

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

5. Lease Serial No.
NMNM-100602

6. If Indian Allottee or Tribe Name
N/A

7. If Unit or CA Agreement, Name and No.
N/A

8. Lease Name and Well No.
CAMPOS 4 #4

9. API Well No.
30-045-039-30297

10. Field and Pool, or Exploratory
LYBROOK GALLUP

11. Sec., T. R. M. or Blk. and Survey or Area

E 4-23N-7W NMPM

12. County or Parish
RIO ARRIBA

13. State
NM

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator
ELM RIDGE EXPLORATION COMPANY, LLC

3a. Address P. O. BOX 156
BLOOMFIELD, NM 87413

3b. Phone No. (include area code)
(505) 632-3476

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 2000' ESL & 800' FWL

At proposed prod. zone SAME

14. Distance in miles and direction from nearest town or post office*
2 AIR MILES NW OF LYBROOK

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 800'

16. No. of acres in lease
606.45

17. Spacing Unit dedicated to this well
LOT 9 (= 37.16 acres)

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 1,869' (4 #2)

19. Proposed Depth
5,875'

20. BLM/BIA Bond No. on file
BLM STATE WIDE 886201C

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
7,189' GL

22. Approximate date work will start*
08/30/2007

23. Estimated duration
3 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.

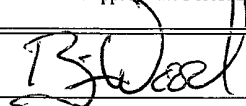
2. A Drilling Plan.

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).

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the
authorized officer.

25. Signature 

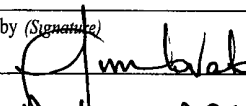
Name (Printed/Typed)
BRIAN WOOD

Date
07/16/2007

Title
CONSULTANT

PHONE: (505) 466-8120

FAX: (505) 466-9682

Approved by (Signature) 

Name (Printed/Typed)

Date
8/2/07

Title
Adj. Mgr. ARN Minerals

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. Test BOPE Min: 1500psi

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 OCB 24 HRS.
PRIOR TO CASING & CEMENT

RCVD AUG3'07

OIL CONS. DIV.

DIST. 3

NMOCD

8-06-07



BH

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-39-3091	² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 28962	⁵ Property Name CAMPOS 4	⁶ Well Number 4
⁷ OGRID No. 149052	⁸ Operator Name ELM RIDGE EXPLORATION, LLC	⁹ Elevation 7189'

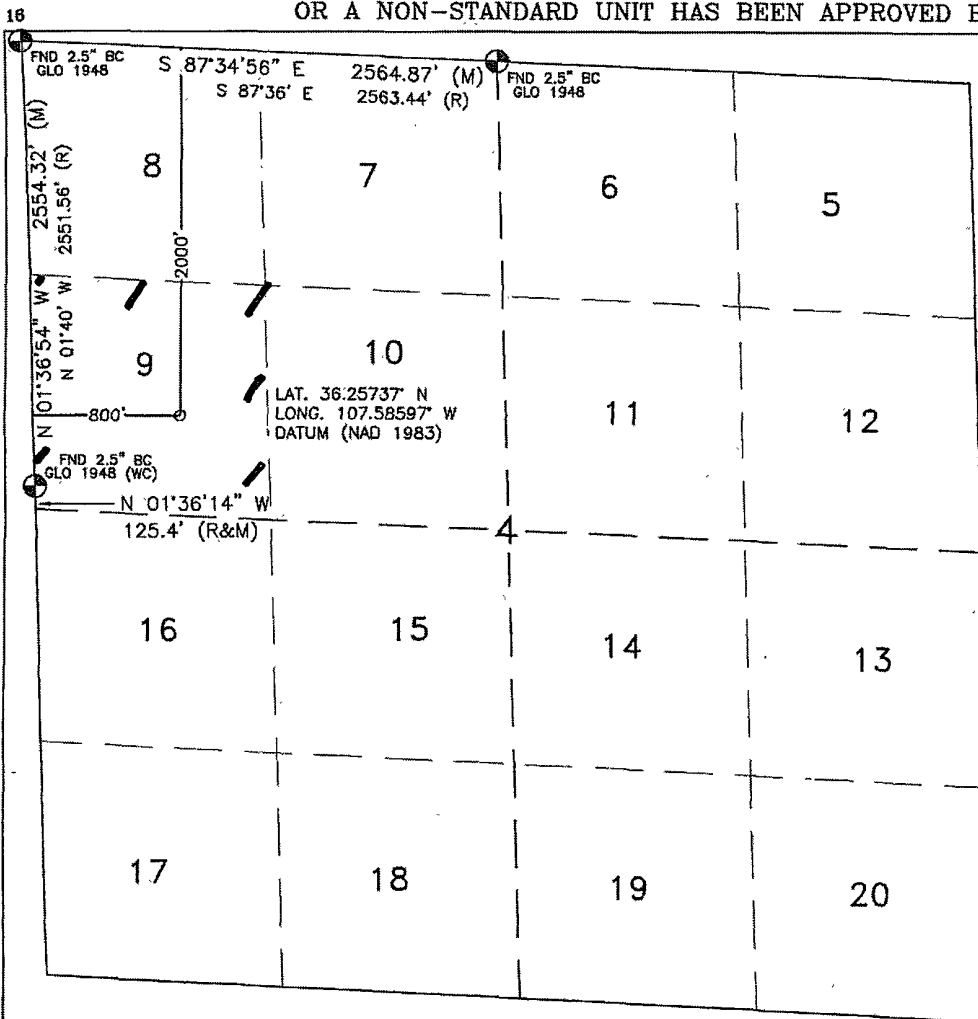
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	4	23N	7W	9	2000'	NORTH	800'	WEST	RIO ARRIBA

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 37.16					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



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 7.16.07
Signature Date

BRIAN WOOD

Printed Name

18 SURVEYOR CERTIFICATION

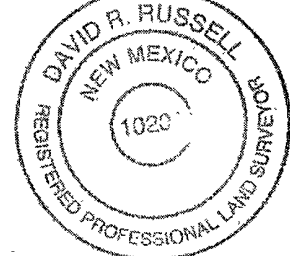
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MAY 22, 2007

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. 30-039- <u>30297</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NMNM-100602
7. Lease Name or Unit Agreement Name CAMPOS 4
8. Well Number 4
9. OGRID Number 149052
10. Pool name or Wildcat LYBROOK GALLUP

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
ELM RIDGE EXPLORATION COMPANY, LLC

3. Address of Operator
P. O. BOX 156, BLOOMFIELD, NM 87413

4. Well Location
Unit Letter: LOT 9 2000' FNL & 800' FWL
Section 4 Township 23 North Range 7 West NMPM RIO ARRIBA County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
7,189' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type: DRILLING Depth to Groundwater: >400' Distance from nearest fresh water well: >1,000' Distance from nearest surface water: <100'

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 Brian Wood TITLE: CONSULTANT

DATE: JULY 16, 2007

Type or print name: BRIAN WOOD

E-mail address: brian@permitswest.com

Telephone No.: (505) 466-8120

For State Use Only

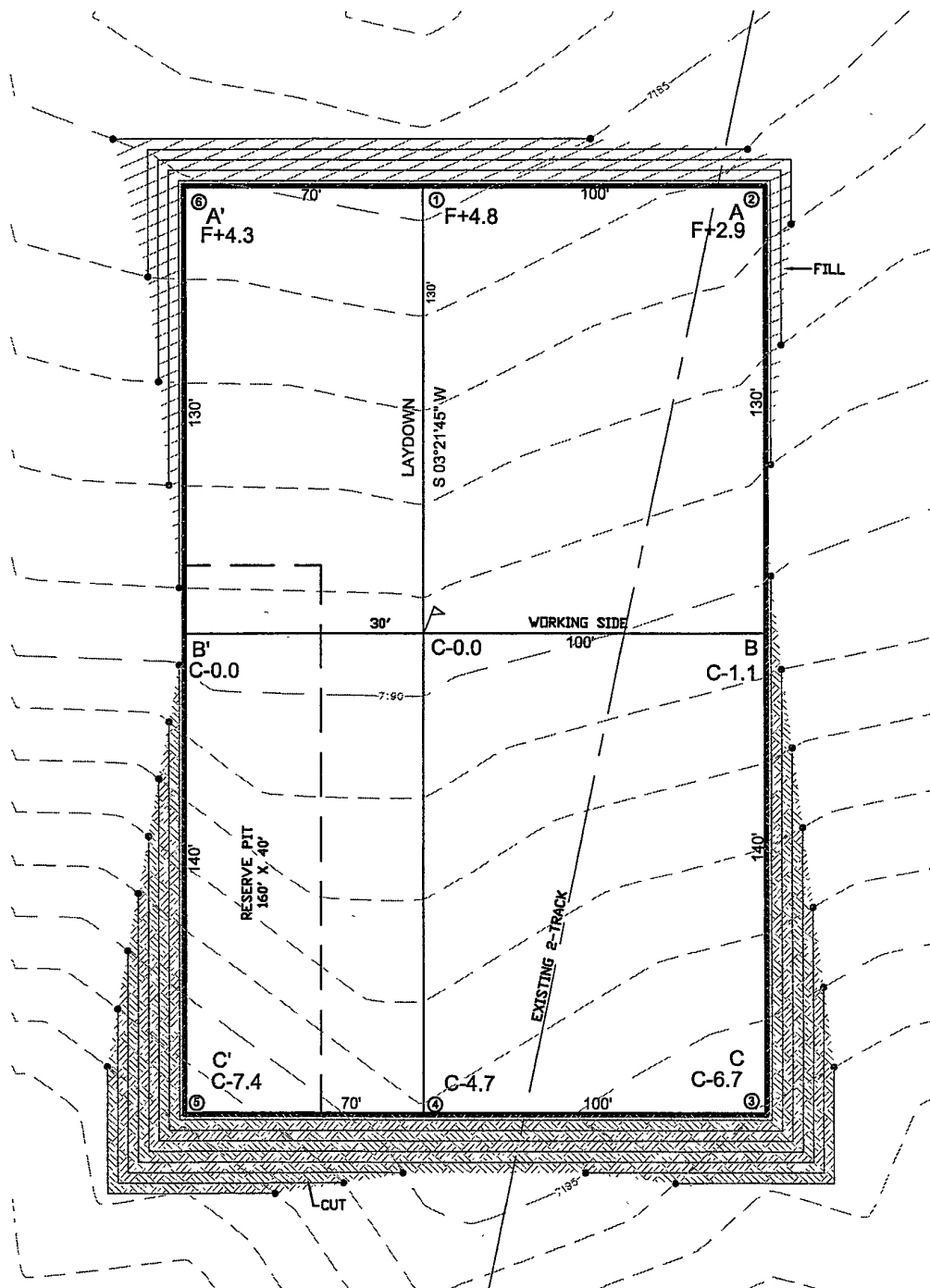
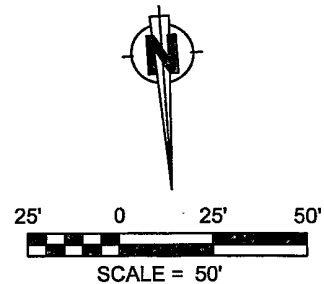
Deputy Oil & Gas Inspector,

APPROVED BY: [Signature] TITLE: District #3 DATE: AUG 06 2007

Conditions of Approval (if any): Close pit in accordance w/ Rule 50.F.1 for vulnerable area due to proximity to array

LATITUDE: 36.25737°N
LONGITUDE: 107.58597°W
DATUM: NAD 83

ELM RIDGE EXPLORATION, LLC
CAMPOS 4 #4
2000' FNL & 800' FWL
LOCATED IN THE SW/4 NW/4 OF SECTION 4,
T23N, R7W, N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO
GROUND ELEVATION: 7189', NAVD 88
FINISHED PAD ELEVATION: 7189.4', NAVD 88

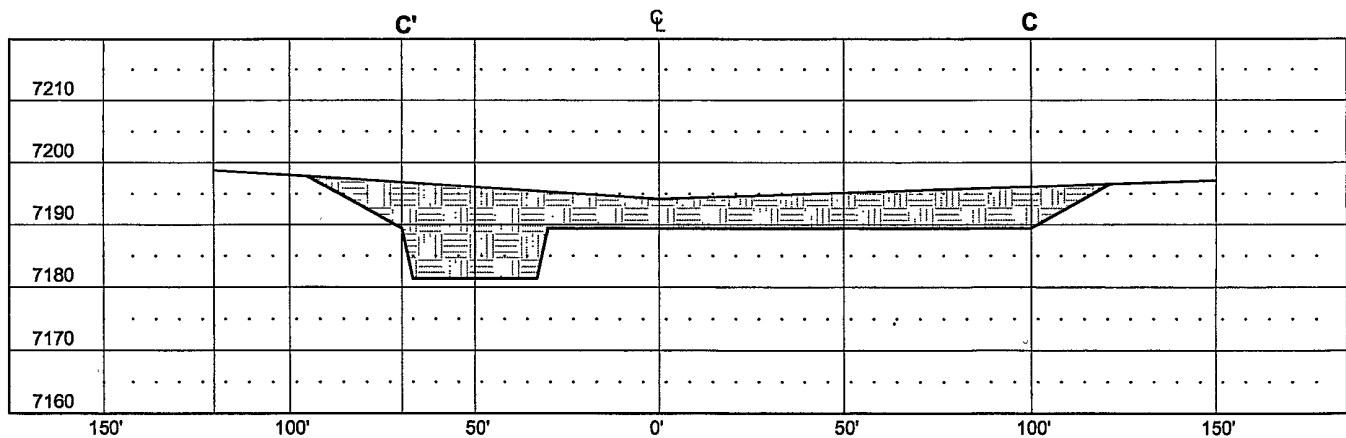
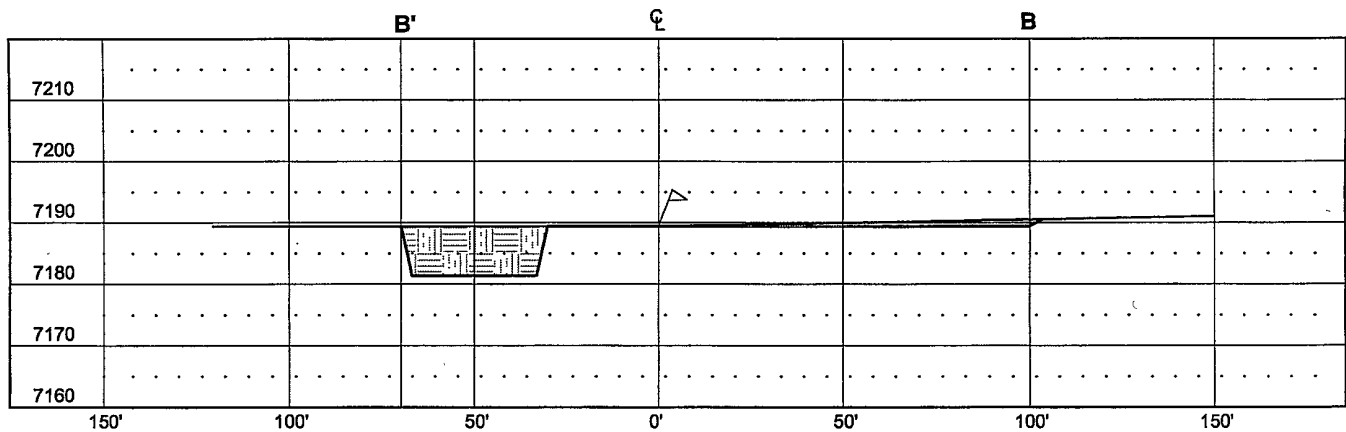
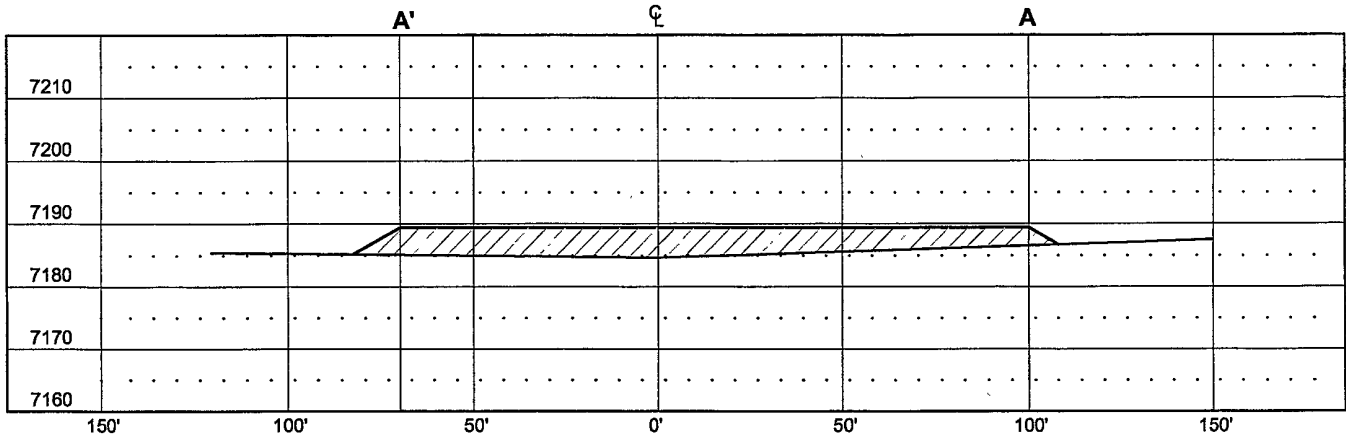


1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 50'
JOB No.: ERE014
DATE: 06/04/07

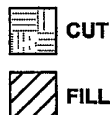


Russell Surveying
1409 W. Aztec Blvd. #2
Aztec, New Mexico 87410
(505) 334-8637

ELM RIDGE EXPLORATION, LLC
 CAMPOS 4 #4
 2000' FNL & 800' FWL
 LOCATED IN THE SW/4 NW/4 OF SECTION 4,
 T23N, R7W, N.M.P.M.,
 RIO ARriba COUNTY, NEW MEXICO
 GROUND ELEVATION: 7189', NAVD 88
 FINISHED PAD ELEVATION: 7189.4', NAVD 88



VERT. SCALE: 1" = 30'
 HORZ. SCALE: 1" = 50'
 JOB No.: RRO001
 DATE: 05/16/06



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

Elm Ridge Exploration Company, LLC
Campos 4 #4
2000' FNL & 800' FWL
Sec. 4, T. 23 N., R. 7 W.
Rio Arriba 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'	12'	+7,189'
Ojo Alamo Sandstone	1,559'	1,571'	+5,630'
Kirtland Shale	1,689'	1,701'	+5,500'
Fruitland	2,034'	2,046'	+5,155'
Pictured Cliffs Sandstone	2,209'	2,221'	+4,980'
Lewis Shale	2,299'	2,311'	+4,890'
Chacra	2,624'	2,636'	+4,565'
Menefee Shale	3,754'	3,766'	+3,435'
Point Lookout Sandstone	4,564'	4,576'	+2,625'
Mancos Shale	4,739'	4,751'	+2,450'
Gallup Sandstone	5,331'	5,343'	+1,858'
Total Depth	5,875'	5,887'	+1,314'

2. NOTABLE ZONES

Oil &/or Gas Zones

Fruitland
Pictured Cliffs
Gallup

Water Zones

Nacimiento
Fruitland
Pictured Cliffs

Coal Zone

Fruitland

Water zones will be protected with casing, cement, and 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.

Elm Ridge Exploration Company, LLC
Campos 4 #4
2000' FNL & 800' FWL
Sec. 4, T. 23 N., R. 7 W.
Rio Arriba County, New Mexico

PAGE 2

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.

A $\geq 2,000$ psi BOP and choke manifold system will be installed and tested to $\approx 2,000$ psi before drilling the 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.

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 assure good 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>Pounds/Foot</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Depth Set</u>
12-1/4"	8-5/8"	24	J-55 or K-55	S T & C	New	350'
7-7/8"	5-1/2"	10.5 15.5 lb/ft	J-55	L T & C	New	5,875'

Surface casing will be cemented to the surface with ≈ 290 cubic feet (≈ 245 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.

joint

Production casing will be cemented to the surface in 2 stages with a stage tool set @ $\approx 3,800'$. Centralizers will be installed on the middle of the shoe joint and on every joint thereafter (≥ 2 dozen centralizers). Thread lock the guide shoe, bottom of float collar, and bottom of stage tool only. Use API casing dope.

Elm Ridge Exploration Company, LLC
Campos 4 #4
2000' FNL & 800' FWL
Sec. 4, T. 23 N., R. 7 W.
Rio Arriba County, New Mexico

PAGE 4

First stage volume will be ≈ 740 cubic feet consisting of ≈ 175 sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl_2 (yield = 1.87 cubic feet per sack, weight = 12.7 pounds per gallon) followed by ≈ 350 sacks Class B with 2% CaCl_2 (yield = 1.18 cubic feet per sack, weight = 15.2 pounds per gallon). Volume = >100% excess, but caliper logs will be used to determine actual volume needed.

Second stage volume will be $\approx 1,330$ cubic feet consisting of ≈ 680 sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl_2 (yield = 1.87 cubic feet per sack, weight = 12.7 pounds per gallon) followed by ≈ 50 sacks of Class B with 2% CaCl_2 (yield = 1.18 cubic feet per sack, weight = 15.2 pounds per gallon). Volume = >100% excess, but caliper logs will be used to determine actual volume needed.

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	<u>ppg</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>pH</u>
0' - 350'	Fresh water gel	9.0	50	NC	9
350' - TD	Fresh water gel	9.0	38 - 50	6.0	9

Enough material to maintain mud properties, control lost circulation, and contain a blowout will be at the well site while drilling. Mud will be checked hourly by rig personnel. Material to soak up possible oil or fuel spills will be on site.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. DIL/GR logs will be run from TD to surface. CNL/FDC logs may be run over selected segments. Samples will be collected every $\approx 10'$ through the Gallup. Samples will be collected every $\approx 30'$ elsewhere.

Elm Ridge Exploration Company, LLC
Campos 4 #4
2000' FNL & 800' FWL
Sec. 4, T. 23 N., R. 7 W.
Rio Arriba County, New Mexico

PAGE 5

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be $\leq 2,525$ psi.

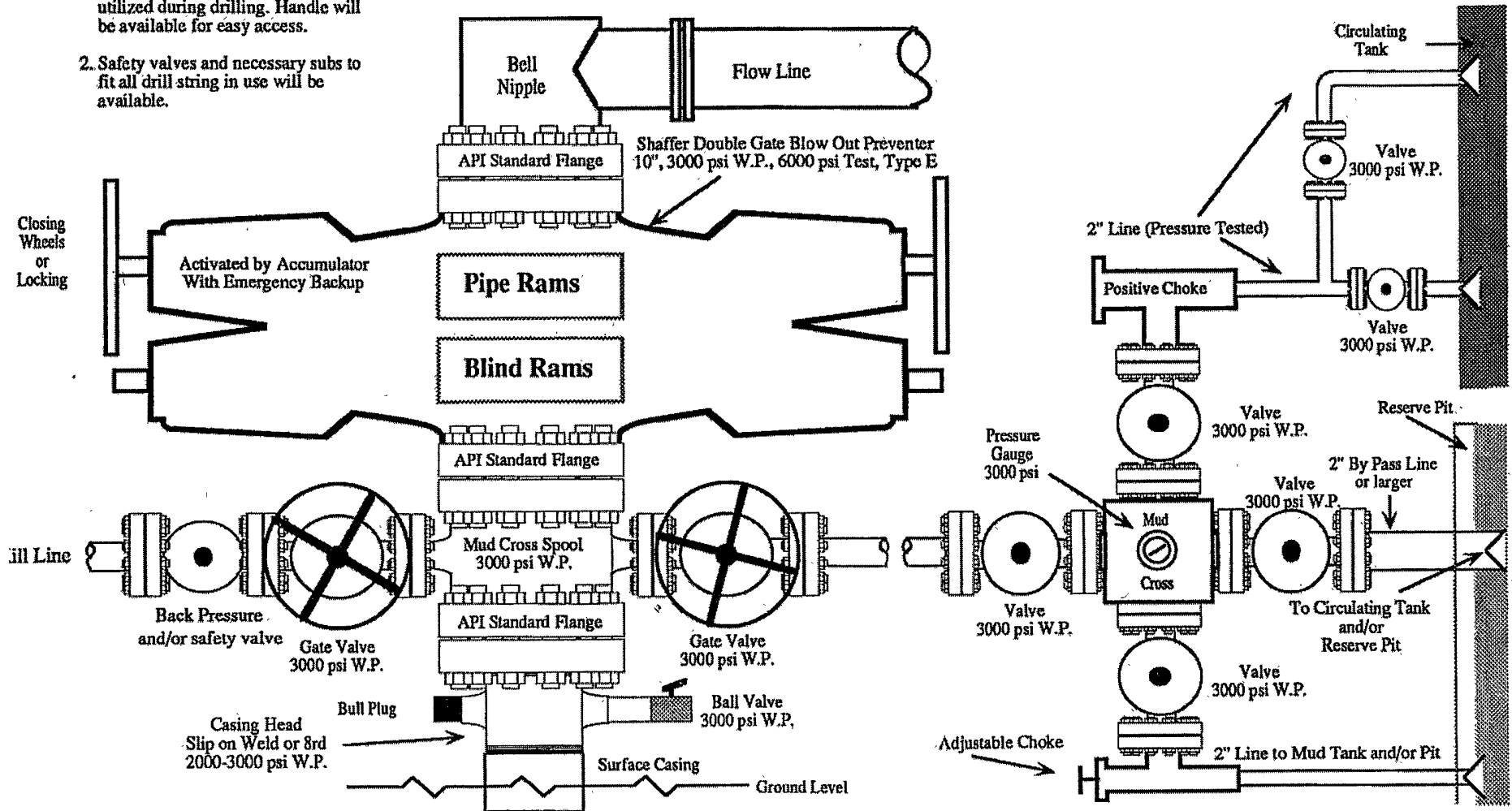
8. OTHER INFORMATION

The anticipated spud date is August 30, 2007. It is expected it will take 1 week to drill and 2 weeks to complete the well.

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.