

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 11 NMNM-114377
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	3b. Phone No. (include area code) (720) 359-9144	8. Lease Name and Well No. TSAH TAH 34 #2
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1805' FNL & 1215' FWL At proposed prod. zone SAME		9. API Well No. 30-045-33998
14. Distance in miles and direction from nearest town or post office* 25 AIR MILES S OF BLOOMFIELD, NM		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL GAS
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 835'	16. No. of acres in lease 160	11. Sec., T. R. M. or Blk. and Survey or Area E 34-25N-10W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19. Proposed Depth 1,900'	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,734' GL	22. Approximate date work will start* 03/01/2007	13. State NM
17. Spacing Unit dedicated to this well W2 320		
20. BLM/BIA Bond No. on file BLM STATE WIDE NMB000371		
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 <i>Brian Wood</i>	Name (Printed/Typed) BRIAN WOOD	Date 10/07/2006
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Title **CONSULTANT** PHONE: (505) 466-8120 FAX: (505) 466-9682

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 8/22/07
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Title AFM	Office FEO	RCVD AUG 23 '07 OIL CONS. DIV.
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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.
PRIOR TO CASING & CEMENT**

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

NMOCD 8-31-07
[Signature]

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

RECEIVED

RCVD AUG 23 '07

ON COUS. DM

¹ API Number: 30-045-		² Pool Code: 71629	³ Pool Name: BASIN FRUITLAND COAL GAS	
⁴ Property Code: 35636	⁵ Property Name: TSAH TAH 34			⁶ Well Number: 2
⁷ OGRIID No. 239235	⁸ Operator Name: ROSETTA RESOURCES OPERATING LP			⁹ Elevation: 6734'

¹⁰ Surface Location

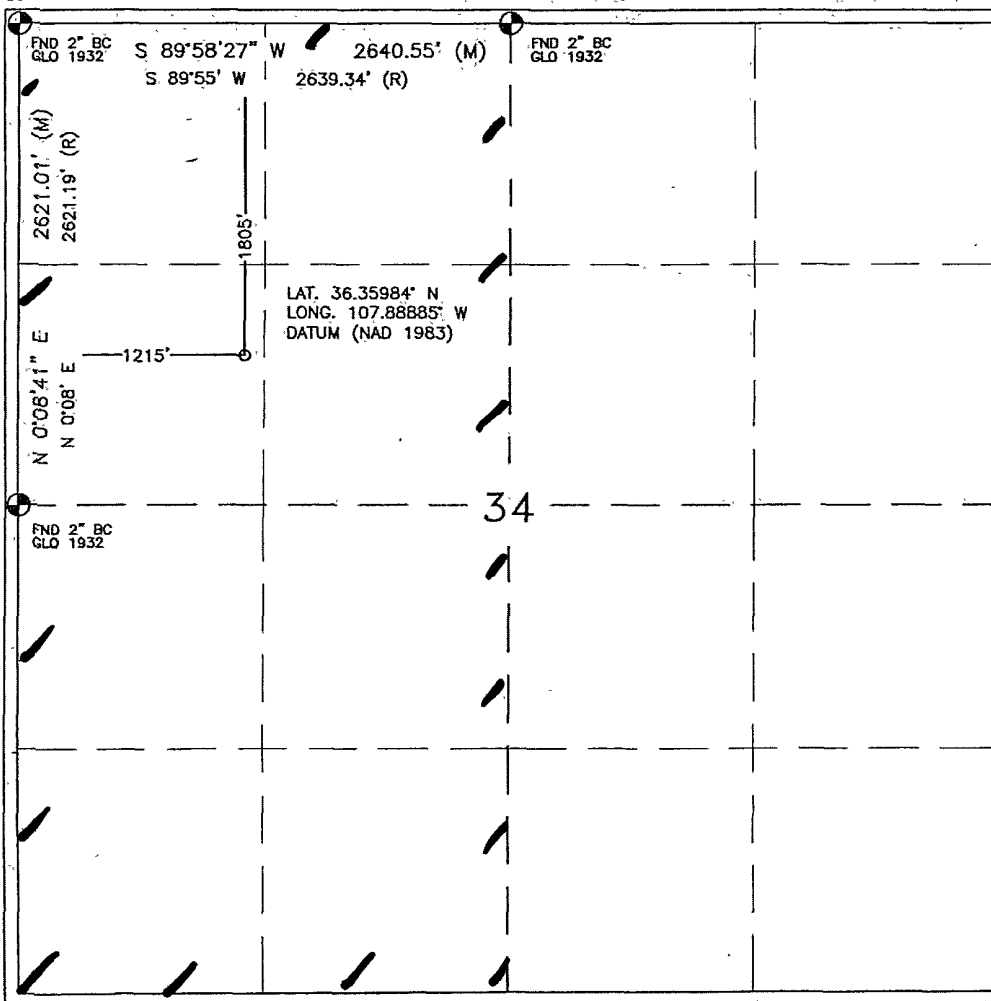
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	34	25N	10W		1805'	NORTH	1215'	WEST	SAN JUAN

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			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		
320			.		C				

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

18



17. OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

B. Wood

Signature

BRIAN WOOD

Printed Name _____

CONSULTANT

Title

OCT. 7, 2006

Date

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.

~~JUNE 14, 2006~~

Date of Survey _____

Signature and Seal of Professional Surveyor

Signature and Seal of Notary Public, Surveyor

David H. Russell

NEW HAMPSHIRE
0201
REGISTERED PROFESSIONAL LAND SURVEYOR
DAVID H. 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-

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. ~~State~~ Oil & Gas Lease No.

NMNM-114377

7. Lease Name or Unit Agreement Name

TSAH TAH 34

8. Well Number #2

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 ☐ Gas Well ☒ Other

2. Name of Operator

ROSETTA RESOURCES INC.

3. Address of Operator

1200 17th ST., SUITE 770, DENVER, CO 80202

4. Well Location

Unit Letter: E

1805' FNL & 1215' FWL

Section 34

Township 25 N

Range 10 W

NMPM

SAN JUAN

County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

6,734' GL

☒ Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type: DRILLING Depth to Groundwater: >100' Distance from nearest fresh water well: >1,500' Distance from nearest surface water: >300'

Pit Liner Thickness:

12 mil

Below-Grade Tank: Volume

bbls:

Construction Material

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPL ☐

OTHER: DRILLING PIT

☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐

P AND A ☐

CASING/CEMENT JOB ☐

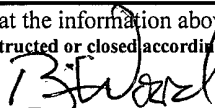
OTHER:

☐

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



TITLE: CONSULTANT

DATE: OCTOBER 7, 2006

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:



TITLE

DATE **AUG 31 2007**

Conditions of Approval (if any):

Rosetta Resources Operating LP
Tsah Tah 34 #2
1805' FNL & 1215' FWL
Sec. 34, T. 25 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'	+6,734'
Fruitland Coal	1,634'	1,639'	+5,100'
Pictured Cliffs	1,644'	1,649'	+5,090'
Lewis Shale	1,734'	1,739'	+5,000'
Total Depth (TD)	1,900'	1,905'	+4,834'

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 34 #2
1805' FNL & 1215' FWL
Sec. 34, T. 25 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 34 #2
1805' FNL & 1215' FWL
Sec. 34, T. 25 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.

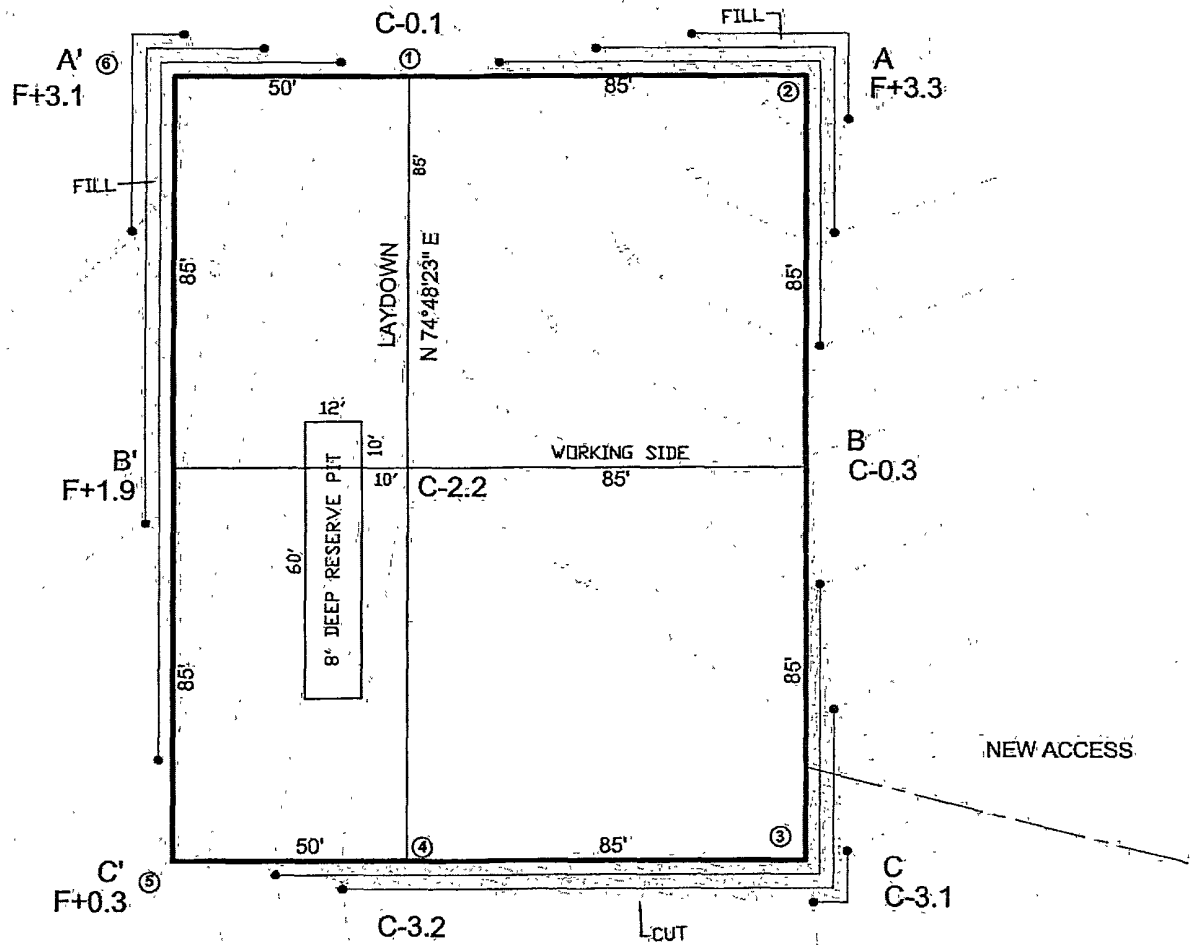
LATITUDE: 36.35984°N
LONGITUDE: 107.88885°W
DATUM: NAD 83

ROSETTA RESOURCES OPERATING LP

TSAH TAH 34 #2
1805' FNL & 1215' FWL
LOCATED IN THE SW/4 NW/4 OF SECTION 34,
T25N, R10W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6734', NAVD 88
FINISHED PAD ELEVATION: 6731.8', NAVD 88



20' 0 20' 40'
SCALE = 40'



1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 40'
JOB No.: RRO006
DATE: 06/26/06



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

ROSETTA RESOURCES OPERATING LP

TSAH.TAH 34 #2

1805' FNL & 1215' FWL

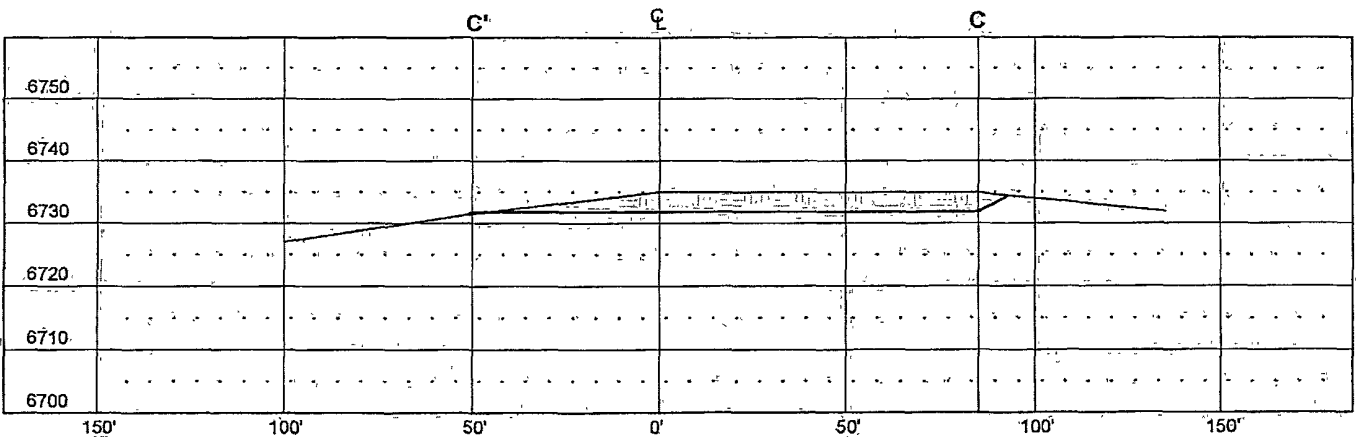
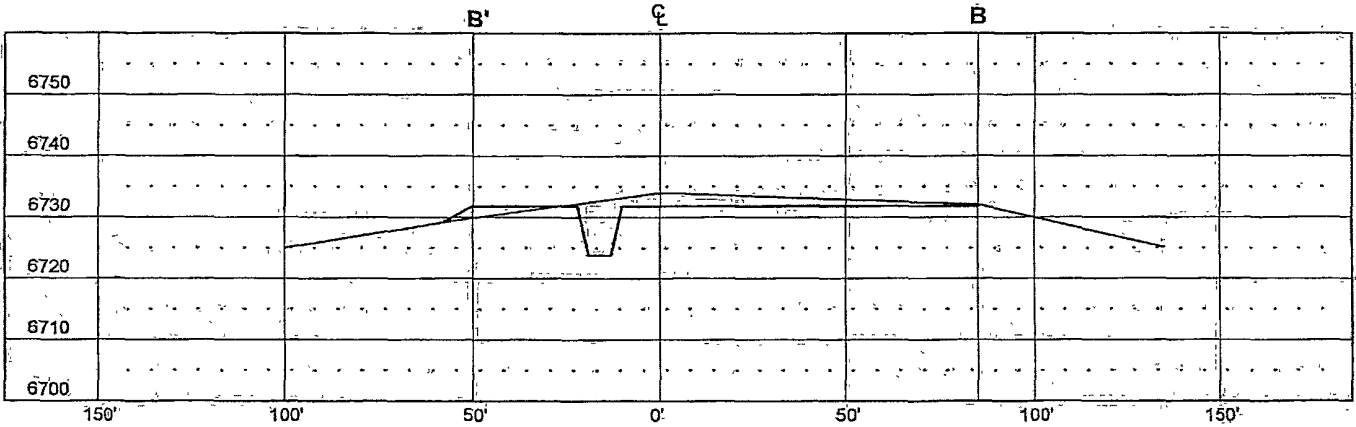
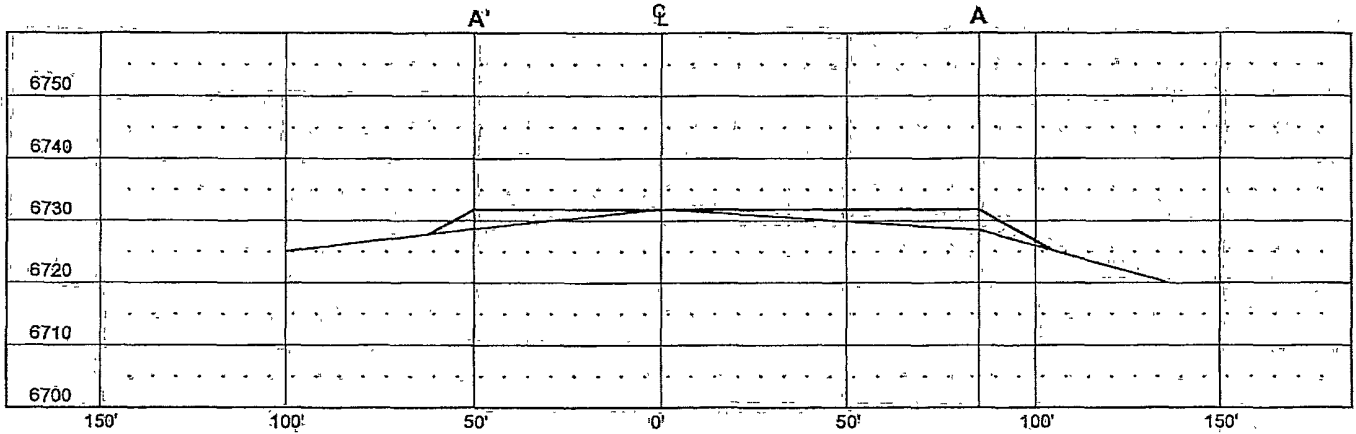
LOCATED IN THE SW/4 NW/4 OF SECTION 34,

T25N, R10W, N.M.P.M.,

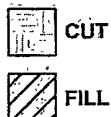
SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 6734', NAVD 88

FINISHED PAD ELEVATION: 6731.8', NAVD 88



VERT. SCALE: 1" = 30'
HORZ. SCALE: 1" = 50'
JOB No.: RRO006
DATE: 06/26/06

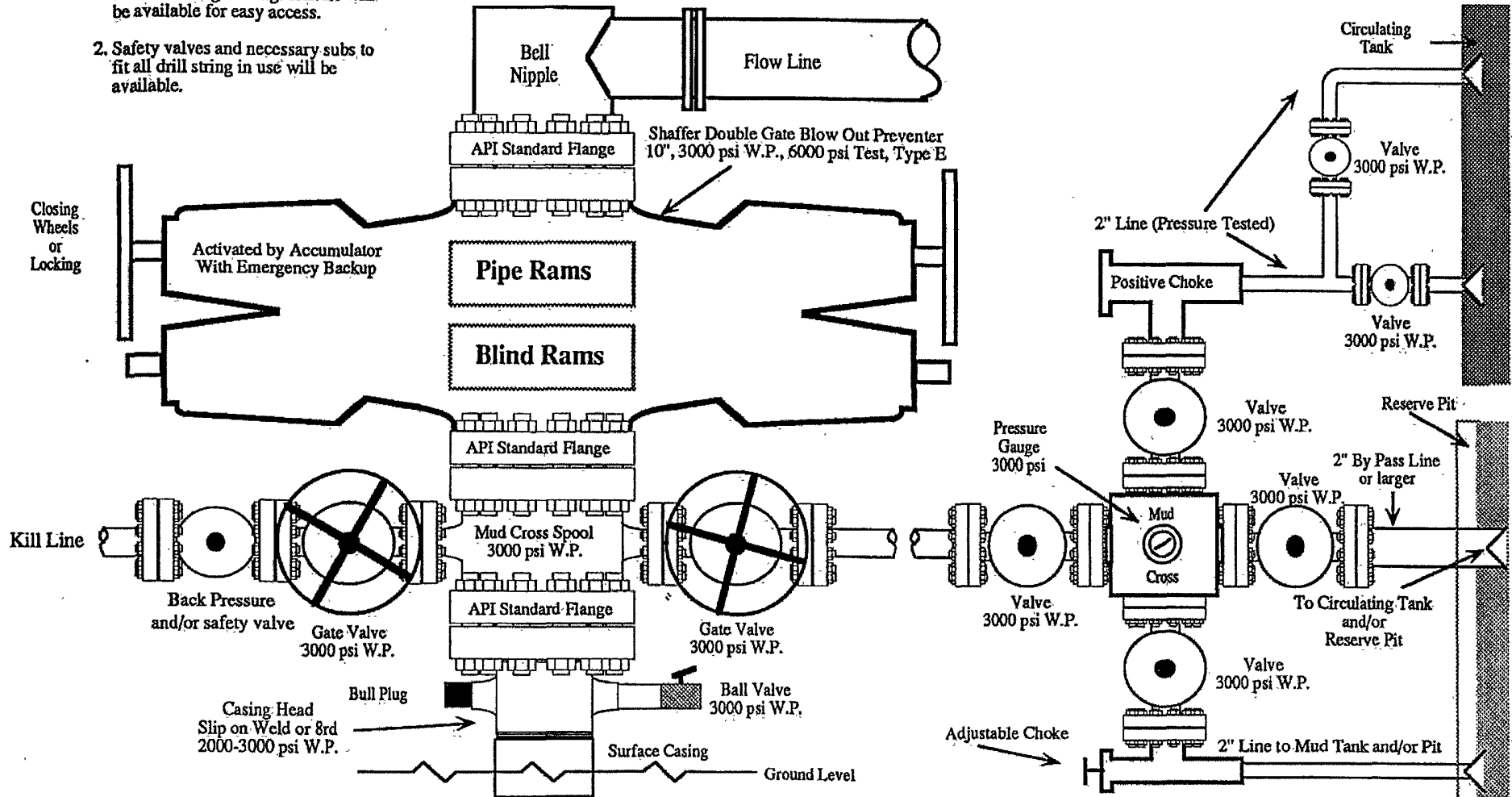


Russell Surveying
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410
(505) 334-8637

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.