Form 3160-3 (April 2004)	FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007					
UNITED STATES DEPARTMENT OF THE I BUREAU OF LAND MAN	5. Lease Serial No. NMNM-112955					
	6. If Indian, Allotee or Tribe Name					
APPLICATION FOR PERMIT TO	DRILL OR REENIER RECEI	VEN	N/A			
la. Type of work:  DRILL  REENTH	ICTON	7 If Unit or CA Agreement, N/A	Name and No.			
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other	Single Zone Multip	ole Zone	8. Lease Name and Well No TSAH TAH 1 #3	). 		
2. Name of Operator ROSETTA RESOURCES OPERATIN	G LP		9. API Well No. 30-045- 2407	9		
3a. Address 1200 17th ST., SUITE 770 DENVER, CO 80202	3b. Phone No. (include area code) (720) 359-9144		10. Field and Pool, or Explora	10. Field and Pool, or Exploratory BASIN FRUITLAND COAL GAS		
4. Location of Well (Report location clearly and in accordance with an	ry State requirements.*)		11. Sec., T. R. M. or Blk. and	Survey or Area		
At surface 1264' FSL & 1477' FWL  At proposed prod. zone SAME			<b>№</b> 1-24N-10W NMPM	If Unit or CA Agreement, Name and No.  N/A  Lease Name and Well No.  TSAH TAH 1 #3  API Well No.  30-045- 3 4079  Field and Pool, or Exploratory  BASIN FRUITLAND COAL GAS  Sec., T. R. M. or Blk. and Survey or Area  1-24N-10W NMPM  County or Parish SAN JUAN  County or Parish SAN JUAN  NM  it dedicated to this well  W4, LOTS 3 & 4 (=321.11 acres)  Bond No. on file  TE WIDE NMB000371  Estimated duration 2 WEEKS		
14. Distance in miles and direction from nearest town or post office*  26 AIR MILES S OF BLOOMFIELD, NM			12. County or Parish SAN JUAN	1		
15. Distance from proposed* location to nearest	16. No. of acres in lease	17. Spacin	g Unit dedicated to this well	<del></del>		
property or lease line, ft. (Also to nearest drig. unit line, if any) 1,477'	1,761.69	SW4,	, S2NW4, LOTS 3 & 4 (=321.11 acres)			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  3,845' (11 #1)		VBIA Bond No. on file  VISTATE WIDE NMB000371				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6.874' GL	22. Approximate date work will sta	rt*	23. Estimated duration 2 WEEKS			
	24. Attachments					
The following, completed in accordance with the requirements of Onshor		ttached to th	is form:			
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	4. Bond to cover t Item 20 above).  Lands, the 5. Operator certific	he operation cation specific info	ns unless covered by an existing	,		
25. Signature	Name (Printed/Typed) BRIAN WOOD		Date 11/17/2006			
Title	PHONE: (505) 466-8120	FA	X: (505) 466-9682			
Approved by (Signature)	Name (Printed/Typed)		Date	1/11/57		
Title AFM	Office FFO					
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	ds legal or equitable title to those righ	its in the sub	oject lease which would entitle t	he applicant to		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	rime for any person knowingly and to any matter within its jurisdiction.	willfully to n	nake to any department or agen	cy of the United		
*(Instructions on page 2)						
$\int$						

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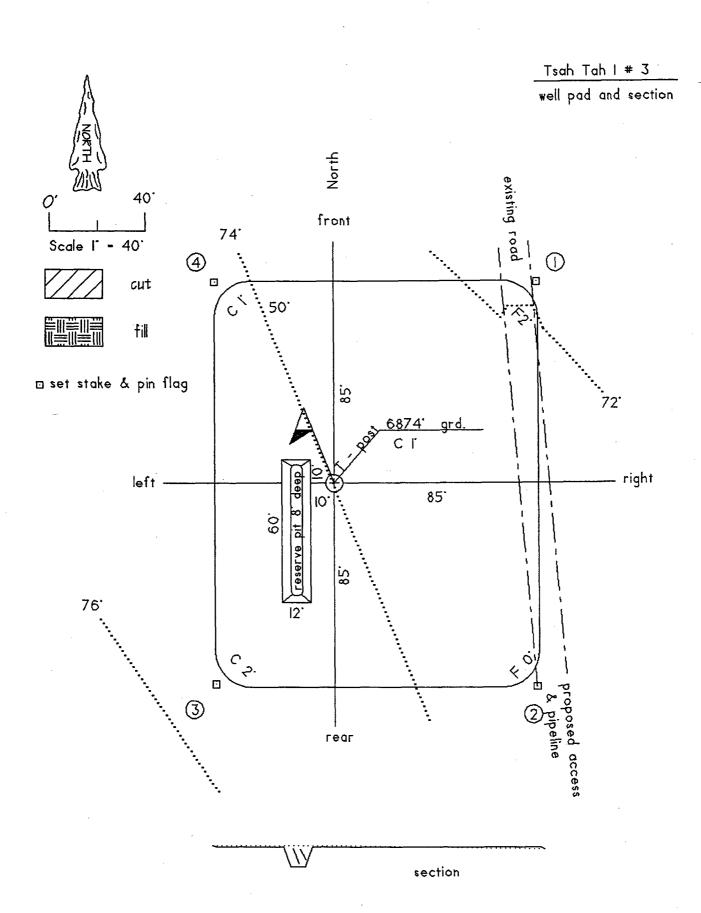
# State of New Mexico Energy. Minerals & Mining Resources Department OL CONSERVATION DIVISION 2040 South Pacheco

Form C<sup>DIST</sup>

						Santa Fe	. NM 8775	<b>95</b> 100 24	PM	12 21	MENDED REPORT
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										Printed No	BRIAN WOOD
										Title	
2665									2663		CONSULTANT
						rom BLM/GLO			131	Date	NOV. 17, 2006
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Submit 3 Copies To Appropriate District	State of New M	exico	Form C-103
Office District I	Energy, Minerals and Nat		May 27, 2004
1625 N. French Dr., Hobbs, NM 88240			WELL API NO. 30-045- 34079
<u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION	N DIVISION	5. Indicate Type of Lease
District III	1220 South St. Francis Dr.		STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 8	7505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505			NMNM-112955
	ICES AND REPORTS ON WELLS	3	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPO			
DIFFERENT RESERVOIR. USE "APPLIC PROPOSALS.)	CATION FOR PERMIT" (FORM C-101) F	OK SUCH	TSAH TAH 1
1. Type of Well: Oil Well	Gas Well Other		8. Well Number #3
2. Name of Operator			9. OGRID Number 239235
ROSETTA RESOURCES INC.  3. Address of Operator			10. Pool name or Wildcat
1200 17 <sup>th</sup> ST., SUITE 770, DENVI	ER. CO 80202		BASIN FRUITLAND COAL GAS
4. Well Location			
Unit Letter: N	1264' FSL & 1477'	FWI.	
Section 1			NMPM SAN JUAN County
	11. Elevation (Show whether DE		
	6,874' GL		
Pik or Below-grade Tank Application Do		•	
Pit type: DRILLING Depth to Groundwa	ater: <u>&gt;100'</u> Distance from nearest fresh w	ater well: <u>&gt; ,000'</u> Dista	ance from nearest surface water: >500'
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume	bbls; Con	struction Material
12. Che	ck Appropriate Box to Indica	te Nature of No	tice, Report or Other Data
NOTICE OF IN	ITENTION TO:	SUE	BSEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON 🔲	REMEDIAL WOR	RK ☐ ALTERING CASING ☐
TEMPORARILY ABANDON	CHANGE PLANS		RILLING OPNS. P AND A
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMEN	NT JOB
OTHER: DRILLING PIT	П	OTHER:	П
	leted operations. (Clearly state all		d give pertinent dates, including estimated date of
starting any proposed work	). SEE RULE 1103. For Multiple	Completions: Attac	ch wellbore diagram of proposed completion or
recompletion.			
I hereby certify that the information	above is true and complete to the b	est of my knowledg	e and belief. I further certify that any pit or below-grade tan ached) alternative OCD-approved plan □.
and been will be constituting of closed acco	rums to minoco guidennes 🖭, a genera	n bermit 🖂 ot an (atta	icheu) anei nauve OCD-approveu pian [1].
SIGNATURE VOICE	TITLE: C	ONSULTANT	DATE: NOVEMBER 17, 2006
Type or print name: BRIAN WOOD	E-mail address: brian@po	ermitswest.com	Telephone No.: (505) 466-8120
For State Use Only	<u> </u>		INSPECTOR, DIST. (22
APPROVED BY:	TITLE	— <del>-</del> <del>-</del>	DATE 1/19/67
Conditions of Approval (if any):	THE TILE		DATE



Rosetta Resources Operating LP Tsah Tah 1 #3 1264' FSL & 1477' FWL Sec. 1, T. 24 N., R. 10 W. San Juan County, New Mexico

## **Drilling Program**

### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<b>GL</b> Depth	KB Depth	<u>Elevation</u>
Nacimiento	0'	5'	+6,874'
Fruitland Coal	1,724'	1,729'	+5,150'
Pictured Cliffs	1,764'	1,769'	+5,110'
Lewis Shale	1,869'	1,874'	+5,005'
Total Depth (TD)	1,900'	1,905'	+4,974'

### 2. NOTABLE ZONES

Oil & Gas Zones	Water Zone	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs		

Water zones will be protected with casing, cement, and fresh water weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

### 3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) BOP and choke manifold system will be installed and tested to 500 psi before drilling surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.



Rosetta Resources Operating LP Tsah Tah 1 #3 1264' FSL & 1477' FWL Sec. 1, T. 24 N., R. 10 W. San Juan County, New Mexico

All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to check mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.

### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Depth Set</u>
8-3/4"	7"	23#	J-55	ST&C	New	120'
6-1/4"	4-1/2"	10.5#	J-55	LSST&C	New	1,900'

Surface casing will be cemented to the surface with  $\approx 35$  cubic feet ( $\approx 30$  sacks) Class B with 1/4 pound per sack cellophane + 2% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter. Thread lock the guide shoe and bottom of float collar only. Will use API casing dope.

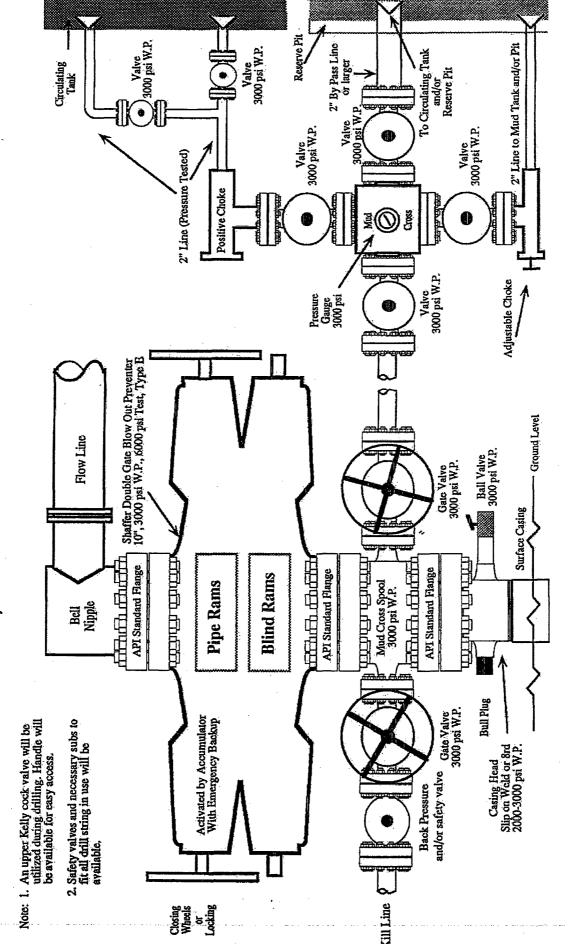
Production casing will be cemented to the surface with  $\approx 348$  cubic feet ( $\approx 295$  sacks) Class B with 1/4 pound per sack cellophane + 2% CaCl<sub>2</sub>. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Five or more centralizers will be used. Volume = 75% excess.

### 5. <u>MUD PROGRAM</u>

A nine pound polymer and fresh water mud system with a viscosity of ≈35 will be used. Sufficient material to maintain mud qualities, control lost circulation, and contain a blowout will be available at the well while drilling.



# 2,000 PSI BOP SYSTEM



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard, 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

Rosetta Resources Operating LP Tsah Tah 1 #3 1264' FSL & 1477' FWL Sec. 1, T. 24 N., R. 10 W. San Juan County, New Mexico

# 6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. DIL/GR log may be run from TD to surface. CNL/FSC log may be run over certain intervals.

### 7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum expected bottom hole pressure will be  $\leq$ 760 psi.

# 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈2 weeks to drill and complete the well.

