

Form 3160-5  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: November 30, 2000

DIST. 3

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM - 112957
2. Name of Operator ROSETTA RESOURCES		6. Indian, Allottee or Tribe Name
3a. Address c/o Walsh Engineering & Production Corp. 7415 East Main St. Farmington, NM 87402	3b. Phone No. (include area code) (505) 327-4892	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1945' FNL & 1690' FWL SEC 33 T25N R10W		8. Well Name and No. TSAH TAH 33 #2
		9. API Well No. 30-045-33672
		10. Field and Pool, or Exploratory Area BASIN FRUITLAND COAL
		11. County or Parish, State San Juan, New Mexico

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input checked="" type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, A Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Rosetta Resources fraced the Tсах Tah 33 #2 on 11/28/06 per the attached treatment report.

14. I hereby certify that the foregoing is true and correct	
Name (Printed/Typed) Paul C. Thompson, P.E.	Title Engineer / Agent
Signature <i>Paul C. Thompson</i>	Date December 05, 2006

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operation thereon.	Office	

Title 18 U.C.S. Section 1001 and Title 43 U.C.S. Section 1212, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOC

FARMINGTON FIELD OFFICE

ACCEPTED FOR RECORD

DEC 08 2006

**FRACTURE TREATMENT REPORT**

Operator: Rosetta Resources	Well Name: Tsah Tah 33 #2
Date: 28-Nov-06	
Field: Basin Fruitland Coal	Location: 33/25N/10W County: San Juan State: NM
Stimulation Company: Blue Jet & Key PPS	Supervisor: Paul Thompson

Stage #: 1/1 Fruitland Coal

Sand on location: Design: 2,500# &amp; 55,000# Weight ticket: 2,820# &amp; 55,360# Size/type: 40/70 Arizona &amp; 20/40 Brady

Fluid on location : No. of Tanks: 3 Strap: 20' Amount: 1200 Usable: 1080 bbls

**Perforations:**

Depth:	1432', 1637' - 1650	Total Holes:	42	PBTD:	1859' KB
Shots per foot:	3	EHD:	0.34"		

**Breakdown:**

Acid: 500 gal of 7-1/2% HCl

Balls: None

Pressure: 523 psi

Rate: 3.5 BPM

Formation broke at 750 psi

**Stimulation:**

ATP: 900 psi

AIR: 13.0 BPM

MTP: 1160 psi

MIR: 16.2 BPM

		Sand Stage	Pressure	Rate	BHTP
		pad	1040	13	1647
ISIP: 648	40/70	0.5 ppg	1030	13.1	1622
5 min: 510		1 ppg	967	13.1	1587
10 min: 410		2 ppg	974	13.0	1618
15 min: 311		3 ppg	993	12.0	1654
		4 ppg	881	13.1	1626
		5 ppg	787	13.1	1552
		6 ppg	700	13.0	1511

Job Complete at: 1650 hrs.

Date: 11/28/2006

Start flow back: SI well

Total Fluid Pumped: 797 BBls

Total Sand Pumped: 2,800# &amp; 55,000#

Total Sand on Formation: 57,800#

Total Nitrogen Pumped: None

**Notes:**

All frac fluid was a mixture of fresh and produced water with biocide and contained 20#/1000 gal guar gel, borate crosslinker, surfactant, enzyme and encapsulated breakers. All sand was tagged with Ir 192. The Nolte plot was slightly negative during the pad and 40/70 stages, was positive during the 2 - 4 ppg stages, then declined rapidly during the 4 - 6 ppg stages. Lowered the injection rate during the pad to try to slow down the declining Nolte plot. Ramped the sand concentration up faster than the schedule. Flushed the sand to 1537' with 24.4 bbls of water. The frac gradient based on the ISIP was 0.88 psi/ft. Left the well SI.