

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

FORM APPROVED
OMB NO. 1004-0136
Expires: January 31, 2007

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM USASF 079527-A
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator PATINA OIL AND GAS CORPORATION		7. If Unit or CA Agreement, Name and No.
3a. Address 5802 US HIGHWAY 64 FARMINGTON, NM 87402		8. Lease Name and Well No. CHAMPLIN #7B
3b. Phone No. (include area code) 505-632-8056		9. API Well No. 30-039-29568
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface 685' FNL, & 1705' FEL - UL "B"		10. Field and Pool, or Exploratory Blanco Mesa Verde - Basin Dakota
At proposed prod. zone SAME		11. Sec., T., R., M., or Blk. And Survey or Area SEC 25 T27N R4W 8
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 21 MILES SOUTH OF DULCE, NM		12. County or Parish RIO ARRIBA
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg unit line, if any) 685'		13. State NM
16. No. of Acres in lease 320+		17. Spacing Unit dedicated to this well E/2 320 ACRES MV/DK
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1000'		20. BLM/ BFA Bond No. on file
21. Elevations (Show whether DF, RT, GR, etc.) 7239 7243' GL		22. Aproximate date work will start* SEPTEMBER, 2005
		23. Estimated Duration 18 DAYS

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 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 	Name (Printed/ Typed) JEAN M. MUSE	Date 6/13/2005
Title REGULATORY/ENGINEERING TECHNICIAN		
Approved By (Signature) 	Name (Printed/ Typed) AFM	Date 5/30/06
Title 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.

* (Instructions on reverse)

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

NMOCB

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29568		*Pool Code 72319 \ 71599	*Pool Name BLANCO MESAVERDE \ BASIN DAKOTA
*Property Code 24023	*Property Name CHAMPLIN		*Well Number 7B
*GRID No. 173252	*Operator Name PATINA SAN JUAN, INC.		*Elevation 7239

¹⁰ Surface Location

UL or lot no. B	Section 25	Township 27N	Range 4W	Lot Idn	Feet from the 685	North/South line NORTH	Feet from the 1705	East/West line EAST	County RIO ARriba
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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
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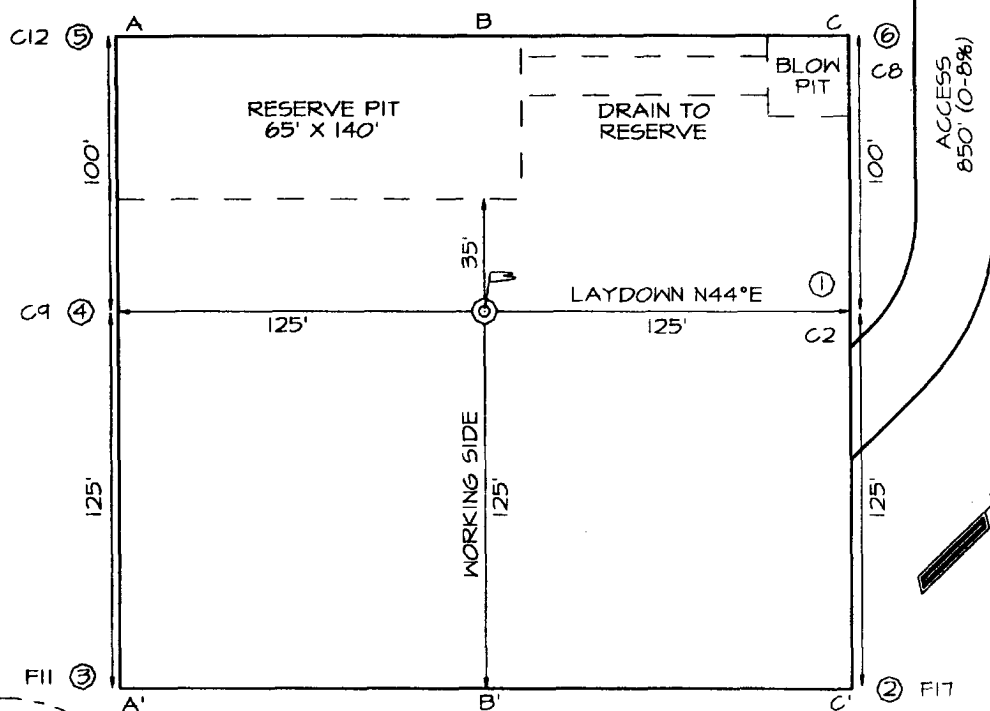
¹² Dedicated Acres 320.0 Acres - (E/2) MV 320 - DK DK	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

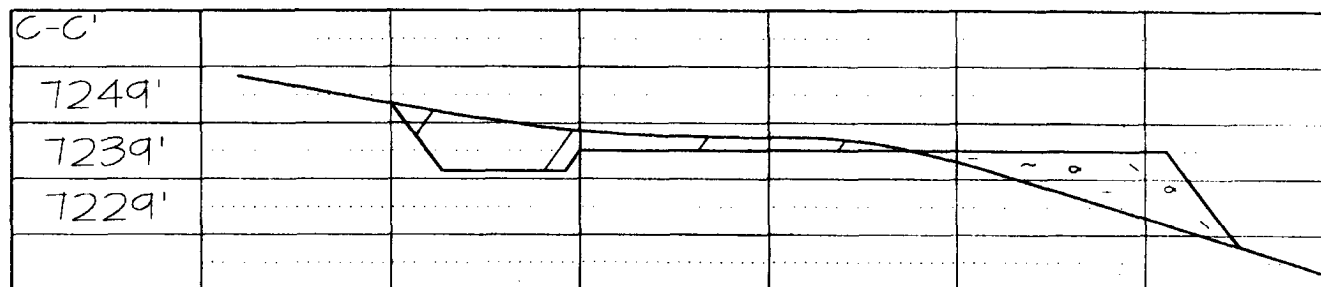
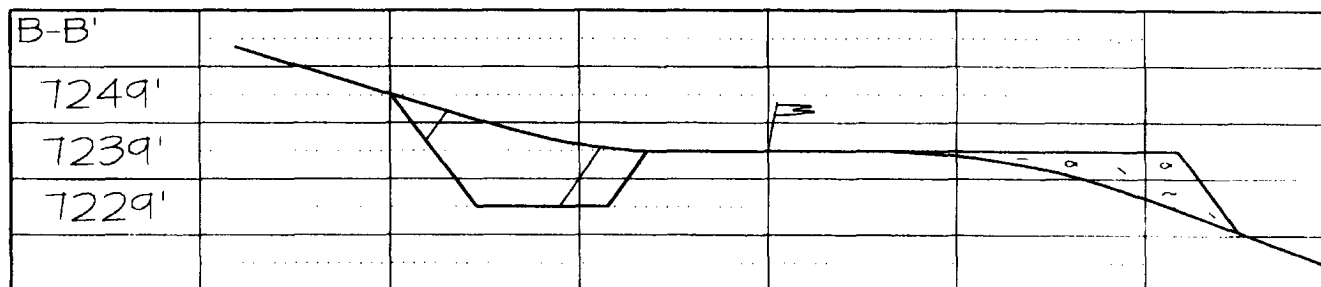
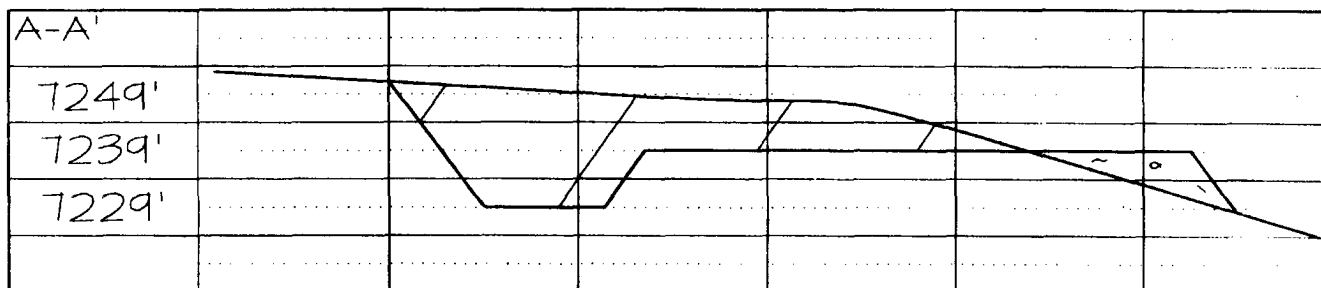
<div>16</div> <div>5276.70'</div> <div>685'</div> <div>1705'</div> <div>5273.40'</div> <div>5280.00'</div> <div>5280.60'</div> <div>25</div> <div>LEASE SF-079527-A</div> <div>RECEIVED 2005 JUN 17 6M 7 55</div> <div>070 FAIRMINGTON NM</div>	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>[Signature]</i> Signature JEAN M MUSE Printed Name Regulatory/Eng Tech Title 6/13/05 Date</p> <div>18 SURVEYOR CERTIFICATION</div> <p>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</p> <p>Survey Date: DECEMBER 8, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <div><p>JASON C. EDWARDS Certificate Number 15269</p></div>
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LATITUDE: 36°32'59"
LONGITUDE: 107°11'57"
DATUM: NAD1927

DATUM: NAD1927



WASH



**Champlin #7B
General Drilling Plan
Patina San Juan, Inc.
Rio Arriba County, New Mexico**

1. LOCATION:

Elevation: 7243' GL
N 8³⁸ WNE 2110' FNL and 1705' FEL
Section 25, T27N, R4W

Field: Blanco MV & Basin DK, Tapacito Pictured Cliffs
Surface: Carson National Forest - US Forest Service
Minerals: Carson National Forest - US Forest Service

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

Surface formation – San Jose

<u>Formation</u>	<u>Estimated Formation Top (Ft)</u>
Fruitland	3782
Pictured Cliffs**	4133
Lewis	4363
Cliff House	5733
Menefee	5974
Point Lookout***	6275
Gallup	7360
Greenhorn	8250
Graneros	8316
Dakota ***	8355
TD	8685

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	13.50	9.625	0	300
Intermediate	8.75	7.0	0	4550
Production	6.25	4.5	4250	8685

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
7.000	6.366	23.0	L80	LTC	3,830	6,340	435,000
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: 5,000 psi

Float Equipment:

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

Intermediate Casing: Float shoe on bottom joint and a float collar one joint up from float shoe. One centralizer 10 ft above float shoe and nine centralizers spaced every joint above the float collar. Stage tool above the Fruitland Coal. One centralizer below stage tool and one centralizer above stage tool.

Production Casing: 4 1/2" whirler type cement nosed guide shoe and a float collar on top of bottom joint with centralizers over potential hydrocarbon bearing zones.

CEMENTING PROGRAMS:

9-5/8" Surface casing:

245 sx Type III cement with 2% CaCl₂, ¼#/sx cellofakes. 100% excess to circulate cement to surface. WOC 12 hrs. Pressure test surface casing to 1000 psi for 30 minutes.

Slurry weight: 15.2 ppg
Slurry yield: 1.27 ft³/sx

Volume basis:	40' of 9-5/8" shoe joint	17 cu ft
	300' of 13-1/2" x 9-5/8" annulus	147 cu ft
	<u>100% excess (annulus)</u>	<u>147 cu ft</u>
	Total	311 cu ft

Note:

1. Design top of cement is the surface.
2. Have available 100 sx Type III cement with 2% CaCl₂ for top out purposes.

7" Intermediate Casing:

1st Stage:

155 sx of Type III cement plus additives

Slurry weight: 13.0 ppg

Slurry yield: 2.00 ft³/sx 310

2nd Stage: (Stage tool at ±2500')

Lead: 105 sx of Type III cement plus additives

Slurry weight: 12.0 ppg

Slurry yield: 2.55 ft³/sx 268

Tail: 60 sx of Type III cement plus additives

Slurry weight: 13.0 ppg

Slurry yield: 2.00 ft³/sx 120

498 ft³

Volume Basis:	40' of 7" shoe joint	9 cu ft
	4250' of 7" x 8 ¾" hole	639 cu ft
	300' of 7" x 9 5/8" casing	50 cu ft
	<u>30% excess (annulus)</u>	<u>207 cu ft</u>
	Total	905 cu ft

Note:

1. Design top of cement is surface.
2. Actual cement volumes to be based on caliper log plus 30%.
3. Intermediate TD @ ±4550', cement stage tool @ ±2500'.

4 1/2" Production casing:

390 sx of 50/50 Type III/POZ cement plus additives

Slurry weight: 12.5 ppg

Slurry yield: 1.78 ft³/sx

Volume basis:	40' of 4 1/2" shoe joint	5 cu ft
	4135' of 4 1/2" x 6 1/4" hole	424 cu ft
	300' of 4 1/2" x 7" casing overlap	33 cu ft
	200' above 4.5" liner (without drill pipe)	44 cu ft
	40% excess (annulus)	183 cu ft
	Total	689 cu ft

Note:

1. Design top of cement is $\pm 4050'$ (200' above the top of the 4.5" liner w/out drill pipe).
2. Intermediate casing @ $\pm 4550'$.
3. Estimated TD @ $\pm 8685'$, estimated TOL @ $\pm 4250'$ (300' overlap).
4. 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 intermediate hole will be drilled with a LSND mud from the base of surface casing to intermediate TD. 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.

The production hole will be drilled with air or air/mist to TD.

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: Intermediate Hole:

1) DIL-GR-SP: TD to base of surface casing.

2) LDT-CNL-GR-CAL-PE: TD to base of surface casing

Production Hole:

1) No open hole logs

2) Cased hole resistivity & porosity logs

7. ABNORMAL PRESSURE AND TEMPERATURE:

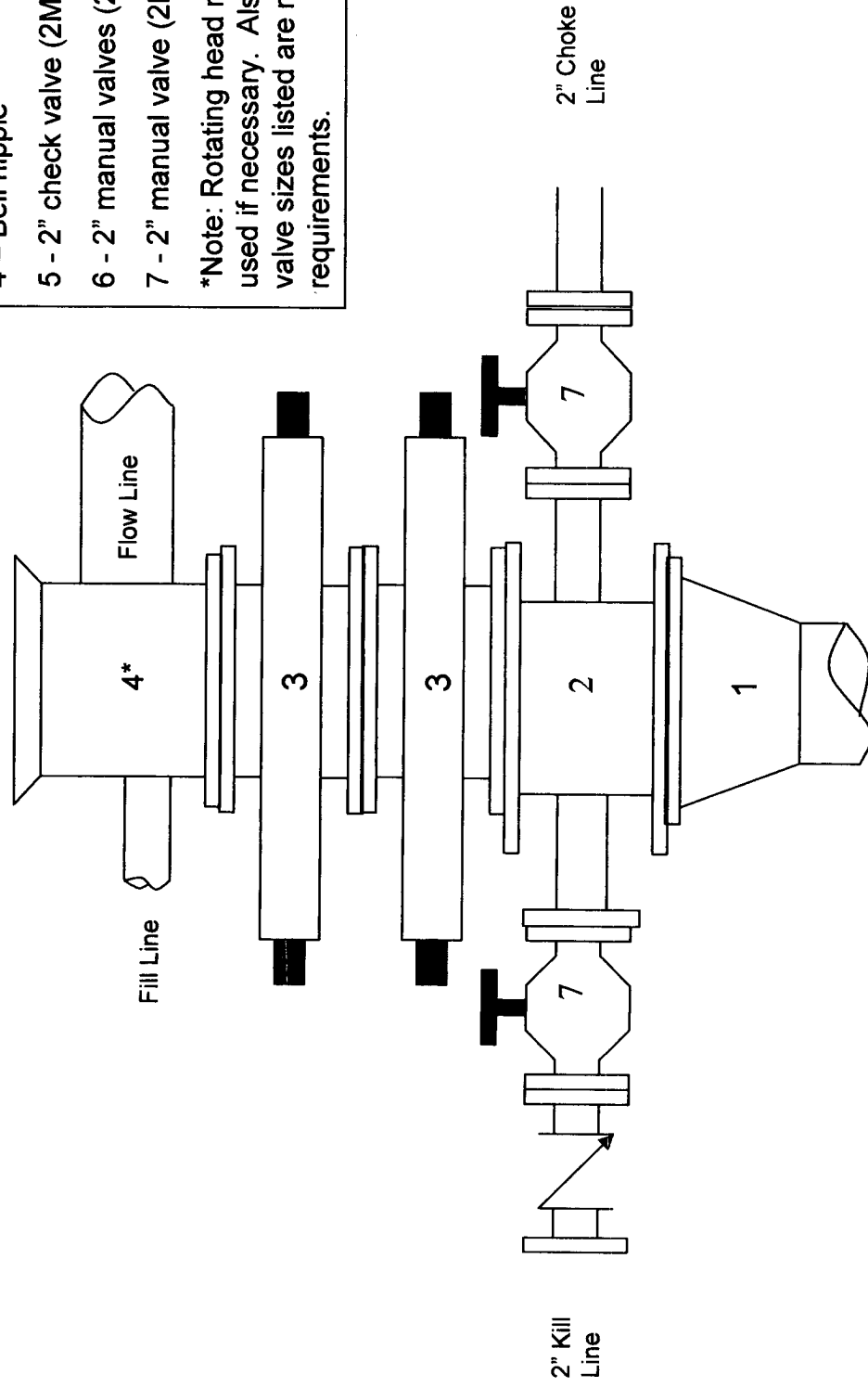
H ₂ S	None
Coal	Fruitland
Minerals	None
Water	None
Static BHT	175° F
Lost Circulation	Possible
Hole Deviation	None
Abnormal Pressures	None
Unusual Drilling Problems	None

8. ANTICIPATED STARTING DATE: September, 2005

Anticipated duration: 18 days

Champlin #7B

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)
- 7 - 2" manual valve (2M)

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

Champlin #7B

2000 psi Choke Manifold

Minimum requirements

Components

- 1 – 2" Valve (2M)
- 2 – 3" 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.

