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 30-045-32722

[4] Property Code	[5] Property Name	[6] Well No.
34330	CHAVEZ 02	#07

[9] Proposed Pool 1	[10] Proposed Pool 2
MESA VERDE	

RECEIVED DEC 2004 OIL CONS. DIV. DIST. 3

[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
G	2	31N	13W	G	1977	NORTH	1821	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	5779'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
N	4800'	Mesa Verde	N/A	JUNE 1, 2005

Depth to Groundwater >100' | Distance from nearest fresh water well <1000' | 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'	140 sx	SURFACE
7 7/8"	4 ½"	11.6#	4800'	700 sx	SURFACE

[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 Blanco Mesa Verde formation as referenced in the attached drilling plan.

The Blanco Mesa Verde formation will be selectively perforated and completed.

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

[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: **12/06/04** Phone: **505-632-8056**

OIL CONSERVATION DIVISION

Approved by:

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

Approval Date: DEC - 8 2004 Expiration Date: DEC - 8 2005

Conditions of Approval Attached ☐

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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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

1 API Number	2 Pool Code	3 Pool Name
30-045-32722	72319	BLANCO MESA VERDE

4 Property Code	5 Property Name	6 Well Number
34330	CHAVEZ 02	07

7 OGRID No.	8 Operator Name	9 Elevation
173252	PATINA OIL & GAS CORPORATION	5787'

10 Surface Location

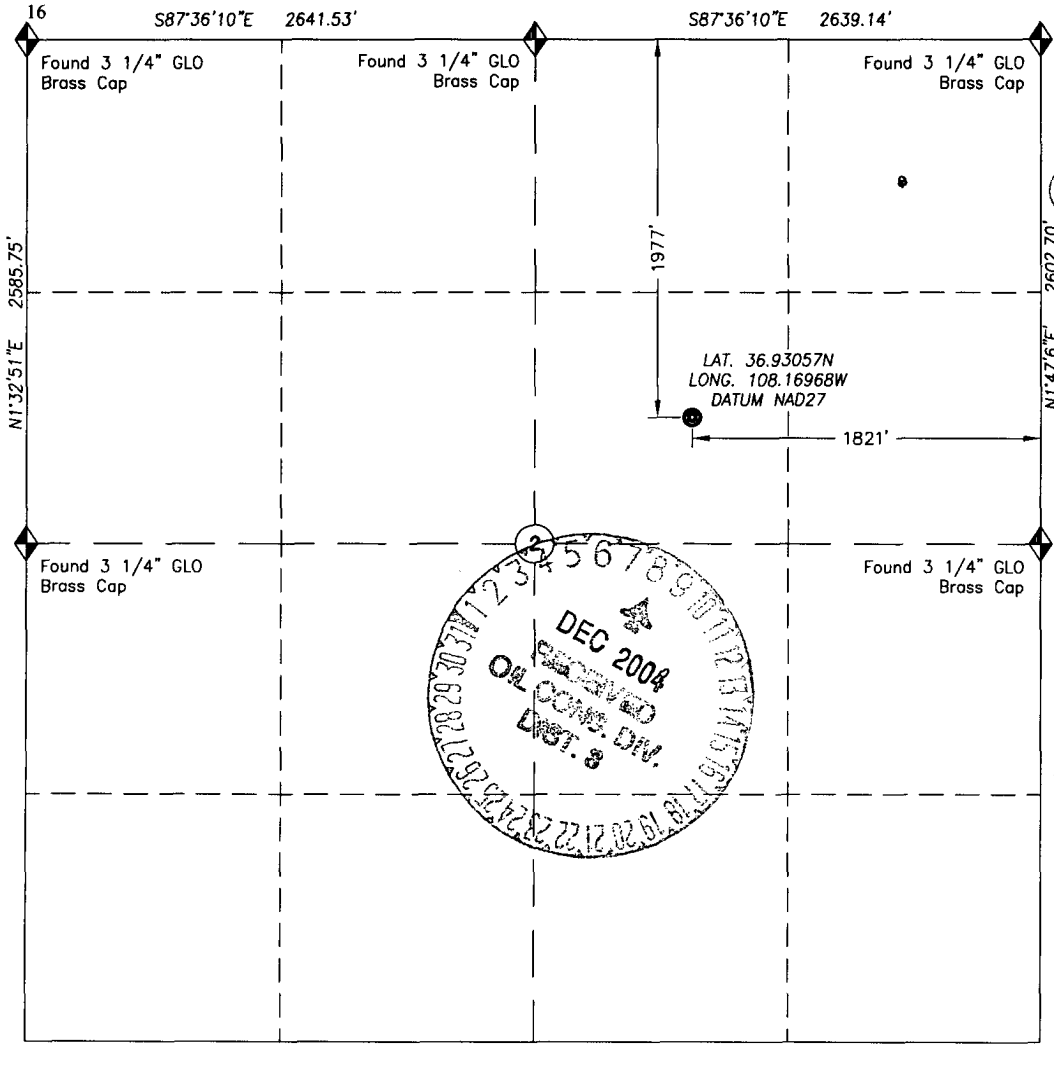
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	2	31N	13W		1977	NORTH	1821	EAST	SAN JUAN

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 In fill	14 Consolidation Code	15 Order No.
319.4 ~~320~~ ACRE E 1/2			

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

Printed Name: Jean M. Muse

Title and E-mail Address: jmuse@patinasanjuan.com Reg/Engr. Tech

Date: 12/06/04

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.

November 17, 2004

Date of Survey

DALE E. BELL NEW MEXICO 14400 11/23/04 REGISTERED PROFESSIONAL SURVEYOR

Dale E. Bell
New Mexico Reg. PS No. 14400
For and on behalf of Trigon Epc
126 Rock Point Dr., Suite B
Durango CO 81301
(970) 385-9100

PAD LAYOUT PLAN & PROFILE

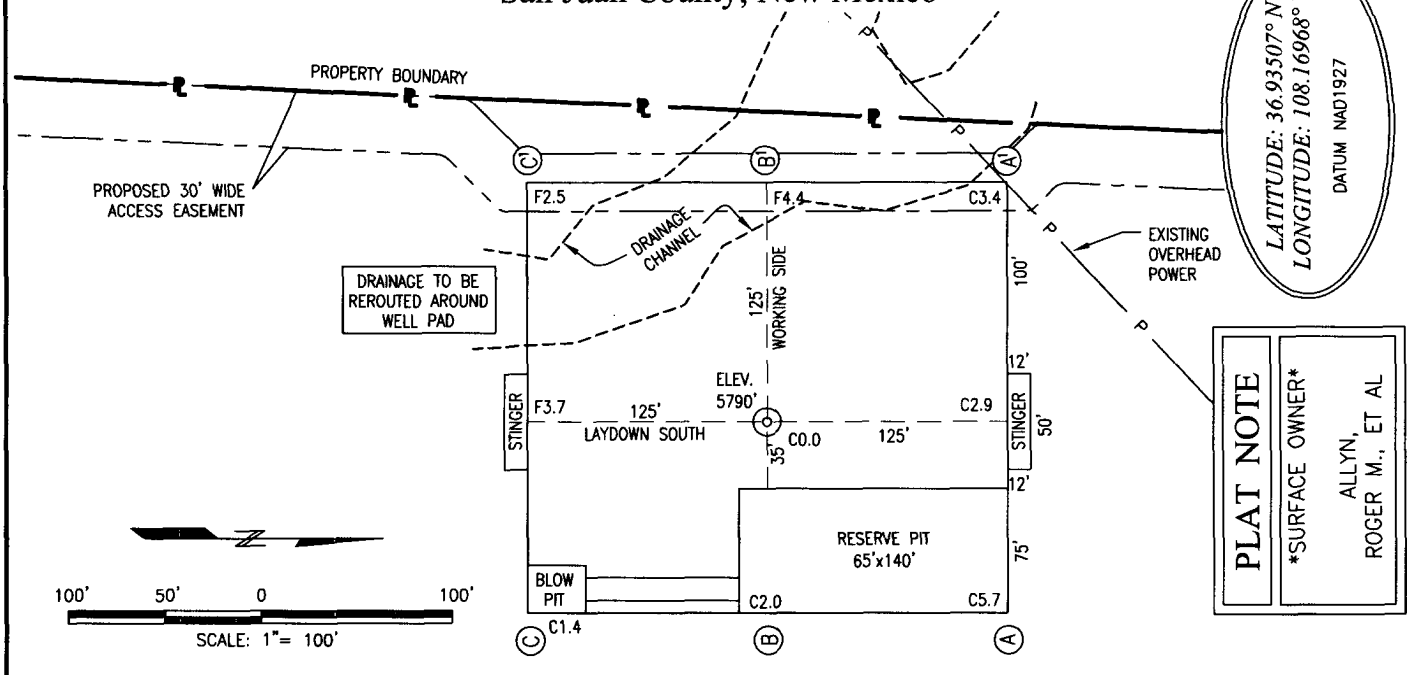
PATINA OIL & GAS CORPORATION

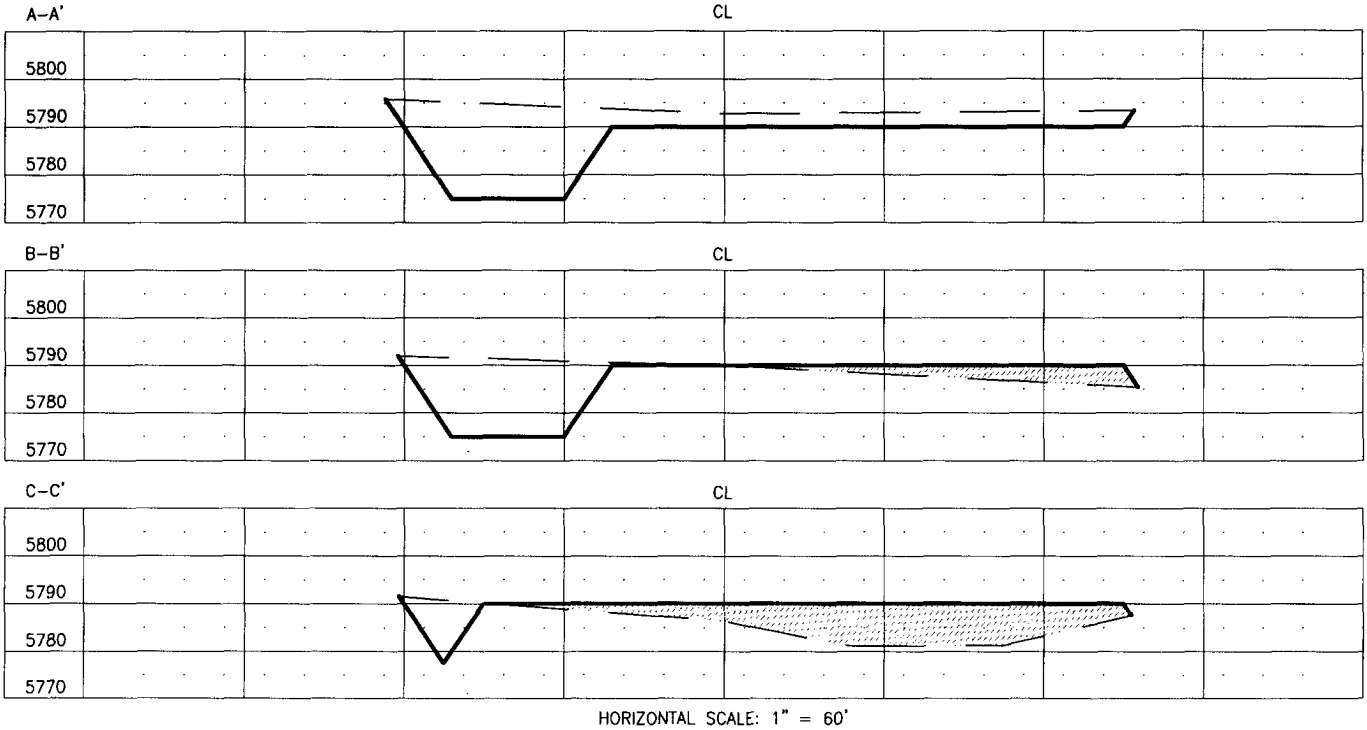
Chavez 02 #07

1977' F/NL 1821' F/EL

Sec. 2, T31N, R13W, N.M.P.M.

San Juan County, New Mexico





HORIZONTAL SCALE: 1" = 60'

VERTICAL SCALE: 1" = 40'

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL ONE-CALL FOR LOCATION OF ALL BURIED FACILITIES ON WELL PAD AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
2. CUTS AND FILLS SHOWN ARE APPROXIMATE – FINAL FINISHED ELEVATION IS TO BE ADJUSTED SO EARTHWORK WILL BALANCE. CORNER STAKES ARE APPROXIMATE AND DO NOT INCLUDE ADDITIONAL AREAS NEEDED FOR SIDESLOPES AND DRAINAGES. FINAL PAD DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR.

DATE SURVEYED: 11/17/04	DRAWN BY: AEM	DATE DRAWN: 09/28/04	REVISION DATE: 11/22/04	FILE NAME: CHAVEZ020702

CLIENT

PATINA OIL & GAS CORPORATION

PREPARED BY

TRIGON EPC

ENGINEERING • PROCUREMENT • CONSTRUCTION

ACCESS ROAD PLAT

PATINA OIL & GAS CORPORATION

Chavez 02 #07

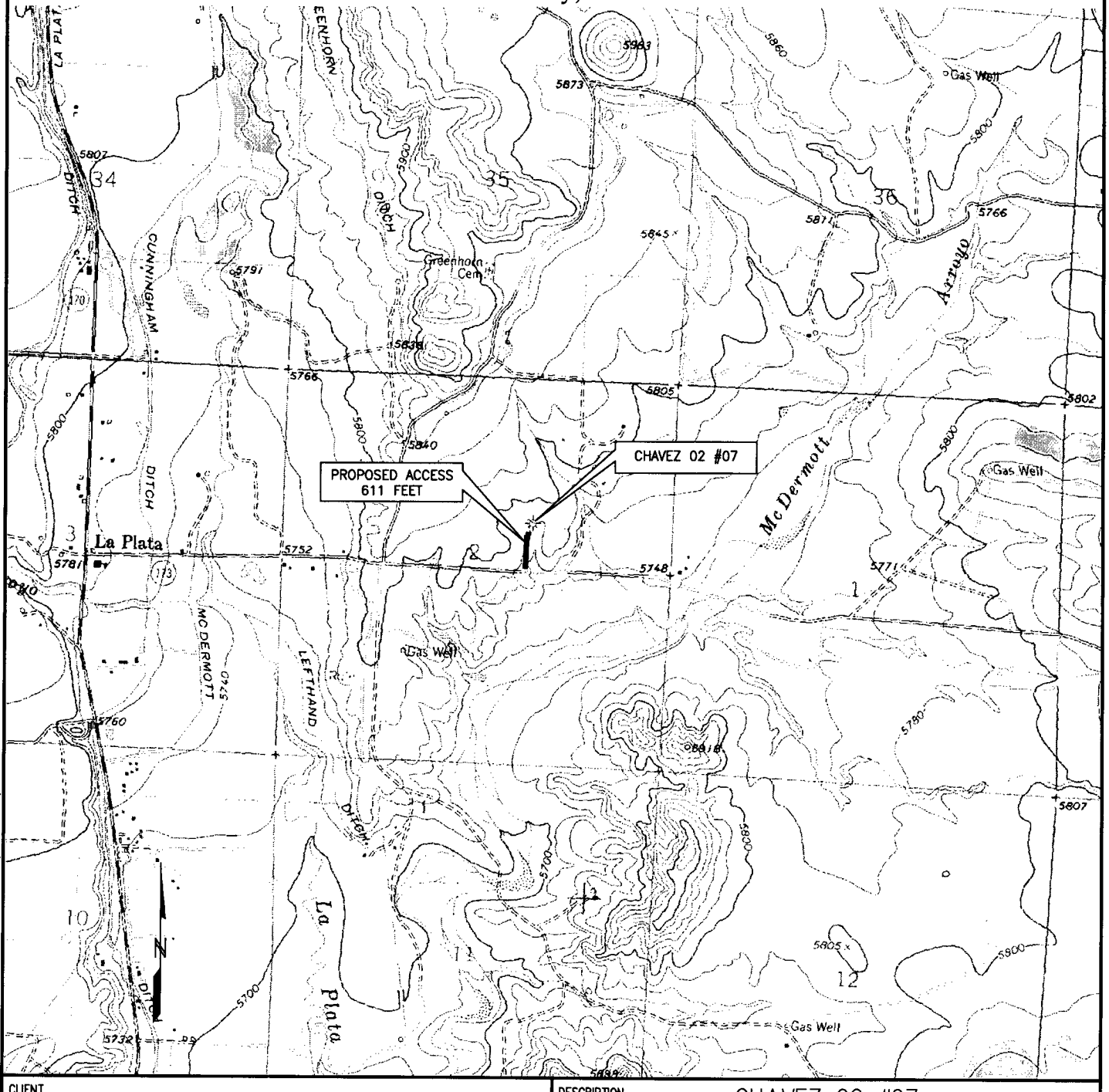
1977' F/NL 1821' F/EL

Lattitude: 36.93057 N

Longitude: 108.16968 W

Sec. 2 T31N, R13W, N.M.P.M.

San Juan County, New Mexico



CLIENT: PATINA OIL & GAS CORPORATION			DESCRIPTION: CHAVEZ 02 #07 ACCESS ROAD PLAT	
SCALE: 1"=2000'	REVISION: 11/22/04	DRAWN BY: AEM	DATE DRAWN: 09/28/04	FILE NAME: CHAVEZ020703
SURVEYED BY: TRIGON EPC 126 ROCK POINT DRIVE, SUITE B DURANGO, CO 81301 970-385-9100			PREPARED BY: TRIGON EPC ENGINEERING • PROCUREMENT • CONSTRUCTION	

Nov 23, 2004 - 11:04am by anayherr - Path = K:\JOBS\2014-02 Patina Huerfano 2005 PUD\Chavez 02-07\CHAVEZ020703.DWG

Directions from the intersection of highway 64 & Highway 170 on west side of Farmington New Mexico

To Patina Chavez #02-07

1980 FNL & 1901 FEL, Section 3, T-31-N, R-13-W, N.M.P.M., San Juan County, New Mexico

From the intersection of Highway #64 & Highway #170 just West of Farmington NM, Go North on Highway #170, 14.5 miles to the intersection of Highway #170 & Highway #574.

Go right (East) 1.0 mile to the beginning of proposed access road on the left (North) which continues north 611' to staked location.

Chavez 02 No. 07
Operations Plan
Patina San Juan, Inc.
San Juan County, New Mexico

CASING DESIGN:

Casing Program:

Hole Size	Depth	Casing Size
12 ¼"	250'	9 5/8"
7 7/8"	4800'	4 ½"

Hole Size	Casing Type	Top (MD)	Bottom (MD)	Wt. (lb./ft)	Grade	Thread	Condition
9-5/8"	Surface	0'	250'	36.0	J55	STC	New
4 ½"	Production	0'	4800'	11.6	N80	LTC	New

Casing Data OD	Wt/Ft	Grade	Thread	Collapse (psi)	Burst (psi)	Min. Tensile (Lbs.)
9-5/8"	36.0 lbs.	J55	STC	2,020	3,520	394,000
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:	0.85 to 1.30 psi/foot
Maximum anticipated reservoir pressure:	900 psi
Maximum anticipated mud weight:	9.0 ppg
Maximum surface treating pressure:	3,500 psi

 12-1-04

Float Equipment:

Surface Casing: Guide shoe on bottom and 3 centralizers on the bottom 3 joints.
Production Casing: 4 1/2" 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 with additional centralizers over potential hydrocarbon bearing zones.

CEMENTING PROGRAMS:

9-5/8" Surface casing:

140 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	
	250' of 12-1/4" x 9-5/8" annulus	78 cu ft	
	100% excess (annulus)	78 cu ft	
	Total		173 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: 150 sacks of Type III cement
Slurry weight: 14.5 ppg
Slurry yield: 1.4 ft^3/sack

2nd Stage: (Stage tool at 3600' +/-): 550 sacks of Premium Lite FM

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

Volume Basis:	40' of 4 1/2" shoe joint	4 cu ft	
	4500' of 4 1/2" x 7 7/8" annulus	1036 cu ft	
	300' of 4 1/2" x 9 5/8" hole	78 cu ft	
	15% excess (annulus)	155 cu ft	
	Total		1273 cu ft

Note:
1. Design top of cement is surface.
2. Actual cement volumes to be based on caliper log plus 15%.

 SF 12-1-04

MUD PROGRAM:

The surface hole will be drilled with spud mud. Gel and polymer sweeps will be used from surface to 250 feet as necessary to keep hole clean.

The production hole will be drilled with LSND mud from base of surface casing to TD. 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.

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.

EVALUATION PROGRAM:

Mud logger:	None planned
Testing:	No DST is planned
Coring:	None Planned
Electric logs:	1) DIL-GR-SP: TD to base of surface casing.
	2) LDT-CNL-GR-CAL-PE: TD to base of surface casing

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.

 SV 12-1-02

Chavez 02 No. 07

2000 psi BOP stack
Minimum requirements

Components

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

2 – Drilling spool 11" (2M)

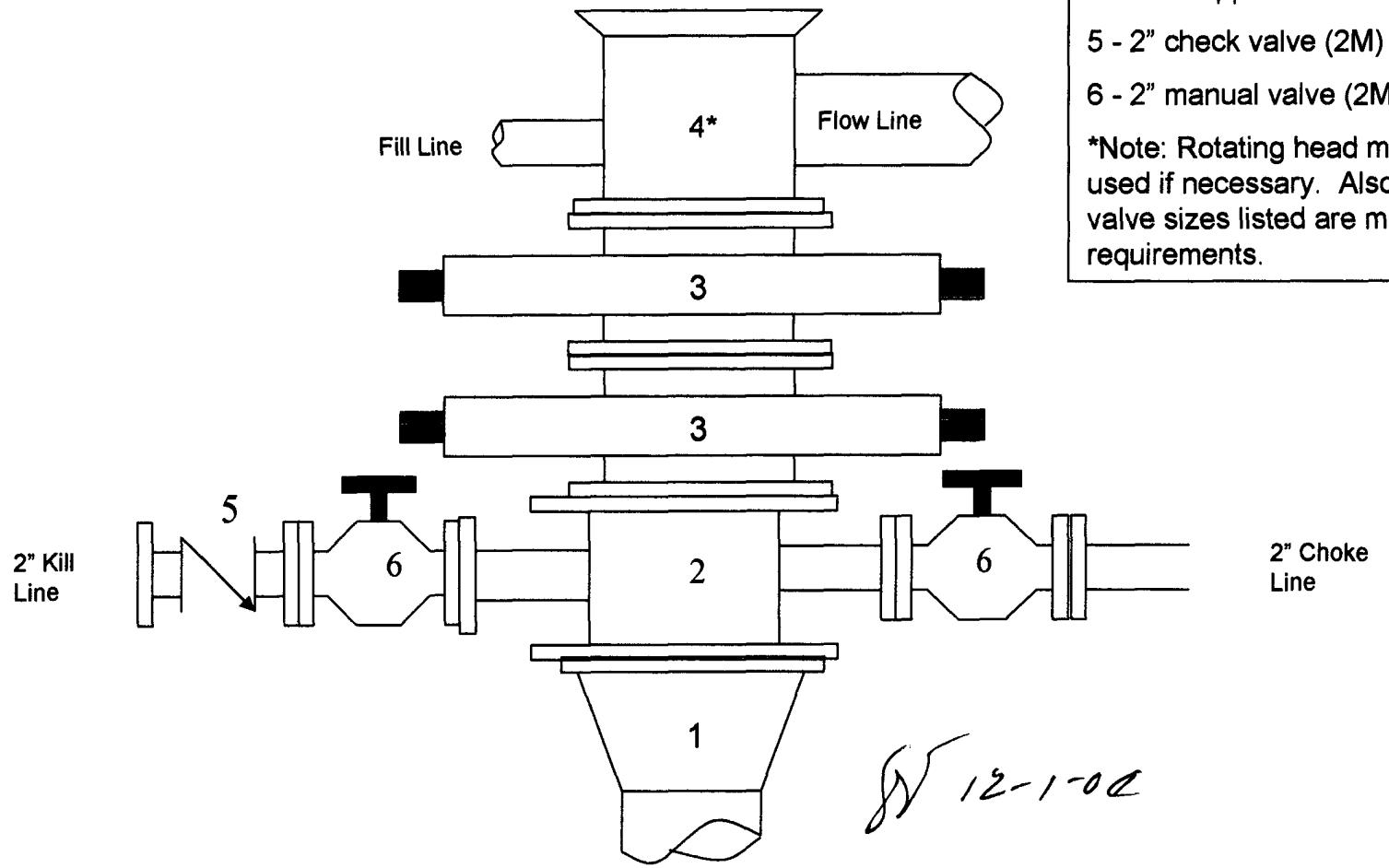
3 – A double or two single rams with blinds on bottom 11" (2M)

4 – Bell nipple*

5 - 2" check valve (2M)

6 - 2" manual valve (2M)

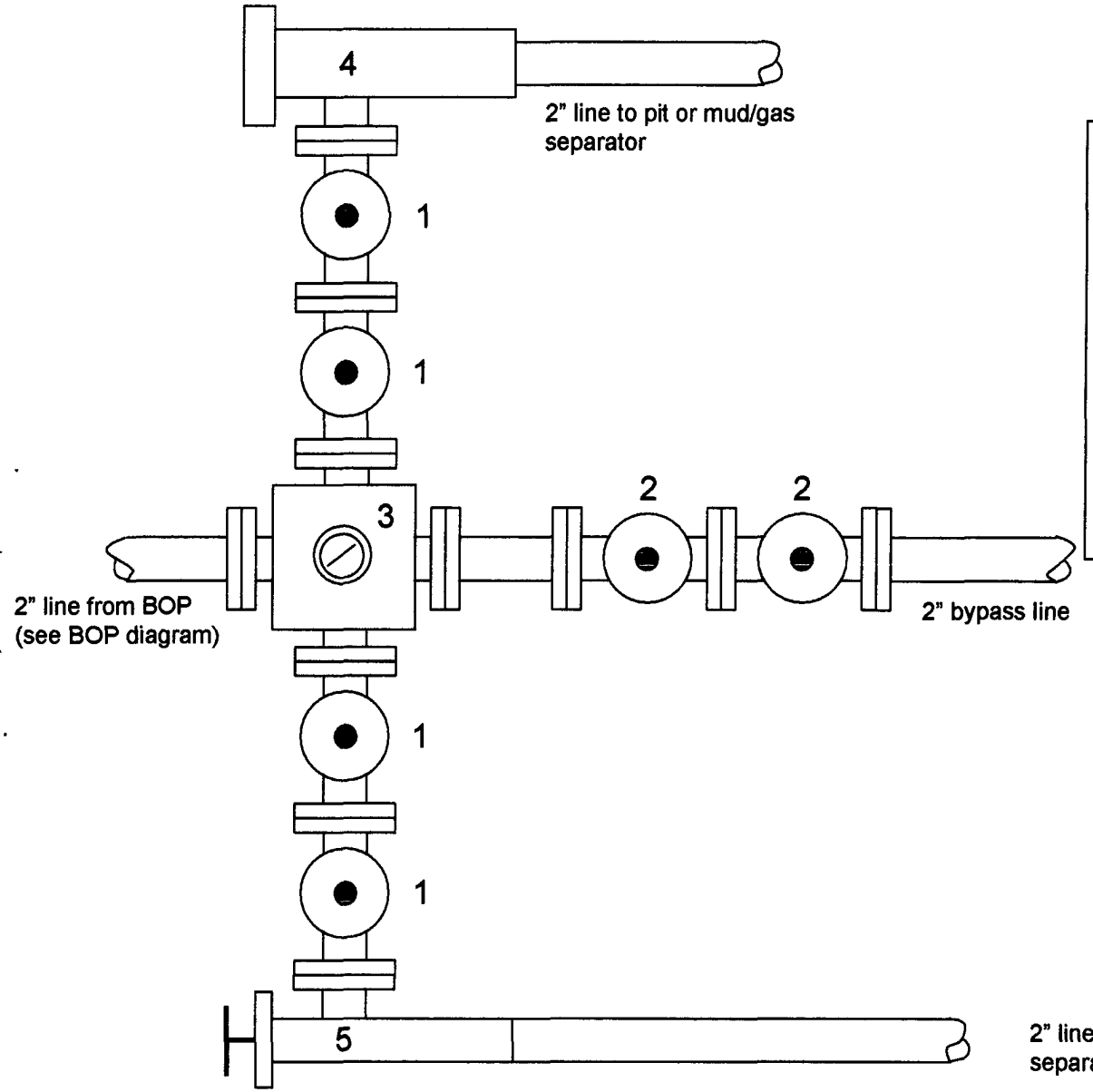
*Note: Rotating head may also be used if necessary. Also, all line and valve sizes listed are minimum requirements.



12-1-02

Chavez 02 No. 07

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.

12-1-04