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.

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.

Santa Fe, NM 87505

Pit, Below-Grade Tank, or
12793 <u>Proposed Alternative Method Permit or Closure Plan Application</u>
Type of action:
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 LLC OGRID #:
Address:2700 Farmington Ave, Building K, Suite #1. Farmington, NM 87402
Facility or well name:QUINN #337S
API Number:30-045-33510OCD Permit Number:
U/L or Qtr/Qtr        P
Center of Proposed Design: Latitude36.892562 Longitude107.711017 NAD: □ 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment NMOCD determined coordinates to be
36.892636N 107.710682W NAD 83
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: Thicknessmil LLDPE HDPE PVC Other
☐ String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
3.
⊠ Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume:120bbl Type of fluid:Produced Water/
Tank Construction material:Steel open-top with expanded metal cover
Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  MAR 1 6 2015
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness20mil
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.
Submittal of all 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 specifyFour foot hog-wire with single strand of barbed wire on top

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other Expanded metal top  Monthly inspections (If netting or screening is not physically feasible)	
5. 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	
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 acceptance are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
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. ( <b>Does not apply to below grade tanks</b> )  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. ( <b>Does not apply to below grade tanks</b> ) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ 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 (cortification) of the proposed site: A cried photo: Satellite image.	☐ Yes ☐ No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
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 N	MAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc 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 ☐ 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. and 19.15.17.13 NMAC	NMAC 15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
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 doc 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 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:	.15.17.9 NMAC

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the	documents are
attached.  ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC ☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Quality Control/Quality Assurance Construction and Installation Plan ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan ☐ Coloure 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	
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 Flex 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	luid Management Pit
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a	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 ☐ 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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P. 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	☐ Yes ☐ No ☐ 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	☐ 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 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	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 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	Yes No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

<ul> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	
	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.	
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ 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.	an 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.  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 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 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	11 NMAC 15.17.11 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 beli	ef.
Name (Print):Michael Dame Title:HSE Associate	
Signature:	
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: Approval Date: 5/4/3  Title: OCD Permit Number:	2015
	2015
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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	the closure report. complete this
Title: 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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not	the closure report. complete this
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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	the closure report. complete this

22		
Operator Closure	Certification:	
		ure report is true, accurate and complete to the best of my knowledge and irrements and conditions specified in the approved closure plan.
Name (Print):	Michael Dame	Title:HSE Associate
Signature:	Michael Ulame	Date:3/13/2015
e-mail address:	mdame@enervest.net	Telephone:505-325-0318

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

1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

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

Form C-141

Revised August 8, 2011

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

			Rele	ease Notific	cation	and Co	rrective A	ction				
						<b>OPERA</b>	ΓOR		Initia	al Report	$\boxtimes$	Final Report
		nervest Opera				Contact Mi						
		gton Ave B	uilding K	, Suite #1			No. 505-325-03					
Facility Nar	ne Quinn	33/3				Facility Typ	e Oil & Gas Pro	oduction				
Surface Ow	ner: Burea	u of Land M	anageme	ent Mineral (	Owner:	Bureau of L	and Managemer	nt A	PI No	. 30-045-3	3510	
				LOCA	ATIO	N OF REI	LEASE					
Unit Letter P	Section 18	Township 31N	Range 8W	Feet from the	North	South Line	Feet from the	East/West	Line	County San Juan		
		La	titude				W -107.7110	017				
Type of Relea	ase None			NAT	TURE	OF REL	Release None	Vo	lume D	Recovered n	one	
Source of Rel							Iour of Occurrence			Hour of Dis		
Was Immedia	ate Notice (		Yes 🗵	No □ Not R	equired	If YES, To	Whom?	,				
By Whom?					•	Date and H	lour					
Was a Watero	course Read	ched?	Yes 🗵	l No		If YES, Vo	olume Impacting t	he Watercou	ırse.			
If a Watawaay	maa waa Im	pacted, Descr										
Below grade Benzene – No BTEX – Nor GRO/DRO – Total Petrole Chloride – No	tank excava on Detect ( on Detect (El 92.5 mg/kg um Hydroc onDetect (E	(EPA Method PA Method 80 g (EPA 8015)	A five po 8021) (21) (21) (22) (22) (32) (4) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	oint composite sai		s collect from	the excavation a	nd submitted	l analys	sis, the resul	ts are	
No release wa												
regulations al public health should their of or the environ	I operators or the envi- operations hament. In a	are required to ronment. The nave failed to a	o report ar acceptance adequately OCD accep	nd/or file certain in the of a C-141 report investigate and in	release n ort by the remediat	otifications and NMOCD me contamination	knowledge and und perform correct arked as "Final R on that pose a three the operator of the correct arked as "Final R".	etive actions eport" does eat to ground	for rele not reli d water	eases which eve the open r, surface wa	may en rator of iter, hu	ndanger f liability man health
Signature:	Mr	In !	la de				OIL CON		ION	DIVISIO	<u>ON</u>	
Printed Name	e: Michael	Dame				Approved by	Environmental S	pecialist:				
Title: HSE A	ssociate					Approval Dat	e:	Expi	ration l	Date:		
	ess: mdame	@ enervest.ne Phone:	505-325-	0318		Conditions of	Approval:			Attached		

<sup>\*</sup> Attach Additional Sheets If Necessary



January 13, 2015

Farmington District Office Bureau of Land Management 6251 College Blvd. Suite A Farmington, NM 87402

Dave Mankiewicz,

EnerVest Operating, LLC is planning on closing the below grade tank on below pit on the QUINN 337S on Monday January 19, 2015. The work will begin at 9:00am-weather permitting. The location for the below grade tank is located in U/L-P, Section 18, Township 31N, Range 8 West, San Juan County, New Mexico. (API No. 30-045-33510). Lat: 36.892562, Long: 107.711017.

EnerVest Operating, LLC

Michael Dame HSE Associate



### **Analytical Report**

#### **Report Summary**

Client: Enervest Operating

Chain Of Custody Number: 17897

Samples Received: 1/5/2015 3:31:00PM

Job Number: 05123-0002

Work Order: P501008

Project Name/Location: Quinn 3375

Entire Report Reviewed By:

Tim Cain, Laboratory Manager

Date:

1/12/15

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.



2700 Farmington Ave.

Farmington NM, 87401

Project Name:

Quinn 3375

Project Number: Project Manager: 05123-0002

Mike Dame

Reported:

12-Jan-15 11:05

#### **Analyical Report for Samples**

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Quinn 3375	P501008-01A	Soil	01/05/15	01/05/15	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

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



Project Name:

Quinn 3375

2700 Farmington Ave. Farmington NM, 87401

Project Number:

05123-0002

Project Manager:

Mike Dame

Reported: 12-Jan-15 11:05

#### Quinn 3375 P501008-01 (Solid)

	1200	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.10	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
Toluene	ND	0.10	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
Ethylbenzene	ND	0.10	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
p,m-Xylene	ND	0.20	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
o-Xylene	ND	0.10	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
Total Xylenes	ND	0.10	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
Total BTEX	ND	0.10	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		121 %	50-	-150	1502007	01/06/15	01/06/15	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg	1	1502007	01/06/15	01/06/15	EPA 8015D	
Diesel Range Organics (C10-C28)	92.5	30.0	mg/kg	1	1502006	01/06/15	01/06/15	EPA 8015D	
Surrogate: o-Terphenyl		115 %	50-	-200	1502006	01/06/15	01/06/15	EPA 8015D	
Surrogate: 4-Bromochlorobenzene-FID		109 %	50-	-150	1502007	01/06/15	01/06/15	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	43.9	34.9	mg/kg	1	1502015	01/06/15	01/06/15	EPA 418.1	
Cation/Anion Analysis									
Chloride	ND	9.91	mg/kg	1	1502011	01/06/15	01/06/15	EPA 300.0	

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

5796 US Highway 64, Farmington, NM 87401

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



Project Name:

Quinn 3375

2700 Farmington Ave.

Project Number:

05123-0002

**Reported:** 12-Jan-15 11:05

Farmington NM, 87401 Project Manager:

Mike Dame

Volatile Organics by EPA 8021 - Quality Control

**Envirotech Analytical Laboratory** 

Patch 1502007 Purgo and Tran										
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
		Reporting		Spike	Source		%REC		RPD	

Batch 1502007 - Purge and Trap EPA 5	030A									
Blank (1502007-BLK1)				Prepared: 0	5-Jan-15	Analyzed: (	06-Jan-15			
Benzene	ND	0.10	mg/kg							
Toluene	ND	0.10	"							
Ethylbenzene	ND	0.10	"							
p,m-Xylene	ND	0.20	11							
o-Xylene	ND	0.10	"							
Total Xylenes	ND	0.10	"							
Total BTEX	ND	0.10	"							
Surrogate: 4-Bromochlorobenzene-PID	0.469		"	0.399		117	50-150			
LCS (1502007-BS1)				Prepared: 0	5-Jan-15	Analyzed: (	06-Jan-15			
Benzene	18.0	0.10	mg/kg	20.0		89.9	75-125			
Toluene	18.4	0.10	"	20.0		91.9	70-125			
Ethylbenzene	18.8	0.10	"	20.0		94.2	75-125			
p,m-Xylene	38.5	0.20	"	40.0		96.3	80-125			
o-Xylene	19.0	0.10	"	20.0		95.1	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.482		"	0.400		121	50-150			
Matrix Spike (1502007-MS1)	Source	e: P501002-	01	Prepared: 0	5-Jan-15	Analyzed: (	06-Jan-15			
Benzene	18.0	0.10	mg/kg	19.9	ND	90.3	75-125			
Toluene	18.4	0.10		19.9	ND	92.2	70-125			
Ethylbenzene	18.8	0.10	11	19.9	ND	94.4	75-125			
p,m-Xylene	38.3	0.20	"	39.9	ND	96.1	80-125			
o-Xylene	19.0	0.10	"	19.9	ND	95.4	75-125			
Surrogate: 4-Bromochlorobenzene-PID	0.488		"	0.399		122	50-150			
Matrix Spike Dup (1502007-MSD1)	Source	e: P501002-	01	Prepared: 0	5-Jan-15	Analyzed: (	06-Jan-15			
Benzene	18.0	0.10	mg/kg	20.0	ND	90.0	75-125	0.0651	15	
Toluene	18.4	0.10		20.0	ND	92.0	70-125	0.0574	15	
Ethylbenzene	18.6	0.10	**	20.0	ND	93.2	75-125	1.04	15	
p,m-Xylene	37.9	0.20	"	40.0	ND	94.8	80-125	1.17	15	
o-Xylene	18.7	0.10	"	20.0	ND	93.7	75-125	1.69	15	
Surrogate: 4-Bromochlorobenzene-PID	0.478		"	0.400		120	50-150			

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

5796 US Highway 64, Farmington, NM 87401

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

envirotech-inc.com

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

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

laboratory@envirotech-inc.com



Project Name:

Quinn 3375

2700 Farmington Ave. Farmington NM, 87401

Project Number: Project Manager:

Reporting

05123-0002

Spike

Source

Mike Dame

Reported: 12-Jan-15 11:05

RPD

%REC

#### Nonhalogenated Organics by 8015 - Quality Control

#### **Envirotech Analytical Laboratory**

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1502006 - DRO Extraction EPA 3	550M	_								
Blank (1502006-BLK1)				Prepared: (	)5-Jan-15	Analyzed: 0	6-Jan-15			
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg							
Surrogate: o-Terphenyl	47.8		"	40.0		120	50-200			
LCS (1502006-BS1)				Prepared: (	)5-Jan-15	Analyzed: 0	6-Jan-15			
Diesel Range Organics (C10-C28)	569	29.9	mg/kg	498		114	38-132			
Surrogate: o-Terphenyl	46.3		"	39.9		116	50-200			
Matrix Spike (1502006-MS1)	Sourc	e: P501002-	01	Prepared: (	)5-Jan-15	Analyzed: 0	6-Jan-15			
Diesel Range Organics (C10-C28)	553	29.9	mg/kg	499	ND	111	38-132			
Surrogate: o-Terphenyl	43.9		"	39.9		110	50-200			
Matrix Spike Dup (1502006-MSD1)	Sourc	e: P501002-	01	Prepared: (	)5-Jan-15	Analyzed: 0	)6-Jan-15			
Diesel Range Organics (C10-C28)	593	29.9	mg/kg	499	ND	119	38-132	6.87	20	
Surrogate: o-Terphenyl	48.0		"	39.9		120	50-200			

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

5796 US Highway 64, Farmington, NM 87401

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



Project Name:

Quinn 3375

2700 Farmington Ave.

Project Number:

Reporting

05123-0002

Farmington NM, 87401 Project Manager:

Mike Dame

Spike

Source

Reported: 12-Jan-15 11:05

RPD

%REC

#### Nonhalogenated Organics by 8015 - Quality Control

#### **Envirotech Analytical Laboratory**

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1502007 - Purge and Trap EPA 50	)30A									
Blank (1502007-BLK1)				Prepared: 0	5-Jan-15	Analyzed: 0	6-Jan-15			
Gasoline Range Organics (C6-C10)	ND	9.98	mg/kg							
Surrogate: 4-Bromochlorobenzene-FID	0.428		"	0.399		107	50-150			
LCS (1502007-BS1)				Prepared: 0	5-Jan-15	Analyzed: 0	6-Jan-15			
Gasoline Range Organics (C6-C10)	268	9.99	mg/kg	292		92.0	80-120			
Surrogate: 4-Bromochlorobenzene-FID	0.437		"	0.400		109	50-150			
Matrix Spike (1502007-MS1)	Source	e: P501002-	01	Prepared: 0	5-Jan-15	Analyzed: 0	6-Jan-15			
Gasoline Range Organics (C6-C10)	266	9.97	mg/kg	291	ND	91.3	75-125			
Surrogate: 4-Bromochlorobenzene-FID	0.438		"	0.399		110	50-150			
Matrix Spike Dup (1502007-MSD1)	Source	e: P501002-	01	Prepared: 0	5-Jan-15	Analyzed: 0	6-Jan-15			
Gasoline Range Organics (C6-C10)	263	9.99	mg/kg	292	ND	90.0	75-125	1.25	15	
Surrogate: 4-Bromochlorobenzene-FID	0.428		"	0.400		107	50-150			

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

5796 US Highway 64, Farmington, NM 87401

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

envirotech-inc.com

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

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

laboratory@envirotech-inc.com



Project Name:

Quinn 3375

2700 Farmington Ave.

Project Number:

Reporting

05123-0002

Farmington NM, 87401 Project Manager:

Mike Dame

Spike

Source

**Reported:** 12-Jan-15 11:05

RPD

%REC

#### Total Petroleum Hydrocarbons by 418.1 - Quality Control

#### **Envirotech Analytical Laboratory**

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1502015 - 418 Freon Extraction										
Blank (1502015-BLK1)				Prepared &	Analyzed:	06-Jan-15				
Total Petroleum Hydrocarbons	ND	34.9	mg/kg							
Duplicate (1502015-DUP1)	Sourc	e: P501002-	01	Prepared &	Analyzed:	06-Jan-15				
Total Petroleum Hydrocarbons	35.9	34.9	mg/kg		ND				30	
Matrix Spike (1502015-MS1)	Sourc	e: P501002-	01	Prepared &	Analyzed:	06-Jan-15				
Total Petroleum Hydrocarbons	1850	34.9	mg/kg	2010	ND	92.1	80-120			

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

5796 US Highway 64, Farmington, NM 87401

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



Project Name:

Quinn 3375

2700 Farmington Ave. Farmington NM, 87401

Project Number:

05123-0002

Project Manager: Mike Dame

**Reported:** 12-Jan-15 11:05

Cation/Anion Analysis - Quality Control

**Envirotech Analytical Laboratory** 

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 1502011 - Anion Extraction EPA 300.0 Blank (1502011-BLK1) Prepared & Analyzed: 06-Jan-15 Chloride ND 9.84 mg/kg LCS (1502011-BS1) Prepared & Analyzed: 06-Jan-15 Chloride 468 9.84 mg/kg 90-110 Matrix Spike (1502011-MS1) Prepared & Analyzed: 06-Jan-15 Source: P501007-01 Chloride 494 ND 97.9 9.88 80-120 mg/kg Matrix Spike Dup (1502011-MSD1) Source: P501007-01 Prepared & Analyzed: 06-Jan-15 Chloride 484 9.88 mg/kg ND 97.9 80-120 0.0820

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



Project Name:

Quinn 3375

2700 Farmington Ave. Farmington NM, 87401

Project Number:

05123-0002

Project Manager:

Mike Dame

Reported:

12-Jan-15 11:05

#### **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

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

## **CHAIN OF CUSTODY RECORD**

17897

Client: Enervest			C	ject Name / Locatio Quinn 3375	5					ANALYSIS / PARAMETERS																																
Email results to: mdame Gene	west, net		Sam	mpler Name:	re/le	Dame				3015)	18021)	8260)	S				-																									
Client Phone No.: 505-115-7	1879		Clie	os 123	-000	2				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	/ Anion	/ Anion	Cation / Anion	/ Anion	/ Anion														TCLP with H/P	CO Table 910-1	118.1)	RIDE		e Cool	Sample Intact				
Sample No./ Identification	Sample Date	Samp	- 1	Lab No.		Volume Intainers	P HNO <sub>₹</sub>	reserv	cative Cool	TPH (A	BTEX	VOC (I	RCRA	Cation	RCI	TCLP	CO Tal	TPH (418.1)	CHLORIDE		Sample	Sample																				
Quinn 3375	1/5/15	2:30	pm	P501008-01	402	jar			1	/	/							/	V		/																					
			_				1		-												-																					
			-				1 ;														_	1																				
							1														-																					
																				_	-																					
			-			\$4000000000000000000000000000000000000	-														-																					
Relinquished by: (Signature)	1 dave				Date	Time 3:3)			by: (S											Date		Time 331																				
Relinquished by: (Signature)							Rece	eived	by:(S	ignat	ure)																															
Sample Matrix Soil Solid Sludge	Aqueous [	] Othe	r 🔲 _																																							
☐ Sample(s) dropped off after	hours to see	cure dro	p off	area.	3 €	en V Ana	ir (	o i	e (	chator	) i	4.8																														

# ENERVEST OPERATING, LLC

FORMATION FRC
LATITUDE N 36.8926
LONGITUDE W 107.7104
SE/SE, 675' FSL & 900' FEL
SEC.18 TO31N RO08W
LEASE NO. SF-078511
API NO. 30-045-33510
SAN JUAN COUNTY, NEW MEXICO
EMERGENCY NUMBER (5<sup>IN CASE</sup> OF EMERGENCY CALL 70
NO SMOKING NO TRESPASSING



#### Dame, Michael

From:

Dame, Michael

Sent:

Tuesday, January 13, 2015 7:48 AM

To: Cc:

'Smith, Cory, EMNRD'

Gardner, Wilbert

Subject:

72 Hour Notice. QUINN 337S

**Tracking:** 

Recipient

Read

'Smith, Cory, EMNRD'

Gardner, Wilbert

Read: 1/13/2015 7:49 AM

OIL CONS. DIV DIST. 3

APR 23 2015

#### Good Morning,

Enervest Operating is planning on closing the below grade tank excavation on the QUINN 337S Monday January 19, 2015. The work will start at 9:00am weather permitting. The location for the below grade tank is located in U/L-P, Section 18, Township 31N, Range 8 West, San Juan County, New Mexico. (API No. 30-045-33510). Lat:36.89256 Long: -107.71101.

Thank you,

#### Michael Dame CSHO

EnerVest, Ltd. | HSE Associate 2700 Farmington Ave., Building K, Suite 1| Farmington, NM 87401 | Mobile:505.215.7879 mdame@enervest.net | www.enervest.net



#### **EnerVest Operating, LLC (EV)**

#### BELOW-GRADE TANK CLOSURE PLAN

OIL CONS. DIV DIST. 3

Rule 19.15.17.13

APR 23 2015

Well Name – QUINN #337S Below Grade Tank API # 30-045-33510 Location UL- P, Sec 18 T-31N, R-8W Lat: N 36.892562 Lat W -107. 711017

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 prior to EnerVest ownership.

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

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

Operators Name Unit letter, Section, Township, & Range of well Well name and well number API Number of well Enervest Operating provided 72 hour notification to the state of New Mexico and the Bureau of Land Management per regulations. See the attached notification and responses.

- 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 the liner was disposed at the San Juan Regional Landfill (Permit #SWM 052426).

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:

			Test
Constituent	Method	Standard	Results
			Non-
Chloride	EPA 300.0	250mg/kg	Detect
	EPA SW-846		43.9
TPH	Method 418.1	100 mg/kg	mg/kg
	EPA SW-846		
	Method 8021B		Non-
BTEX	or8260B	50 mg/kg	Detect

Benzene	EPA -SW-846 Method 8021B or 8015M	0.2 mg/kg	Non- Detect
	EPA SW-846		92.5
GRO/DRO	Method 8015B	500 mg/kg	mg/kg

Not needed for 2008 BET Closure Plan JK 5/4/205

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

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 filed by Sierra Oil Field Services on January 23, 2015 utilizing soil that was already on location. The location was contoured to match the existing terrain. See attached photographs.

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 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.

EV will reseed once the BLM has come and done their inspection of the location, and contour the location to BLM standards.