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.

# 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 s  Closure of a pit, closed-loop  Instructions: Please submit of a male it form form (Form Class)	ystem, below-grade tank, or proposed alternative method system, below-grade tank, or proposed alternative method distribution of the control
Please be advised that approval of this request does not relieve the operator of lia	
Operator: Energen Resources Corporation	OGRID #: <u>162928</u>
Address: 2010 Afton Place, Farmington, New Mexico 87401	RCVD JUL 2'08
Facility or well name:C.J. Holder #600S	
API Number: <u>30:045:34753</u>	OCD Permit Number: DI51. 3
U/L or Qtr/Qtr <u>SESE</u> Section <u>30</u> Township <u>29N</u> Range	· · · · · · · · · · · · · · · · · · ·
Center of Proposed Design: Latitude 36.69274° N	Longitude 108.24085° W NAD: □1927 ⊠ 1983
Surface Owner:   Federal   State   Private   Tribal Trust or Indian A	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	☐ Lined ☑ Unlined
Lined Unlined	Liner type: Thicknessmil
Liner type: Thicknessmil	Other
Other String-Reinforced	Seams: Welded Factory Other
Seams: Welded Factory Other	Volume: <u>265</u> bbl <u>165</u> yd³
Volume:bbl Dimensions: L x W x D	Dimensions: Length 40 x Width 12
Below-grade tank: Subsection I of 19.15.17.11 NMAC	Fencing: Subsection D of 19.15.17.11 NMAC
Volume:bbl	Chain link, six feet in height, two strands of barbed wire at top
Type of fluid:	Four foot height, four strands of barbed wire evenly spaced between one and
Tank Construction material:	four feet
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: Thicknessmil	emergency telephone numbers
Other	☑ Signed in compliance with 19.15.3.103 NMAC
Alternative Method:	Administrative Approvals and Exceptions:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration	Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.
of approval	Please check a box if one or more of the following is requested, if not leave
RECEIVED 13	blank: Administrative approval(s): Requests must be submitted to the
	appropriate division district or the Santa Fe Environmental Bureau office for
BECEIVED 3	consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe
(2) III	Environmental Bureau office for consideration of approval.

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 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.  (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.  - 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
Within an unstable area.  - 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 FEMA map	☐ Yes ☐ No
Form C. 144 Oil Conservation Division Press 2 o	

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC						
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are						
attached.						
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC						
Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC						
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC						
Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC						
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC						
Uperating 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						
Closure Flan - 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: or Permit Number:						
Tronously reproved besign (unual copy of using a)						
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						
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						
Ouality 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						
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)						

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					
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						
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						
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other 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 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						
Within an unstable area.  - 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 FEMA map						
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection 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 G 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 in or facilities for the disposal of liquids, drilling fluids and drill cuttings.	identify 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. 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  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 be achieved)  Soil Cover Design - based upon the appropriate requirements of Subsection I 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 t	rue, accurate and complete to	o the best of my knowledge and belief.			
Name (Print): Devin Mills	Title:	Drilling Engineer			
Signature:	Date:	7/2/08			
e-mail address: dmills@energen.com		505-324-4121			
OCD Approval: Permit Application (including closure plan)	Closure Plan (only)				
OCD Representative Signature: B.A. B.A.		Approval Date:			
Title: Enviro (Spec	OCD Permit Nu	ımber;			
Closure Report (required within 60 days of closure completion): S		NMAC ompletion Date:			
Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ ☐ If different from approved plan, please explain.	Alternative Closure Meth	od .			
Closure Report Attachment Checklist: Instructions: Each of the formark 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	Longitude	NAD: [ 1927 [ 1983			
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.					
Name (Print):	Title:				
Signature:	Date:				
e-mail address:	Telephone:				

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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

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

٠,	API Number	r		<sup>3</sup> Pool Co 71629		³ Pool Name FC			
* Property	Code	· <del></del>			, v	6 Well Number # 600S			
<sup>7</sup> OGRID 162928				C.J. HOLDER # 6  **Operator Name **Elication					
					10 Surface	Location			
UL or lot no. P	Section 30	Township 29N	Range 13W	Lot (dn	Feet from the	North/South line SOUTH	Feet from the	East/West line EAST	County SAN JUAN
	<del></del>	<del></del>	"Вс	ttom H	lole Location I	Different Fron	n Surface	<del></del>	
UL or lot ao.	Section	Township	Range	Lot lo	n Feet from the	North/South line	Feet from the	East/West line	Count
12 Dedicated Acre	s Doint o	r infill 14 C	cosolidation	Code 15	Order No.	L			

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.

<sup>16</sup> FD. 3 1/4"			FD. 3 1/4"	FD. 3 1/2" BRASS CAP	17 OPERATOR CERTIFICATION
ALUM. CAP BLM 1984	- 1		ALUM. CAP BLM 1984	BLM 1984	I hereby certify that the information consumed herein is true and complete
DLIVI 1904	• 1		BLW 1964	BLW 1904	to the best of my knowledge and bakef, and that this organization either
	-				owns a working interest or unleased mineral interest in the land including
1				ĺ	the proposed bottom hole location or hat a right to drill this well at this
1					location pursuant to a contract with an owner of such a wineral or working
1					buterest, or to a soluntary proling agreement or a compulsory pooling
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1				<u> </u>	Signature Date
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1	'			45	plat was plotted from field notes of actual surveys
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BY SGL PROP.)		\$89°54'00"E (1			
		(-		HCS LS#9672	

#### **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:

- The liquids will be vaccumed out and disposed of at the Agua Moss Pretty Lady #1 facility (Disposal API Number 30-048-30922). 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) immediately following rig operations. All remaining liquids will be transported and disposed of in the Agua Moss Pretty Lady #1 facility (Disposal API number 30-048-30922). 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.

## **Closed-loop Completion:**

A closed-loop tank will be set on location once drilling operations have ceased. The closed-loop tank will measure 20 ft height by 12 ft diameter (400 BBL) or 20 ft height by 10 ft 6 in diameter (300 BLL). It will be designed, operated, maintained and closed according to the attached Closed-loop Design Plan, Closed-loop Operating and Maintenance Plan, and Closed-loop Closure Plan.

hit and District Engineer Energen Resources

Kirt Snyder 8/28/2009