## RECFIVED

DEC 2 7 2007

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

UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5. Lease Serial No.

Bureau of Land Management NMNM-114380

Farmington Field Office 6 If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. ✓ DRILL REENTER la. Type of work: 8. Lease Name and Well No. lb. Type of Well: Oil Well ✓ Gas Well ✓ Single Zone Multiple Zone WEST BISTI 7 #4 9. API Well No. Name of Operator ROSETTA RESOURCES OPERATING LP 30-045-3b. Phone No. (include area code) 3a. Address 1200 17th ST., SUITE 770 10. Field and Pool, or Exploratory **DENVER, CO 80202** (720) 359-9144 BASIN FRUITLAND COAL GAS 11. Sec., T. R. M. or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 1300' FSL & 1300' FEL At surface 7-25N-13W NMPM At proposed prod. zone SAME 13. State 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* 20 AIR MILES S OF FARMINGTON, NM SAN JUAN NM Distance from proposed\* 17. Spacing Unit dedicated to this well 16. No. of acres in lease location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) 1,300 2,136.17 E2 (320 acres) 20. BLM/BIA Bond No. on file 19. Proposed Depth 18. Distance from proposed location\* to nearest well, drilling, completed, N/A 1,500 BLM STATE WIDE NMB000371 applied for, on this lease, ft. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 6,372' GL 2 WEEKS 05/01/2008 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the authorized officer. 25. Signature Name (Printed/Typed) Date **BRIAN WOOD** 12/23/2007 Title **CONSULTANT** PHONE: (505) 466-8120 FAX: (505) 466-9682 Approved by (Signature) Name (Printed/Typed) Title Office Application approval 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 operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to 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)

# NOTIFY AZTEC OCD 24 HRS.

BLM'S APPROVAL OR ACCEPTANCE OF THIS OF TO CASING & CE DAILING OPERATIONS AUTHORIZED ARE ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS

AUTHORIZATION REQUIRED FOR OPERATIONS

NWOCD

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

ON FEDERAL AND INDIAN LANDS

NOV 2 5 2009

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

DISTRICT II 1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

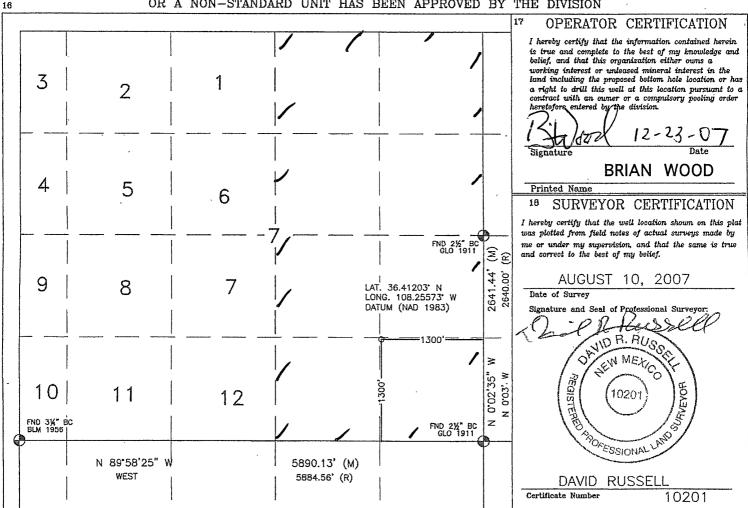
DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code	<sup>3</sup> Pool Name		
30-045-3	345531	71629	BASIN FRUITLAND COA	L	
⁴Property Code		5 P:	operty Name	<sup>6</sup> Well Number	
· 3-7905		· WE	. 4		
7 OGRID No.	<sup>8</sup> Operator Name			<sup>9</sup> Elevation	
239235	ROSETTA RESOURCES OPERATING LP			6372'	
		<sup>10</sup> Sur	face Location		

North/South line UL or lot no. Section Township Range Lot Idn Feet from the Feet from the East/West line County Ρ 7 25N 13W 1300' SOUTH 1300' **EAST** SAN JUAN 11 Bottom Hole Location If Different From Surface UL or lot no. Lot Idn Section Township Range Feet from the North/South line Feet from the East/West line County <sup>12</sup> Dedicated Acres 18 Joint or Infill 14 Consolidation Code 15 Order No. 320

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



Rosetta Resources Operating LP West Bisti 7 #4 1300' FSL & 1300' FEL Sec. 7, T. 25 N., R. 13 W. San Juan County, New Mexico

## **Drilling Program**

#### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento	0'	5'	+6,372'
Kirtland Shale	572'	577'	+5,800'
Fruitland Coal	1,262'	1,267'	+5,110'
Pictured Cliffs	1,322'	1,327'	+5,050'
Lewis Shale	1,397'	1,402'	+4,975'
Total Depth (TD)	1,500'	1,505'	+4,872'

### 2. NOTABLE ZONES

Oil & Gas Zones	<u>Water Zone</u>	<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



Rosetta Resources Operating LP West Bisti 7 #4 1300' FSL & 1300' FEL Sec. 7, T. 25 N., R. 13 W. San Juan County, New Mexico

use when kelly is not in use.

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	1,500'

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  $\approx 271$  cubic feet ( $\approx 230$  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. MUD PROGRAM

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



Rosetta Resources Operating LP West Bisti 7 #4 1300' FSL & 1300' FEL Sec. 7, T. 25 N., R. 13 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  $\leq 600$  psi.

#### 8. OTHER INFORMATION

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



Form 3160-5

RECEIVED

_	UNITED STATES EPARTMENT OF THE SUREAU OF LAND MAN	INTERIOR A		l l	FORM APPROVED OM B No. 1004-0137 Expires: March 31, 2007		
SUNDRY Do not use th	NOTICES AND REP is form for proposals to II. Use Form 3160-3 (A	PORTS ON TO THE	of Land Manag /ELLS Field Off e-enter an proposals.	fice    5. Lease Serie   NMNM	al No. -114380 , Allottee or Tribe Name		
SUBMIT IN TRI	PLICATE- Other instr	uctions on rev	erse side.	7. If Unit of	r CA/Agreement, Name and/or No.		
1. Type of Well Oil Well	Gas Well Other			N/A			
2. Name of Operator	<del>-</del>			8. Well Na WEST	me and No. BISTI 7 #4		
Name of Operator ROSETTA RESOURCES OPERATING LP  3a. Address  3b. Phone No. (include area code)			lude area code)	9. API We 30-045	34553		
1200 17th ST., SUITE 770, DEI		720 359-9144		10. Field an	d Pool, or Exploratory Area		
4. Location of Well (Footage, Sec., 7					BASIN FRUITLAND COAL GAS  11. County or Parish, State		
1300' FSL & 1300' FEL 7-25N	-13W NMPM				UAN COUNTY, NM		
12. CHECK AF	PROPRIATE BOX(ES) TO	INDICATE NAT	URE OF NOTICE	REPORT, OF	ROTHER DATA		
TYPE OF SUBMISSION			TYPE OF ACTION	1			
If the proposal is to deepen dire Attach the Bond under which the following completion of the inv	ctionally or recomplete horizontally the work will be performed or provi- colved operations. If the operation that Abandonment Notices shall be	y, give subsurface loo de the Bond No. on t results in a multiple c	Reclamation Recomplete Temporari Water Disceptions and measured attentions and measured affile with BLM/BIA. Rompletion or recompletion or recomplete the statement of the statement with the statement of the sta	te ily Abandon posal e of any proposed wand true vertical dept tequired subsequent etion in a new interve	Water Shut-Off Well Integrity Other CHANGE BOP  Ork and approximate duration thereof. In the second state of the second state		
cc: BLM, Campbell  14. I hereby certify that the fore Name (Printed/Typed)  BRIAN WOOD	going is true and correct (PHONE 505 46	6-8120) Title	: CONSULTANT		(FAX 505 466-9682		
Signature 5 BBD	1	Dat	e	04/12/2008			
	THIS SPACE FOR I	FEDERAL OF	R STATE OFF	ICE USE			
Approved by Conditions of approval, if any are a	III MCCLes of this notice	does not warrant or	Title A	M	Date 11/19/09		

certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to 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)



Chihuahua Rig #201 BOP Testing Procedure.

Refer to the attached diagram for the bradenhead and BOP configuration. No mud cross will be utilized. The choke manifold will be connected to one side of the bradenhead. Connect the third-party testing company's test truck to the opposite side of the bradenhead.

#### Kill Line Valve:

Connect the test truck to the kill line valve and pressure test the valve to 250 psig low and 1,000 psig high. Test each pressure for 10 minutes.

#### Blind Rams

Close the blind rams and open the bradenhead valve to the choke manifold. Have all three of the choke manifold valves closed. Pressure test the blind rams, casing, bradenhead, and choke manifold to 250 psig low and 1,000 psig high. Test each pressure for 30 minutes. A successful test will not have more than a 10% drop during the 30 minute test period.

If the test is successful proceed with the pipe ram test.

If the test is not successful, open the blind rams and install the test plug at the bottom of the bradenhead (the test plug seal is below the two valves on the bradenhead). Close the bradenhead valve to the choke manifold. Pressure test the blind rams and bradenhead to 250 psig low and 1,000 psig high. Open the bradenhead valve to the choke manifold and repeat the test. If theses test fail with no obvious leaks at either the blind rams or the choke manifold, remove the test plug and run a 7" packer into the first joint of casing and repeat both tests. Use caution when pulling the test plug if pressure is trapped below the plug. Recommend closing the pipe rams and opening the bradenhead valve to the choke manifold before trying to pull the test plug.

#### Pipe Rams:

Install the TIW valve on the bottom of one joint of drill pipe. Run the one joint into the well and close the pipe rams. Chain down the joint of drill pipe but leave the top of the pipe open. With the bradenhead valve open and the test truck still connected to the other side of the bradenhead, test the pipe rams to 250 psig low and 1,000 psig high. Hold each pressure for 30 min with no more than a 10% drop during the test period.

#### Upper Kelly Cock:

Install the TTW valve to the bottom of the Kelly. Install the test truck to the TTW Valve. With the TTW valve closed, pressure test the TTW valve to 250 psig low and 1,000 psig high for 10 minutes. Open and the TTW valve and close the upper Kelly cock. Pressure test the Kelly and upper Kelly cock to 250 psig low and 1,000 psig high. Hold each pressure for 10 minutes with 0% drop during the test.

## "2M" BLOWOUT PREVENTER SYSTEM

