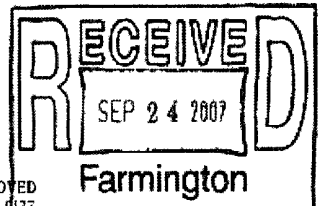


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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. 14-20-603-1371
1b. Type of Well: <input checked="" 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 Navajo Allottee # 011156
2. Name of Operator Patina Oil and Gas Corporation		7. If Unit or CA Agreement, Name and No SW-1-4223
3a. Address 5802 US Highway 64, Farmington, NM 87401	3b. Phone No. (include area code) 505-632-8056	8. Lease Name and Well No. Navajo 11 05
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1980 FNL and 660 FWL At proposed prod. zone SAME		9. API Well No. 30-045-34161
14. Distance in miles and direction from nearest town or post office* 25 miles south of Bloomfield, NM		10. Field and Pool, or F Basin Dakota Basin Mancos
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'		11. Sec., T. R. M. or Blk. and Survey or Area E Sec. 11 T25N R 10W
16. No. of acres in lease 320	17. Spacing Unit dedicated to this well N/2 320 acres	12. County or Parish San Juan
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 660'	19. Proposed Depth 6031'	13. State NM
20. BLM/BIA Bond No. on file LMP8720503-CO1291	21. Estimated duration 12 days	22. Approximate date work will start* 06/01/2007
23. Elevations (Show whether DF, KDR, RT, GL, etc.) 6819' GL		24. Attachments

RCVD MAY 9 '08
OIL CONS. DIV.
DIST. 3

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Billie Maez</i>	Name (Printed/Typed) Billie Maez	Date 1-12-07
Title District Manager		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 9/19/07
Title 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".

OPERATOR *B* MAY 13 2008
AV

District I
1625 N. 1st St. Dr. Santa Fe, NM 87505
District II
101 W. Grand Avenue, Santa Fe, NM 87510
District III
1000 Rte. Blvd., Santa Fe, NM 87510
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-107
Revised June 10, 2003
Submit to: Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-3461	2. Pool Code 76010	3. Pool Name Flora Vista Galt	4. Well Name SAGE DAKOTA
5. Property Code 304640	6. Property Name NAVAJO 11		7. Well Number 05
8. GRID No. 234550	9. Operator Name Noble Energy		10. Elevation 6819'

Surface Location

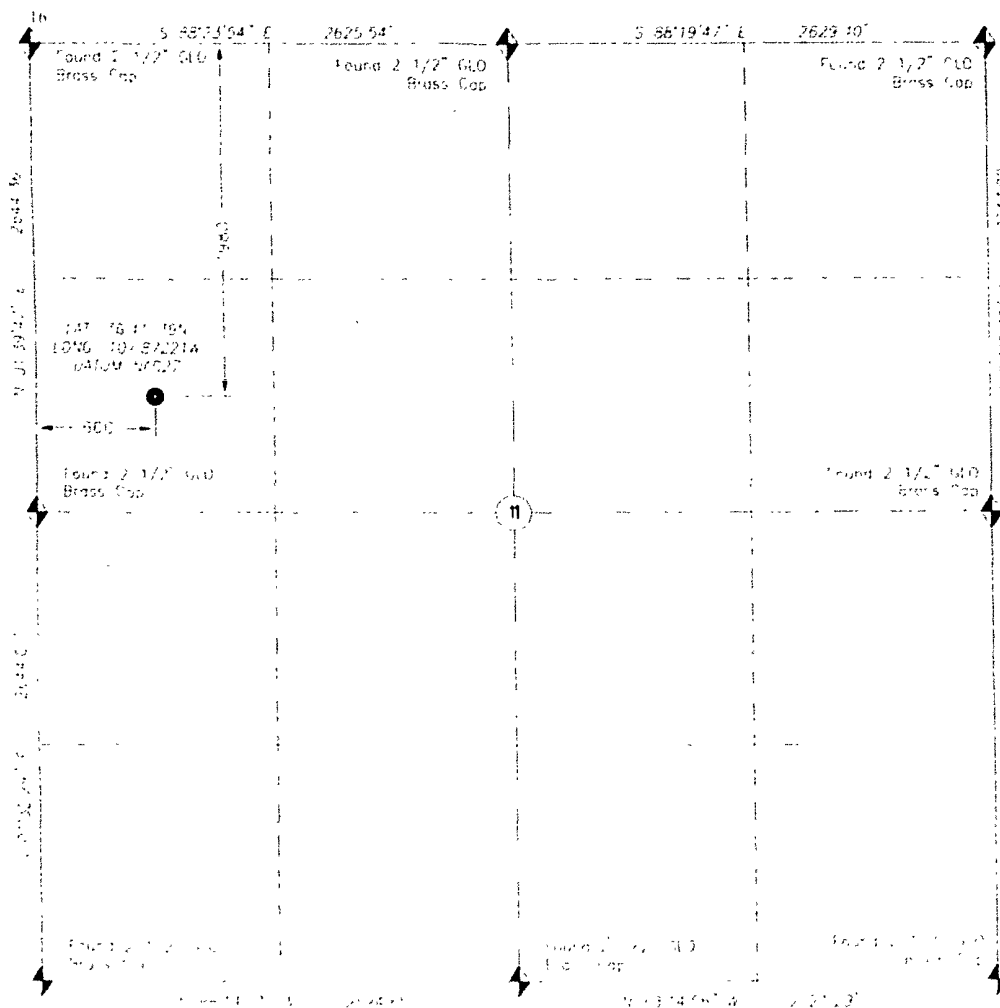
11. Section	12. Township	13. Range	14. Foot from the	15. North-South line	16. Feet from the	17. East-West line	18. County
11	25N	10W	1980	NORTH	660	WEST	SAN JUAN

Bottom Hole Location If Different From Surface

19. Section	20. Township	21. Range	22. Foot from the	23. North-South line	24. Feet from the	25. East-West line	26. County

27. Dedicated Acres 320 ACPE	28. Joint or In-fill N 1/2	29. Consolidation Code	30. 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. <i>Muse</i> JEAN M. MUSE Regulatory/Engineering Tech jmuse@nobleenergyllc.com 3/14/06
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. October 2, 2004 <i>[Signature]</i> 14400 REGISTERED PROFESSIONAL SURVEYOR 10/11/01 I am a member of the New Mexico Surveyors Association and am duly licensed as a Professional Surveyor.

District I
1325 N. French Dr., Hobbs, NM 88240
District II
1801 W. Grand Avenue, Albuquerque, NM 87130
District III
1000 N. Main St., Alamogordo, NM 88003
District IV
1320 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-34161		Well Name 92232/11599 Basin Mañitos		Foot Name BASIN DAKOTA	
Property Code 304640		Property Name NAVAJO 11		Well Number D5	
Section No. 23455D		Operator Name Noble Energy PATINA SAN JUAN, INC.		Elevation 6819'	

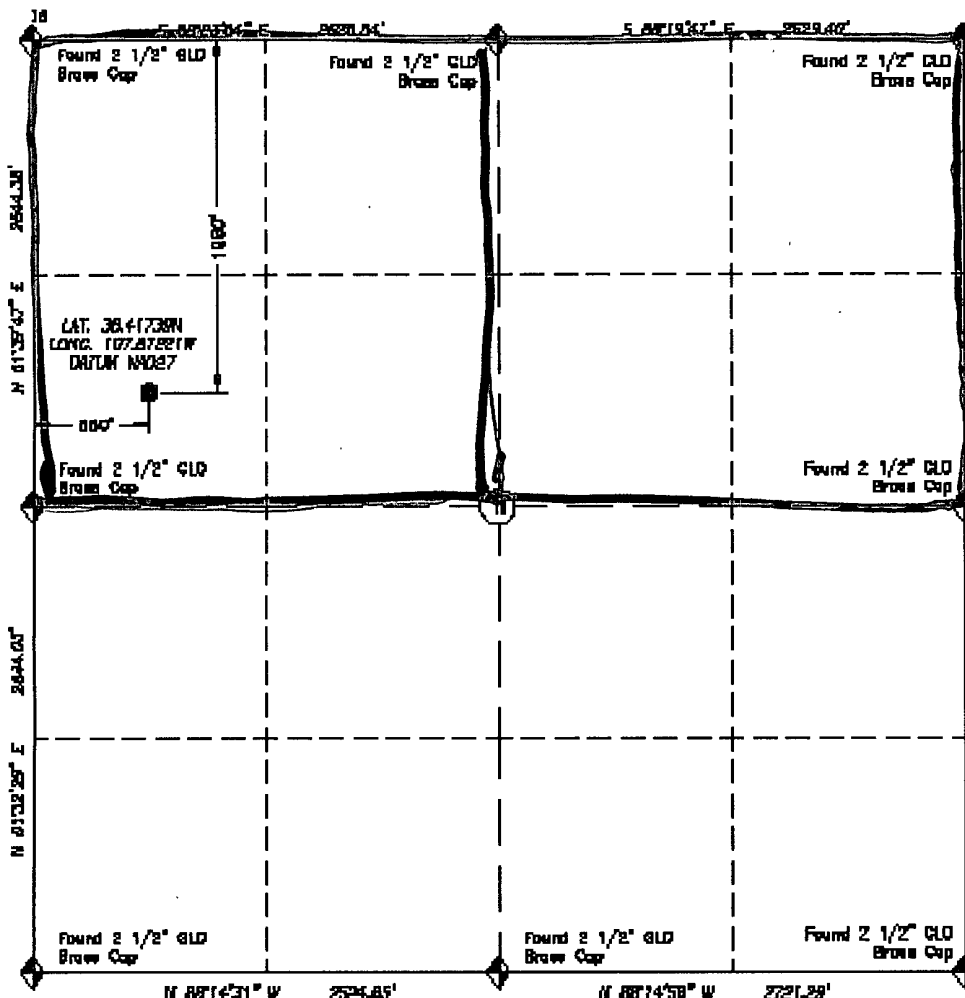
10 Surface Location

UL or Lot no.	Section	Township	Range	Lot 1/4	Foot from Co.	North/South line	Foot from line	East/West line	County
	11	25N	10W		1980	NORTH	880	WEST	SAN JUAN

11 Bottom Hole Location if Different From Surface

UL or Lot no.	Section	Township	Range	Lot 1/4	Foot from Co.	North/South line	Foot from line	East/West line	County
12 Total Acreage 160 AC NW 1/4 mp N 1/2					13 Joint or To B		14 Consolidation Code		15 Order No.
320 ACRE									

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. Signature: <i>JEAN M. MUSE</i> Printed Name: JEAN M. MUSE Title: REGULATORY COMPLIANCE Date: 3/14/06	
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. Date of Survey: October 2, 2004	
Date E. Bell New Mexico Reg. PS No. 14400 For and on behalf of Trijon Ego 128 Rock Point Dr., Suite B Durango CO 81301 (970) 380-9100	

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- 34161

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

NAVAJO

8. Well Number **11 #05**

9. OGRID Number **234550**

10. Pool name or Wildcat

BASIN DAKOTA *Basin Mancos*

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

Name of Operator

NOBLE ENERGY, INC.

3. Address of Operator

5802 US HIGHWAY 64, FARMINGTON, NM 87401

4. Well Location

Unit Letter **E** : **1980'** feet from the **NORTH** line and **660'** feet from the **WEST** line
Section **11** Township **25N** Range **10W** NMPM **SAN JUAN, COUNTY**

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

6819' GR

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type **X** reserve Depth to Groundwater **<100'** Distance from nearest fresh water well **>1000'** Distance from nearest surface water **<200'**

Pit Liner Thickness: **12** mil Below-Grade Tank: Volume bbls; Construction Material **reinforced polyethylene plastic**

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: **PIT PERMIT APPLICATION** ☒

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.

DRILLING PIT APPLICATION

PROPOSED: LINED DRILLING PIT WITH UNLINED VENT/FLARE/BLOW PIT FOR THE DRILLING OF A NATURAL GAS WELL.

SEE ATTACHED CROSS SECTION AND DRILLING PAD WITH PIT DIAGRAM

RCVD MAY 1 '08
OIL CONS. DIV.
DIST. 3

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 *Billie Maez* TITLE **SAN JUAN DISTRICT MANAGER** DATE **04/28/2008**

Type or print name **BILLIE MAEZ** E-mail address: **bmaez@nobleenergyinc.com** Telephone No. **505-632-8056**

For State Use Only

APPROVED BY: *Branch P. M.* TITLE **Deputy Oil & Gas Inspector, District #3** DATE **MAY 13 2008**

Conditions of Approval (if any):

Navajo 11 #05
General Drilling Plan
Patina San Juan, Inc.
San Juan County, New Mexico

1. LOCATION:

Est. elevation: 6730'
SWNW Section 11-T25N-R10W
1980' FNL 660' FWL
San Juan, New Mexico

Field:

Surface: United States of America

Minerals: United States of America

2. SURFACE FORMATION, ESTIMATED TOPS AND WATER, OIL, GAS OR MINERAL BEARING FORMATIONS (TVD):

Surface formation – Nacimiento

Formation	drilling depth
Ojo Alamo	886
Kirtland	1029
Fruitland	1495
Pictured Cliffs**	1960
Lewis	2207
Cliff House**	3529
Menefee	3547
Point Lookout**	4438
Mancos Shale	4678
Gallup**	5716
Greenhorn	6391
Graneros	6451
Dakota***	6491
TD	6631

Legend:

* Freshwater bearing formation

** Possible hydrocarbon bearing formation

*** Probable hydrocarbon bearing formation

Possible H2S bearing formation

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

3. PRESSURE CONTROL EQUIPMENT:

BOP equipment will be tested to its rated working pressure or 70-percent of the internal yield of the surface casing, but not to exceed 1,000 psi. See attachments for BOP and choke manifold diagrams.

Production Hole BOP Requirements and Test Plan

11" – 2,000 psi single ram (blind)

11" – 2,000 psi single ram (pipe)

Test as follows:

a) Pipe rams:	1,000 psi (High)	250 psi (low)
b) Choke manifold:	1,000 psi (High)	250 psi (low)
c) Choke lines:	1,000 psi (High)	250 psi (low)

All ram type preventers and related equipment will be hydraulically tested at nipple-up. They will also be retested in either of the following events:

- A pressure seal is broken.
- 30 days have elapsed since the last successful test of the equipment.

Furthermore, BOP's will be checked daily as to mechanical operating condition. All ram type preventers will have hand wheels, which will be operative and accessible at the time the preventers are installed. See attached Exhibit for details on the BOP equipment.

AUXILIARY EQUIPMENT:

- a) Manually operated kelly cock (upper and lower)
- b) Full opening manually operated safety valves in the full open position, capable of fitting all drill stem connections.

4. CASING DESIGN:

Hole Data				
Interval	Bit Size (Inches)	Casing Size (Inches)	Top (Ft)	Bottom (Ft)
Surface	12.25	9.625	0	310
Production	7 7/8	4.5	0	6631

Casing Data							
OD (Inches)	ID (Inches)	Weight (Lbs/Ft)	Grade	Thread	Collapse (psi)	Burst (psi)	Min. Tensile (Lbs)
9.625	8.921	36.0	J55	STC	2,020	3,520	394,000
4.5	4.276	11.6	N80	LTC	6,350	7,780	223,000

MINIMUM CASING DESIGN FACTORS:

COLLAPSE: 1.125

BURST: 1.00

TENSION: 1.80

Area Fracture Gradient Range: 0.7 – 0.8 psi/foot

Maximum anticipated reservoir pressure: 2,500 psi

Maximum anticipated mud weight: 9.0 ppg

Maximum surface treating pressure: 3,750 psi

Float Equipment:

Surface Casing: Guide shoe on bottom and 3 centralizers on the bottom 3 joints.

Production Casing: Float shoe on bottom joint and a float collar one joint up from float shoe. One centralizer 10 ft above float shoe and centralizers over potential hydrocarbon bearing zones. Stage tool above the Cliffhouse formation. One centralizer below stage tool and one centralizer above stage tool.

CEMENTING PROGRAMS:

9-5/8" Surface casing:

200 sx Type III cement with 3% CaCl_2 , 1/4#/sx cellofakes. 100% excess to circulate cement to surface. WOC 4 hrs. Pressure test surface casing to 1000 psi for 30 minutes.

Slurry weight: 15.2 ppg
Slurry yield: 1.28 ft³/sack

Volume basis:	40' of 9-5/8" shoe joint	17 cu ft
	320 min 300' of 12-1/4" x 9-5/8" annulus	100 cu ft
	<u>100% excess (annulus)</u>	<u>100 cu ft</u>
	Total	217 cu ft

Note:

1. Design top of cement is the surface.
2. Have available 100 sx Type III cement with 2% CaCl_2 for top out purposes.

4 1/2" Production casing:

1st Stage:

Lead: 175 sx of Type III cement plus additives

Slurry weight: 10.6 ppg

Slurry yield: 4.28 ft³/sx

Tail: 190 sx Type III cement plus additives

Slurry weight: 12.5 ppg

Slurry yield: 2.20 ft³/sx

2nd Stage:

Lead: 95 sx of Type III cement plus additives

Slurry weight: 10.6 ppg

Slurry yield: 4.28 ft³/sx

Tail: 205 sx Type III cement plus additives

Slurry weight: 12.5 ppg

Slurry yield: 2.20 ft³/sx

Volume basis:	1 st Stage:	
	40' of 4 1/2" shoe joint	5 cu ft
	3400' of 4 1/2" x 7 7/8" hole	775 cu ft
	2 nd Stage:	
	2500' of 4 1/2" x 7 7/8" hole	570 cu ft
	<u>30% excess (annulus)</u>	<u>405 cu ft</u>
	Total	1755 cu ft

Note:

1. Design 1st stage top of cement is $\pm 3230'$ (300' above the top of the Cliff House formation).
2. DV tool is 300' below the top of the Lewis Shale formation.
3. Actual cement volumes to be based on caliper log plus 30%.

5. MUD PROGRAM:

The surface hole will be drilled with spud mud. Gel and polymer sweeps will be used from surface to 300 feet as necessary to keep hole clean.

The production hole will be drilled with water until mud up at about 3420 ft. From mud up point to total depth, it will be drilled with a LSND mud. Anticipated mud weight ranges from 8.5 – 9.2 ppg. Mud weight will be increased as required to maintain hole stability and control gas influx.

Sufficient mud materials to maintain stable wellbore conditions (for either well control or lost circulation scenarios) will be maintained at the well site.

No chrome-based additives will be used in the mud system.

6. EVALUATION PROGRAM:

Mud logger: From base of surface casing to TD.

Testing: No DST is planned

Coring: None Planned

Electric logs: Production Hole:
1) GR-Neutron: TD to surface.
2) SP-LDT-DIL-CAL-PE: TD to base of surface casing

7. ABNORMAL PRESSURE AND TEMPERATURE:

H ₂ S	None
Coal	Fruitland
Minerals	None
Water	None
Static BHT	175° F
Lost Circulation	Possible
Hole Deviation	None
Abnormal Pressures	None
Unusual Drilling Problems	None

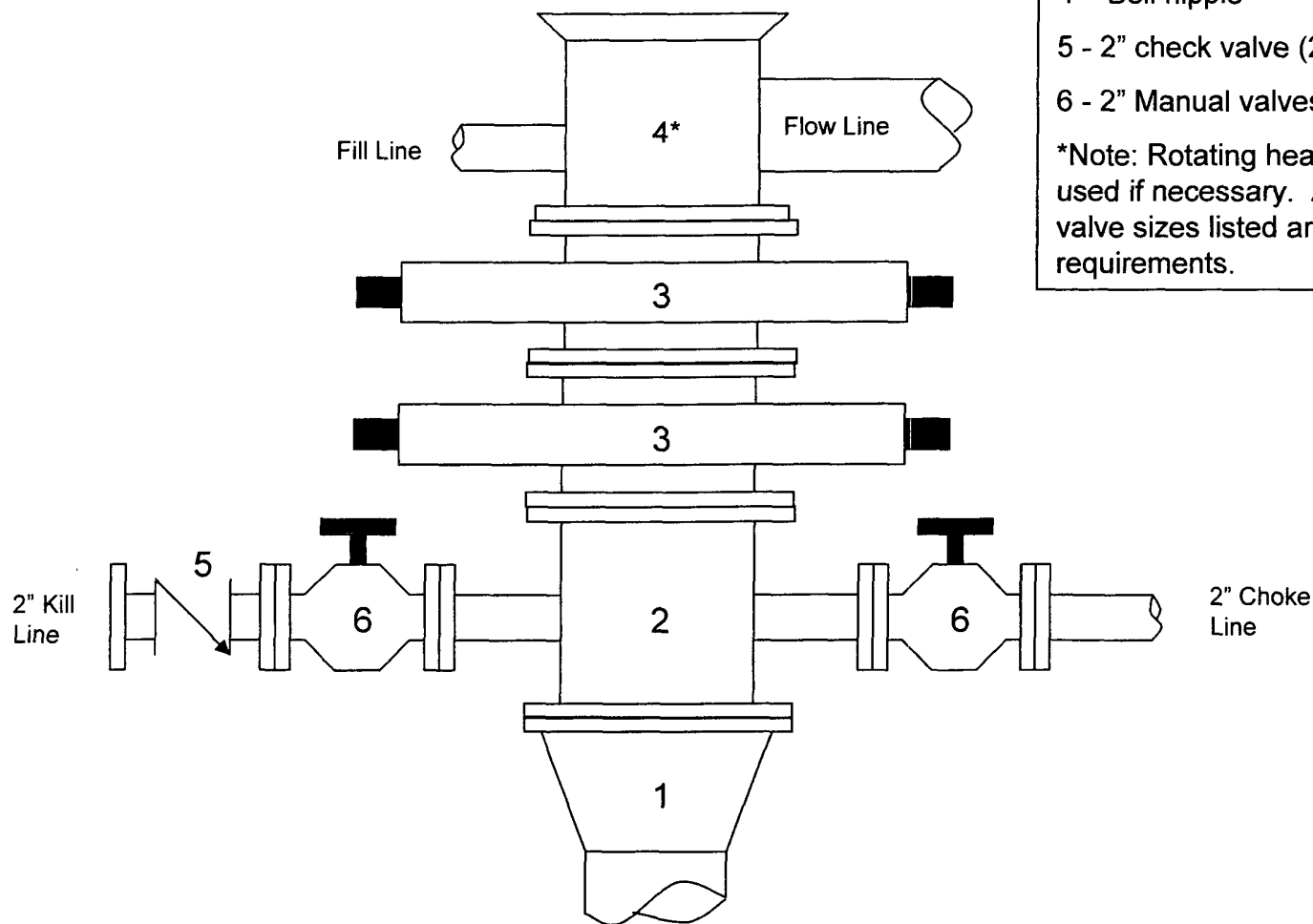
8. ANTICIPATED STARTING DATE: Q2, 2006

Anticipated duration: 16 days

Navajo 11 #05

2000 psi BOP stack

Minimum requirements



Components

1 - Wellhead 9-5/8" (2M)

2 - Drilling spool 11" (2M)

3 - A double or two single rams with blinds on bottom 11" (2M)

4 - Bell nipple*

5 - 2" check valve (2M)

6 - 2" Manual valves (2M)

*Note: Rotating head may also be used if necessary. Also, all line and valve sizes listed are minimum requirements.

Navajo 11 #05

2000 psi Choke Manifold
Minimum requirements

Components

1 – 2" Valve (2M)

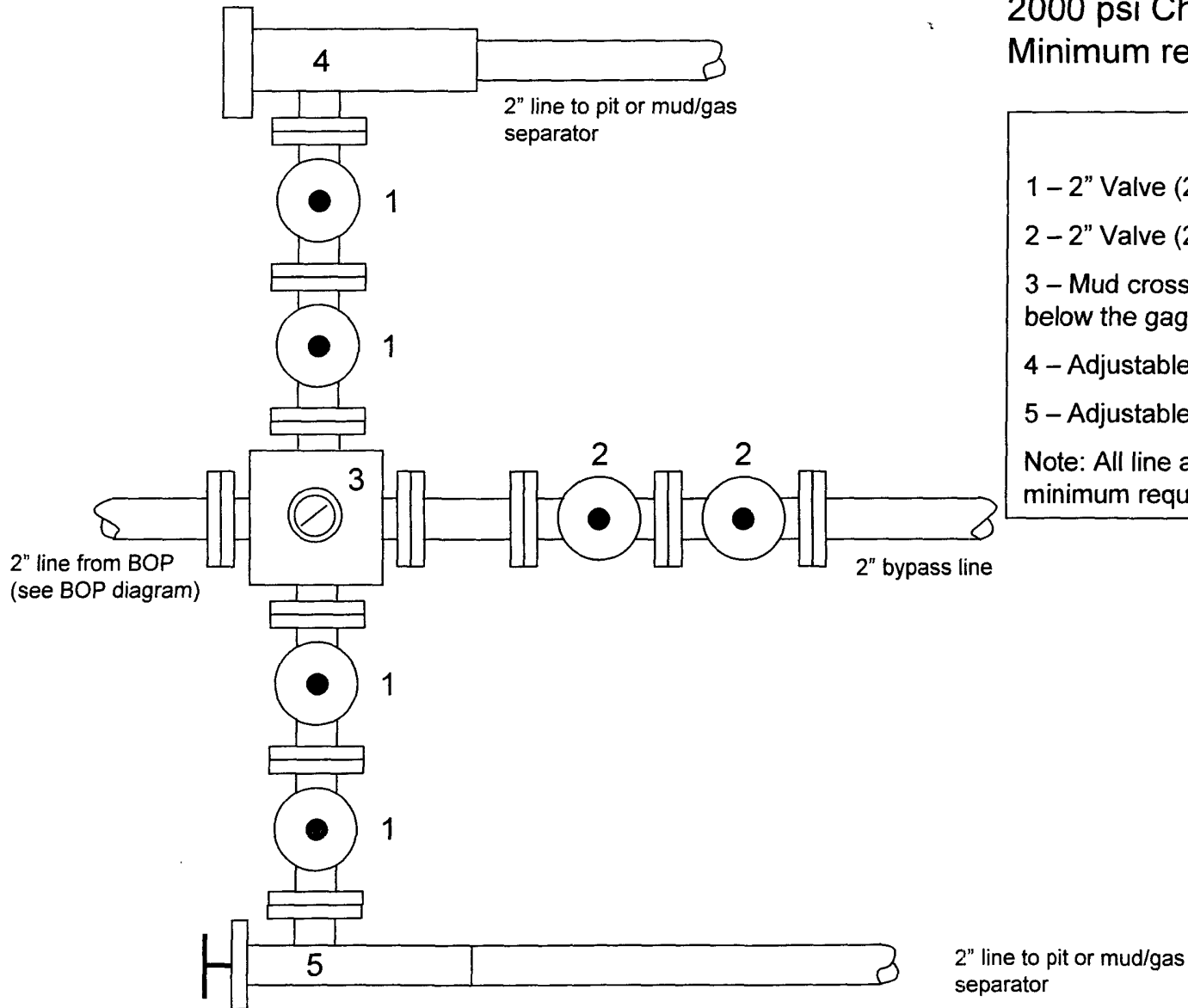
2 – 2" Valve (2M)

3 – Mud cross with gauge (2M) flanged below the gage.

4 – Adjustable choke (2M)

5 – Adjustable choke (2M)

Note: All line and valve sizes listed are minimum requirements.



1. **THE** **STATE** **OF** **THE** **UNION** **OF** **AMERICA** **IN** **THE** **YEAR** **1860**