Form C-144 June 24, 2008

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

## Proposed Alternative Method Permit or Closure Plan Application

Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances. Operator: Enervest Operating, LLC OGRID #: 143199 Address: Peter Tower 1001 Fannin Street Suite 800, Houston, TX 77002 Facility or well name: Bear Canyon Unit No. 6: API Number: 30- OCD Permit Number: U/L or Qtr/Qtr D, NWNW\_\_\_ Section 14 Township 26 North Range 02 West County: Rio Arriba Center of Proposed Design: Latitude: 36°29'28.42157" North Longitude: 107°01'33,74496" West NAD: ⊠1927 □ 1983 Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment Pit: Subsection F or G of 19.15.17.11 NMAC Closed-loop System: Subsection H of 19.15.17.11 NMAC ☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other \_\_\_\_\_ Temporary: ⊠ Drilling ☐ Workover Permanent Emergency Cavitation Steel Pit ☐ Lined ☐ Unlined ☐ Lined ☐ Unlined Liner type: Thickness 20 mil □ LLDPE □ HDPE □ PVC Other \_\_\_\_ ☐ Other ☐ String-Reinforced Seams: Welded Factory Other Seams: 

■ Welded 

■ Factory 

■ Other 

\_\_\_\_ Volume: \_\_\_\_\_bbl \_\_\_\_yd<sup>3</sup> Dimensions: Length\_\_\_\_ x Width\_\_\_\_ Volume: not to exceed 10 acre-fl., including free-board Dimensions: L 200 ft x W 65 ft x D 8 ft. Topsoil to be on the east side of well pad, as shown on plat. Excavated top soil will not be within 300 ft. of a continuously flowing stream or within 200 ft. of a significant watercourse. Below-grade tank: Subsection I of 19.15.17.11 NMAC Fencing: Subsection D of 19.15.17.11 NMAC Volume: Chain link, six feet in height, two strands of barbed wire at top Type of fluid: Four foot height, 48" of steel mesh field-fence with one strand of barbed Tank Construction material: wire on top of field-fence Secondary containment with leak detection Netting: Subsection E of 19.15.17.11 NMAC Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Screen Netting Other ☐ Visible sidewalls and liner ☐ Monthly inspections ☐ Visible sidewalls only Signs: Subsection C of 19.15.17.11 NMAC Other ≥ 12'x24', 2' lettering, providing Operator's name, site location, and Liner type: Thickness \_\_\_\_\_\_mil HDPE PVC emergency telephone numbers Other \_\_\_\_ Signed in compliance with 19.15.3.103 NMAC

Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration	Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are requi 19.15.17 NMAC for guidance.	red. Please refer to
of approval.	Please check a box if one or more of the following is request blank:	-
	<ul> <li>✓ Administrative approval(s): Requests must be submit appropriate division district or the Santa Fe Environmental B consideration of approval.</li> <li>✓ Exception(s): Requests must be submitted to the Santa Fe Environmental B</li> </ul>	ureau office for
	Environmental Bureau office for consideration of approval.	na re
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting acceptable source material are provided below. Requests regarding chan approval from the appropriate district office or may be considered an exception of approval. Applicant in 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dryin loop system.	ges to certain siting criteria may require administrative seption which must be submitted to the Santa Fe must attach justification for request. Please refer to	
Ground water is less than 50 feet below the bottom of the temporary pit, pe - NM Office of the State Engineer - iWATERS database search; US		☐ Yes ☒ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any clake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed		☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, o (Applies to temporary, emergency, or cavitation pits and below-grade tank - Visual inspection (certification) of the proposed site; Aerial photo;	s)	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, (Applies to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo;	,	☐ Yes ☑ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring watering purposes, or within 1000 horizontal feet of any other fresh water of NM Office of the State Engineer - iWATERS database search; Vis	well or spring, in existence at the time of initial application.	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fr adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written	·	☐ Yes ⊠ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic ma	up; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD	-Mining and Mineral Division	☐ Yes ☑ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Society; Topographic map	Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☑ No
Within a 100-year floodplain. - FEMA map		☐ Yes 🖾 No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Appl Instructions: Each of the following items must be attached to the applica		
attached.  ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the require  ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon to  ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate Design Plan - based upon the appropriate requirements of 19.15.17.1  ☐ Operating and Maintenance Plan - based upon the appropriate requirements of Subsection	ments of Paragraph (4) of Subsection B of 19.15.17.9 NMAC he requirements of Paragraph (2) of Subsection B of 19.15.17.9 interrequirements of 19.15.17.10 NMAC 1 NMAC ements of 19.15.17.12 NMAC	
Previously Approved Design (attach conv. of design) API Number:	or Parmit Number	

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Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are
attached.
Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan - 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:
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
Proposed Closure: 19.15.17.13 NMAC
Type: ☑ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative
Proposed Closure Method:  Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC	
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ⊠ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ⊠ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes □ No □ NA   NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ⊠ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ⊠ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes 🛭 No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ⊠ No
<ul> <li>Within an unstable area.</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 FEMA map	☐ Yes ⊠ No
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be at closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC	
Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please in or facilities for the disposal of liquids, drilling fluids and drill cuttings.	dentify the facility
Disposal Facility Name: Disposal Facility Permit Number:	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan	n. Please indicate,
by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Construction and Design of Burial Trench (if applicable) 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 Subsection F of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	t be achieved)

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): TOUNG	TitleCom	oliances Supy.
Signature Lama Laura	Date:	29.08
e-mail address: RYOUNG WEDERVAST, NE		13 495-6530
OCD Approval: Permit Application (including closure plan)	Closure Plan (only)	
OCD Representative Signature: Branch	ell	Approval Date: 7-31-88
Title: Ensino/spec	OCD Permit Numbe	r:
Closure Report (required within 60 days of closure completion):	Subsection K of 19.15.17.13 NMA	
		tion Date
Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ If different from approved plan, please explain.	Alternative Closure Method	
Closure Report Attachment Checklist: Instructions: Each of the mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable) Plot Plan Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results 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	following items must be attached to	othe closure report. Please indicate, by a check  NAD:   1927   1983
Operator Closure Certification:		
I hereby certify that the information and attachments submitted with belief. I also certify that the closure complies with all applicable clo		
Name (Print):	Title:	
Signature:	Date:	
e-mail address:	Telephone:	

## Enervest Operating, LLC San Juan Basin Pit Design and Construction Plan

In accordance with Rule 19 15 17 the following information describes the design and construction of temporary pits on Enervest Operating LLC locations. This is Enervest's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit, which does not conform to this plan.

#### **General Plan**

- 1. Enervest will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. Prior to constructing the Pit, topsoil will be stockpiled In the construction zone for later use in restoration.
- 3. Enervest will post a well Sign, not less than 12" by 24", on the well site prior to construction of the temporary Pit The sign will list the operator on record as the operator, the location of the well site by unit letter, section, township range, and emergency telephone numbers.
- 4. Enervest shall construct all new fences utilizing 48" steel mesh field-fence on the bottom with a single strand of barbed wire on top. T-posts shall be Installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front Side of the fence will be temporarily removed for operational purposes.
- 5. Enervest shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
- 6. Enervest shall construct the pit so that the slopes are no steeper than two horizontal feet to 1 vertical foot.
- 7. Pit walls will be walked down by a crawler type tractor following construction.
- 8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- 9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- 10. All liners will be anchored In the bottom of a compacted earth-filled trench at least 18 inches deep.
- 11. Enervest will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. Enervest will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. Enervest will minimize the number of field seams in corners and irregularly shaped areas.
- 12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 13. The Pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.
- 15. Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.
- 16. The lower half of the blow pit (nearest lined pit) will be lined with the same 20 milliner. The upper half of the blow pit will remain unlined as allowed in Rule 19 15 17 11 F 11.
- 17. Enervest will not allow freestanding liquids to remain on the unlined portion of a temporary blow pit.

#### Enervest Operating, LLC San Juan Basin Maintenance and Operating Plan

In accordance with Rule 19 15 17 the following monitoring describes the operation and maintenance of temporary pits on Enervest Operating, LLC locations. This is Enervest's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

#### **General Plan**

- 1. Enervest will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. Enervest will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed at Basin Disposal Inc, permit # NM-01-005
- 3. Enervest will not discharge or store any hazardous waste in any temporary pit.
- 4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then Enervest shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
- 5. If a leak develops below the liquid's level, Enervest shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. Enervest shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. Enervest shall notify the Aztec Division office as required pursuant to Subsection B of 19 15 3 116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19 15 3 116 NMAC shall be reported 10 the division's Environmental Bureau Chief.
- 6. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 7. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 8. Enervest shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will be stored on-site until closure of pit.
- 9. Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
- 10. Enervest will maintain the temporary pit free of miscellaneous solid waste or debris.
- 11. During drilling or workover operations, Enervest will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged In the IADC reports Enervest will file this log with the Aztec Division office upon closure of the pit
- 12. After drilling or workover operations, Enervest will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at Enervest's office electronically and will be filed with the Aztec Division office upon closure of the pit.
- 13. Enervest shall maintain at least two feet of freeboard for a temporary pit.
- 14. Enervest shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling or workover rig.
- 15. Enervest shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. Enervest may request additional time to remove liquids from the Aztec Division office if it is not feasible to remove liquids within 48 hours.

## Enervest Operating, LLC San Juan Basin Closure Plan

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Enervest Operating, LLC locations. This is Enervest's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

#### General Plan:

- 1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves.
- 2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
- 3. The surface owner shall be notified of Enervest proposed closure plan using a means that provides proof of notice i.e., certified mail, return receipt requested.
- 4. Within 6 months of the Rig Off status occurring Enervest will ensure that temporary pits are closed, re-contoured, and reseeded.
- 5. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
- 6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.
- 7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with Non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
- 8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met,

all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 802 1B or 8260B	0.2
BTEX	EPA SW-846 802 1B or 8260B	50
ТРН	EPA SW-846 418.1	2500
GRP/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	1000

- 9. Upon completion of Solidification and testing, the Pit area will be backfilled with compacted, non-waste containing, earthen material A minimum of four feet of cover shall be achieved and the cover shall include one loot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 10. Re-counting of location will match fit, shape, line, form and texture of the surrounding. Reshaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 11. Notification will be sent to OCD when the reclaimed area is seeded.
- 12. Enervest shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (unimpacted) 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.
- 13. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four-foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 68240

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

1000 Rio Brazos Rd., Axtec, N.M. 87410

#### State of New Mexico Energy, Minerals & Natural Resources Department

#### OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 1220 South St. Francis Dr., Santa Fe, NM 87505 T AMENDED REPORT

	WELL LO	OCATION AND	D ACREAGE	DEDICATION	PLAT	
¹API Number		Pool Code		<sup>a</sup> Pool	Name	
<sup>4</sup> Property Code			Property Name			* Well Number
		BEAR	CANYON UNIT		•	6
OGRID No.		•	Operator Name			* Elevation

ENERVEST OPERATING. LLC 7384' 10 Surface Location North/South line UL or lot no. Section Township Lot Idn Feet from the Feet from the East/West line Range County 2-W 350 **NORTH** RIO ARRIBA D 14 26-N 665 WEST <sup>11</sup> Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 26-N 2-W 2250 SOUTH 1790 **EAST** RIO ARRIBA Dedicated Acres Joint or Infill <sup>14</sup> Consolidation Code 18 Order No. NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED 16 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION S 89°58'15" E SET P&C LS No. 8894 1/2" REBAR ON CALC'D DBL PROP. SET P&C LS No. 8894 **OPERATOR CERTIFICATION** 2633.00' (M) I hereby certify that the information contained herein 665 to true and complete to the best of my knowledge and belief, and that this organization either owns a workle SURFACE: at or unleased minoral interest in the land LAT: 36°29'28.40908° N. (NAD 83) LONG: 107°01'34.57144° W. (NAD 83) tricinating the proposed battom hole tovation or has a right to drill this well at this location pursuant to a FD. 2 1/2" BC. contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the 1916 GLO.

00°01'30" W 5283.78' (C) FD, 2 1/2" BC. 1916 G.L.O. 1790 BOTTOM HOLE: B.H.L. LAT: 36'29'01.90436" N. (NAD 83) LONG:107'.1"00.12812" W. (NAD 83) CALC'D CORNER 2250 FROM W.C. N 00'01" W-19.8 WITNESS CORNER FD. 2 1/2" 9C. 1916 G.L.O. FD. 2 1/2° BC. N 89°50'59" W 2632.35' (C) 1916 G.L.O.

Signature	/	Dale
/		

#### SURVEYOR CERTIFICATION

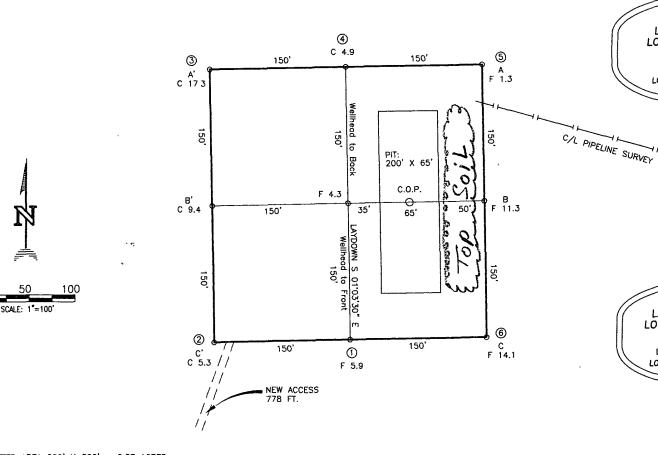
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.



#### **ENERVEST OPERATING, LLC**

BEAR CANYON UNIT No. 64 3 350 FNL 665 FWL

SECTION 14, T-26-N, R-2-W, N.M.P.M., RIO ARRIBA COUNTY, N.M. GROUND ELEVATION: 7384', DATE: JULY 9, 2008



NAD 83 LAT. = 36.49122° N. LONG. = 107.02627° W.

LAT. = 36°29'28.40908" N. LONG. = 107°01'34.57144" W.

**CENTER OF PIT** 

NAD 83 LAT. = 36.49123° N. LONG. = 107.02604° W.

NAD 27 LAT. = 36°29'28.42157" N. LONG. = 107°01'33.74496" W

TOTAL PERMITTED AREA 300' X 300' = 2.07 ACRES TOTAL NEW DISTURBANCE 300' X 300' = 2.07 ACRES TEMP. USE AREA = 0.00 ACRES EXISTING DISTURBED AREA = 0.00 ACRES TOTAL NEW PIPELINE AREA = 6.59 ACRES

TOTAL NEW ACCESS AREA = 0.36 ACRES

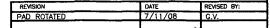
#### NOTES:

1) ESTIMATED VOLUMES CALCULATED BY AVERAGE END AREA AT CROSS SECTION SHOWN.

2) RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE). BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

#### NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL UTILITY NOTIFICATION CENTER OF NEW MEXICO TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.





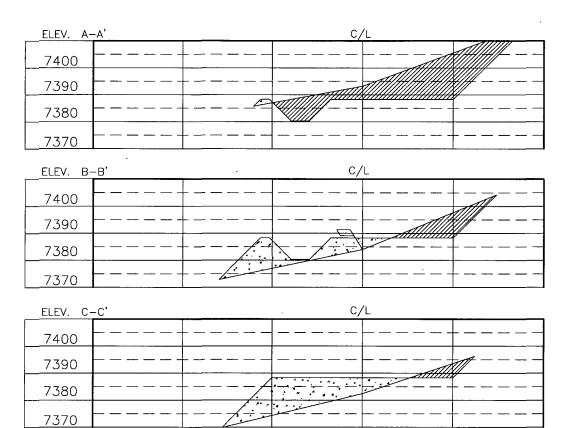
Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. 8ex 510 · Farmington, NM 87499
Phone (505) 326-1772 · Fax (505) 326-6019
NEW MEXICO LS. 8894

DRAWN BY. B.K.	CADFILE: EV002_PL8
ROW#: EV002	DATE: 06/06/08

#### **ENERVEST OPERATING, LLC**

#### BEAR CANYON UNIT No. 6 350 FNL 665 FWL

SECTION 14, T-26-N, R-2-W, N.M.P.M., RIO ARRIBA COUNTY, N.M. GROUND ELEVATION: 7384', DATE: JULY 9, 2008



NAD 83

LAT. = 36.49122° N. LONG. = 107.02627° W.

NAD 27

LAT. = 36°29'28.40908" N. LONG. = 107°01'34.57144" W.

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES CONTRACTOR SHOULD CALL UTILITY NOTIFICATION CENTER OF NEW MEXICO TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

REVISION	DATE	REVISED BY-
PAD ROTATED	7/11/08	GV



Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O Box 510 ·Farmington, NM 87499
Phone (505) 326-1772 · Fax (505) 326-6019
NEW MEXICO L.S. No 8894

DRAWN BY: BK.	CADFILE EV002_CF8
ROW#. EVOO2	DATE 06/06/08

## Hydrogeologic Report for the Bear Canyon Unit 6 Well Enervest Operating, LLC

#### Regional Hydrogeological Context

The surficial geology of the proposed Bear Canyon Unit 6-14 well location is the San Jose. The San Jose of Eocene age occurs in New Mexico and Colorado. This formation outcrops comprises much of the eastern half of the central San Juan Basin. The San Jose Formation overlays the Nacimiento Formation in New Mexico and the Animas Formation in Colorado. The San Jose Formation was deposited in various fluvial type environments. These Tertiary deposits consist of interbedded layers of sandstone, siltstone, shale, and conglomerate. Thickness of the San Jose Formation generally increases from west to east, with a thickness 200 feet in west and south to almost 2,700 feet in the structural center of the basin. Tertiary sediments are exposed in the canyons that trend northwest toward the San Juan River. The San Jose erodes as irregular ledges and slopes. The surface water drainage network has created arroyos, washes, and canyons that are typically narrow and widely spaced (USDA 2007).

Colorado Plateau aquifers underlie an area of approximately 110,000 square miles in western Colorado, northwestern New Mexico, northeastern Arizona and eastern Utah. The distribution of these aquifers is largely controlled by structural deformation. The principle aquifers interconnect across the plateau and are present within the San Juan, Unita, and Piceance basins.

The Unita-Animas Aquifer is widespread across the Colorado Plateau and is the main aquifer within the Bear Canyon Unit. Sedimentary rocks in this aquifer are Lower Tertiary Sandstone and Upper Cretaceous Sands. The Unita-Animas Aquifer in the San Juan Basin of northwestern New Mexico consists of the San Jose Formation, the underlying Nacimiento Formation, and Ojo Alamo Sandstone. The Nacimiento Formation and Ojo Alamo Sandstone are primarily permeable conglomerates and sandstones interbedded with less permeable shale and mudstone. The thickness of the aquifer, approximately 3,500 feet, increases towards the center of the San Juan Basin. The occurrence of ground water is mainly controlled by the distribution of sandstone in the formations. Sandstone distribution is the result of original depositional extent plus any post-depositional modifications such as erosion and structural deformations.

Recharge of the Unita-Animas aquifer in the San Juan Basin originates from the northeastern portion of the basin in Colorado where the aquifer formations are shallower and receive precipitation and surface water through infiltration. The aquifers beneath the Unita-Animas Aquifer are the Mesa Verde, Dakota-Glen Canyon, and the Coconino-DeChelly aquifers.

The Unita-Animas Aquifer contains fresh to moderately saline water. Dissolved solids concentrations generally increase along the groundwater flow path. Ground water quality is generally fair to poor. In most places, the total dissolved solids content exceeds 1,000 mg/L and can range from 500 to 4,000 mg/L. Water is hard to very hard with the actual chemical composition dependent upon the location. Calcium or sodium is the predominate cation, and bicarbonate or sulfate the predominate anion. Ground water yields are generally less than 20 gallons per minute (USGS 2001).

Specific conductance of water from the San Jose Formation ranges from 320 to 5,000  $\mu$ mhos, averaging 2,000  $\mu$ mhos (Stone 1983). Transmissivity data for the San Jose Formation is minimal. Brimhall (1973) reported a specific capacity of 0.23 gallons per minute/foot for the Cube Member of the San Jose Formation. Stone et al (1983) reported values of 40 to 120 feet squared per day from two (2) aquifer tests. The reported discharge from 46 water wells completed in the San Jose Formation ranged from 0.15 to 61 gallons per minute, with a mean of five (5) gallons per minute. Most of these wells produce water for domestic and livestock use (Stone 1983).

The San Jose Formation is a very suitable unit for recharge from precipitation due to the sandy, high permeable soils that readily absorb precipitation. However, the low annual precipitation, relatively high transportation rates, and deep dissections of the San Jose Formation within the Bear Canyon Unit local, all tend to reduce the recharge effectiveness from precipitation.

#### Site Specific Information

<u>Surface Hydrology:</u> The proposed Bear Canyon Unit 6-14 well is located approximately 3.5 miles north, northwest of the Continental Divide. The well location is on a moderate east-facing piñon-juniper slope. Numerous shallow, intermittent drainages traverse the well pad area. They drain to the east into a tributary of Bear Canyon, approximately 1,000 feet to the southeast. Bear Canyon flows to the north into the upper reaches of Tapicito Creek (Canyon), approximately two (2) miles to the north, northwest of the proposed well location.

First Water Bearing Formation: San Jose, Tertiary

Formation Thickness: Approximately 2,700 feet

**Underlying Formation:** Nacimiento, Tertiary

Estimated Depth to Ground Water: The closest water wells are approximately 4,300 feet to the east (SJ-3489) and approximately 4,400 feet to the northwest (SJ-00419). The well to the east was proposed to be drilled to a 600-foot depth. No Driller's Well Record is on file with the New Mexico Office of the State Engineer. However, the water well owner states that depth to water is 128 feet in this well. The well to the northwest was originally completed as an oil and gas well. It was plugged-back to 2,500 feet as a water well in 1997. Water depth in this well is unknown. A third water well is listed in the Office of the State Engineer's database (¡Waters) in T. 26N., R. 02W. Section 22 SE½SE½NW½. The depth to water in this well is listed at 15 feet. However, this well was drilled in 1957 and given its topographic location this water depth is questionable. No other water well depths within Township 26 North, Range 02 West are listed as shallower than 150 feet. Therefore, water depth in the proposed Bear Canyon 6-14 well location is estimated at greater than 100 feet.

Stockpiled top soil will be on the east side of the well pad. This excavated topsoil material will not be within 300 feet of a flowing water course or within 200 feet of any other watercourse.

#### References

Allen, Erin. Undated. <u>Colorado Plateau Aquifers</u>. <u>http://www.stgeorgeutahrentals.com/zion-national-park.html</u>

Brimhall, R.M. 1973. Ground Water Hydrology of Tertiary Rocks of the San Juan Basin, New Mexico: Four Corners Geological Society.

Personal Communications with Mr. Steve Stevenson. July 2008. Water well owner (SF-3489).

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T. 1983. Hydrogeology and Water Resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6.

- U.S. Department of Agriculture, Forest Service. 2007. Draft Environmental Impact Statement for Surface Management of Gas Leasing and Development. Jicarilla Ranger District, Carson National Forest, Rio Arriba County, New Mexico.
- U.S. Department of the Interior. Bureau of Land Management. 2003. Final Farmington Resource Management Plan and Final Environmental Impact Statement. Farmington Field Office. Farmington, New Mexico.
- U. S. Geological Survey. 2001. Ground Water Atlas of the United States: Arizona, Colorado, New Mexico and Utah, USGS Publication HA 730-C; <a href="http://capp.water.usgs.gov">http://capp.water.usgs.gov</a>

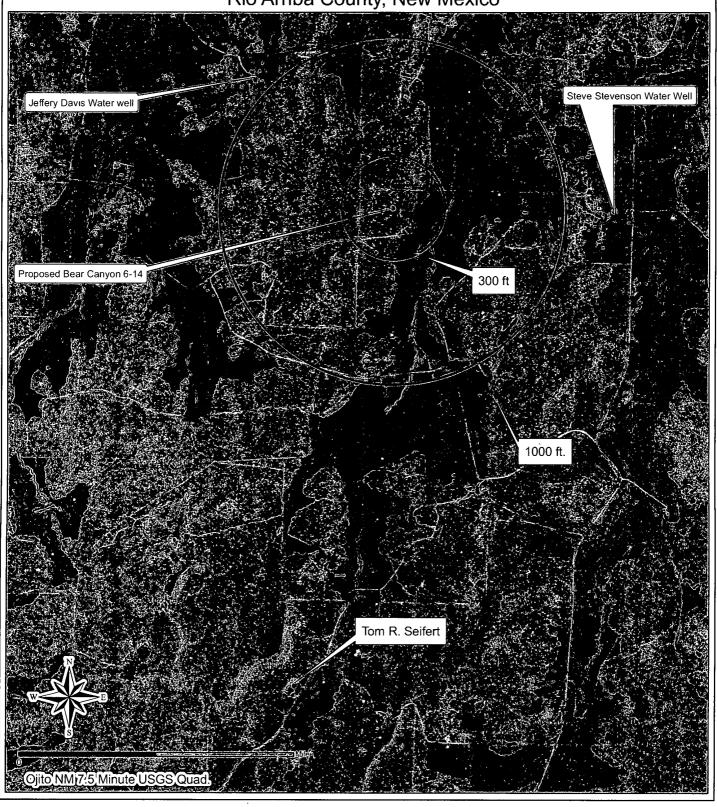
#### FEMA Map - 100 Year Floodplain

The FEMA map for the proposed Bear Canyon Unit 6-14 (Number 350049 0575 B) does not show any 100-year floodplains within the project area. The proposed well location is located approximately 1,000 feet northwest of a tributary to Bear Canyon. The proposed location is not near a wash or watercourse, and is not in a 100-year floodplain as visible on the USGS Ojitos 7.5 Minute Quadrangle.

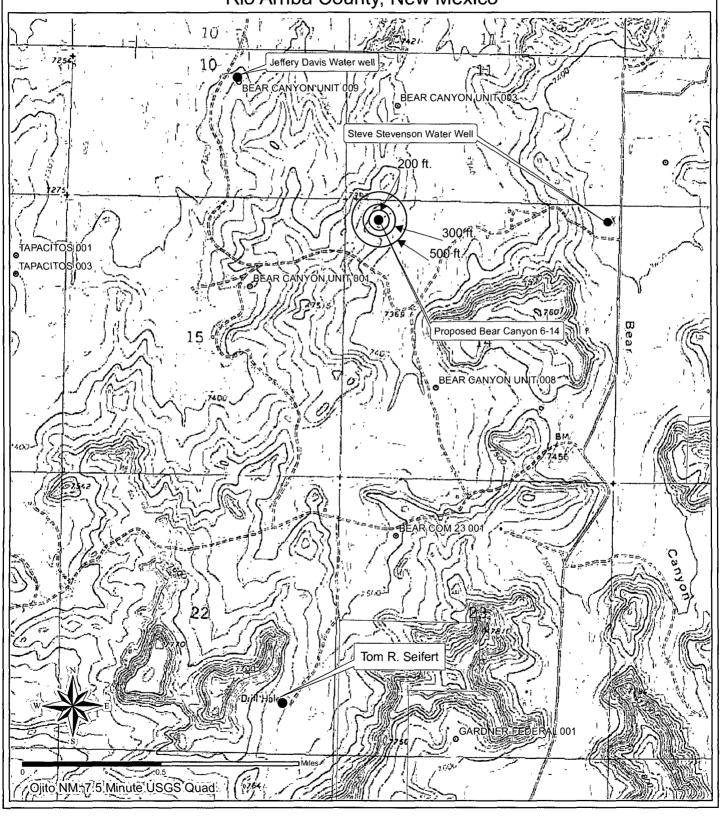
#### **Siting Criteria Compliance Demonstrations**

The proposed Bear Canyon Unit 6-14 well is not located on an unstable area. The well location is not located over a mine, or on a steep hillside. The location of the proposed temporary pit will not be within 300 feet of any continuously flowing watercourse or within 200 feet of any other watercourse, lakebed, sinkhole, or playa lake. The location of the proposed temporary pit will not be within 300 feet of any permanent residence, school, hospital, institution or church. The location of the proposed temporary pit will not be within 500 feet of any private, domestic fresh water well or spring, or within 1,000 feet of any other fresh water well or spring. The location of the proposed temporary pit will not be within any incorporated municipal boundaries or within any defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. The location of the proposed temporary pit will not be within 500 feet of a wetland. Please refer to the attached siting criteria maps for demonstration of compliance with the above listed conditions.

Siting Criteria Map I
Existing Known Water Wells and Springs
EnerVest Operating, LLC
Proposed Bear Canyon Unit No. 6
T26N, R02W, Section 14, NMPM
Rio Arriba County, New Mexico



# Siting Criteria Map II Topographic Features EnerVest Operating, LLC Proposed Bear Canyon Unit No. 6 T26N, R02W, Section 14, NMPM Rio Arriba County, New Mexico





#### Nelson Consulting, Inc.

#### Environmental, Compliance, and GIS Services

July 29, 2008

Certified Return Receipt Requested

Mr. Steve Stevenson HC 74 Lindrith, New Mexico 87029

RE: Enervest Operating, LLC Bear Canyon 6-14 Well

#### Dear Mr. Stevenson:

This letter is in reference to Enervest Operating, LLC proposed Bear Canyon 6-14 well. As an agent for Enervest, we are completing the C-144 Pit Application form for submittal to New Mexico Oil Conservation Division. Part of this application requires specific notification to the landowner concerning disposal of pit waste materials.

For the proposed Bear Canyon 6-14 well, all pit waste materials will be buried in place on the proposed well pad, in compliance with all NMOCD rules and regulations. Please consider this your notification for on-site pit waste burial. If you have any questions please give me a call at (970) 799-3684 or (505) 327-6331 ext. 108. Thank you.

Sincerely,

/s/ Ityse K. Gold

	MAIL REC	CEIPT Coverage Provided)
For delivery informa	ation visit our website	F3 F3 4000 F79/94
Pòstage Certified Fee	\$,42	Postmark
Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required)	2.20	Here
Total Postage & Fees	\$5.32	

ting, LLC

Sineet, Api. No.;
or PO Box No.
City, State, ZIP+4

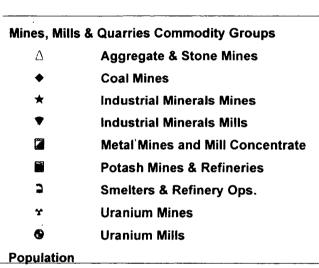
PS Form 3800, June 2002.

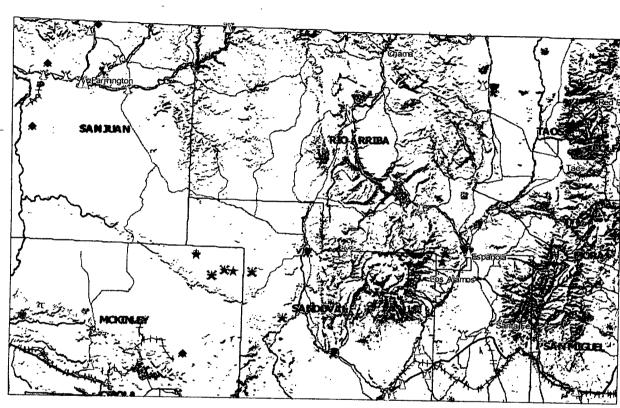
See Reverse for Instructions

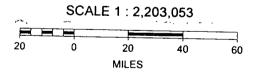
Phone (505) 327-6331 Fax (505) 327-6332

Phone (970) 375-9703 Fax (970) 247-0941

## **MMQonline Public Version**









## T. 26 N., R. 02 W., NMPM

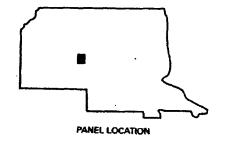
NATIONAL FLOOD INSURANCE PROGRAM

#### FIRM FLOOD INSURANCE RATE MAP

RIO ARRIBA COUNTY, NEW MEXICO UNINCORPORATED AREAS

PANEL 575 OF 1325

(SEE MAP INDEX FOR PANELS NOT PRINTED)



COMMUNITY-PANEL NUMBER

350049 0575 B

EFFECTIVE DATE:

JANUARY 5, 1989

Federal Emergency Management Agency

**Enervest Operating LLC** 1001 Fannin St, Suite 800 Houston, Texas 77002

Mr. Steve Stevenson,

The requirements of the new OCD pit rule states that for all temporary pits, the ground water must be more than 100 ft deep. The water well near your home is located east of our location, the Bear Canyon Well #6-14. Please advise on the depth of your water well so that we can comply on the OCD temporary pit rule.

Thank you,

Drilling Engineer

**Enervest Operating, LLC** 

Fax: 713-615-1462

My well is 128'
Thuch you

7-116-08

### New Mexico Office of the State Engineer POD Reports and Downloads

	NAD27	<b>X</b> :7	Y:	Zone:	ا معنا	Search Radius:
County:			Basin:		Num	nber: Suffix:
Owner N	ame: (Fir	st)	(Last)		_ 0	Non-Domestic ODomestic   Al
P	OD / Surfac	e Data	Report Av	g Depth to Water	Report	Water Column Report

#### WATER COLUMN REPORT 07/10/2008

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet) POD Number Tws Rng Sec q q q Zone Х Y Well Water Column SJ 02963 26N 02W 02 3 3 2 1300 SJ 03102 26N 02W 04 1 4 1 630 210 420 \_\_\_ 26N SJ 02842 02W 10 4 1 1 7603 SJ 02889 \_\_\_\_ 26N 02W 12 3 3 7658 \_\_\_ 26N 02W 14 2 2 2 SJ 03489 600 SJ 02449 \_\_\_\_ 26N 02W 21 4 1 4 350 255 605 SJ 02101 \_\_\_\_ 26N 02W 22 1 4 4 600 150 450 \_\_\_ 26N 02W 22 4 1 4 SJ 03425 1500 SJ 00419 \_\_ 26N 02W 22 4 4 1 160 15 145 \_ 26N SJ 02964 02W 23 1 2 2 342 150 192 500 SJ 02905 26N 02W 24 320 180

Record Count: 11

## New Mexico Office of the State Engineer POD Reports and Downloads

	Township:	26N ∶R	ange: 02W	Sections:		
7	NAD27 X:		Y:	Zone:	hore "; Line	Search Radius:
County:		Basin:			Num	ber: Suffix:
Owner Nam	ne: (First)		(Last	)[	0	Non-Domestic O Domestic O All
POD	) / Surface Data	Report	A	vg Depth to Water	Report	Water Column Report

#### AVERAGE DEPTH OF WATER REPORT 07/10/2008

ın Feet)
Avg
210
350
83
150
180
21 35 8 15

Record Count: 6

Back

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)

Zone

POD Number

Tws Rng Sec qqq

Х

SJ 02101

26N 02W 22 1 4 4

Driller Licence: 733 MO-TE DRILLING, INC.

Driller Name:

Source: Shallow

Drill Start Date: 10/27/1986

Drill Finish Date: 10/30/1986

Log File Date: 11/10/1986 Pump Type:

PCW Received Date: Pipe Discharge Size:

Casing Size: 7

Estimated Yield:

Depth Well: 600

Depth Water: 150

Water	Bearing	Stratifications:
-------	---------	------------------

Top	Bottom
135	150
165	175
180	203
425	430
Top	Bottom

Description Sandstone/Gravel/Conglomerate Sandstone/Gravel/Conglomerate Sandstone/Gravel/Conglomerate

Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Botton
200	220
400	426
480	500
580	600

Back

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)

POD Number SJ 03102

Tws Rng Sec q q q Y

26N 02W 04 1 4 1 Zone

Driller Licence: 1111 STEVENSON, STEVE L.

Driller Name: STEVENSON

Source: Shallow

Drill Start Date: 08/20/2001

Drill Finish Date: 08/30/2001

Log File Date: 03/13/2003 Pump Type:

Water Bearing Stratifications:

PCW Received Date: Pipe Discharge Size:

Casing Size: 5

Estimated Yield: 5

Depth Well: 630

Depth Water: 210

Top Bottom Description 190 233 Sandstone/Gravel/Conglomerate 256 290 Sandstone/Gravel/Conglomerate 310 323 Sandstone/Gravel/Conglomerate

Casing Perforations:

595 610 Top Bottom 240 260 360 400

415

610

390

590

Sandstone/Gravel/Conglomerate

Sandstone/Gravel/Conglomerate

Back

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)

Zone

POD Number

Tws Rng Sec q q q

X. Y

SJ 02964

26N 02W 23 1 2 2

Driller Licence: 1111 STEVENSON, STEVE L.

Driller Name: STEVENSON EXCAVATION

Drill Start Date: 11/04/1999

Source: Shallow Drill Finish Date: 11/07/1999

Log File Date: 11/12/1999 Pump Type:

PCW Received Date: Pipe Discharge Size:

Casing Size: 5 Depth Well: 342 Estimated Yield: 10 Depth Water: 150

Casing Perforations:

Top Bottom 312 332

Back

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest)

Zone

POD Number SJ 00419

Tws Rng Sec q q q

Х

26N 02W 22 4 4 1

Driller Licence:

Driller Name: R&G DRILLING

Drill Start Date:

Log File Date:

Pump Type: SUBMER

Casing Size:

Depth Well: 160

Source: Shallow

Y

Drill Finish Date: 08/31/1957

PCW Received Date: Pipe Discharge Size: Estimated Yield:

Depth Water: 15