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

Type of action:

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.

<u>Pit, Below-Grade Tank, or</u> Proposed Alternative Method Permit or Closure Plan Application

Below grade tank registration

Permit of a pit or proposed alternative method

Closure of a pit, below-grade tank, or proposed alternative method MAK UD 2019 Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade safe []] 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.
L. OCRID#.
Operator:Enervest Operating LLCOGRID #:
Address:2700 Farmington Ave, Building K, Suite 1. Farmington, N.M. 87401
Facility or well name:Cain #002
API Number:
U/L or Qtr/Qtr H Section 25 Township 31N Range 13W County: San Juan
Center of Proposed Design: Latitude36.87374 Longitude -108 14945 NAD: □1927 ⋈ 1983
Surface Owner: Federal State Private Tribal Trust or In
Pit: Subsection F, G or J of 19.15.17.11 NMAC Sustification BY: Cory Smith DATE: 300/19 (505) 334-6178 Ext. 115 Date Sample Date Date
Selow-grade tank: Subsection I of 19.15.17.11 NMAC Volume:95bbl Type of fluid:Produced Water Tank Construction material:Steel double bottom tank Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Otherleak detection Liner type: Thicknessmil HDPE PVC Other
Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
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 Wire mesh fence with a pipe railing

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)										
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										
3.										
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.										
o. 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 accep material 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. (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.	☐ 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									
in the control of the	ı l									

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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Natructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the do 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. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:30-045-25574 or Permit Number:	NMAC 15.17.9 NMAC
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 do 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	.15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

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 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 ₂ 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	documents are
Closure Flair - based upon the appropriate requirements of Subsection C of 19.13.17.9 NWAC and 19.13.17.13 NWAC	<u> </u>
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 F. 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
14. Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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	
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. I 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	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	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 unatakla area	☐ Yes ☐ No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	<u>.</u>
Society; Topographic map Within a 100-year floodplain.	☐ Yes ☐ No
- FEMA map	Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plans 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 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 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	1 NMAC 5.17.11 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 belief.	f.
Name (Print):Michael Dame Title:HSE Associate	
Signature: Date:3/12/2018	
Signature:	
e-mail address:mdame@enervest.net Telephone:505-325-0318	
e-mail address:mdame@enervest.net Telephone:505-325-0318	
e-mail address:mdame@enervest.net Telephone:505-325-0318	
e-mail address:mdame@enervest.net	the closure report.
e-mail address:	the closure report.

22. Operator Closure Certi	fication:		_	
	nformation and attachments submitted with this clo the closure complies with all applicable closure req			
Name (Print):	Michael Dame	Title:	HSE A	Associate
Signature:	Wiehael Home	 	Date:	3/12/2018
e-mail address:	mdame@enervest.net	Telepho	one:	505-325-0318

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

State of New Mexico Energy Minerals and Natural Resources

Revised August 8, 2011 Submit 1 Copy to appropriate District Office in

Form C-141

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action											
						OPERA?	ΓOR	□ In	itial Report	×	Final Report
Name of Co	mpany En	ervest Opera	ting				chael Dame				
		gton Ave B		. Suite #1			No. 505-325-03	18			
Facility Nar							e Oil & Gas Pro				
Surface Ow	ner: Privat	e		Mineral O	wner: F	Private		API	No. 30-045-	25574	
						OF RE	LEASE				
Unit Letter H	Section 25	Township 31N	Range 13W	Feet from the	North/S	South Line	Feet from the	East/West Lin	e County San Juar	n	
		La	ntitude_	N. 36.87374	Lo	ngitude	W -108.149	45			
				NAT	URE (OF REL	EASE				
Type of Rele		•		•			Release None		e Recovered		
Source of Re							lour of Occurrence	e Date a	nd Hour of D	iscovery	,
Was Immedia	ate Notice (Yes 🗵	No □ Not Re	quired	If YES, To	Whom?				
Was Immediate Notice Given? Yes No Not Required											
	course Read	hed?						the Watercourse			
			Yes 🗵] No							
If a Watercou	irse was Im	pacted, Descri	be Fully.	*		l					
Below grade Benzene – No BTEX – Noi GRO/DRO – Total Petrole Chloride – No	tank excava on Detect (n Detect (EI Non Detect um Hydroca on Detect m	EPA Method PA Method 80 t mg/kg (EPA	A five po 8021) 21) 8015) Detect mg ethod 300	pint composite san g/kg (EPA Method 0.0)			the excavation a	nd submitted an	alysis, the res	sults are	
No release w	as detected	by analysis								10.00	
regulations al public health should their or or the environ	Il operators or the envir operations h nment. In a	are required to ronment. The ave failed to a	report ar acceptance dequately CD accep	e is true and compled/or file certain rece of a C-141 report investigate and restance of a C-141 received.	elease no rt by the emediate	otifications a NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	ctive actions for eport" does not eat to ground w	releases whice relieve the operator, surface was not the contractions of the contracti	th may experator of water, hu	ndanger f liability ıman health
Signature:	Me	hael		lane				<u>SERVATIC</u>	<u>N DIVISI</u>	<u>ION</u>	
Printed Name	e: Michael	Dame			A	Approved by	Environmental S	pecialist:			
Title: HSE S _I	pecialist				A	Approval Da	te:	Expirati	on Date:		
E-mail Addre	ess: mdame(@ enervest.ne	t		(Conditions of	f Approval:		Attache	ed 🔲	
Date: 3/12/	2018 Pho	ne: 505-325-0	318								

^{*} Attach Additional Sheets If Necessary

EnerVest Operating, LLC (EV)

BELOW-GRADE TANK CLOSURE PLAN

Rule 19.15.17.13

Well Name – Cain #002 API # 30-045-25574 Location UL- H, Sec 25, T-31N, R-13W Lat: N 36.87374 Lat W -108.14945

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 February 14th, 2018.

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 landowner. See 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 disposed of at the Envirotech Land Farm (Permit #NM-01-0011). The interior of the tank was steam cleaned prior to removal. The tank was transported to the Enervest yard where it was inspected and recoated. The tank will be utilized at another location in the future.

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

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

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

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

Constituent	Method	Old Standard	Test Results
Chloride	EPA 300.0	250 mg/kg	Non- Detect
TPH	EPA SW-846 Method 418.1	100 mg/kg	Non- Detect
1711	EPA SW-846	100 mg/kg	
BTEX	Method 8021B or8260B	50 mg/kg	Non- Detect
, D	EPA -SW-846 Method 8021B or	0.2/	Non-
Benzene	8015M EPA SW-846	0.2 mg/kg	Detect Non-
GRO/DRO	Method 8015B	500 mg/kg	Detect

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

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

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

The excavation was back filled by Sierra Oilfield Services utilizing soil that was already on location on March 9th, 2018. 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 has not reseeded the area where the pit was removed due to where it was located between the oil tank and the newly set above grade tank



Analytical Report

Report Summary

Client: Enervest Operating Chain Of Custody Number:

Samples Received: 3/1/2018 10:05:00AM

Job Number: 05123-0002 Work Order: P803002

Project Name/Location: Cain #002

Report Reviewed By:	Wallet Hinkown	Date:	3/6/18		
	Walter Hinchman, Laboratory Director				
	Tim Cain, Quality Assurance Officer	Date:	3/6/18		

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.



Enervest Operating

Project Name:

Cain #002

2700 Farmington Ave. Farmington NM, 87401 Project Number: Project Manager: 05123-0002 Mike Dame Reported: 06-Mar-18 17:59

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Cain #002	P803002-01A	Soil	03/01/18	03/01/18	Glass Jar, 4 oz.
	P803002-01B	Soil	03/01/18	03/01/18	Glass Jar, 4 oz.



Enervest Operating 2700 Farmington Ave.

Project Name:

Cain #002

Project Number:

05123-0002

Reported:

Farmington NM, 87401

Project Manager:

Mike Dame

06-Mar-18 17:59

Cain #002 P803002-01 (Solid)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	100	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
Toluene	ND.	100	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
Ethylbenzene	ND	100	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
p,m-Xylene	ND	200	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
o-Xylene	ND	100	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
Total Xylenes	ND	100	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
Total BTEX	ND	100	ug/kg	1	1809019	03/01/18	03/03/18	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		100 %	50-	-150	1809019	03/01/18	03/03/18	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1809019	03/01/18	03/03/18	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1809022	03/01/18	03/05/18	EPA 8015D	
Oil Range Organics (C28-C40+)	ND	50.0	mg/kg	1	1809022	03/01/18	03/05/18	EPA 8015D	
Surrogate: 1-Chloro-4-fluorohenzene-FID		96.7 %	50-	-150	1809019	03/01/18	03/03/18	EPA 8015D	
Surrogate: n-Nonane		71.3 %	50	-200	1809022	03/01/18	03/05/18	EPA 8015D	CV3
Anions by 300.0									
Chloride	ND	20.0	mg/kg	1	1809020	03/01/18	03/01/18	EPA 300.0	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	ND	40.0	mg/kg	1	1809018	03/01/18	03/01/18	EPA 418.1	



Enervest Operating

Project Name:

Cain #002

2700 Farmington Ave. Farmington NM, 87401

Project Number: Project Manager: 05123-0002 Mike Dame

Reported:

06-Mar-18 17:59

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1809019 - Purge and Trap EPA 5030A										
Blank (1809019-BLK1)				Prepared: 0	1-Mar-18	Analyzed	02-Mar-18			
Benzene	ND	100	ug/kg	ricpared. 0	1-ivial-10	mary z.cu.	02-Wai-10			
Toluene	ND	100	"							
Ethylbenzene	ND	100								
p,m-Xylene	ND	200								
o-Xylene	ND	100								
Total Xylenes	ND	100	•							
Total BTEX	ND	100								
Surrogate: 4-Bromochlorobenzene-PID	7800		*	8000		97.5	50-150	-		
LCS (1809019-BS1)				Prepared: 0	1-Mar-18	Analyzed	02-Mar-18			
Benzene	4880	100	ug/kg	5000	. Irruit (O	97.6	70-130			
Toluene	4830	100		5000		96.7	70-130			
Ethylbenzene	4880	100		5000		97.6	70-130			
p,m-Xylene	9750	200		10000		97.6	70-130			
o-Xylene	4800	100		5000		96.0	70-130			
Total Xylenes	14600	100	-	15000		97.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7890		-	8000		98.6	50-150			
Matrix Spike (1809019-MS1)	Sou	ırce: P803001-	01	Prepared: (01-Mar-18	Analyzed:	02-Mar-18			
Benzene	4740	100	ug/kg	5000	ND	94.8	54.3-133			
Toluene	4700	100	**	5000	ND	94.1	61.4-130			
Ethylbenzene	4780	100		5000	ND	95.6	61.4-133			
p,ni-Xylene	9510	200		10000	ND	95.1	63.3-131			
o-Xylene	4710	100		5000	ND	94.3	63.3-131			
Total Xylenes	14200	100	-	15000	ND	94.8	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	8350		-	8000		104	50-150			
Matrix Spike Dup (1809019-MSD1)	Sou	arce: P803001-	01	Prepared: (01-Mar-18	Analyzed:	02-Mar-18			
Benzene	4800	100	ug/kg	5000	ND	96.1	54.3-133	1.34	20	
Toluene	4770	100		5000	ND	95.5	61.4-130	1.42	20	
Ethylbenzene	4840	100		5000	ND	96.9	61.4-133	1.26	20	
p,m-Xylene	9630	200		10000	ND	96.4	63.3-131	1.30	20	
o-Xylene	4770	100	**	5000	ND	95.4	63.3-131	1.21	20	
Total Xylenes	14400	100	•	15000	ND	96.1	63.3-131	1.27	20	
Surrogate: 4-Bromochlorobenzene-PID	8250		,,	8000		103	50-150			

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5796 US Highway 64, Farmington, NM 87401

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

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



Encryest Operating 2700 Farmington Ave. Farmington NM, 87401 Project Name:

Cain #002

Project Number: Project Manager:

Reporting

05123-0002 Mike Dame

Spike

Source

Reported:

RPD

%REC

06-Mar-18 17:59

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes						
Batch 1809019 - Purge and Trap EPA 50	30A															
Blank (1809019-BLK1)		Prepared: 01-Mar-18 Analyzed: 02-Mar-18														
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg													
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.44		*	8.00		93.0	50-150									
LCS (1809019-BS2)				Prepared: 0	01-Mar-18											
Gasoline Range Organics (C6-C10)	48.3	20,0	mg/kg	50.0		96.7	70-130									
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		*	8.00		93.8	50-150									
Matrix Spike (1809019-MS2)	Sourc	e: P803001-	01	Prepared: (01-Mar-18	Analyzed: (02-Mar-18									
Gasoline Range Organics (C6-C10)	54.9	20.0	mg/kg	50.0	ND	110	70-130									
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91			8.00		98.9	50-150									
Matrix Spike Dup (1809019-MSD2)	Source	e: P803001-	01	Prepared: 0	01-Mar-18	Analyzed: (02-Mar-18									
Gasoline Range Organics (C6-C10)	54.8	20.0	mg/kg	50.0	ND	110	70-130	0.330	20							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61			8.00		95.1	50-150									



Enervest Operating 2700 Farmington Ave. Farmington NM, 87401 Project Name: Project Number: Project Manager: Cain #002

05123-0002 Mike Dame

Reported: 06-Mar-18 17:59

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
Batch 1809022 - DRO Extraction EPA 3570										
Blank (1809022-BLK1)				Prepared: (01-Mar-18	Analyzed: (05-Mar-18			
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40+)	ND	50.0								
Surrogate: n-Nonane	40.7			50.0		81.3	50-200			
LCS (1809022-BS1)				Prepared: (01-Mar-18	Analyzed:	02-Mar-18			
Diesel Range Organics (C10-C28)	502	25.0	mg/kg	500		100	38-132			
Surrogate: n-Nonane	50.0		*	50.0		100	50-200			
Matrix Spike (1809022-MS1)	Sou	rce: P803002-	01	Prepared:	01-Mar-18	02-Mar-18				
Diesel Range Organics (C10-C28)	567	25.0	mg/kg	500	ND	113	38-132			
Surrogate: n-Nonane	57.0			50.0		114	50-200			
Matrix Spike Dup (1809022-MSD1)	Sou	rce: P803002-	01	Prepared:	01-Mar-18					
Diesel Range Organics (C10-C28)	664	25.0	mg/kg	500	ND	133	38-132	15.7	20	SPKI
Surrogate: n-Nonane	63.9		**	50.0		128	50-200			



Enervest Operating 2700 Farmington Ave. Farmington NM, 87401 Project Name:

Cain #002

Project Number: Project Manager:

Reporting

05123-0002

Spike

Reported:

RPD

Mike Dame

Source

%REC

06-Mar-18 17:59

Anions by 300.0 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Limit	Units	Level	Result	%RI:C	Limits	KPD	Limit	Notes
Batch 1809020 - Anion Extraction EPA 3	300.0/9056A									
Blank (1809020-BLK1)				Prepared &	Analyzed:	01-Mar-18				
Chloride	ND	20.0	mg/kg							
LCS (1809020-BS1)				Prepared &	Analyzed:	01-Mar-18	2			
Chloride	248	20.0	mg/kg	250		99.0	90-110			
Matrix Spike (1809020-MS1)	Source	e: P803002-	01	Prepared &	Analyzed:	01-Mar-18				
Chloride	255	20.0	mg/kg	250	ND	102	80-120			
Matrix Spike Dup (1809020-MSD1)	Source	e: P803002-	01	Prepared &	Analyzed:	01-Mar-18				
Chloride	255	20.0	mg/kg	250	ND	102	80-120	0.251	20	



Encryest Operating 2700 Farmington Ave. Farmington NM, 87401 Project Name: Project Number: Project Manager: Cain #002

05123-0002 Mike Dame

Reported: 06-Mar-18 17:59

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Result	Limit								
	Linit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared &	Analyzed:	01-Mar-18				
ND	40.0	mg/kg							
			Prepared &	Analyzed:	01-Mar-18				
978	40.0	mg/kg	1000		97.8	80-120			
Sour	ce: P803002-	01	Prepared &	: Analyzed:	01-Mar-18				
996	40.0	mg/kg	1000	ND	99.6	70-130			
Sour	ce: P803002-	01	Prepared &	Analyzed:	01-Mar-18		5		
1010	40.0	mg/kg	1000	ND	101	70-130	1.40	30	
	978 Sour 996 Sour	978 40.0 Source: P803002- 996 40.0 Source: P803002-	978 40.0 mg/kg Source: P803002-01 996 40.0 mg/kg Source: P803002-01	ND 40.0 mg/kg Prepared & 978 40.0 mg/kg 1000 Source: P803002-01 Prepared & 996 40.0 mg/kg 1000 Source: P803002-01 Prepared &	ND 40.0 mg/kg Prepared & Analyzed: 978 40.0 mg/kg 1000 Source: P803002-01 Prepared & Analyzed: 996 40.0 mg/kg 1000 ND Source: P803002-01 Prepared & Analyzed:	Prepared & Analyzed: 01-Mar-18	Prepared & Analyzed: 01-Mar-18 978 40.0 mg/kg 1000 97.8 80-120 Source: P803002-01 Prepared & Analyzed: 01-Mar-18 996 40.0 mg/kg 1000 ND 99.6 70-130 Source: P803002-01 Prepared & Analyzed: 01-Mar-18	Prepared & Analyzed: 01-Mar-18	Prepared & Analyzed: 01-Mar-18



Encryest Operating

Project Name:

Cain #002

2700 Farmington Ave. Farmington NM, 87401 Project Number: Project Manager: 05123-0002 Mike Dame Reported:

06-Mar-18 17:59

Notes and Definitions

SPK1

The spike recovery is outside of quality control limits.

CV3

CV recovery was below quality control limits.

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

RPD

Relative Percent Difference

Project I	oject Information Chain of Custody							tody													of			
Client: Encrest 19 perating Report						ttention			-	La	b Us	se On	ly		٠.	T.	AI		EPA Program					
Project: (a; a #00) Report due by:										Lab	Lab WO#				Job Number				3D	RCRA	CWA	SDWA		
Project	Manager	: Mik	ebam	e	_	Att	ention:			P8	303	002		05	123	3-01	102		v	1				
Address						Add	dress:						-	Analys	is a	nd M	etho	d			S	tate		
City, Sta	te, Zip				,	City	y, State, Zip			15	15										NM CC	UT AZ		
Phone: Phone:								88	8	-			0.0					- 1						
Email:	mdame	Oene!	VEStin	et		Em	ail:					805	8260	000	s 30	7								
Time Sampled	Date Sampled	Matrix	No Containers	Sample I	D				Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chlorides 300.0	TPH 418.1					Re	marks		
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Addition	al Instru	ctions:				V	Is ice in	wool																
l, (field sampl is considered	er), attest to t fraud and ma	he validity an	nd authenticity for legal actio	of this sample n. Sampled by	a. I am awa	re that t	angering with or intentionally	mislabelling the sa	mple location,	, date o	or time	of colle	ection								°C on subseque			
Relinquished by: (Signature) Date Time Received by: (Signature)					e)	Date		Time			Lab Use Only Received on ice: Y N													
9110	122		3/	1/15	7:00	Fin	a p-		3/1/18		10C)5	an	Rece	ived	oni	ice:	(Y / 1	N				
Relinquish	ed by: (Sign	nature)	Date	,	Time		Received by: (Signature)			Time		Time			T1 T2 T3									
Sample Mat	rix: S - Soil,	Sd - Solid, S	ig - Sludge, A	- Aqueous,	O - Other				Container	Тур	e: g -	glass	_	_	_		_		The same of the same of	-	A			
Note: Samp	les are disca	rded 30 day	ys after resu	ts are repor	ted unless	othera	arrangements are made. H	lazardous sampl	es will be ret	turned	to cli	ent or	dispo	sed of	at the							the above		
													_	-	_									

5796 US Highway 64, Farmington, HM 87401

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

Laboratory and wrotech-inc coin

Dame, Michael

From: Dame, Michael

Sent: Wednesday, February 07, 2018 2:16 PM

To: Smith, Cory, EMNRD

Cc: Deal, Chester

Subject: 72 Hour notice for Cain #002

Good Afternoon,

This is a 72 hour notice that Enervest Operating will be pulling the below grade pit on the Cain #002 (API#: 30-045-25574). U/L: H, Section 25, Township 31N, Range 13W. Lat: 36.87374, Long: -108.14945. Work will begin at 9:00am on Wednesday February 14th, 2018, we will have a crew there to pull the pit, as well as conduct a 5 point soil sample to send to Envirotech Laboratory for analysis.

Thank you,

Michael Dame CSHO

EnerVest, Ltd. | HSE Specialist

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



