Form 3160-3 (April 2004)			OMB No	o. 1004-0137 March 31, 2007	
UNITED STATI DEPARTMENT OF THE BUREAU OF LAND MA	INTERIOR 200 10	AM 11:	5. Lease Serial No.		
APPLICATION FOR PERMIT TO		YED	6. If Indian, Allotee N/A	or Tribe Name	
la. Type of work: DRILL REEN	TER 210 FART	·	7 If Unit or CA Agre N/A	eement, Name and No.	
lb. Type of Well: Oil Well Gas Well Other	✓ Single Zone Multı	ple Zone	8. Lease Name and V		
2. Name of Operator ROSETTA RESOURCES OPERAT	ING LP		9. API Well No. 30-045- 3 4	1279	
3a. Address 1200 17th ST., SUITE 770 DENVER, CO 80202	3b. Phone No. (include area code) (720) 359-9144		10. Field and Pool, or BASIN FRUIT	Exploratory TLAND COAL GAS	
4. Location of Well (Report location clearly and in accordance with	any State requirements *)		11. Sec., T. R. M. or B	Blk. and Survey or Area	
At surface 1980' FSL & 670' FEL At proposed prod. zone SAME			<u></u>	NMPM	
14. Distance in miles and direction from nearest town or post office* 27 AIR MILES S OF BLOOMFIELD, NM			12 County or Parish SAN JUAN	13. State	
15 Distance from proposed*	16 No. of acres in lease	17. Spacin	ng Unit dedicated to this		
location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 670'	320	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'		LM/BIA Bond No. on file LM STATE WIDE NMB000371		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,930' GL	22 Approximate date work will sta 10/01/2007	ırt*	23. Estimated duratio 2 WEEKS	on .	
	24. Attachments				
The following, completed in accordance with the requirements of Ons	hore Oil and Gas Order No.1, shall be a	ttached to the	is form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syste SUPO shall be filed with the appropriate Forest Service Office). 	Item 20 above). m Lands, the 5. Operator certification.	cation specific inf	·	existing bond on file (see	
25. Signature	Name (Printed/Typed) BRIAN WOOD			Date 04/14/2007	
Trile	PHONE: (505) 466-8120	FA	X: (505) 466-9682		
Approved by (Signature) Manker of	Name (Printed/Typed)			Date 3/25/0/	
Title AFM	Office FF	>		, , , , , , , , , , , , , , , , , , ,	
Application approval does not warrant or certify that the applicant he conduct operations thereon. Conditions of approval if any are attached	olds legal or equitable title to those righ	nts in the sul	oject lease which would e	entitle the applicant to	

*(Instructions on page 2)

SEE ATTACHED FOR **CONDITIONS OF APPROVAL**

NOTIFY AZTEC OCD 24 HRS. NMOCD PRIOR TO CASING & CEMENT

APR 0 1 2008

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.

This action is subject to technical and procedural 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".

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 86240

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

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

OIL CONSERVATION DIVISION APR 18 Submit: to Appropriate District Office State Lease - 4 Carrent State - 4 Carrent State

1220 South St. Francis Dr. Santa Fe, NM 87505

RECEIVED AMENDED REPORT BL.

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Númber	¹ API Number ² Pool Code		⁵ Pool Name				
30-045- 3	4279 7	1629	BASIN	FRUITLAND	COAL	GAS	
Property Code	⁶ Property Na					Well Number	
. 36/03	•	TSA	H TAH 11			•4	
OGRID No.	⁶ Operator Name				² Elevation		
239235		ROSETTA RESO	URCES OPERATI	ING LP		6930'	

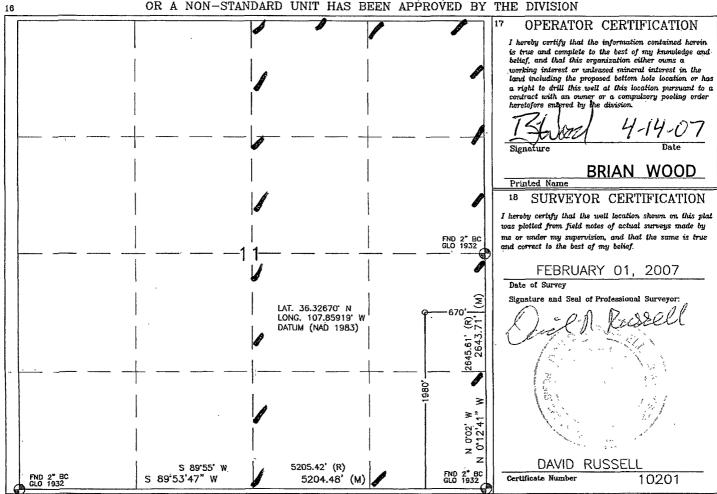
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
ı	11	24N	10W		1980'	SOUTH	670'	EAST	SAN JUAN
	•	-	11				·	•	•

11 Rollom Hole Location If Different From Surface

_				ມບແ	om nore	POCATION D	nuicience ele	our surface		
UL or lot	no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
			•		,		,			Councy
	- 1				i					
			<u> </u>	J- <u></u>		<u></u>			<u> </u>	1
12 Dedicate	d Acres	3		13 Joint or	Infill	14 Consolidation C	ode	15 Order No.		
j				l			·			
ł		2.2	~ <i>(.</i> 1/	1		l	^			
i		3 2	o ℓu			ł	C			
L				L		L				

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



Submit 3 Copies To Appropriate District Office District I	State of New More Energy, Minerals and Nati			Form C-103 May 27, 2004	
1625 N. French Dr., Hobbs, NM 88240 District II			WELL API NO. 30-045-	PFE	
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type	e of Lease	
<u>District III</u> 1000 Rio Brazos Rd , Aztec, NM 87410	1220 South St. Fra		STATE	☐ FEE ☐	
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 8	7505	6. State Oil & 0 NMNM-114376	1	
	TICES AND REPORTS ON WELLS	3	7. Lease Name	or Unit Agreement Name	
	OSALS TO DRILL OR TO DEEPEN OR PL CATION FOR PERMIT" (FORM C-101) FO		TSAH TAH 11		
1. Type of Well: Oil Well	Gas Well Other		8. Well Numbe		
2. Name of Operator ROSETTA RESOURCES OPERA	TING LP		9. OGRID Num		
3. Address of Operator 1200 17 th ST., SUITE 770, DENV	ER. CO 80202		10. Pool name of BASIN FRUITI	or Wildcat LAND COAL GAS	
4. Well Location			2112111111111		
Unit Letter: I	1980' FSL & 670' FE	L			
Section 11		Range 10 W	NMPM SAN	JUAN County	
	11. Elevation (Show whether DR			Profession of the second	
Pit or Below-grade Tank Application D	6,930° GL or Closure [
-	ater: >50' Distance from nearest fresh wat	ter well: <u>>1,000'</u> Dista	nce from nearest surfac	ce water: >500'	
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume	bbls; Con	struction Material		
12. Che	ck Appropriate Box to Indicate	te Nature of No	tice, Report or C	Other Data	
NOTICE OF IN	NTENTION TO:	I SUI	BSEQUENT RI	EPORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WO		ALTERING CASING 🖂	
TEMPORARILY ABANDON	CHANGE PLANS		RILLING OPNS.	P AND A	
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMEN	NT JOB		
OTHER: DRILLING PIT	ū	OTHER:		П	
13. Describe proposed or comp	leted operations. (Clearly state all p	ertinent details, an			
starting any proposed work recompletion.). SEE RULE 1103. For Multiple (Completions: Attac	ch wellbore diagram	of proposed completion or	
				<u> </u>	
•				,	
I hereby certify that the information has been/will be constructed or closed according	above is true and complete to the be rding to NMOCD guidelines 🖳 a general	st of my knowledg permit or an (atta	e and belief. I furthe ched) alternative OCD	er certify that any pit or below-grade tan -approved plan .	ık
SIGNATURE BLOCK	TITLE: CO	ONSULTANT	DATE: A	PRIL 14, 2007	
Type or print name: BRIAN WOOD	E-mail address: brian@per	mitswest.com	Telephone 1	No.: (505) 466-8120	
For State Use Only) De	eputy Oil & d	as Inspector	•	
APPROVED BY:	TITLE	Distric	ct #3	'DATE APR 0 1 2008	
Conditions of Approval (if any):	111111111111111111111111111111111111111	20111			

Rosetta Resources Operating LP Tsah Tah 11 #4 1980' FSL & 670' FEL Sec. 11, T. 24 N., R. 10 W. San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	GL Depth	KB Depth	<u>Elevation</u>
Nacimiento	0'	5'	+6,930'
Fruitland Coal	1,530'	1,535'	+5,400'
Pictured Cliffs	1,780'	1,785'	+5,150'
Lewis Shale	1,855'	1,860'	+5,075'
Total Depth (TD)	1,900'	1,905'	+5,030'

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 use when kelly is not in use.



Rosetta Resources Operating LP Tsah Tah 11 #4 1980' FSL & 670' FEL Sec. 11, 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 ≈ 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 ≈ 348 cubic feet (≈ 295 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.



Rosetta Resources Operating LP Tsah Tah 11 #4 1980' FSL & 670' FEL Sec. 11, 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.



LATITUDE: 36.32670°N ROSETTA RESOURCES OPERATING LP LONGITUDE: 107.85919°W **TSAH TAH 11 #4** DATUM: NAD 83 1980' FSL & 670' FEL LOCATED IN THE NE/4 SE/4 OF SECTION 11, T24N, R10W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6930', NAVD 88 20' 20' 40' FINISHED PAD ELEVATION: 6929.5', NAVD 88 SCALE = 40' 210 LF OF NEW / TO CR #7520 / V ACCESS A' 6 1 C-0.1 F-0.1 C+0.1 82. N 17°38'14" E LAYDOWN 85 C-0.2 C-1.8 WORKING SIDE RESERVE PIT B' 10' C-0.0 85' 60, DEEP ò F+1.1 50' 85' C'_⑤ C-1.6 C-0.8

1 FOOT CONTOUR INTERVAL SHOWN

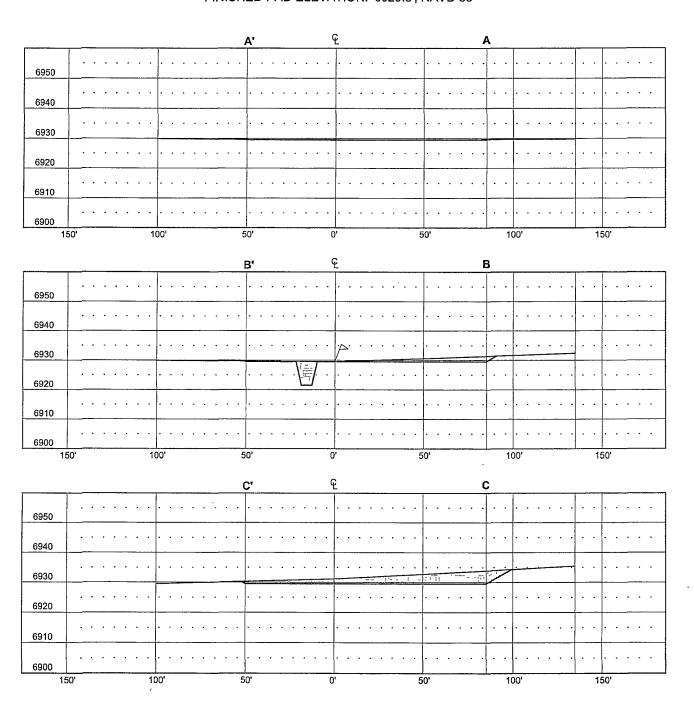
SCALE: 1" = 40' JOB No.: RRO017 DATE: 02/05/07



Russell Surveying 1409 W. Aztec Blvd. #5 Aztec, New Mexico 87410 (505) 334-8637

ROSETTA RESOURCES OPERATING LP

TSAH TAH 11 #4
1980' FŞL & 670' FEL
LOCATED IN THE NE/4 SE/4 OF SECTION 11,
T24N, R10W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6930', NAVD 88
FINISHED PAD ELEVATION: 6929.5', NAVD 88



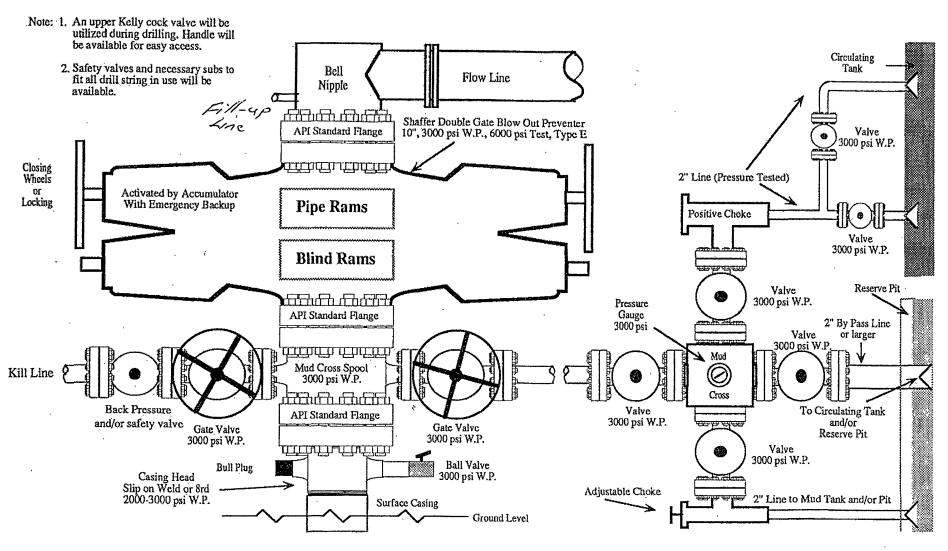
VERT. SCALE: 1" = 30' HORZ. SCALE: 1" = 50' JOB No.: RRO017 DATE: 02/05/07





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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.