

DIST. 3

Form 3160-3
(April 2004)

RECEIVED

MAR 27 2008

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Farmington Field OfficeFORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

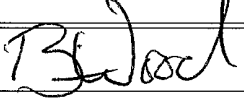
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-62970
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator ROSETTA RESOURCES OPERATING LP		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 1200 17th ST., SUITE 770 DENVER, CO 80202		8. Lease Name and Well No. TSAH TAH 4 #4
3b. Phone No. (include area code) (720) 359-9144		9. API Well No. 30-045-34673
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1400' FSL & 1400' FEL At proposed prod. zone SAME		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL GAS
14. Distance in miles and direction from nearest town or post office* 10 AIR MILES NW OF NAGEEZI, NM		11. Sec., T. R. M. or Blk. and Survey or Area 4-24N-10W NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,240'	16. No. of acres in lease 322.00	17. Spacing Unit dedicated to this well E/2 SE4, S2NE4, and LOTS 1 & 2 (= 322.00 acres)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,304' (oil well 4-32)	19. Proposed Depth 1,900'	20. BLM/BIA Bond No. on file BLM STATE WIDE NMB000371
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,897' GL	22. Approximate date work will start* 04/20/2008	23. Estimated duration 2 WEEKS

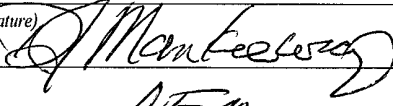
24. Attachments

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 03/23/2008
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Title CONSULTANT PHONE: (505) 466-8120 FAX: (505) 466-9682

Approved by (Signature) 	Name (Printed/Typed)	Date 4/21/08
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Title AFM Office FEO

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)

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".

NMOCD

APR 24 2008

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

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AV

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

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

RECEIVED
MAR 27 2008

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

Bureau of Land Management
Farmington Field Office
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34673	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 37128	⁵ Property Name TSAH TAH 4	⁶ Well Number 4
⁷ GRID No. 239235	⁸ Operator Name ROSETTA RESOURCES OPERATING LP	⁹ Elevation 6897'

¹⁰ Surface Location

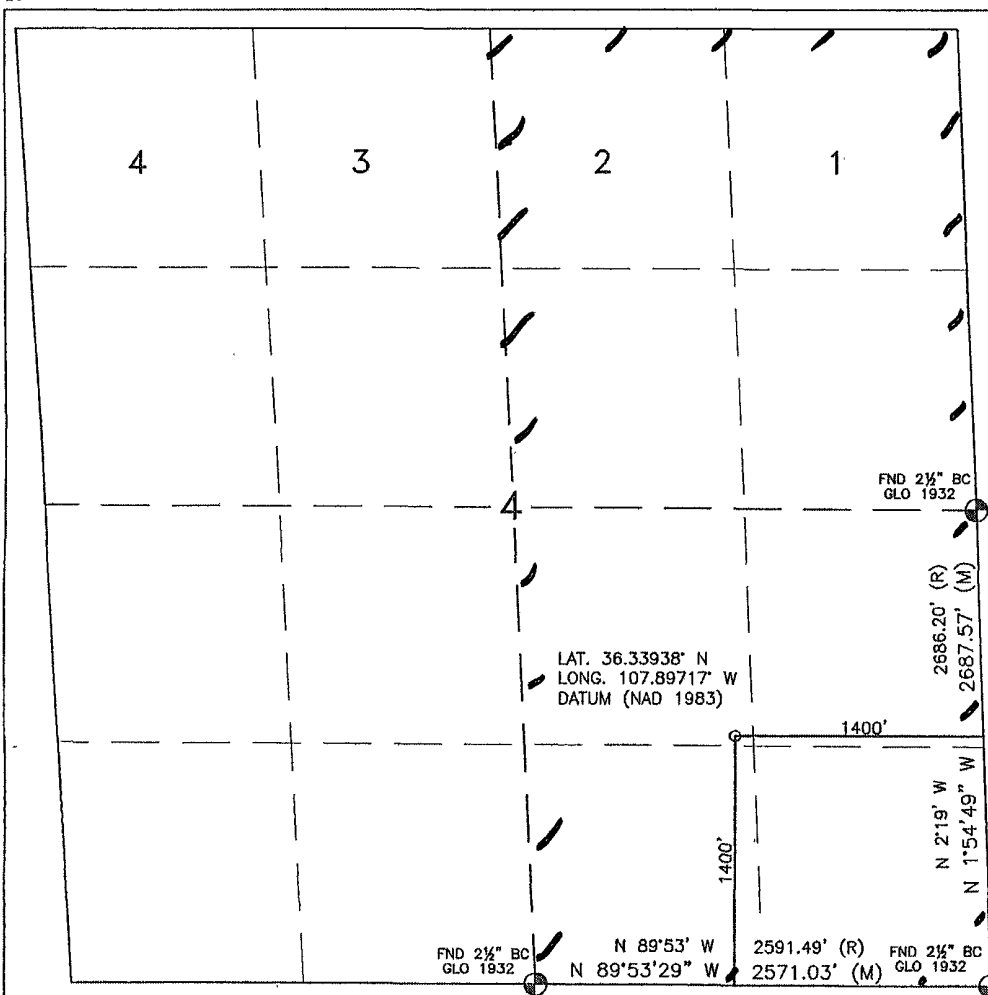
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	4	24N	10W		1400'	SOUTH	1400'	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 322.00			¹³ Joint or Infill .		¹⁴ Consolidation Code .		¹⁵ Order No. .		

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

16



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner or a compulsory pooling order heretofore entered by the division.

Brian Wood 3-23-08
Signature Date

BRIAN WOOD

Printed Name

¹⁸ SURVEYOR CERTIFICATION

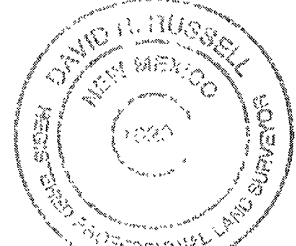
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JANUARY 4, 2008

Date of Survey

Signature and Seal of Professional Surveyor:

David R. Russell



DAVID RUSSELL

Certificate Number 10201

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103

May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-045- <u>34673</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NMNM-62970
7. Lease Name or Unit Agreement Name TSAH TAH 4
8. Well Number #4
9. OGRID Number 239235
10. Pool name or Wildcat BASIN FRUITLAND COAL GAS

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator ROSETTA RESOURCES OPERATING LP	
3. Address of Operator 1200 17 th ST., SUITE 770, DENVER, CO 80202	
4. Well Location Unit Letter: J 1400' FSL & 1400' FEL Section 4 Township 24 N Range 10 W NMPM SAN JUAN County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6,897' GL	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type: <u>DRILLING</u> Depth to Groundwater: <u>>600'</u> Distance from nearest fresh water well: <u>>1,000'</u> Distance from nearest surface water: <u>>200'</u>	
Pit Liner Thickness: <u>12 mil</u> Below-Grade Tank: Volume bbls Construction Material: <u>SYNTHETIC</u>	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: DRILLING PIT <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Brian Wood TITLE: CONSULTANT DATE: MARCH 23, 2008

Type or print name: BRIAN WOOD E-mail address: brian@permitswest.com Telephone No.: (505) 466-8120

For State Use Only

Deputy Oil & Gas Inspector,
District #3

APPROVED BY: [Signature] TITLE: DATE: APR 24 2008

Conditions of Approval (if any):

Rosetta Resources Operating LP
Tsah Tah 4 #4
1400' FSL & 1400' FEL
Sec. 8, T. 24 N., R. 10 W.
San Juan County, New Mexico

PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento	0'	5'	+6,897'
Ojo Alamo sandstone	847'	852'	+6,050'
Fruitland Coal	1,647'	1,652'	+5,250'
Pictured Cliffs	1,667'	1,672'	+5,230'
Total Depth (TD)	1,900'	1,905'	+4,947'

2. NOTABLE ZONES

<u>Oil & Gas Zones</u>	<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 4 #4
1400' FSL & 1400' FEL
Sec. 3, T. 24 N., R. 10 W.
San Juan County, New Mexico

PAGE 2

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	S T & C	New	120'
6-1/4"	4-1/2"	10.5#	J-55	L S S T & 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% CaCl_2 . 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% CaCl_2 . 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 4 #4
1400' FSL & 1400' FEL
Sec. ~~3~~ 8, T. 24 N., R. 10 W.
San Juan County, New Mexico

PAGE 4

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 ≤ 760 psi.

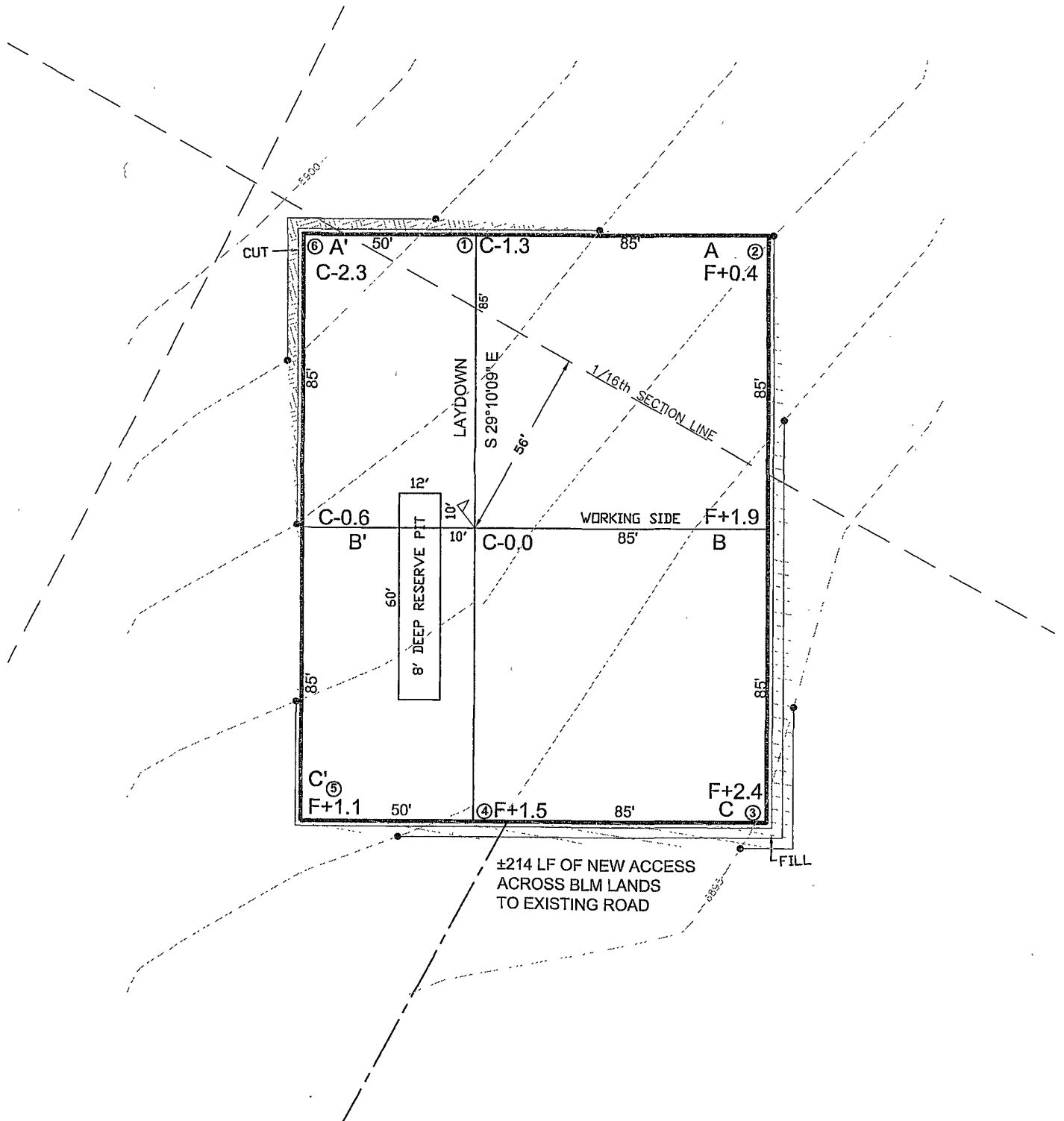
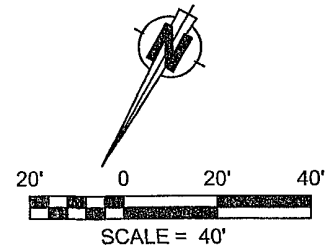
8. OTHER INFORMATION

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

LATITUDE: 36.33938°N
LONGITUDE: 107.89717°W
DATUM: NAD 83

ROSETTA RESOURCES OPERATING LP

TSAH TAH 4 #4
1400' FSL & 1400' FEL
LOCATED IN THE NW/4 SE/4 OF SECTION 4,
T24N, R10W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6897', NAVD 88
FINISHED PAD ELEVATION: 6897.4', NAVD 88



1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 40'
JOB No.: RRO033
DATE: 01/16/08

Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637



ROSETTA RESOURCES OPERATING LP

TSAH TAH 4 #4

1400' FSL & 1400' FEL

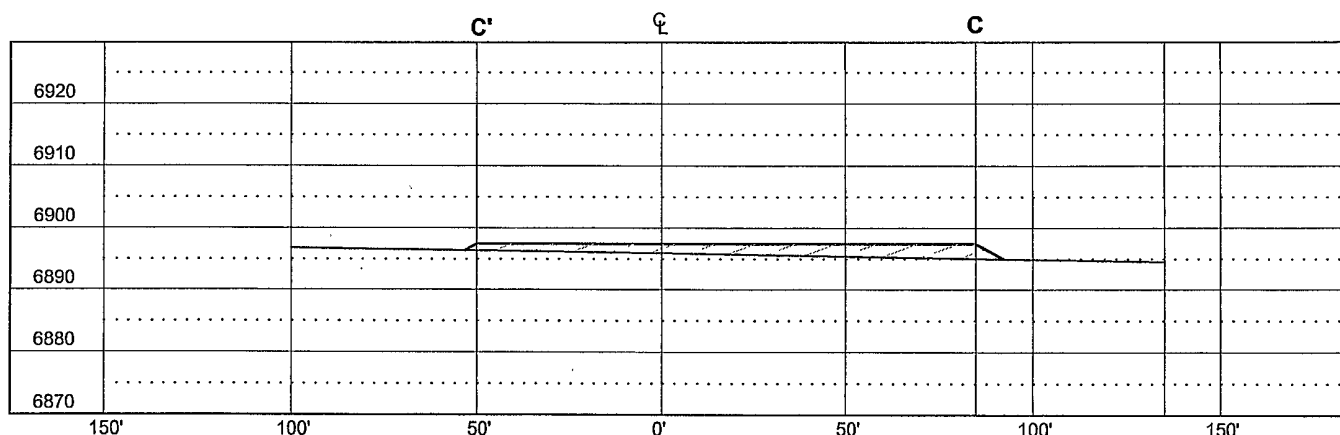
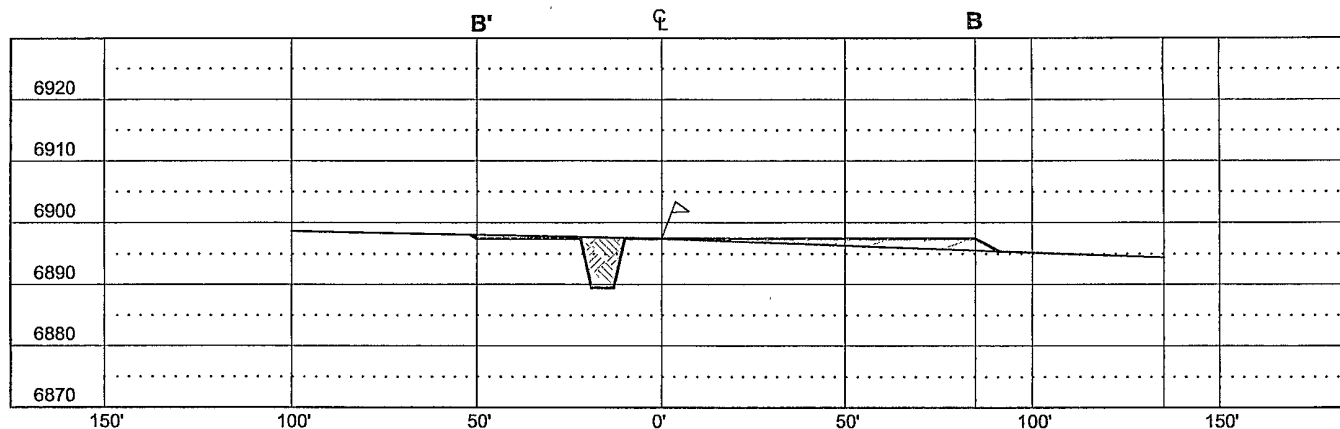
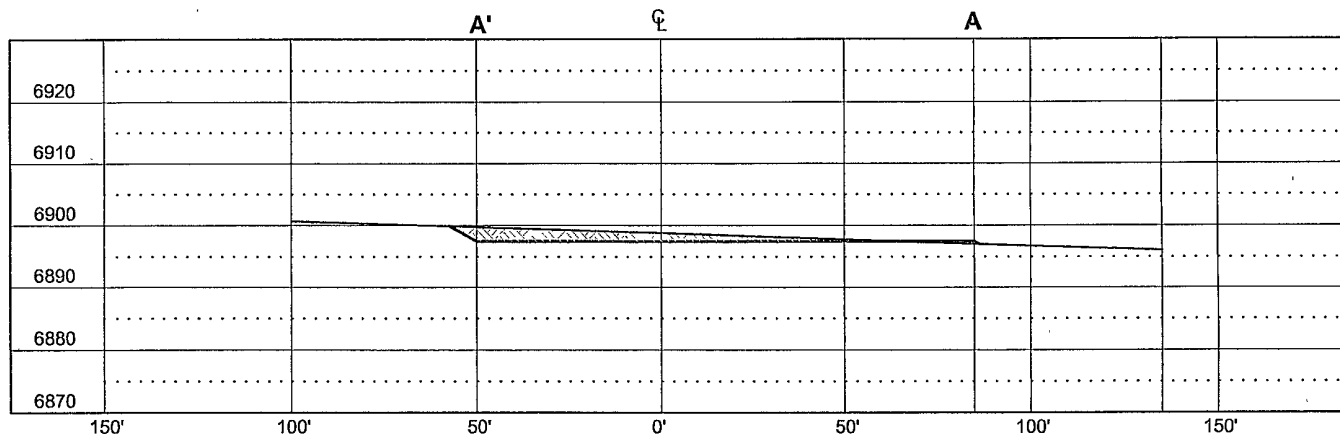
LOCATED IN THE NW/4 SE/4 OF SECTION 4,

T24N, R10W, N.M.P.M.,

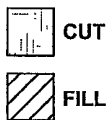
SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 6897', NAVD 88

FINISHED PAD ELEVATION: 6897.4', NAVD 88



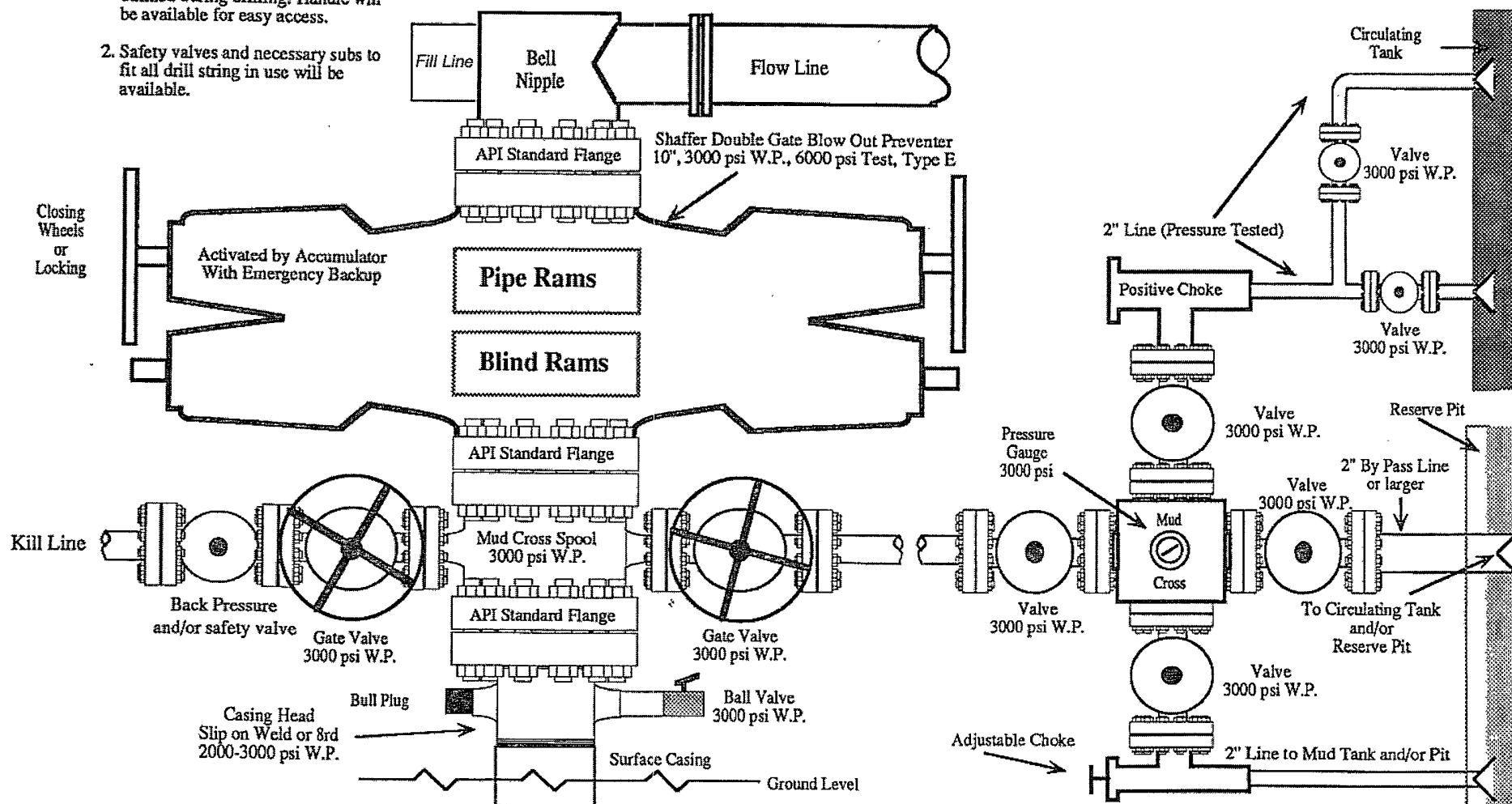
VERT. SCALE: 1" = 30'
 HORZ. SCALE: 1" = 50'
 JOB No.: RRO034
 DATE: 01/15/08



Russell Surveying
 1409 W. Aztec Blvd. #2
 Aztec, New Mexico 87410
 (505) 334-8637

2,000 PSI BOP SYSTEM

- Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.
2. Safety valves and necessary subs to fit all drill string in use will be available.



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.