District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, 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-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONEXX

[1] Operator Name and Address	[2] OGRID Number / [3] API Number
Patina San Juan, Inc. 5802 U. S. Highway 64 Farmington, NM 87401 (505) 632-8056	173252 30-045-32689

[3] Property Code	[4] Property Name	[6] Well No.
24045	KAUFMAN	#02

[9] Proposed Pool 1	[10] Proposed Pool 2
BASIN DAKOTA	BLANCO MESA VERDE

[7] Surface Location

UL or lot no.	Sec.	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	33	31N	13W	B	660	NORTH	1845	EAST	SAN JUAN

[8] Proposed 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

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	P	5550'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
N	7300'	Basin Dakota	N/A	JUNE 1, 2005

Depth to Groundwater >100' | Distance from nearest fresh water well >200' | Distance from nearest surface water >1000'

Pit: Liner: Synthetic ☐ 12 mils thick Clay ☐ Pit Volume:_____bbls Drilling Method:

Closed-Loop System ☐ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☒

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 ¼"	9 5/8"	36#	250'	165 sx	SURFACE
8 ¾"	7"	23#	4100' +/-	465 sx	SURFACE
6 ¼"	4 ½"	11.6#	7300'	220 sx	+/- 3800'

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Patina San Juan, Inc. proposes to drill a vertical well at the above described location and test the Basin Dakota and Blanco Mesa Verde formations as referenced in the attached drilling plan and multi-point surface use plans.

The Basin Dakota/Blanco Mesa Verde formations will be selectively perforated and completed.

The well will be connected to Williams Field Services gathering system.

RECEIVED NOV 2004 OIL CONS. DIV. DIST. 3

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Printed name: JEAN M. MUSE

Title: REGULATORY/ENGINEERING TECHNICIAN

E-mail Address: jmuse@patinasanjuan.com

Date: **11/22/04** Phone: **505-632-8056**

OIL CONSERVATION DIVISION

Approved by:

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date: NOV 23 2004 Expiration Date: NOV 23 2005

Conditions of Approval Attached ☐

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

¹API Number	²Pool Code	³Pool Name	
30-045-32689	72319/71599	Blanco Mesa Verde/BASIN DAKOTA	
⁴Property Code	⁵Property Name		⁶Well Number
24045	KAUFMAN		02
⁷OGRID No.	⁸Operator Name		⁹Elevation
173252	PATINA SAN JUAN, INC.		5550'

¹⁰ Surface Location

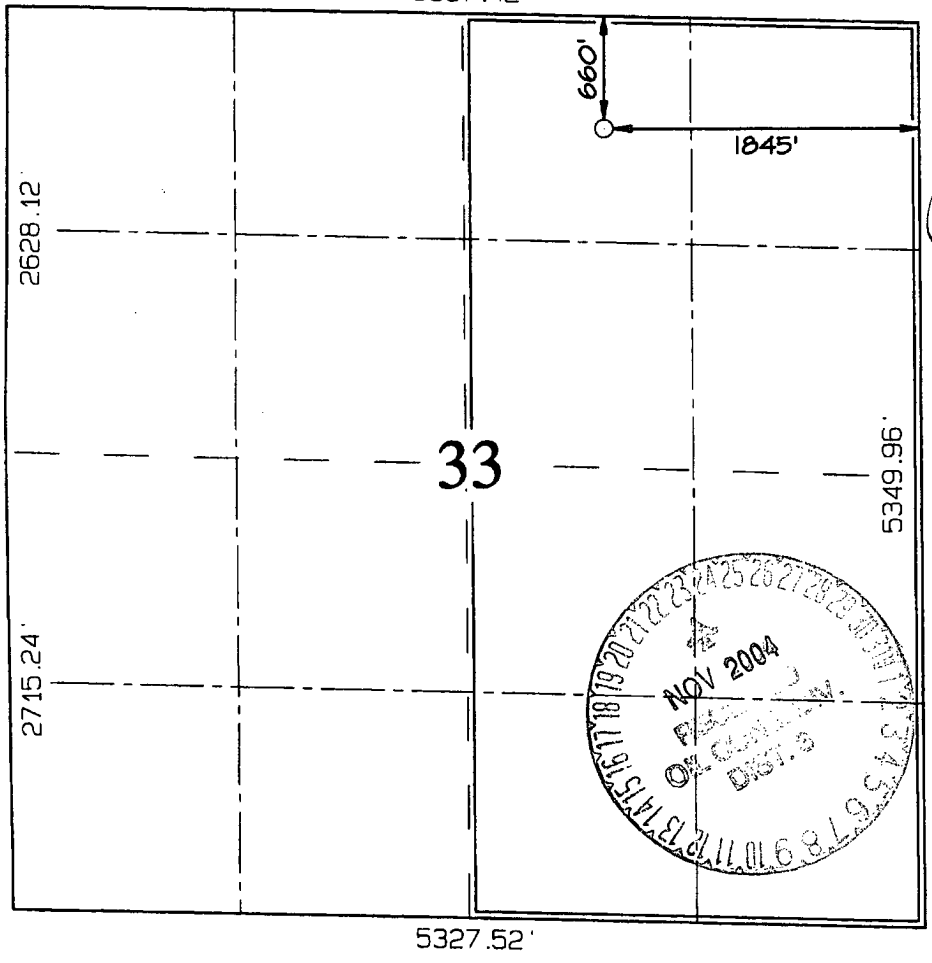
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	33	31N	13W		660	NORTH	1845	EAST	SAN JUAN

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	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
320.0 Acres - (E/2)			

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

JEAN M. MUSE
Printed Name

Reg/Engr'g Tech
Title

11/22/04
Date

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.

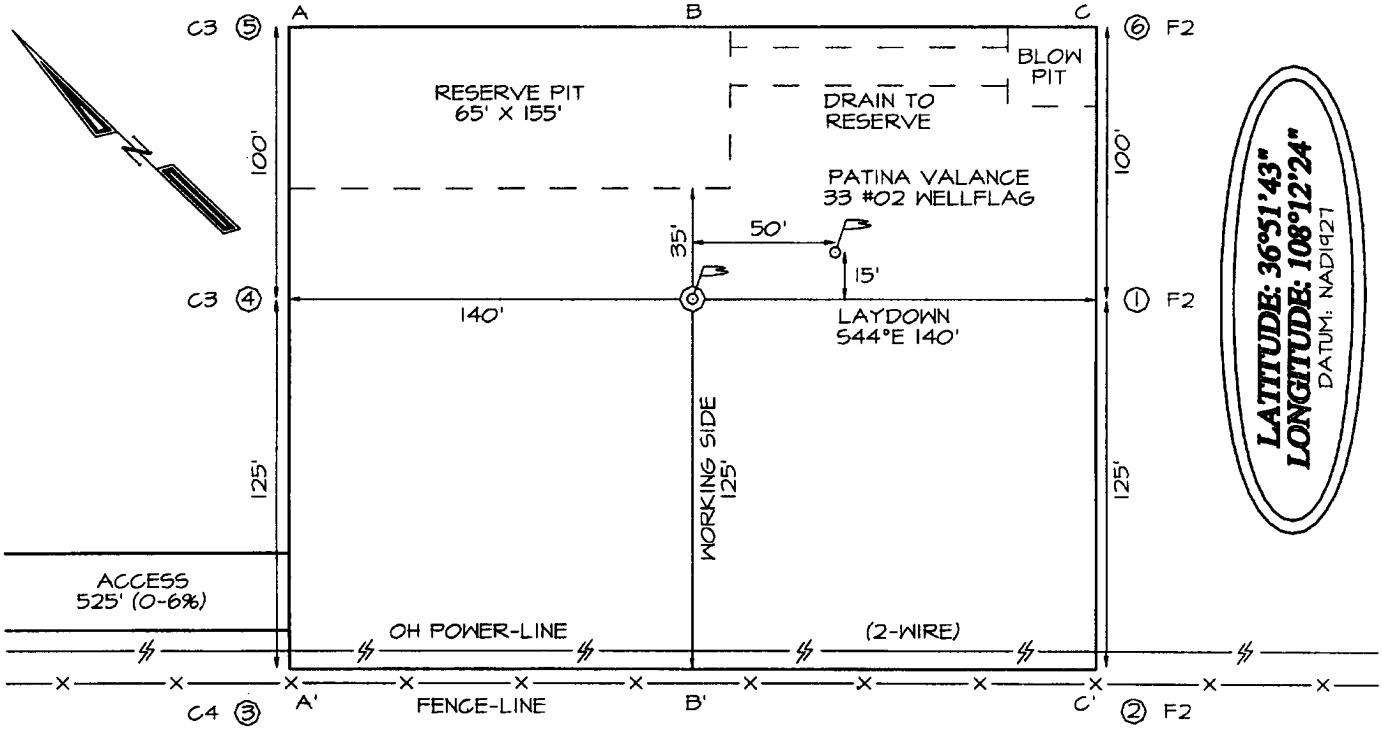
Date of Survey: OCTOBER 1, 2004

Signature and Seal of Professional Surveyor

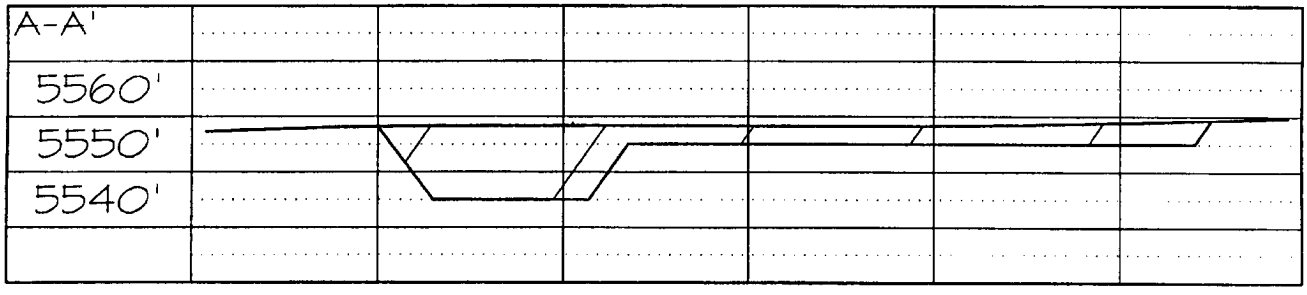
JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

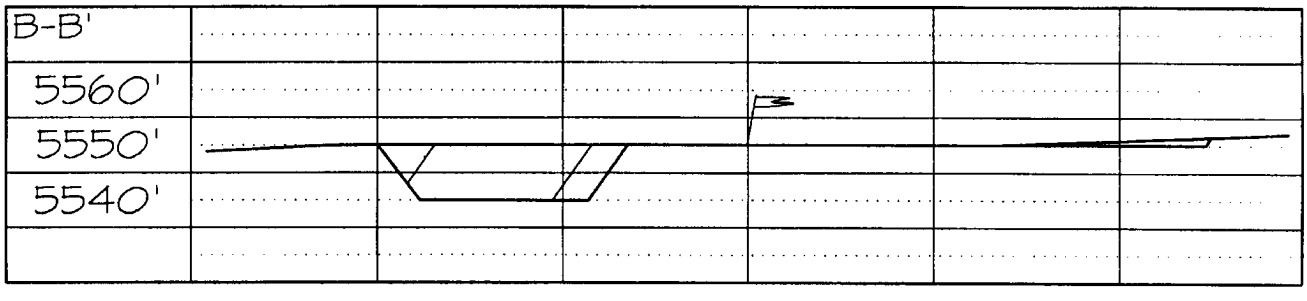
JASON C. EDWARDS
Certificate Number 15269

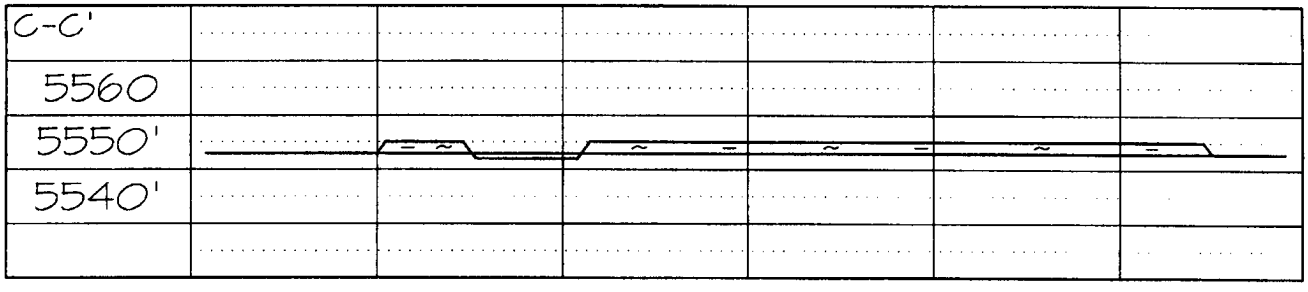
PATINA SAN JUAN, INC. KAUFMAN 33 #02
660' FNL & 1845' FEL, SECTION 33, T31N, R13W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5550'



LATITUDE: 36°51'43"
LONGITUDE: 108°12'24"
DATUM: NAD1927







FILENAME: 311333BT	SHEET 2 OF 3	NCE SURVEYS, INC.	DRAWN BY: EDO	CHECKED BY: JCE

3. PRESSURE CONTROL EQUIPMENT:

BOP equipment will be tested to the lesser of its rated working pressure, 70-percent of the internal yield of the surface casing or 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 and 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:

Casing Program:

Hole Size	Depth	Casing Size
12 ¼"	250'	9 5/8"
8 ¾"	4100' +/- / 150' below Menefee top	7"
6 ¼"	7300' / through Dakota	4 1/2"

Casing Size	Casing Type	Top (MD)	Bottom (MD)	Wt. (lb./ft)	Grade	Thread	Condition
9-5/8"	Surface	0'	250'	36.0	J55	STC	New
7"	Intermediate	0'	4100' +/-	23.0	N80	LTC	New
4 ½"	Production	3900'	7300'	11.6	N80	LTC	New

Casing Data				Collapse	Burst	Min. Tensile
OD	Wt/Ft	Grade	Thread	(psi)	(psi)	(Lbs.)
9-5/8"	36.0 lbs.	J55	STC	2,020	3,520	394,000
7"	23.0 lbs.	N80	LTC	3,830	6,340	442,000
4 1/2"	11.6 lbs.	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:	3,500 - 3,750 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 Cliffhouse formation. 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:
165 sxs Type III cement with 2% $CaCl_2$, 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 ft^3/sack

Volume basis:	40' of 9-5/8" shoe joint	17 cu ft
	300' of 12-1/4" x 9-5/8" annulus	94 cu ft
	100% excess (annulus)	94 cu ft
	Total	205 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.

7" Intermediate Casing:
1st Stage: 100 sacks of Type III cement
Slurry weight: 14.5 ppg
Slurry yield: 1.4 ft^3/sack

2nd Stage: (Stage tool at 3300' +/-): 365 sacks of Premium Lite FM

Slurry weight: 12.4 ppg
Slurry yield: 1.92 ft^3/sack

Volume Basis:	40' of 7" shoe joint	9 cu ft
	3800' of 7" x 8 ¾" annulus	586 cu ft
	300' of 7" x 9 5/8" hole	50 cu ft
	30% excess (annulus)	176 cu ft
	Total	821 cu ft

Note:
1. Design top of cement is surface.
2. Actual cement volumes to be based on caliper log plus 30%.

4 1/2" Production casing:
Stage 1: 220 sacks of Premium Lite High Strength FM out guide shoe.

Slurry weight: 12.3 ppg
Slurry yield: 2.13 ft^3/sack

Volume basis:	40' of 4 1/2" shoe joint	5 cu ft
	4 1/2 " x 6 1/4" hole	318 cu ft
	4 ½" x 7" casing	33 cu ft
	30% excess (annulus)	107 cu ft
	Total	463 cu ft

Note:
1. Design top of cement is 3800 +/- ft. or 300 ft. into 7" intermediate casing.
2. 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 water until mud up at about 3000 ft. From 3000' to 4100', intermediate casing depth, will be drilled with LSND mud. Anticipated mud weight ranges from 8.5 – 9.0 ppg. Mud weight will be increased as required to maintain hole stability and control gas influx.

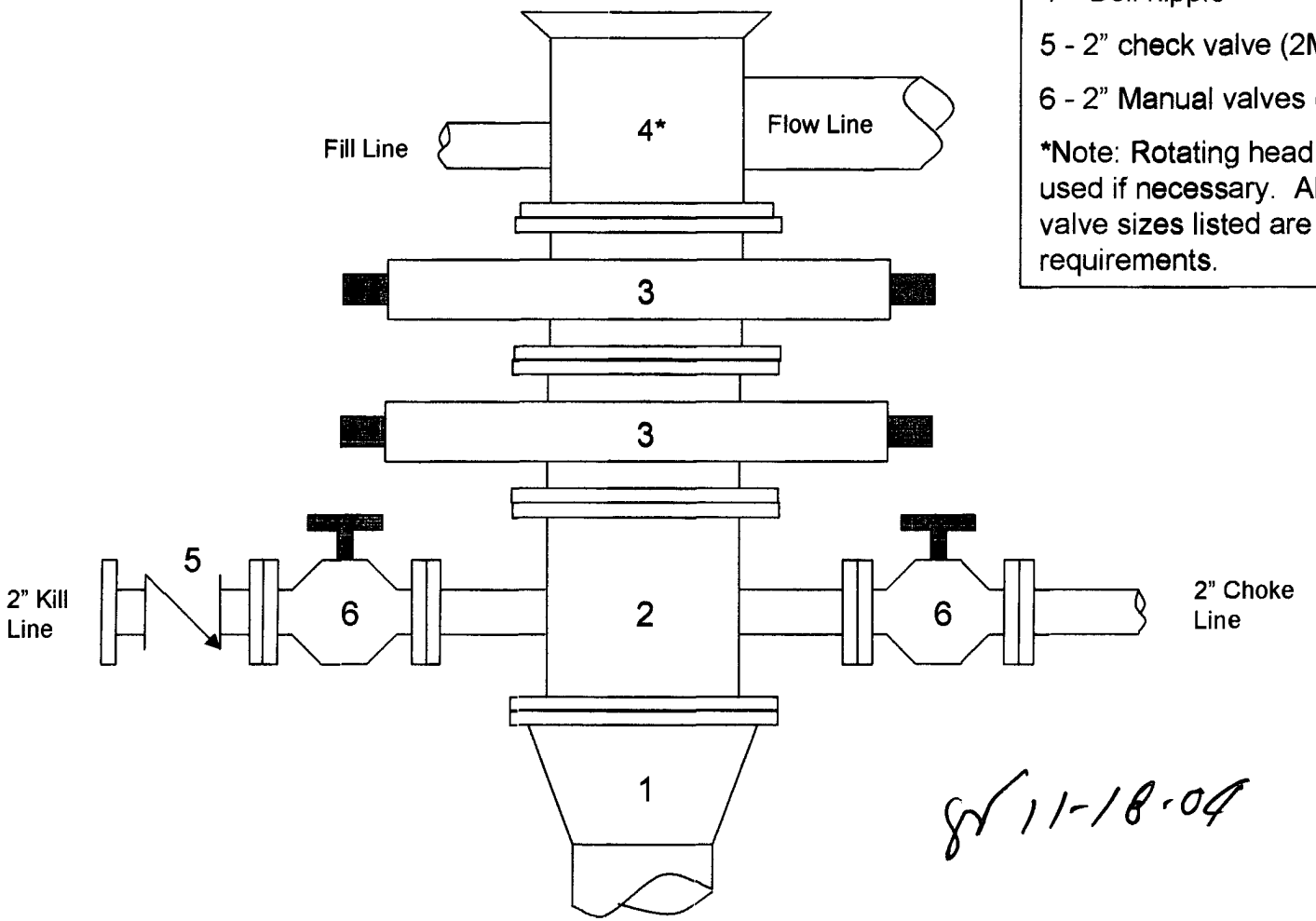
The production hole will be drilled with air or air/mist.

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.

Kaufman 33 No. 02

2000 psi BOP stack
Minimum requirements

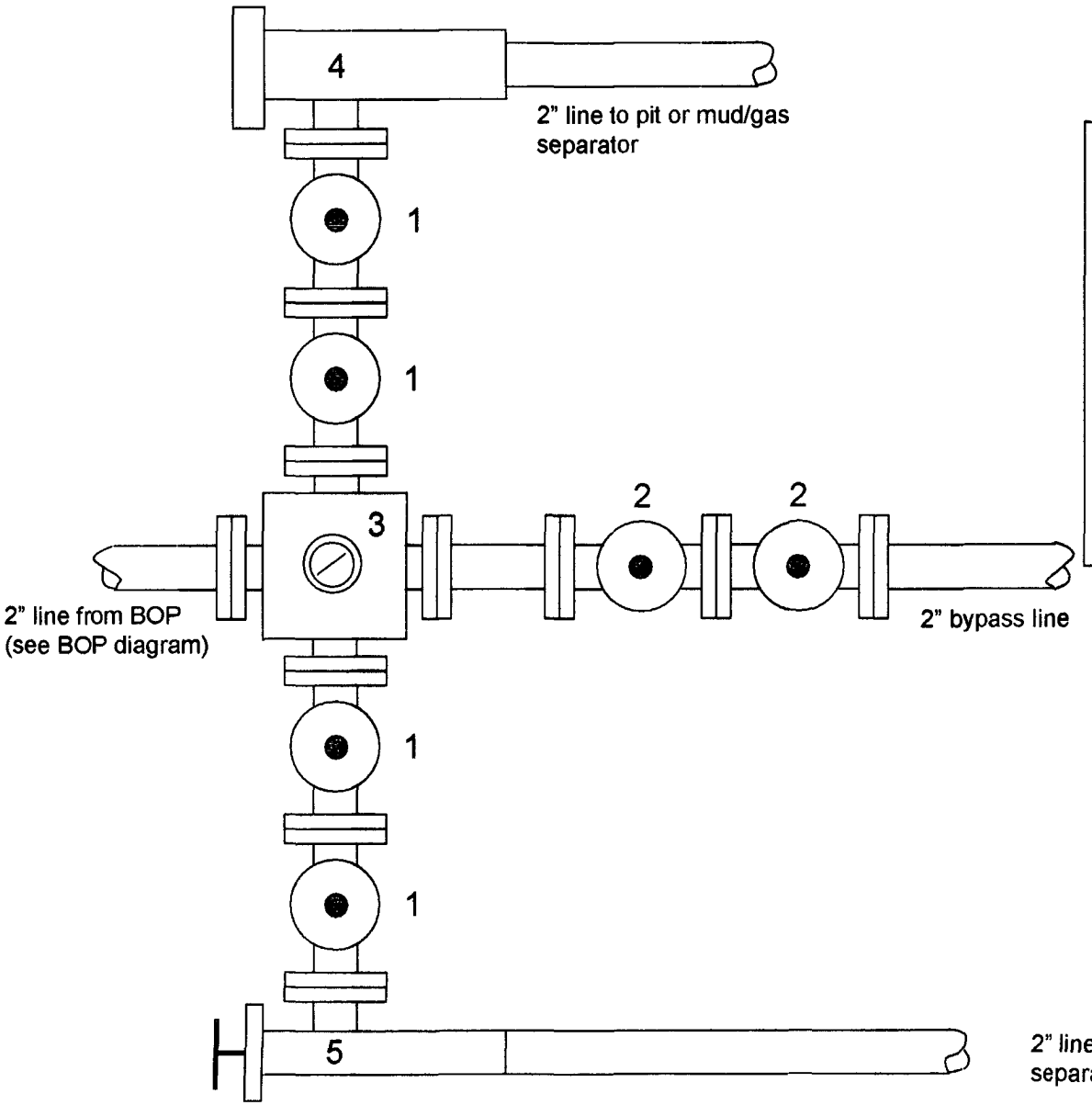


Components
1 - Wellhead 9-5/8" (2M)
2 – Drilling spool 11" (2M)
3 – A double or two single rams with blinds on bottom 11" (2M)
4 – Bell nipple*
5 - 2" check valve (2M)
6 - 2" Manual valves (2M)
*Note: Rotating head may also be used if necessary. Also, all line and valve sizes listed are minimum requirements.

11-18-04

Kaufman 33 No. 02

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 beam choke (2M)
5 – Adjustable needle choke (2M)
Note: All line and valve sizes listed are minimum requirements.

11-18-04