## **Pat Sanchez**

From: Pat Sanchez

**Sent:** Friday, December 19, 2008 10:22 AM

To: 'charlie.perrin@state.nm.us'; 'brandon.powell@state.nm.us'

Cc: Vicki Donaghey; Kirt Snyder; Martin Cabrera; Charlie Donahue; Ed Hasely

Subject: Pit closures for Closed Loop flow Back tanks - remedial/work over type

### Mr. Powell and Mr. Perrin;

We will be submitting several work over - flow back tank type closed loop permits for closure. The permits were approved by NMOCD from Mid summer until late fall of 2008. A miscommunication in our internal processing occurred and we did not submit closure reports.

The fluids are typically produced water with spent treatment fluid that have been pumped into the reservoir during operations and were disposed of in our own SWD's typically.

I will be out of the office from December 20th and back in on Monday January 5, 2009 - if you need to follow-up by phone please call my Supervisor Mr. Charlie Donahue at 505.324.4140.

They will be submitted as soon as possible.

Thanks

Patricio W. Sanchez Energen Resources District Engineer- San Juan 2010 Afton Place Farmington, NM 87401 Telephone 505.324.4141 Cell 505.793.7605 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.

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# Pit, Closed-Loop System, Below-Grade Tank, or 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 in	ulividual nit-closed-loon system-helow-erade tank or alternative reauest	
Please be advised that approval of this request does not relieve the operator of li	ability should operations result in pollution of surface water, ground water or the	
environment. Nor does approval relieve the operator of its responsibility to com-	ply with any other applicable governmental authority's rules, regulations or ordinances.	
Operator:Energen Resources	OGRID #:16298	
Address:2010 Afton Place, Farmington, New Mexico 87401		
Facility or well name:Carracas 28 B 2		
API Number:30-039-30168 OCD Permit	Number:	
U/L or Qtr/QtrE Section27 Township32N	Range 4W County:Rio Arriba	
Center of Proposed Design: Latitude36.9061 N Lon	gitude107.24826W 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	
Temporary: Drilling Workover	☐ Drying Pad ☑ Tanks ☐ Haul-off Bins ☐ Other	
Permanent Emergency Cavitation Steel Pit	☐ Lined ☐ Unlined	
Lined Unlined	Liner type: Thicknessmil LLDPE HDPE PVC	
Liner type: Thicknessmil	Other	
Other String-Reinforced	Seams: Welded Factory Other	
Seams: Welded Factory Other	Volume:400bblyd <sup>3</sup>	
Volume: bbl Dimensions: L x W x D	Dimensions: Length_20 ft x Width12 ft_	
Below-grade tank: Subsection I of 19.15.17.11 NMAC	Fencing: Subsection D of 19.15.17.11 NMAC	
Below-grade tank: Subsection I of 19.15.17.11 NMAC   Volume:bbl	Fencing: Subsection D of 19.15.17.11 NMAC  Chain link, six feet in height, two strands of barbed wire at top	
<del></del>	l <del></del>	
Volume:bbl	Chain link, six feet in height, two strands of barbed wire at top	
Volume:bbl  Type of fluid:	Chain link, six feet in height, two strands of barbed wire at top  Four foot height, four strands of barbed wire evenly spaced between one and	
Volume:bbl  Type of fluid:  Tank Construction material:	Chain link, six feet in height, two strands of barbed wire at top Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection	Chain link, six feet in height, two strands of barbed wire at top  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	☐ Chain link, six feet in height, two strands of barbed wire at top ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC ☐ Screen ☐ Netting ☐ Other	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls and liner	Chain link, six feet in height, two strands of barbed wire at top Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC Screen Netting Other Monthly inspections	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls and liner  Visible sidewalls only	Chain link, six feet in height, two strands of barbed wire at top  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC  Screen Netting Other  Monthly inspections  Signs: Subsection C of 19.15.17.11 NMAC	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls and liner  Other  Other	Chain link, six feet in height, two strands of barbed wire at top  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC  Screen Netting Other  Monthly inspections  Signs: Subsection C of 19.15.17.11 NMAC  12'x24', 2' lettering, providing Operator's name, site location, and	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls and liner  Visible sidewalls only  Other	Chain link, six feet in height, two strands of barbed wire at top  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC  Screen Netting Other  Monthly inspections  Signs: Subsection C of 19.15.17.11 NMAC  12'x24', 2' lettering, providing Operator's name, site location, and emergency telephone numbers  Signed in compliance with 19.15.3.103 NMAC  Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to	
Volume:bbl  Type of fluid:  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls and liner  Visible sidewalls only  Other  Liner type: Thickness mil	Chain link, six feet in height, two strands of barbed wire at top  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Netting: Subsection E of 19.15.17.11 NMAC  Screen Netting Other  Monthly inspections  Signs: Subsection C of 19.15.17.11 NMAC  12'x24', 2' lettering, providing Operator's name, site location, and emergency telephone numbers  Signed in compliance with 19.15.3.103 NMAC  Administrative Approvals and Exceptions:	

Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.	
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
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.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)  - 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 search; 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.	☐ Yes ☐ No
<ul> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<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
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 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.    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 19.15.17.10 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 - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	9 NMAC
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC	oumants ara
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the deattached.  Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10 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	19.15.17.9
Previously Approved Design (attach copy of design) API Number:	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC				
nstructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are				
uttached.  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	1			
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 co	asideration)			
	isider action /			
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.	☐ Yes ☐ No			
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ NA			
Ground water is between 50 and 100 feet below the bottom of the buried waste	☐ Yes ☐ No			
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ NA			
Crowd water is more than 100 feet helew the hettern of the huried wests	☐ Yes ☐ No			
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	□ NA			
- Mill Office of the State Engineer - IWATERS database search, 0303, Data obtained from hearby wens				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No			
lake (measured from the ordinary high-water mark).				
- Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	L 165 L 140			
Tissum inspection (conditionally of the proposed site, richar photo, satellite inage				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	☐ Yes ☐ No			
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				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No			
adopted pursuant to NMSA 1978, Section 3-27-3, as amended.				
- Written confirmation or verification from the municipality; Written approval obtained from the municipality				
WW. 1. CO. C				
Within 500 feet of a wetland.	☐ Yes ☐ No			
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site				
Within the area overlying a subsurface mine.	☐ Yes ☐ No			
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	-			
WPd 's assessed blooms				
Within an unstable area.  Engineering measures incorporated into the decien: NM Burgay of Geology & Mineral Persurges: USGS: NM Geological	☐ Yes ☐ No			
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>				
	_			
Within a 100-year floodplain.	☐ Yes ☐ No			
- FEMA map				

Form C-144

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the
closure plan. Please indicate, by a check mark in the box, that the documents are attached.
Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
<ul> <li>☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC</li> <li>☑ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)</li> </ul>
Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC
Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please indentify the facility
or facilities for the disposal of liquids, drilling fluids and drill cuttings.
Disposal Facility Name: _Envirotech,; Carracas SWD #1 Disposal Facility Permit Number:NM-01-0011; API 30-039-24278
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate,
by a check mark in the box, that the documents are attached.
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
<ul> <li>Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)</li> </ul>
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
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):Pat Sanchez Title:District Engineer
Signature:
e-mail address:psanchez@energen.com
OCD Approval: Permit Application (including closure plan) Closure Plan (only)
2/23/11
OCD Approval: Permit Application (including closure plan) Closure Plan (only)  OCD Representative Signature: Providen Comell Approval Date: 7-10-08
OCD Representative Signature: Branchon Someth ) Alghander: 7-10-08
2/23/11
OCD Representative Signature: Branchon Formell
OCD Representative Signature: Branchon Someth
OCD Representative Signature: Branchon Cornell Approval Date: 7-10-08  Title: Enviro Spec OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 99/208  Closure Method:
OCD Representative Signature: Branchon Formell
OCD Representative Signature: Branchon Cornell Approval Date: 7-10-08  Title: Enviro Spec OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 99/208  Closure Method:
OCD Representative Signature: Branchon Formell
OCD Representative Signature: Branchon Formell Approval Date: 7-10-08  Title: ENVINO Space OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 99/208  Closure Method: Alternative Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.
OCD Representative Signature: Branchon Formell Approval Date: 7-10-08  Title: ENTICO Splc. OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 999999999999999999999999999999999999
OCD Representative Signature: Branchon, Someth
OCD Representative Signature: Branchon Formell Approval Date: 7-10-08  Title: EVV: O Splc OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 9/9/208  Closure Method: Alternative Closure Method Alternative Closure Method  If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  PA Proof of Closure Notice  Proof of Deed Notice (if applicable)  Approval Date: 7-10-08  OCD Permit Number: 7-10-08  Approval Date: 7-10-08  Approval Date: 7-10-08
OCD Representative Signature: Branchon Formell Approval Date: 7-10-08  Title: EVV: 0   Spec. OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 9/9   208  Closure Method: Alternative Closure Method Alternative Closure Method If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  PA Proof of Closure Notice Proof of Deed Notice (if applicable)  Plot Plan  Confirmation Sampling Analytical Results
OCD Representative Signature: Browling Bowell
OCD Representative Signature: Browlon Formell Approval Date: 7-10-08  Title: Enviro   Spec. OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 9/9/2008  Closure Method: Alternative Closure Method Alternative Closure Method If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  PA Proof of Closure Notice  Proof of Closure Notice (if applicable)  Plot Plan  Waste Material Sampling Analytical Results  Disposal Facility Name and Permit Number  UN Soil Backfilling and Cover Installation
OCD Representative Signature: Browling Some Source Completion Subsection K of 19.15.17.13 NMAC Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Closure Notice Proof of Deed Notice (if applicable) Confirmation Sampling Analytical Results Waste Material Sampling Analytical Results Soil Backfilling and Cover Installation
OCD Representative Signature: Browlon Someth   2/23/11   Approval Date:   7-10-0-8    Title:   Evico   Space   OCD Permit Number:    Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC   Closure Completion Date:   99   308    Closure Method:   Alternative Closure Method   Alternative Closure Method   If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.    A   Proof of Closure Notice   Proof of Closure Notice   Proof of Closure Notice   Confirmation Sampling Analytical Results   Disposal Facility Name and Permit Number UA   Soil Backfilling and Cover Installation   Soil Backfilling and Cover Installation   Re-vegetation Application Rates and Seeding Technique   Siet Reclamation (Photo Documentation)
OCD Representative Signature:
OCD Representative Signature: Browlon Someth   2/23/11   Approval Date:   7-10-0-8    Title:   Evico   Space   OCD Permit Number:    Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC   Closure Completion Date:   99   308    Closure Method:   Alternative Closure Method   Alternative Closure Method   If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.    A   Proof of Closure Notice   Proof of Closure Notice   Proof of Closure Notice   Confirmation Sampling Analytical Results   Disposal Facility Name and Permit Number UA   Soil Backfilling and Cover Installation   Soil Backfilling and Cover Installation   Re-vegetation Application Rates and Seeding Technique   Siet Reclamation (Photo Documentation)
OCD Representative Signature:
OCD Representative Signature: Branchon Bowell   Approval Date:   7-10-0 8    Title:   EVVICO   Spic   OCD Permit Number:    Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC   Closure Completion Date:   9/9   2008    Closure Method:   On-Site Closure Method   Alternative Closure Method   If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice   Proof of Deed Notice (if applicable)   Plot Plan   Plot
OCD Representative Signature: Browlon   Someth   Approval Date:   7-10-0 8    Title:   Englico   Spec.   OCD Permit Number:    Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC   Closure Completion Date:   99   2008    Closure Method:   On-Site Closure Method   Alternative Closure Method   If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice   Proof of Deed Notice (if applicable)   Proof of Deed Notice (if appli
OCD Representative Signature: Branchon Found Approval Date: 7-10-08  Title: FV:0   5pc. OCD Permit Number:  Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Closure Completion Date: 19/308  Closure Method: Closure Completion Date: 19/308  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice Proof of Deed Notice (if applicable)  Plot Plan  Waste Material Sampling Analytical Results  Waste Material Sampling Analytical Results  Disposal Facility Name and Permit Number Undon Site Receptation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)  On-site Closure Cortification:  I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and
OCD Representative Signature: Browlon   Doweld   Approval Date:   7-10-0-8    Title:   Enviro   Spec   OCD Permit Number:    Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC   Closure Completion Date:   9/9/2008    Closure Method:   On-Site Closure Method   Alternative Closure Method   If different from approved plan, please explain.    Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.    Proof of Deed Notice (if applicable)   Plot Plan   Proof of Deed Notice (if applicable)   Plot Plan   On-Site Soil Backfilling and Cover Installation   Soil Backfilling and Cover Installation   Soil Backfilling and Cover Installation   Site Reclamation (Photo Documentation)   On-site Closure Location: Latitude   Longitude   NAD:   1927   1983    Operator Closure Certification:   Longitude   NAD:   Instructions   Plot Plan   NAD:   Instructions   Plot Plan   P
OCD Representative Signature: Browlon   Someth   Approval Date:   7-10-0 8    Title:   Englico   Spec.   OCD Permit Number:    Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC   Closure Completion Date:   99   2008    Closure Method:   On-Site Closure Method   Alternative Closure Method   If different from approved plan, please explain.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice   Proof of Deed Notice (if applicable)   Proof of Deed Notice (if appli

# **Closed-loop Design Plan:**

Our closed loop system will not entail a drying pad, temporary pit, below grade tank or sump. It will entail an above ground tank suitable for holding the cuttings and fluids for rig operations. The tank will be of sufficient volume to maintain a safe free board between disposal of the liquids and solids from rig operations.

- 1) Fencing is not required for an above ground closed-loop system.
- 2) It will be signed in compliance with 19.15.3.103 NMAC.
- 3) A frac tank will be on location to store fresh water.

# **Closed-loop Operating and Maintenance Plan:**

The closed-loop tank will be operated and maintained; to contain liquids and solids, to aid in the prevention of contamination of fresh water sources, in order to protect public health and the environment. To attain this goal the following steps will be followed:

- 1) The liquids will be vaccumed out and disposed of at the Carracas SWD#1 facility (Disposal API Number 30-039-30168). Solids in the closed-loop tank will be vacuumed out and disposed of at Envirotech (Permit Number NM-01-0011) on a periodic basis to prevent over topping.
- 2) No hazardous waste, miscellaneous solid waste or debris will be discharged into or stored in the tank. Only fluids or cuttings used or generated by rig operations will be placed or stored in the tank.
- 3) The division district office will be notified within 48 hours of the discovery of compromised integrity of the closed-loop tank. Upon the discovery of the compromised tank, repairs will be enacted immediately.
- 4) All of the above operations will be inspected and a log will be signed and dated. During rig operations the inspection will be daily.

# **Closed-loop Closure Plan:**

The closed loop tank will be closed in accordance with 19.15.17.13. This will be done by transporting cuttings and all remaining sludges to Envirotech (Permit Number NM-01-0011) following rig operations. All remaining liquids will be transported and disposed of in the Carracas SWD#1 facility (Disposal API number 30-039-30168). The tanks will be removed from the location as part of the rig move. At time of well abandonment, the site will be reclaimed and re-vegetated to pre-existing conditions when possible.

Oistrict I PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer' DD. Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd. Aztec, NM 87410

01strict IV PO Box 2088. Santa Fe. NM 87504-2088 State of New Mexico-Energy, Minerals & Natural Resources Department

Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION PO Box 2088

Santa Fe, NM 87504-2088 PM 2: 19

\_\_ AMENDED REPORT

RECEINED

WELL LOCATION AND ACREAGE DEDIGATION PLAT

'API Number	'Pool Code 'Pool Name		2
	71629	BASIN FRUITLA	AND COAL
*Property Code	· 'Prop	perty Name	"Well Number
	CARRACAS 28B		. 5
'OGRID No	'Operator Name		*Elevation
162928	ENERGEN RESOURCES CORPORATION		7241
105350		ce Location	

UL or lot no Section Township Range Lot Idn Feet from the North/South line Feet from the East/Hest line RIO NORTH Ε 27 32N 4W 1730 780 WEST ARRIBA 11 Bottom Hole Location If Different From Surface UL or lot no Lat Ian North/South line Feet from the Feet from the East/Hest line RIO **4W** 1300 NORTH В 28 32N 1980 EAST ARRIBA Usint or Intall 12 Dedicated Acres 14 Consolidation Code 3200 Acres - (E/2)

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

