

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

2007 MAY 7 AM 9 36

RECEIVED

070 FARMINGTON NM

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

5. Lease Serial No.
NMSF-080238A

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

1a. Type of work: ☒ DRILL ☐ REENTER

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

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

8. Lease Name and Well No.
CHACO 6 #1

2. Name of Operator
MERRION OIL & GAS CORPORATION

9. API Well No.
30-045- 34307

3a. Address 610 REILLY AVE.
FARMINGTON, NM 87401

3b. Phone No. (include area code)
(505) 324-5300

10. Field and Pool, or Exploratory
BAS. MANCOS & BAS. DAK.

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

At surface 888' FNL & 846' FWL

At proposed prod. zone SAME

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

D 6-26N-12W NMPM

14. Distance in miles and direction from nearest town or post office*
13 AIR MILES SOUTH OF FARMINGTON

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) 1,226'

16. No. of acres in lease
2,373.98

17. Spacing Unit dedicated to this well
309.9 w/2
Busin MA, DK: Lots 3-7, SENW, E2SW4

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 1,137'

19. Proposed Depth
6,060'

20. BLM/BIA Bond No. on file
NM-0883

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5,939' GL

22. Approximate date work will start*
09/15/2007

23. Estimated duration
2 WEEKS

24. Attachments

RCVD FEB 2 '10

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

OIL CONS. DIV.

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.

DIST. 3

25. Signature

Brian Wood

Name (Printed/Typed)

BRIAN WOOD

Date

05/04/2007

Title

CONSULTANT

PHONE: (505) 466-8120

FAX: (505) 466-9682

Approved by (Signature)

Monte Lee

Name (Printed/Typed)

Date

1/27/2010

Title

AFN

Office

FFO

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.

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS

*(Instructions on page 2)

FEB 12 2010

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

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

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CONSTRUCTION OF THE ABOVE APPLICATIONS.

NMOCD

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-045-34307	Pool Code 22232	Pool Name Basin Mangos Gas Pool
Property Code 38022	Property Name Chaco 6	Well Number 1
OGRI No. 014634	Operator Name MERRION OIL & GAS CORPORATION	Elevation 5939'

Surface Location

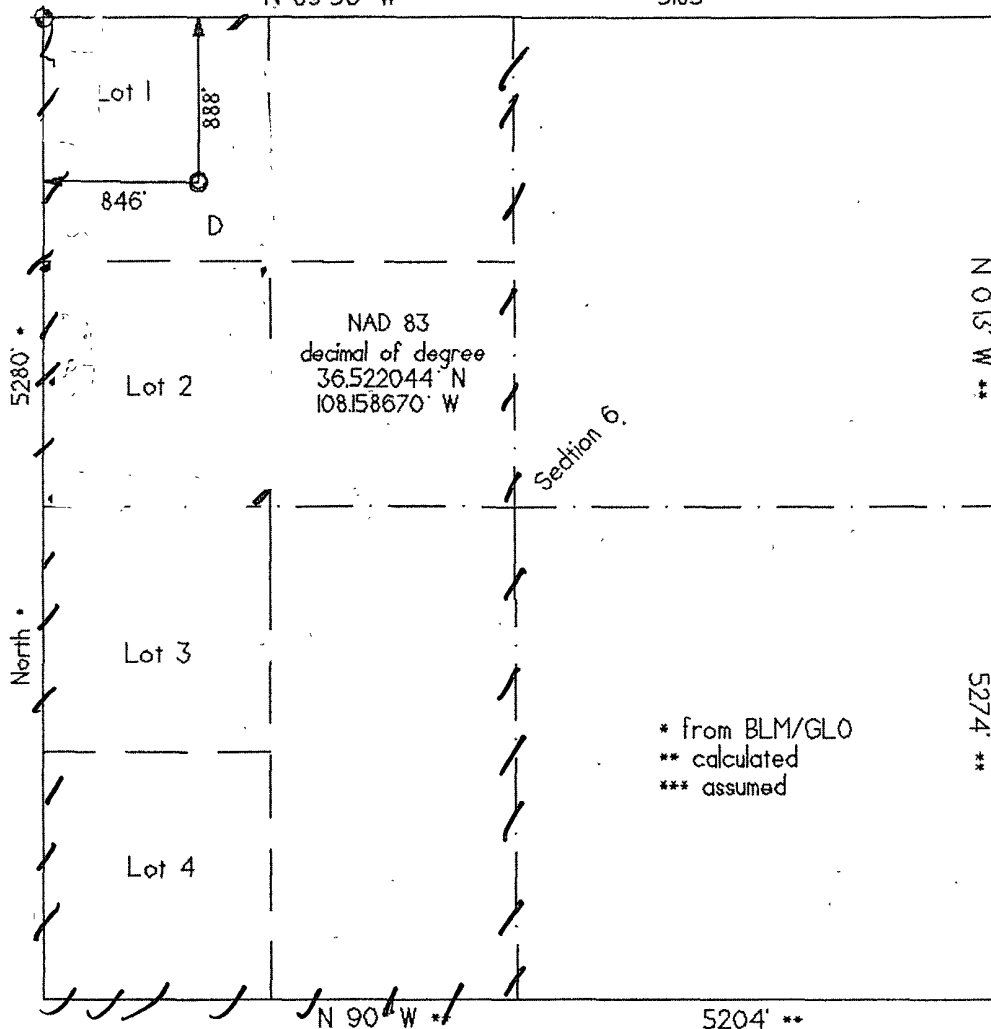
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from >	North/South	Feet from >	East/West	County
D	6	26 N.	12 W.		888'	North	846'	West	San Juan

Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot ldn.	Feet from >	North/South	Feet from >	East/West	County
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Dedicated Acres 309.9	Joint or Infill	Consolidation Code .	Order No.
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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.



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 bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pool agreement or a compulsory pooling order heretofore entered by the division.

Date _____

MAY 4, 2007

Signature

Blair

Printed Name

BRIAN WOOD

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.

Date of survey

rev: 03 28 '07

Signature and Seal of Professional Surveyor



Certificate Number 6844

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 & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C - 102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

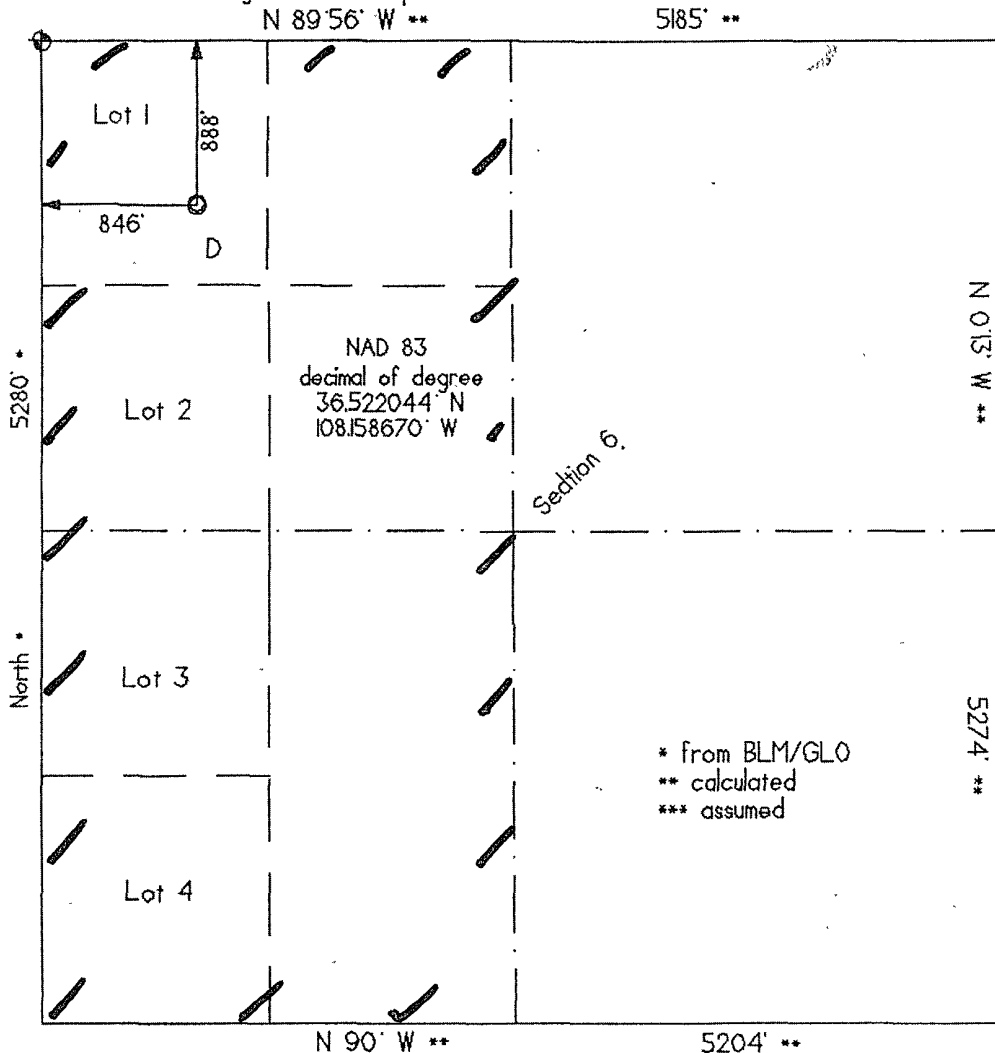
2007 MAY 7 AM 9 36

APA Number 30-045-	Pool Code 71599	Basin BASIN DAKOTA
Property Code	Property Name Chaco 6	Well Number 1
OGRD No. 014634	Operator Name MERRION OIL & GAS CORPORATION	Elevation 5939'

Surface Location								
UL or Lot	Sec.	Twp.	Rge.	Lot Ldn.	Feet from >	North/South	Feet from >	East/West
D	6	26 N.	12 W.		888'	North	846'	West

Bottom Hole Location If Different From Surface								
UL or Lot	Sec.	Twp.	Rge.	Lot Ldn.	Feet from >	North/South	Feet from >	East/West
Dedicated Acres 309.9		Joint or Infill		Consolidation Code		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.



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 bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pool agreement or a compulsory pooling order heretofore entered by the division.	
Date	MAY 4, 2007
Signature	<i>Brian Wood</i>
Printed Name	BRIAN WOOD
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.	
Date of survey	rev: 03 28 '07
Signature and Seal of Professional Surveyor	
Certificate Number	6844

Merrion Oil & Gas Corporation
Chaco 6 #1
888' FNL & 846' FWL
Sec. 6, T. 26 N., R. 12 W.
San Juan County, New Mexico

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Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento	0'	12'	+5,939'
Ojo Alamo	39'	51'	+5,900'
Kirtland Shale	59'	71'	+5,880'
Fruitland	759'	771'	+5,180'
Main Fruitland	1,159'	1,171'	+4,780'
Pictured Cliffs	1,209'	1,221'	+4,730'
Lewis Shale	1,304'	1,316'	+4,635'
La Ventana	2,019'	2,031'	+3,920'
Menefee Shale	2,649'	2,661'	+3,290'
Point Lookout Sandstone	3,689'	3,701'	+2,250'
Mancos Shale	3,899'	3,911'	+2,040'
Gallup Sandstone	4,759'	4,771'	+1,180'
Greenhorn Limestone	5,649'	5,661'	+290'
Dakota Sandstone	5,809'	5,821'	+130'
Total Depth (TD)	6,060'	6,072'	-121'

2. NOTABLE ZONES

Gas & Oil Zones

Fruitland
Pictured Cliffs
Gallup
Dakota

Water Zones

Nacimiento
Fruitland

Coal Zones

Fruitland

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded.

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3. PRESSURE CONTROL

The drilling contract has not been awarded. Thus, the exact BOP model to be used is not yet known. (A typical double ram 2,000 psi model is on PAGE 3.) Minimum working pressure will be 2,000 psi. Pressure calculations are:

$$\begin{aligned} 0.29 \text{ psi/foot} \times 6,060' &= 1,757 \text{ psi maximum expected bottom hole pressure} \\ &\quad - \underline{0.22 \text{ psi/foot} \times 6,060'} = 1,333 \text{ psi gas cut column} \\ &\quad 424 \text{ psi maximum expected surface pressure} \end{aligned}$$

BOP pressure tests will be conducted at time of installation and before drilling out the surface casing shoe. Ram type preventer will be tested to $\approx 1,000$ psi. The BOP will be activated on each bit trip and the activation recorded in the driller's log. A 2,000 psi working pressure choke manifold, kill line from the mud pump, and kelly cock valve will be installed. Stabbing valves for drill pipe and drill collars will be available on the rig floor.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Pounds/Foot</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>Depth Set</u>
12-1/4"	8-5/8"	24	J-55	New	ST & C	320'
7-7/8"	4-1/2"	11.6	J-55	New	LT & C	6,060'

Surface casing will be cemented to surface with ≈ 264 cubic feet (≈ 224 sacks) Class B neat + 1/4 pound per sack cello-flake + 2% to 4% CaCl_2 . Yield = 1.18 cubic feet per sack. Weight = 15.6 pounds per gallon. Excess = 100%. A centralizer will be placed on the bottom joint.

Production casing hole will be cemented in two stages to the surface with $\approx 2,117$ cubic feet. Excess: $\geq 50\%$ (actual volumes will be based on caliper survey). DV tool will be set $\approx 50'$ below the top of the Mancos shale. Thus, DV tool will be set at $\approx 3,950'$. Will install 2 centralizers to bracket DV tool, ≈ 6 centralizers over Dakota, and ≈ 8 centralizers over Gallup.

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First stage ($\approx 2,110'$) of long string cement will cover Gallup and Dakota zones. Lead with ≈ 255 sacks Premium light high strength with 2% KCl + 0.2% CD-32 + 0.5% FL-52 + 1/2 pound per sack cello flake + 2% pheno seal (= 2.01 cubic feet per sack & 12.5 pounds per gallon. Tail with ≈ 150 sacks Type III + 0.3% CD-32 + 0.2% FL-52 + 5% A-10 + 1/4 pound per sack cello flake 2% pheno seal (= 1.54 cubic feet per sack & 14.2 pounds per gallon).

Second stage of cement will cover $\approx 3,950'$ from the DV tool to the surface. Lead with ≈ 475 sacks Type III + 1/4 pound per sack flake + 8% gel + 2% pheno seal (= 2.60 cubic feet per sack & 11.9 pounds per gallon). Tail with ≈ 100 sacks Type III neat (= 1.39 cubic feet per sack & 14.5 pounds per gallon).

5. MUD PROGRAM

Surface hole will be drilled with fresh water based spud mud at ≈ 8.4 pounds per gallon. Lime and gel will be added as needed for viscosity. Production hole will be drilled with a fresh water based low solids non dispersed mud with a weight of < 9.0 pounds per gallon and water loss of < 10 cc. Starch will be added as needed. Producing or sensitive zones will be air drilled.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. DIL-FDC-GR logs will be run from TD to the base of the surface casing.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected.

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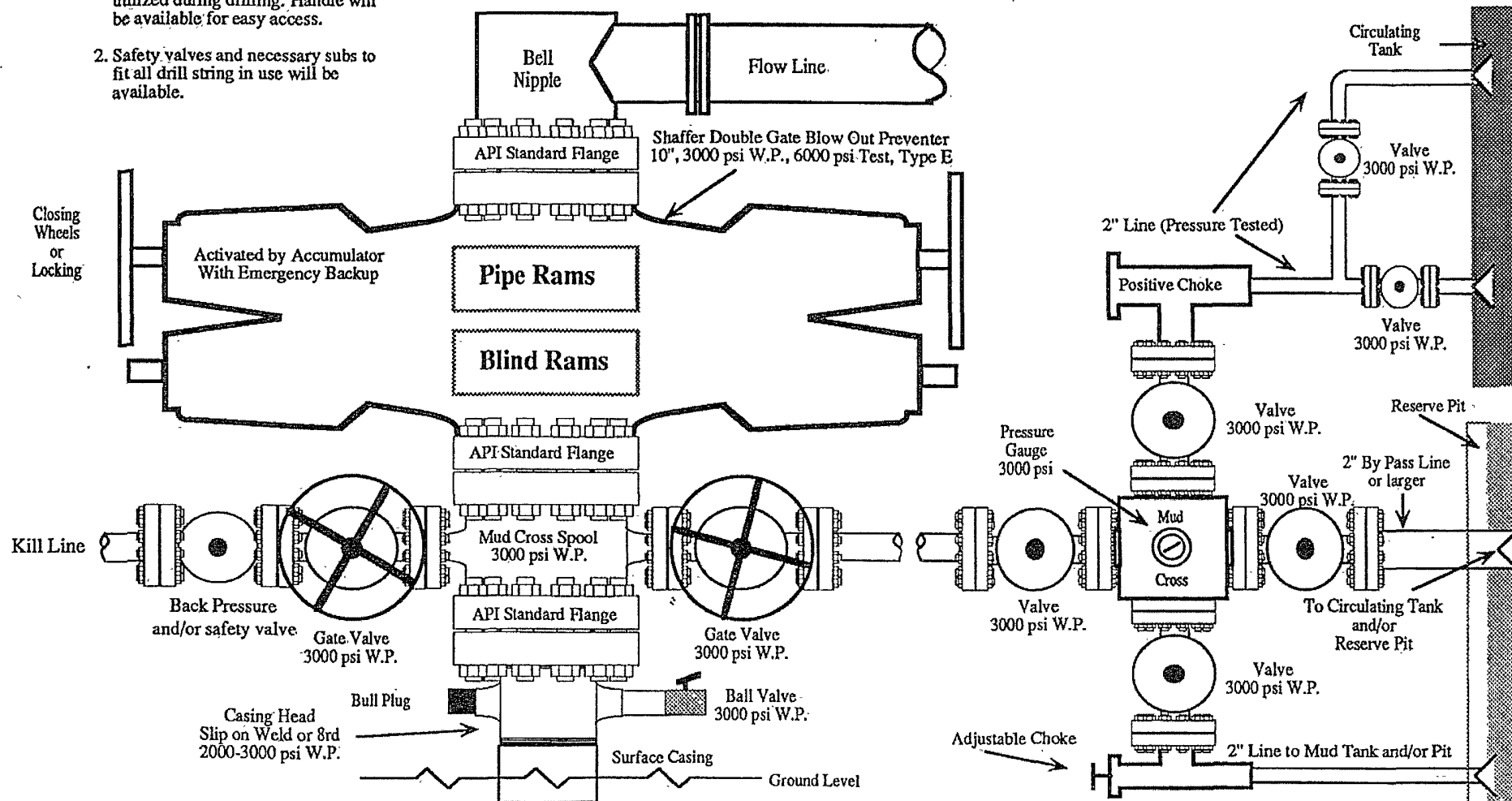
8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take about \approx 2 weeks to drill and \approx 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.