Form 3160-3 (April 2004)



MAR 1 8 2008

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

UNITED STATES DEPARTMENT OF THE INTERIOR of Land Management BUREAU OF LAND MANAGEMENThington Field Office

Lease Serial No.

111111111-114300					
6.	If Indian,	Allotee	or Tribe N	Jame	

APPLICATION FOR PERMIT TO	N/A					
la. Type of work: DRILL REENTE		7. If Unit or CA Agreement, Name and No. N/A				
lb. Type of Well: Oil Well Gas Well Other	√ Sin	gle Zone Multip	le Zone	8. Lease Name and WEST BISTI		
2. Name of Operator ROSETTA RESOURCES OPERATING	G LP			9. API Well No. 30-045- 34659		
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 GAS			
4. Location of Well (Report location clearly and in accordance with an At surface 1495' FSL & 1965' FWL At proposed prod. zone SAME	y State requireme	nts.*)		11. Sec., T. R. M. or Blk. and Survey or Area 11. Sec., T. R. M. or Blk. and Survey or Area		
14. Distance in miles and direction from nearest town or post office* 21 AIR MILES S OF FARMINGTON, NM				12. County or Parish SAN JUAN	13. State NM	,
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,495' 16. No. of acres in lease 2,136.17				cing Unit dedicated to this well PCUD NOV 9 '09 ts 1-12 (394.60 acres) IL COMS. DIV.		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,641' (18 #4)	19. Proposed 1,500'	Depth		BIA Bond No. on file STATE WIDE NMI	3000371	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,432' GL This action is subject to technical and	22. Approxim	nate date work will star 06/21/2008	t*	23. Estimated duration 2 WEEKS	on	
procedural review pursuant to 43 CFR 3165 3 and appeal pursuant to 43 CFR 3165 4 The following, completed in accordance with the requirements of Onshor	24. Attac		ttached to th	SUBJECT	OPERATIONS AUTHORIZE TO COMPLIANCE WITH A REQUIREMENTS".	ED ARE TTACHED
1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).						
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Serfice Office).	Lands, the	Operator certific Such other site authorized office	specific info	ormation and/or plans as	s may be required by the	
25. Signature		(Printed/Typed) BRIAN WOOD			Date 03/14/2008	
itle CONSULTANT	PHONE	E: (505) 466-8120	FAX	K: (505) 466-9682		

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.

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

Name (Printed/Typed)

*(Instructions on page 2)

conduct operations thereon.

Approved by (Signature

Title

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.

NOTIFY AZTEC CCD 24 HRS.

BENDEM ROVAL OR ACCEPTANCE OF THIS OF THE LESSEE AND OFFICE FROM OBTAINING ANY OTHER AUTHORIZATION AUTHORIZATION REQUIRED FOR OPERATIONS

ON FEDERAL AND INDIAN LANDS

NOV 1 3 2009 殸

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

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

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

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 MAR 1 8 2008

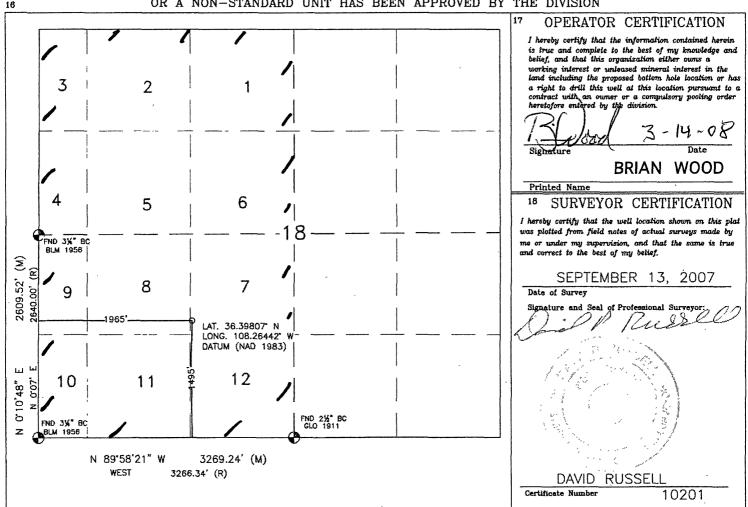
☐ AMENDED REPORT

		WELL	LOCATION	AND	ACREAGE	DEDICATION ASPIATENT	
	4PI Number 30-045-3	34659	*Pool Code 71629		•	*Pool Name BASIN FRUITLAND COAL	
ſ	⁴ Property Code			5 Pro	perty Name		⁶ Well Number
-	37729	•	•	WEST	r bisti 18		•3
	OGRID No.				* Elevation		
	239235				6432		

Santa Fe, NM 87505

¹⁰ Surface Location UL or lot no. Section Townshir Range Lot Idn Feet from the North/South line East/West line Feet from the County 1495 SOUTH 1965 K 18 25N 13W WEST SAN JUAN ¹¹ Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Feet from the North/South line Feet from the East/West line Range County 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 394.60

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 18 #3 1495' FSL & 1965' FWL Sec. 18, T. 25 N., R. 13 W. San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation ·	<u>GL Depth</u>	KB Depth	<u>Elevation</u>
Nacimiento	0'	5'	+6,432'
Kirtland Shale	682'	687'	+5,750'
Fruitland Coal	1,207'	1,212'	+5,225'
Pictured Cliffs	1,262'	1,267'	+5,170'
Lewis Shale	1,432'	1,437'	+5,000'
Total Depth (TD)	1,500'	1,505'	+4,932'

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



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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 ≈ 35 cubic feet (≈ 30 sacks) Class B with 1/4 pound per sack cellophane + 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 ≈ 271 cubic feet (≈ 230 sacks) Class B with 1/4 pound per sack cellophane + 2% CaCl₂. 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 ≈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.



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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 surface. CNL/FSC log may be run over certain intervals.

7. DOWN HOLE CONDITIONS

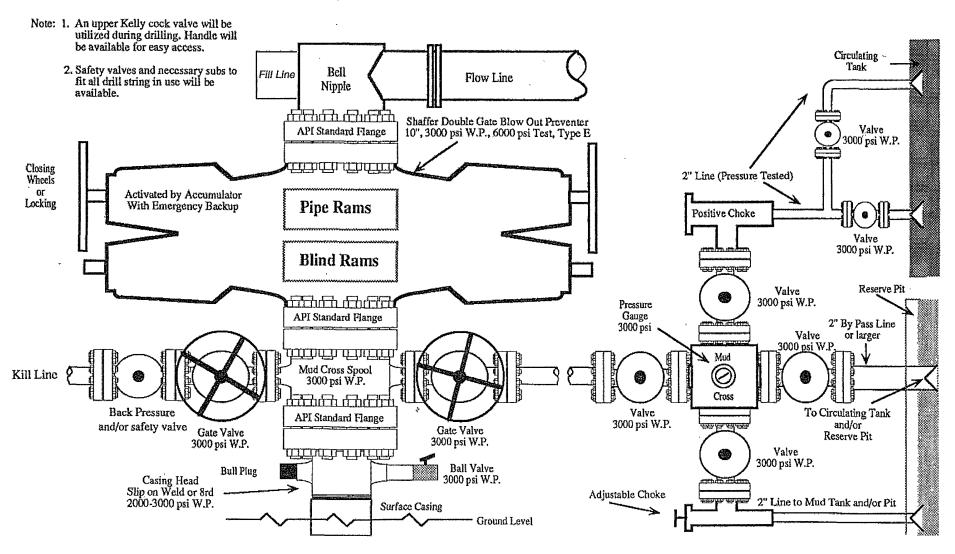
No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum expected bottom hole pressure will be ≤ 600 psi.

8. OTHER INFORMATION

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



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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