District I 1 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.

Form C-144 CLEZ July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

2	60 Subr	7
2nd	Subr	nifth

Closed-Loop System Permit or Closure Plan Application

Santa Fe, NM 87505

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Permit Closure Type of action:

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a

Please be advised that approval of this request does not relieve the open	off bins and propose to implement waste removal for closure, please submit a Form C-144. ator of liability should operations result in pollution of surface water, ground water or the		
environment Nor does approval relieve the operator of its responsibilit	ty to comply with any other applicable governmental authority's rules, regulations or ordinances		
Operator: ROSETTA RESOURCES OPERATING LP	OGRID #: <u>239235</u>		
Address: 1200 17 TH ST., SUITE 770, DENVER, CO 80202			
Facility or well name: TSAH TAH SWD #11			
API Number: <u>30-045-34082</u>	OCD Permit Number:		
U/L or Qtr/Qtr N Section 11 Township 24 NORTH . Rar	nge 10 WEST County: SAN JUAN		
Center of Proposed Design: Latitude 36.32392° N Longitude 107.86944° W NAD: ☐1927 ☐ 1983			
Surface Owner: Federal State Private Tribal Trust or Indian Allotment			
2.			
Operation: Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) P&A			
Above Ground Steel Tanks or Haul-off Bins			
3.			
Signs: Subsection C of 19.15.17.11 NMAC	n, and amarganay talanhana numbara		
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers ☐ Signed in compliance with 19.15.3.103 NMAC			
Market in compnance with 13.15.5.105 NiviAc			
 attached. ☑ Design Plan - based upon the appropriate requirements of 1 ☑ Operating and Maintenance Plan - based upon the appropria 	e application. Please indicate, by a check mark in the box, that the documents are 9.15.17.11 NMAC		
Previously Approved Design (attach copy of design) API	Number:		
☐ Previously Approved Operating and Maintenance Plan AP	I Number:		
	Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17 13.D NMAC) posal of liquids, drilling fluids and drill cuttings. Use attachment if more than two		
Disposal Facility Name: ENVIROTECH Disposal Facility P	ermit Number: NM-01-011 (cuttings & mud)		
Disposal Facility Name: <u>BASIN DISPOSAL</u> Disposal Facility	ty Permit Number: NM-01-005 (liquids)		
Will any of the proposed closed-loop system operations and assoc \square Yes (If yes, please provide the information below) \boxtimes No	iated activities occur on or in areas that will not be used for future service and operations?		
Required for impacted areas which will not be used for future served. Soil Backfill and Cover Design Specifications based upon Re-vegetation Plan - based upon the appropriate requirement. Site Reclamation Plan - based upon the appropriate requirement.	on the appropriate requirements of Subsection H of 19.15.17.13 NMAC onts of Subsection I of 19.15.17.13 NMAC		
	RECEIVED TO		

Operator Application Certification: I hereby certify that the information submitted with this application is true, accurately.	rate and complete to the best of my knowledge and belief.		
Name (Print): BRIAN WOOD Title: CONSULTANT Signature:	Date: <u>12-3-08</u>		
e-mail address: <u>brian@permitswest.com</u> Telephone (505) 466-8120	Date. 12-3-00		
OCD Approval: Permit Application (including closure plan) Closure l	Plan (only)		
OCD Representative Signature: Boll Title:	Approval Date:		
Title:	OCD Permit Number:		
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.			
	Closure Completion Date:		
9. Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, dr. two facilities were utilized.			
Disposal Facility Name:	Disposal Facility Permit Number:		
Disposal Facility Name:	Disposal Facility Permit Number:		
Were the closed-loop system operations and associated activities performed on or in areas that <i>will not</i> be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) \sum No			
Required for impacted areas which will not be used for future service and opera Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	tions·		
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure require			
Name (Print):	Title:		
Signature:	Date:		
c-mail address:	Telephone:		

Rosetta Resources Operating LP Tsah Tah SWD #11 Closed Loop System Plan Design, Operation & Maintenance, and Closure Plan

<u>Design</u>

The closed loop system plan (CLSP) uses above ground steel tanks, roll off bins, and overflow-frac tanks suitable for holding the cuttings and fluids from rig operations. These containers will be sufficient in volume to maintain a safe free board between disposal of liquids and solids. There will be no drying pad, temporary pit, below grade tank, or sump. (A document showing a schematic of a typical well pad and closed loop system (CLS) is attached.)

- Signage will comply with 19. 15. 3. 103. NMAC
- Frac tanks to store fresh water will be on location
- No fence is required for this above ground CLSP

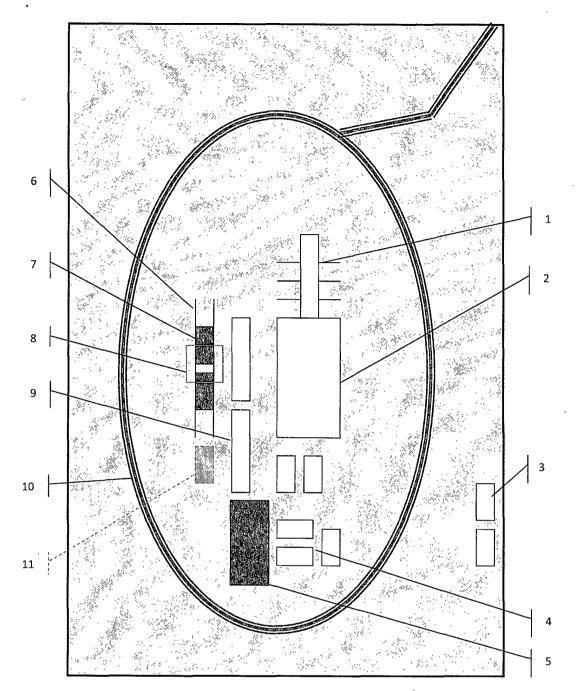
Operation & Maintenance

- 1) The steel above ground tanks will contain liquids and solids to prevent the contamination of fresh water sources.
- 2) Liquids & solids will either be vacuumed out separately or hauled off in roll off bins. Disposal will occur at appropriate OCD licensed facilities on a periodic basis to prevent over topping. Solids and liquids will be trucked to Basin Disposal's facility (NM-01-005) in 3-29n-11w.
- 3) No hazardous waste, miscellaneous solid waste or debris will be discharged into or placed in the tanks. Only fluids or cuttings used or generated by rig operations will be placed or stored in the tanks.
- 4) No waste will be disposed of or buried on location.
- 5) All of the operations will be inspected and a log will be signed daily during rig operations.
- 6) Upon discovery of a compromised closed loop tank, repairs will begin immediately. The OCD district office will be notified within 48 hours of discovery of any compromise.

Closure

- 1) The closed loop tanks will be closed in accordance with 19. 15. 17. 13. NMAC.
- 2) Cuttings and all remaining sludge will be transported to an appropriate OCD licensed facility immediately following completion of rig operations.
- 3) All remaining liquids will be transported to an appropriate OCD licensed facility.
- 4) Tanks will be removed from the location as part of the rig move.
- 5) At time of well plugging & abandonment, the entire well site will be reclaimed and re-vegetated to preexisting conditions when possible.





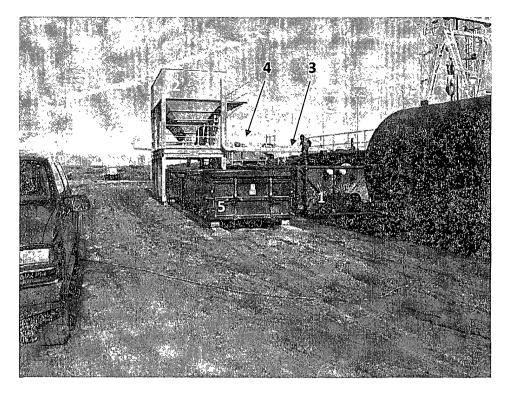
Schematic Closed Loop Drilling Rig*

- 1. Pipe Rack
- 2. Drill Rig
- 3. House Trailers/ Offices
- 4. Generator/Fuel/Storage
- 5. Overflow-Frac Tank
- 6. Skids
- 7. Roll Offs
- 8. Hopper or Centrifuge
- 9. Mud Tanks
- 10. Loop Drive
- 11. Generator (only for use with centrifuge)

*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available



Above: Centrifugal Closed Loop System



Closed Loop Drilling System: Mud tanks to right (1)

Hopper in air to settle out solids (2)

Water return pipe (3)

Shaker between hopper and mud tanks (4)

Roll offs on skids (5)

Flow Chart for Drilling Fluids and Solids

