Form	3	160	-3
(Apri	1	200	14)

UNITED STATES

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT			 Lease Serial No. NMNM-112957 		
APPLICATION FOR PERMIT TO I	DRILL LOOR REENTER	12 (6. If Indian, Allotee o	Tribe Name	
la. Type of work: DRILL REENTE	RECEIVE 070 FARMING		7 If Unit or CA Agreer		
lb. Type of Well: ☐ Oil Well Gas Well ☐ Other	✓ Single Zone Multip	le Zone	8. Lease Name and Work TSAH TAH 33		
2. Name of Operator ROSETTA RESOURCES INC.			9. API Well No. 30-045- 33	578	
3a. Address 1200 17TH ST., SUITE 770 DENVER, CO 80202	3b. Phone No. (include area code) (720) 359-9144		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL		
4. Location of Well (Report location clearly and in accordance with any	v State requirements.*)		11. Sec., T. R. M. or Blk	and Survey or Area	
At surface 1827' FSL & 1493' FEL At proposed prod. zone SAME			J ^{33-25N-10W} NMPM		
14. Distance in miles and direction from nearest town or post office* 25 AIR MILES SSW OF BLOOMFIELD		-	12. County or Parish SAN JUAN	13. State NM	
15. Distance from proposed* location to nearest	16. No. of acres in lease	17. Spacin	g Unit dedicated to this we	ell	
property or lease line, ft. (Also to nearest drig. unit line, if any) 1,700'	1,600.00	E2 (320		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19. Proposed Depth 1,900'		BIA Bond No. on file STATE WIDE RLB0008313		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,806' GL	22. Approximate date work will start* 03/01/2006		23. Estimated duration 2 WEEKS		
	24. Attachments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be a	ttached to th	nis form:		
 Well plat certified by a registered surveyor. A Drilling Plan. 	4. Bond to cover the ltem 20 above).	he operatio	ons unless covered by an e	existing bond on file (see	
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		specific inf	ormation and/or plans as i	may be required by the	
25. Signature	Name (Printed/Typed) BRIAN WOOD			Date 02/03/2006	
Title	PHONE: (505) 466-8120	FA	X: (505) 466-9682		
Approved by (Signature) Manheiler	Name (Printed/Typed)	·		Date 4/26/86	
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.	ls legal or equitable title to those righ	its in the sul	bject lease which would en	title the applicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c	rime for any person knowingly and	willfully to 1	make to any department or	agency of the United	

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

This action is subject to technical and PEGEBURAL review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".



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

Santa Fe. NM 87505

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT APA Number Pool Code Pool Name 71629 **BASIN FRUITLAND COAL** 30-045 3357°C Property Code Well Number Property Name 35624 4 TSAH TAH 33 OGRID No. **Bevation** Operator Name 239235 6806 ROSETTA RESOURCES, INC. Surface Location Feet from > North/South East/West County UL or Lot \$ec. Top. Feet from> Rge. 33 25 N. 1827 SOUTH 1493 **EAST** SAN JUAN Ю W. Bottom Hole Location If Different From Surface County UL or Lot Tup. Feet from North/South Feet from> Rge Dedication Order No. Joint ? Contalidation 320 NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DWISION N 89'48' W -2638 • 2638 • N 89'48' W • OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Printed Name **BRIAN WOOD** Title CONSULTANT • from BLM/GLO Date FEB. 3, 2006 calculated *** assumed SURVEYOR CERTIFICATION I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the 1493 same is true and correct to the best of my belief. ш Date of Survey 2 <u>ا</u> OTO FARMINGTON HM 12/07/05 RECEIVED Signature and Sea Professiona Surve 1827 NAD 27 CO NEXICO 6 PM 12 UV 833 FEB decimal of degree 36.355393 N Ю7.897429 W 6844 2637 • ERED LAND

N 8958 W

2638" **

N 89 58 W ***

5 8 11 St. 18

Submit 3 Copies To Appropriate District	State of New Mexico Energy, Minerals and Natural Resources		Form C-103	
District I			WELL API NO. 20 045 02 COO	
1625 N. French Dr., Hobbs, NM 88240 District II			WELLAPI NO. 30-045-33578	
1301 W. Grand Ave., Artesia, NM 88210 District III	OIL CONSERVATION D 1220 South St. Francis	1	5. Indicate Type of Lease	
1000 Rio Brazos Rd., Aztec, NM 87410			STATE FEE	
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM	Santa Fe, NM 87505		6. State Oil & Gas Lease No. NMNM-112957	
87505	TEO AND DEDODMO ON WELLO			
i e	CES AND REPORTS ON WELLS ALS TO DRILL OR TO DEEPEN OR PLUG	E .	7. Lease Name or Unit Agreement Name TSAH TAH 33	
DIFFERENT RESERVOIR. USE "APPLIC	ATION FOR PERMIT* (FORM C-101) FOR S		13An 1An 33	
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well 🔀 Other		8. Well Number #4	
0 11	A RESOURCES INC.		9. OGRID Number	
***************************************			10. Pool name or Wildcat	
3. Address of Operator 1200 17Th	A ST., SUITE 7/0 , CO 80202		BASIN FRUITLAND COAL GAS	
4. Well Location	, eo 00202			
	1827 feet from the SOUTH	line and 14	93 feet from the <u>EAST</u> line	
Section 33			NMPM County SAN JUAN	
	11. Elevation (Show whether DR, R.			
Pit or Below-grade Tank Application X or	6,806' GL			
	ter_>100'Distance from nearest fresh wate	> 1000	was from wagnest sunface mater >500°	
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume		struction Material	
12. Check A	ppropriate Box to Indicate Nati	ure of Notice, F	Report of Other Data	
NOTICE OF IN			EQUENT REPORT OF:	
PERFORM REMEDIAL WORK	 1	REMEDIAL WORK		
TEMPORARILY ABANDON		COMMENCE DRIL		
PULL OR ALTER CASING	MOLTIFLE COMPL []	CASING/CEMENT	10B	
OTHER: DRILLING PIT		OTHER:		
			give pertinent dates, including estimated date	
or recompletion.	rk). SEE ROLE 1103. For Muluple	Completions: Au	ach wellbore diagram of proposed completion	
I hereby certify that the information	about de true and complete to the best	of my Irogyilodoo	and holiof. To at a country to help a	
grade tank has been/will-be opnstructed of	closed according to NMOCD guidelines	a general permit 🔲 o	and belief. I further certify that any pit or belower an (attached) alternative OCD-approved plan .	
74 10	~ V			
SIGNATURE L JOUR	TITLE C	ONSULTANT	DATE 2-3-06 (505)	
Type or print name BRIAN WO	OOD E-mail addr	ess: brian@peri	mitswest.com Telephone No. 466-8120	
For State Use Only	\bigcap_{1}		APR 2 g 200c	
APPROVED BY:	TITLE	v on a gas imsp	KCTCA, CISI. (5. DATE DATE	
Conditions of Approval (if any):	11/		DAIL	

Tsah Tah 33 * 4 well pad and section 08. ₹ .65 N 40 dry hole pad front Scale 1 cut 50. fill □ set stake & pin flag . 00 6806" C l' right left -100 .09 .00 06 04 section

Rosetta Resources Inc.
Tsah Tah 33 #4
1827' FSL & 1493' FEL
Sec. 33, T. 25 N., R. 10 W.
San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	GL Depth	KB Depth	Elevation
Nacimiento	000'	5'	+6,806'
Fruitland	1,606'	1,611'	+5,200'
Pictured Cliffs	1,681'	1,686'	+5,125'
Lewis Shale	1,796'	1,801'	+5,010'
Total Depth (TD)*	1,900'	1,905'	+4,906'

2. NOTABLE ZONES

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

Water zones will be protected with casing, cement, and fresh water weighted mud. Fresh water encountered while 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 now 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 out the 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.



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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

Hole Size	<u>O. D.</u>	Pounds/Foot	<u>Grade</u>	<u>Type</u>	<u>Age</u>	GL Setting Depth
8-5/8"	7"	23	K-55	ST&C	New	120'
6-3/4"	4-1/2"	10.5	J-55	M & C	New	1,900'

Surface casing will be cemented to the surface with ≈ 35 cubic feet (≈ 30 sacks) Class B with 1/4 pound per sack Flocele + 2% CaCl₂. 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.

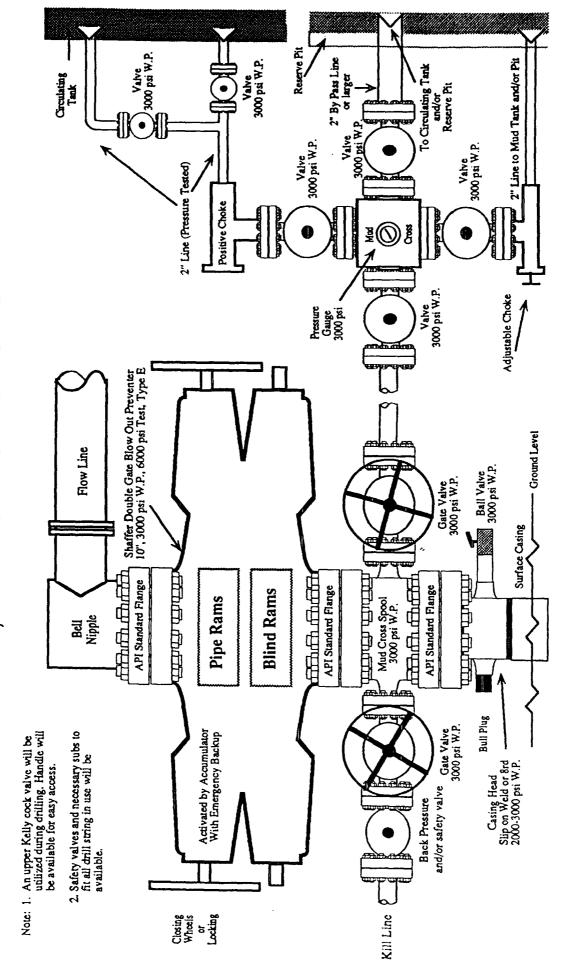
Production casing will be cemented to the surface with \approx 460 cubic feet (\approx 390 sacks) Class B with 1/4 pound per sack Flocele + 2% CaCl₂. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. Five or more centralizers will be used.

5. MUD PROGRAM

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.

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6. CORES, TESTS, & LOGS

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

7. DOWN HOLE CONDITIONS

No abnormal pressure, temperature, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be ≤ 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.

