This well previously approved (API 30-045-29335) for Giant & Central. Approval subsequently expired. Only change is operator.

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2005 OCT 19 AM 8:58
RECEIVED
070 FARMINGTON NM

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM-096042

6. If Indian, Allotee or Tribe Name
N/A

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No.
BISTI DK 24 #1

2. Name of Operator
ELM RIDGE EXPLORATION COMPANY, LLC

9. API Well No.
30-045-33383

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

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

10. Field and Pool, or Exploratory
BASIN DAKOTA

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **850 FNL & 1700 FEL**
At proposed prod. zone **SAME**

11. Sec., T. R. M. or Blk. and Survey or Area
B 24-25N-11W NMPM

14. Distance in miles and direction from nearest town or post office*
22 AIR MILES S OF BLOOMFIELD, 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)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
850'	160	E2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
N/A	6,200'	BLM STATE WIDE 886201C
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
6,480' GL	11/15/2005	6 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)*	Date
	BRIAN WOOD	10/16/2005

Title: **CONSULTANT** PHONE: (505) 466-8120 FAX: (505) 466-9682

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
		12/7/05
Title: Acting Field Manager - Min.	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.

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".

DEC 2005
RECEIVED
OIL CONS. DIV.
DIST. 3

NMOCD

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C - 102

2005 OCT 19 AM 9 58

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code	Pool Name
30-045- 33383	71599	BASIN DAKOTA

Property Code	Property Name	Well Number
~~18324~~ 35303	BISTI DK 24	1

OGRID No.	Operator Name	Elevation
149052	ELM RIDGE EXPLORATION COMPANY, LLC	6480'

Surface Location

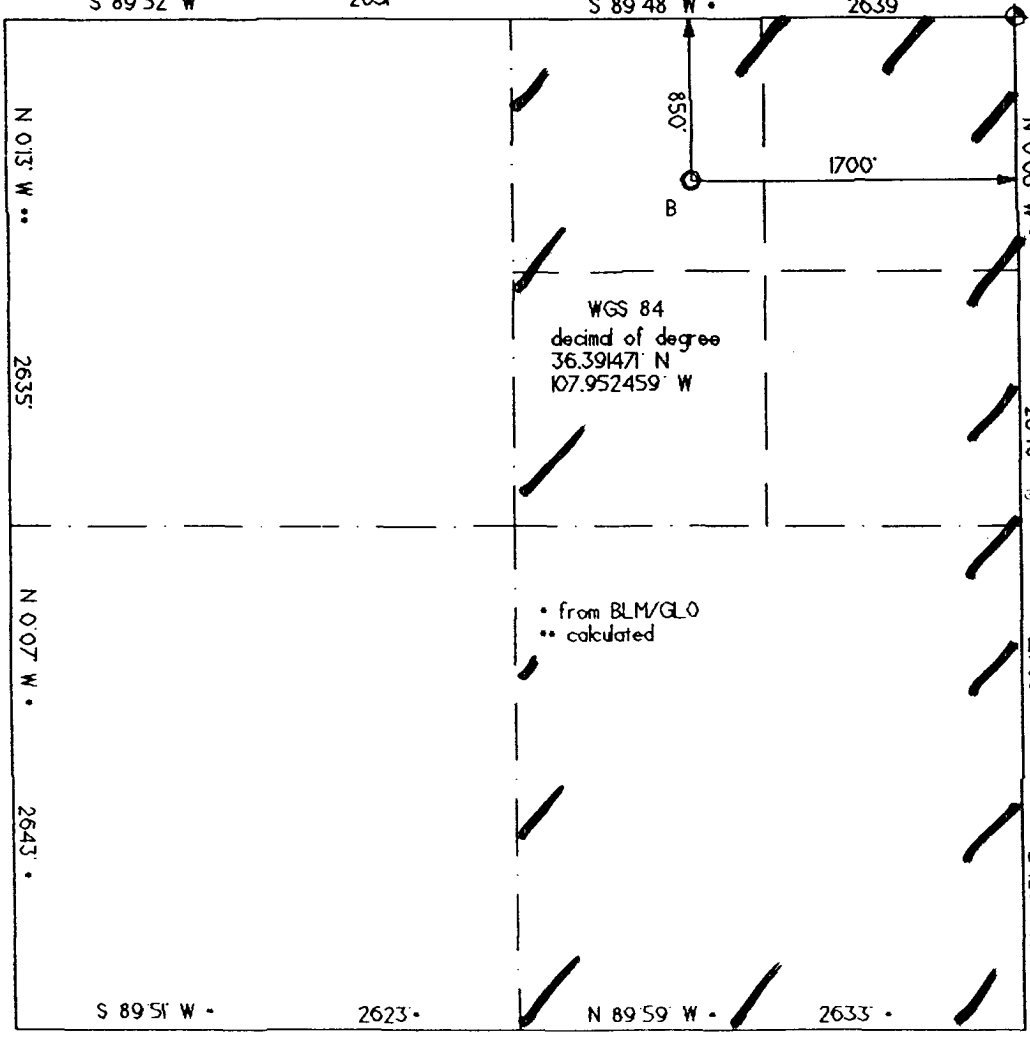
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from>	North/South	Feet from>	East/West	County
B	24	25 N.	II W.		850'	NORTH	1700'	EAST	SAN JUAN

Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from>	North/South	Feet from>	East/West	County

Dedication	Joint ?	Consolidation	Order No.
320		C	

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

Signature: B. Wood

Printed Name: BRIAN WOOD

Title: CONSULTANT

Date: OCT. 16, 2005

SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey: 08\28\'05

Signature and Seal of Professional Surveyor

GARY L. HUDDLESTON
NEW MEXICO
6844
REGISTERED LAND SURVEYOR

Gerald D. Huddleston

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

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

Form C-103
May 27, 2004

WELL API NO. 30-045- 33383

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No. NMNM-096042

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.)

7. Lease Name or Unit Agreement Name: BISTI DK 24

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number 1

2. Name of Operator: ELM RIDGE EXPLORATION COMPANY, LLC

9. OGRID Number 149052

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

10. Pool name or Wildcat: BASIN DAKOTA

4. Well Location
Unit Letter B : 850 feet from the NORTH line and 1700 feet from the EAST line
Section 24 Township 25N Range 11W NMPM County SAN JUAN

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6,480' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILLING Depth to Groundwater >50' Distance from nearest fresh water well ~~>5,280'~~ >1000' Distance from nearest surface water ~150'

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:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: DRILLING PIT ☒		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 & closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.**

SIGNATURE _____ TITLE CONSULTANT DATE OCT. 16, 2005

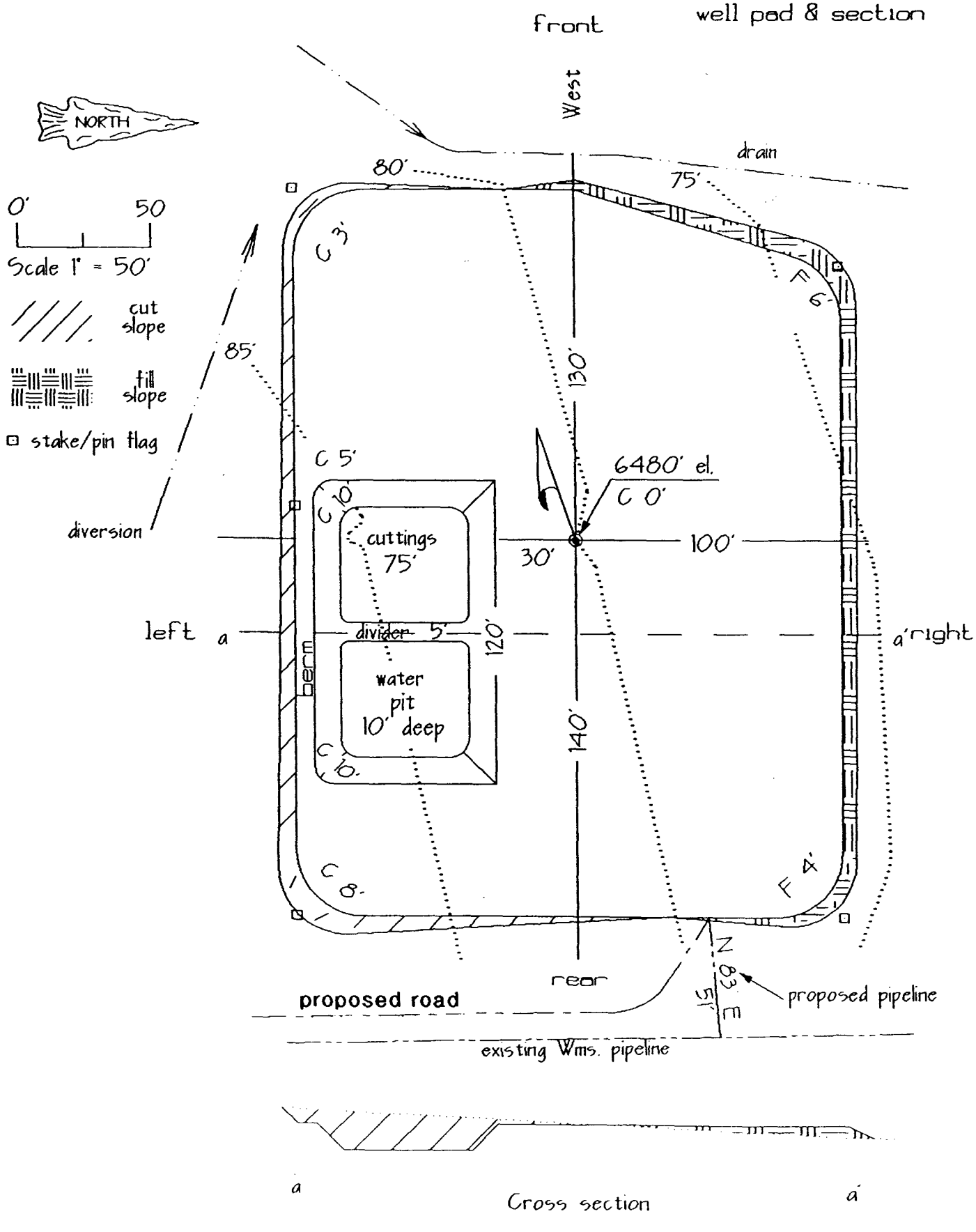
Type or print name BRIAN WOOD E-mail address: brian@permitswest.com Telephone No. (505) 466-8120

For State Use Only

APPROVED BY: _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE DEC 13 2005

Conditions of Approval (if any):

Bisti DK 24 # 1
well pad & section



Elm Ridge Exploration Company, LLC
Bisti DK 24 #1
850' FNL & 1700' FEL
Sec. 24, T. 25 N., R. 11 W.
San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	Elevation
Nacimiento	0'	10'	+6,480'
Fruitland	1,150'	1,160'	+5,330'
Fruitland Coal	1,375'	1,385'	+5,105'
Pictured Cliffs Sandstone	1,390'	1,400'	+5,090'
Lewis Shale	1,525'	1,535'	+4,955'
Mesa Verde	2,210'	2,220'	+4,270'
Basal Cliff House Sandstone	2,875'	2,885'	+3,605'
Menefee Shale	2,915'	2,925'	+3,565'
Point Lookout Sandstone	3,865'	3,875'	+2,615'
Mancos Shale	4,090'	4,100'	+2,390'
Gallup Sandstone	4,895'	4,905'	+1,585'
Greenhorn	5,780'	5,790'	+700'
Graneros	5,845'	5,855'	+635'
Dakota Sandstone	5,935'	5,945'	+545'
Total Depth	6,200'	6,210'	+280'

2. NOTABLE ZONES

Oil &/or Gas Zones	Water Zones	Coal Zone
Fruitland Coal	Nacimiento	Fruitland
Pictured Cliffs	Fruitland	
Gallup		
Dakota		

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.

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 ≥2,000 psi BOP and choke manifold system will be installed and tested to 2,000 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.

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

Hole Size	O. D.	Weight (lb/ft)	Grade	Type	Age	GL Setting Depth
12-1/4"	8-5/8"	24	J-55	S T & C	New	320'
7-7/8"	4-1/2"	10.5	K-55	L T & C	New	6,200'

Surface casing will be cemented to the surface with ≈383 cubic feet (≈325 sacks) Class B with 1/4 pound per sack Flocele + 2% $CaCl_2$. Yield = 1.18 cubic feet per sack. Weight = 15.6 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. Use API casing dope.

joint

Production casing will be cemented to the surface with ≈30% excess as follows:
- Break circulation with water
- Pump ≈20 barrels of chemical wash
- Pump ≈370 sacks (≈1,439 cubic feet) Class B + 3% chemical extender + 1/4 pound/sack cellophane (=3.89 cubic feet per sack & 10.6 pounds per gallon)
- Follow with ≈350 sacks (≈413 cubic feet) Class B + 2% $CaCl_2$ (= 1.18 cubic feet per sack & 15.6 pounds per gallon)
- Set ≈25 centralizers
- W.O.C. = 4 hours

5. MUD PROGRAM

Top ≈4,500' of hole will be drilled with an Aqua gel lime slurry spud mud mixed to 45-50 sec/quart viscosity. At ≈4,500' will mud up with a low solids gel and starch mud. Hardness will be treated soda ash. Mud properties will be:

Annular velocity: 120 feet/minute
Fluid loss: 8-10 cc/30 minutes
pH: 8.3 - 8.5
Plastic Viscosity: 4-8 cps
Solids Content: 5.5% maximum
Viscosity: 45-65 sec/quart
Weight: 8.4 - 8.8 pounds per gallon
Yield Value: 3-6 #100 square feet

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. A one person logging unit will be on site from ≈2,500' to TD. Samples will be caught every ≈20' from ≈2,500' to ≈4,800'. Samples will be caught every ≈10' from ≈4,800' to TD. DIL/GR logs will be run from TD to surface.

Dual induction gamma ray logs will be run from TD to surface casing. Neutron density log will be run from TD through the Gallup, from the base of the Point Lookout through the Mesa Verde, and from the base of the Pictured Cliffs through the Fruitland. CCL, cement bond (if needed), and gamma ray logs will be run in the cased hole from PBTD to surface casing.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum pressure will be ≤2,000 psi.

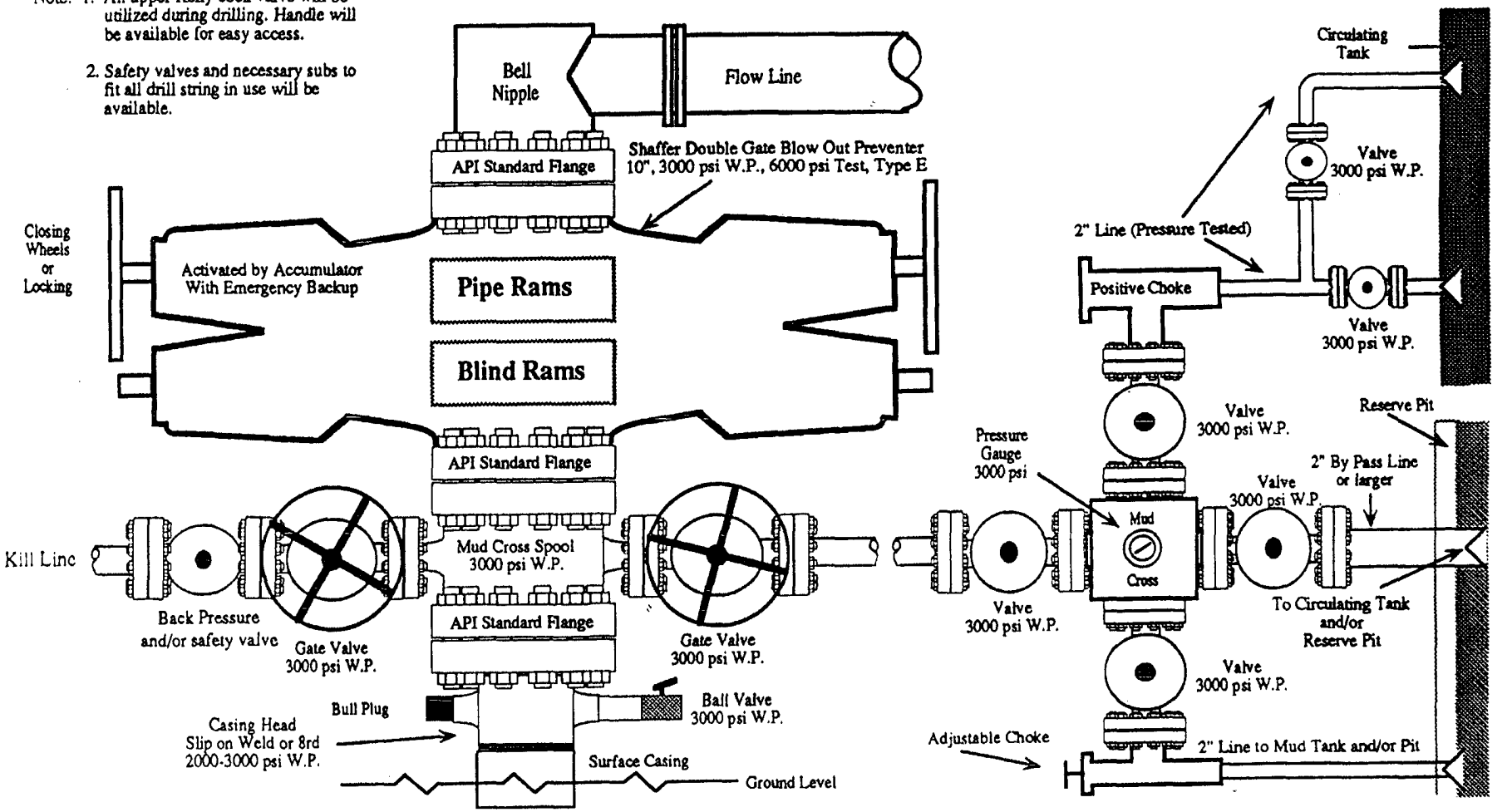
8. OTHER INFORMATION

The spud date will be November 15, 2005 (lease expires November 30, 2005). It is expected it will take ≈2 weeks to drill and ≈4 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.