington, NM 87401

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865

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

envirotech-inc.com  
laboratory@envirotech-inc.com



Enverest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jicarilla Contract 148 #36 Project Number: 05123-0002 Project Manager: Mike Dame	Reported: 06-Jun-17 12:48
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**Jicarilla Contract 148 #36  
P706003-01 (Solid)**

Analyte	Reporting								
	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.10	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8021B	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.1 %		50-150	1722009	06/02/17	06/02/17	EPA 8021B	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1722009	06/02/17	06/02/17	EPA 8015D	
Diesel Range Organics (C10-C28)	140	25.0	mg/kg	1	1722011	06/02/17	06/05/17	EPA 8015D	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		113 %		50-150	1722009	06/02/17	06/02/17	EPA 8015D	
<i>Surrogate: n-Nonane</i>		121 %		50-200	1722011	06/02/17	06/05/17	EPA 8015D	
<b>Total Petroleum Hydrocarbons by 418.1</b>									
Total Petroleum Hydrocarbons	472	40.0	mg/kg	1	1723003	06/05/17	06/05/17	EPA 418.1	
<b>Cation/Anion Analysis</b>									
Chloride	ND	20.0	mg/kg	1	1723001	06/05/17	06/05/17	EPA 300.0	

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Enverest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jicarilla Contract 148 #36 Project Number: 05123-0002 Project Manager: Mike Dame	Reported: 06-Jun-17 12:48
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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 1722009 - Purge and Trap EPA 5030A**

Blank (1722009-BLK1)			Prepared & Analyzed: 02-Jun-17							
Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	"							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	7.18		"	8.00		89.8	50-150			

LCS (1722009-BS1)			Prepared & Analyzed: 02-Jun-17							
Benzene	4.20	0.10	mg/kg	5.00		84.1	70-130			
Toluene	4.34	0.10	"	5.00		86.9	70-130			
Ethylbenzene	4.43	0.10	"	5.00		88.7	70-130			
p,m-Xylene	8.85	0.20	"	10.0		88.6	70-130			
o-Xylene	4.36	0.10	"	5.00		87.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.67		"	8.00		95.9	50-150			

Matrix Spike (1722009-MS1)			Source: P705052-01		Prepared & Analyzed: 02-Jun-17					
Benzene	4.15	0.10	mg/kg	5.00	ND	82.9	54.3-133			
Toluene	4.27	0.10	"	5.00	ND	85.4	61.4-130			
Ethylbenzene	4.32	0.10	"	5.00	ND	86.5	61.4-133			
p,m-Xylene	8.61	0.20	"	10.0	ND	86.2	63.3-131			
o-Xylene	4.23	0.10	"	5.00	ND	84.7	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.74		"	8.00		96.8	50-150			

Matrix Spike Dup (1722009-MSD1)			Source: P705052-01		Prepared & Analyzed: 02-Jun-17					
Benzene	4.25	0.10	mg/kg	5.00	ND	85.1	54.3-133	2.55	20	
Toluene	4.40	0.10	"	5.00	ND	88.1	61.4-130	3.04	20	
Ethylbenzene	4.47	0.10	"	5.00	ND	89.5	61.4-133	3.46	20	
p,m-Xylenec	8.91	0.20	"	10.0	ND	89.2	63.3-131	3.42	20	
o-Xylene	4.38	0.10	"	5.00	ND	87.6	63.3-131	3.40	20	
Surrogate: 4-Bromochlorobenzene-PID	7.71		"	8.00		96.4	50-150			

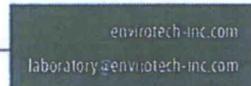
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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jicarilla Contract 148 #36 Project Number: 05123-0002 Project Manager: Mike Dame	Reported: 06-Jun-17 12:48
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**Nonhalogenated Organics by 8015 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1722009 - Purge and Trap EPA 5030A</b>										
<b>Blank (1722009-BLK1)</b>				Prepared & Analyzed: 02-Jun-17						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.19		"	8.00		115	50-150			
<b>LCS (1722009-BS1)</b>				Prepared & Analyzed: 02-Jun-17						
Gasoline Range Organics (C6-C10)	61.8	20.0	mg/kg	60.9		101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.18		"	8.00		115	50-150			
<b>Matrix Spike (1722009-MS1)</b>		Source: P705052-01		Prepared & Analyzed: 02-Jun-17						
Gasoline Range Organics (C6-C10)	59.8	20.0	mg/kg	60.9	ND	98.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.17		"	8.00		115	50-150			
<b>Matrix Spike Dup (1722009-MSD1)</b>		Source: P705052-01		Prepared & Analyzed: 02-Jun-17						
Gasoline Range Organics (C6-C10)	61.4	20.0	mg/kg	60.9	ND	101	70-130	2.56	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.10		"	8.00		114	50-150			

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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jicarilla Contract 148 #36 Project Number: 05123-0002 Project Manager: Mike Dame	Reported: 06-Jun-17 12:48
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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
<b>Batch 1722011 - DRO Extraction EPA 3570</b>										
<b>Blank (1722011-BLK1)</b>				Prepared: 02-Jun-17 Analyzed: 05-Jun-17						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Surrogate: n-Nonane	51.2		"	50.0		102	50-200			
<b>LCS (1722011-BS1)</b>				Prepared: 02-Jun-17 Analyzed: 05-Jun-17						
Diesel Range Organics (C10-C28)	496	25.0	mg/kg	500		99.2	38-132			
Surrogate: n-Nonane	54.6		"	50.0		109	50-200			
<b>Matrix Spike (1722011-MS1)</b>				Source: P706003-01		Prepared: 02-Jun-17 Analyzed: 05-Jun-17				
Diesel Range Organics (C10-C28)	672	25.0	mg/kg	500	140	107	38-132			
Surrogate: n-Nonane	60.7		"	50.0		121	50-200			
<b>Matrix Spike Dup (1722011-MSD1)</b>				Source: P706003-01		Prepared: 02-Jun-17 Analyzed: 05-Jun-17				
Diesel Range Organics (C10-C28)	713	25.0	mg/kg	500	140	115	38-132	5.90	20	
Surrogate: n-Nonane	60.9		"	50.0		122	50-200			

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Enervest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name:	Jicarilla Contract 148 #36	<b>Reported:</b> 06-Jun-17 12:48
	Project Number:	05123-0002	
	Project Manager:	Mike Dame	

**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
<b>Batch 1723003 - 418 Freon Extraction</b>										
<b>Blank (1723003-BLK1)</b>										
Prepared & Analyzed: 05-Jun-17										
Total Petroleum Hydrocarbons	ND	40.0	mg/kg							
<b>LCS (1723003-BS1)</b>										
Prepared & Analyzed: 05-Jun-17										
Total Petroleum Hydrocarbons	1060	40.0	mg/kg	1000		106	80-120			
<b>Matrix Spike (1723003-MS1)</b>										
Source: P706003-01 Prepared & Analyzed: 05-Jun-17										
Total Petroleum Hydrocarbons	1470	40.0	mg/kg	1000	472	100	70-130			
<b>Matrix Spike Dup (1723003-MSD1)</b>										
Source: P706003-01 Prepared & Analyzed: 05-Jun-17										
Total Petroleum Hydrocarbons	1450	40.0	mg/kg	1000	472	97.4	70-130	1.78	30	

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Encrvest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jicarilla Contract 148 #36 Project Number: 05123-0002 Project Manager: Mike Dame	Reported: 06-Jun-17 12:48
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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 1723001 - Anion Extraction EPA 300.0</b>										
<b>Blank (1723001-BLK1)</b> Prepared & Analyzed: 05-Jun-17										
Chloride	ND	20.0	mg/kg							
<b>LCS (1723001-BS1)</b> Prepared & Analyzed: 05-Jun-17										
Chloride	253	20.0	mg/kg	250		101	90-110			
<b>Matrix Spike (1723001-MS1)</b> Source: P706003-01 Prepared & Analyzed: 05-Jun-17										
Chloride	254	20.0	mg/kg	250	ND	102	80-120			
<b>Matrix Spike Dup (1723001-MSD1)</b> Source: P706003-01 Prepared & Analyzed: 05-Jun-17										
Chloride	257	20.0	mg/kg	250	ND	103	80-120	1.16	20	

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Enverest Operating 2700 Farmington Ave. Farmington NM, 87401	Project Name: Jicarilla Contract 148 #36 Project Number: 05123-0002 Project Manager: Mike Dame	Reported: 06-Jun-17 12:48
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**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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Client: Enervest Operating  
 Project: Jicarilla Contract 148#36  
 Sampler: Michael Dame  
 Phone: 505-215-7879  
 Email(s): mdame@enervest.net  
 Project Manager: Michael Dame

RUSH?  
 1d  
 3d

Lab Use Only		Analysis and Method						Lab Only		
Lab WO# <b>P706003</b>		GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TCLP Metals	CO Table 910-1	TDS	Lab Number	Correct Cont/Prsr (s) Y/N
Job Number <b>05123-0002</b>										

Page 1 of 1

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	TCLP Metals	CO Table 910-1	TDS	Lab Number	Correct Cont/Prsr (s) Y/N
Jicarilla Contract 148#36	6-1-17	9:42	Solid Soil	1-4oz soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				1	Y

Relinquished by: (Signature) <i>[Signature]</i>	Date <u>6/1/17</u>	Time <u>1350</u>	Received by: (Signature) <i>[Signature]</i>	Date <u>6/1/17</u>	Time <u>1350</u>	<b>Lab Use Only</b> <b>**Received on Ice Y / N</b> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>17.3</u>
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass

\*\*Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Sample(s) dropped off after hours to a secure drop off area. Chain of Custody Notes/Billing Info:

Page 10 of 10

JICARILLA CONTRACT 148 #36 - DK

API# 30-039-23680

FEDERAL LEASE# JIC 148

SE/4 NE/4 (H) S.23-T25N-R5W

RIO ARRIBA COUNTY ELEV 6,831

**ENERVEST OPERATING, LLC** ↓ COMPANY

LAT 36.38631 LONG 107.32265