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
Patina San Juan, Inc. 5802 U. S. Highway 64 Farmington, NM 87401 (505) 632-8056	173252
	[3] API Number 30-045-32611

[5] Property Code	[5] Property Name	[6] Well No.
34351	JACQUEZ 02	#04

[9] Proposed Pool 1	[10] Proposed Pool 2
BASIN DAKOTA	BLANCO MESAVERDE

OCT 2004

[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
D	2	31N	13W	D	660	NORTH	660	WEST	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	5786
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
N	7100	DK/MV	N/A	NOVEMBER 2004

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

Pit: Liner: Synthetic X 12 mils thick Clay ☐ Pit Volume: _____ bbls Drilling Method:

Closed-Loop System ☐ Fresh Water X 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#	4200'+/-	100 sx + 365 sx	SURFACE
6 ¼"	4 ½"	11.6#	7100'	220 sx	3900' +/- 300' into 7"

[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.

SEE ATTACHED WELL PLAN

[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: RUNELL A. SEALE Runell A Seale

Title: AGENT

E-mail Address: raseale@patinasanjuan.com

Date: 10/8/04 Phone: 505-632-8056

OIL CONSERVATION DIVISION

Approved by: DEPUTY OIL & GAS INSPECTOR, DIST. #3

Title:

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

Conditions of Approval Attached ☐

District I
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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
30-045-32611	71599 / 72319	Basin Dakota / Blanco Mesa Verde

4 Property Code	5 Property Name	6 Well Number
34351	JACQUEZ 02	04

7 OGRID No.	8 Operator Name	9 Elevation
173252	PATINA OIL & GAS CORPORATION	5786'

10 Surface Location

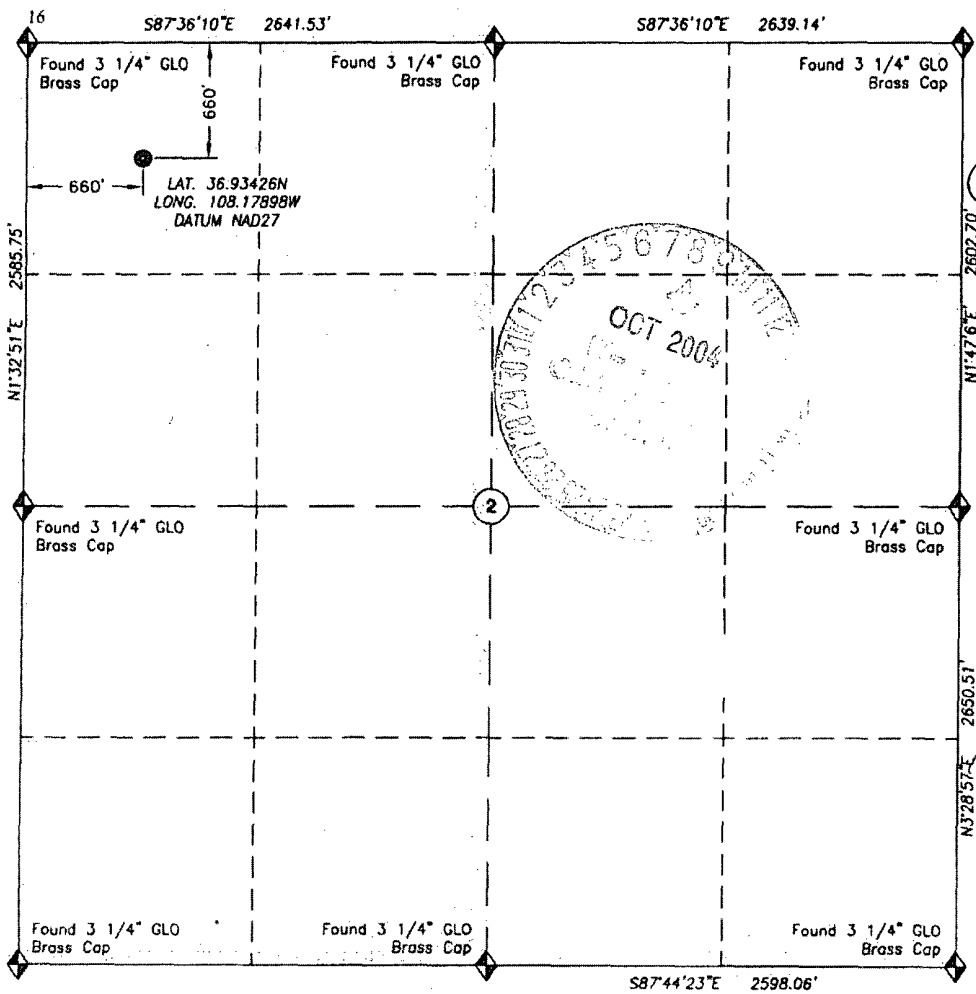
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	2	31N	13W	D	660	NORTH	660	WEST	SAN JUAN

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.
~~320~~ 319.8 ac W/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 Muse

Printed Name

Reg Engr Tech

jmuse@patinasanjuan.com

Title and E-mail Address

10-01-04

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.

September 23, 2004

Date of Survey

DALE E. BELL
NEW MEXICO
14400
9/30/04
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

Jacquez 02 No. 04
General Drilling 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"
8 ¾"	4200' +/-	7"
6 ¼"	7100'	4 1/2"

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
7"	Intermediate	0'	4200' +/-	23.0	N80	LTC	New
4 ½"	Production	0	7100'	11.6	N80	LTC	New

Casing Data				Collapse (psi)	Burst (psi)	Min. Tensile (Lbs.)
OD	Wt/Ft	Grade	Thread			
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 3600' +/-): 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
	3900' 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 3900 +/- ft. or 300 ft. into 7" intermediate casing.
2. Actual cement volumes to be based on caliper log plus 30%.

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 till mud up at about 3100 ft. From 3100' to 4200', 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.

EVALUATION PROGRAM:

Mud logger: None Planned.
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) DIL-GR-SP: TD to base of intermediate casing.
2) LDT-CNL-GR-CAL-PE: TD to base of intermediate 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.

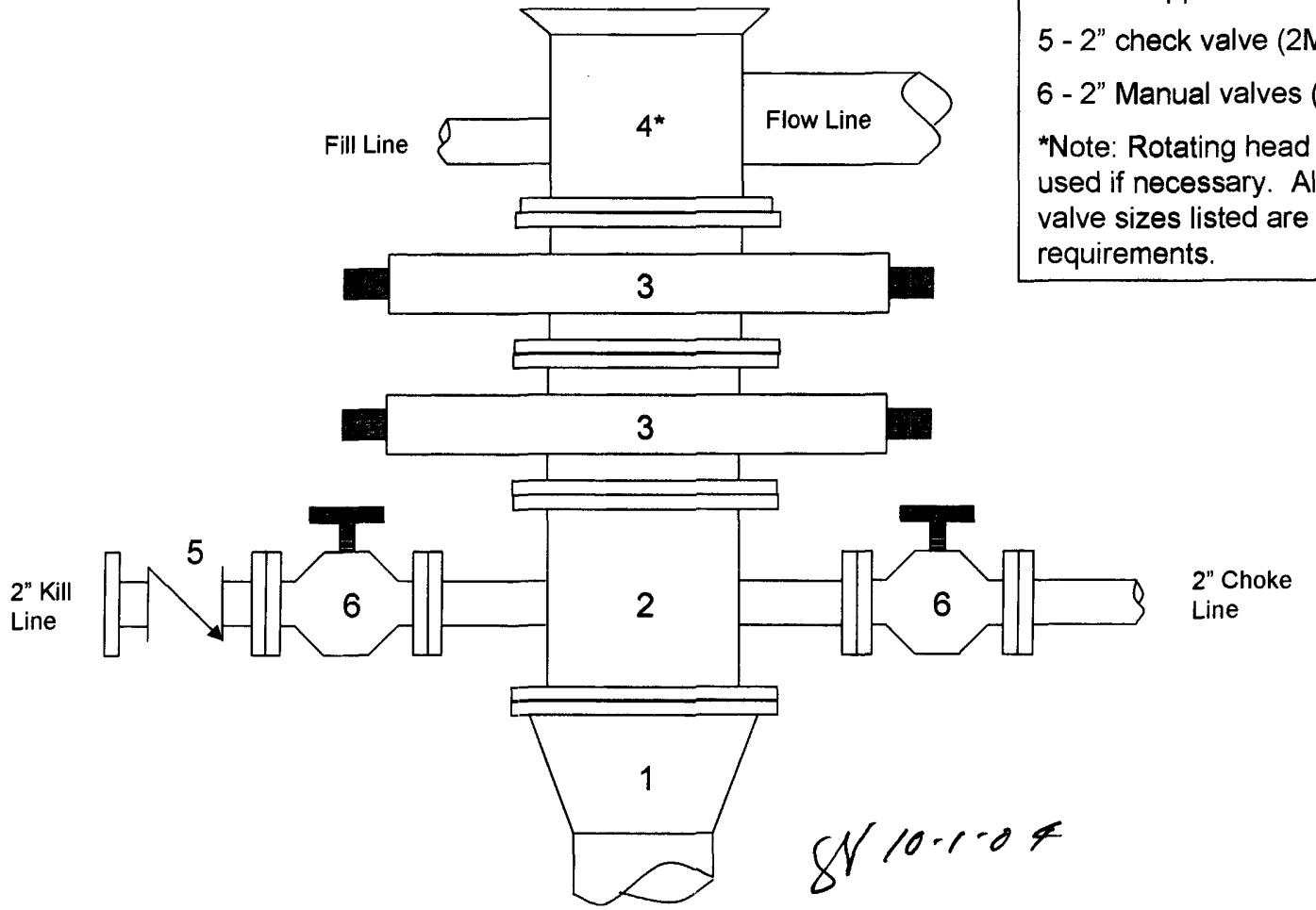
AUXILIARY EQUIPMENT:

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.

Jacquez 02 No. 04

2000 psi BOP stack
Minimum requirements

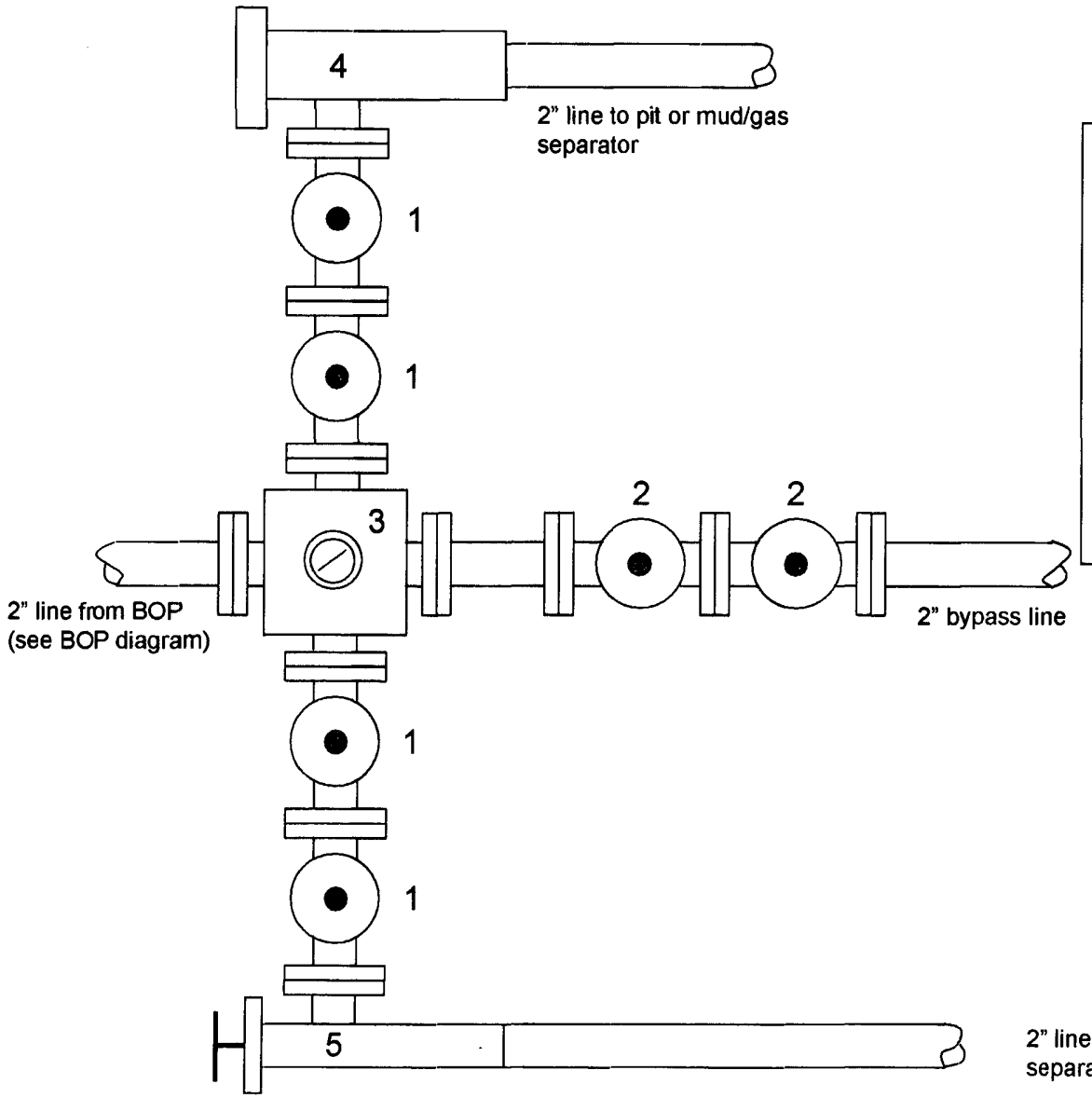
Components
1 - Wellhead 9-5/8" (2M)
2 – Drilling spool 11" (2M)
3 – A double or two single rams with blinds on bottom 11" (2M)
4 – Bell nipple*
5 - 2" check valve (2M)
6 - 2" Manual valves (2M)
*Note: Rotating head may also be used if necessary. Also, all line and valve sizes listed are minimum requirements.



SN 10-1-04

Jacquez 02 No. 04

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.

GT 10-1-04

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

To Patina Jacquez 02 #04

660 FNL & 660 FWL, Section 2, 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) 0.7 mile to the intersection of Highway # 574 & County road 1300, Turn Left (North) on County road # 1300;

Go 0.3 miles to the intersection of County Road #1300 & County Road #1305, Turn Left (Northwesterly);

Go 0.2 miles, Turn left (West) on gravel road;

Go 0.1 miles to beginning of proposed access road on the left (South) which continues north 555' to staked location.

PAD LAYOUT PLAN & PROFILE

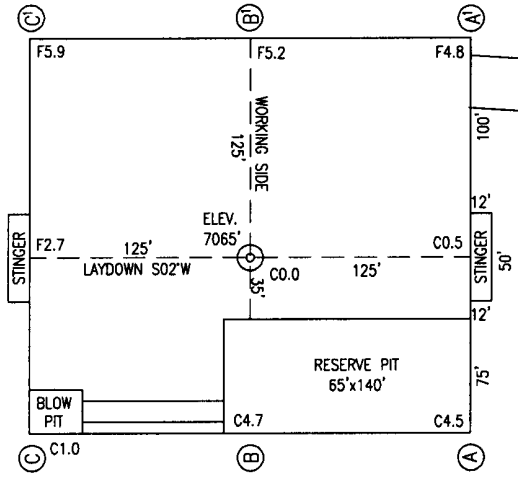
PATINA OIL & GAS CORPORATION

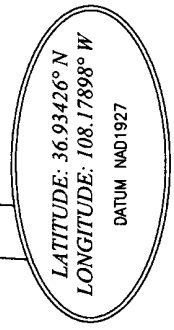
Jacquez 02 #04

660' F/NL 660' F/WL

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

San Juan County, New Mexico





PROPOSED 30' WIDE ACCESS EASEMENT

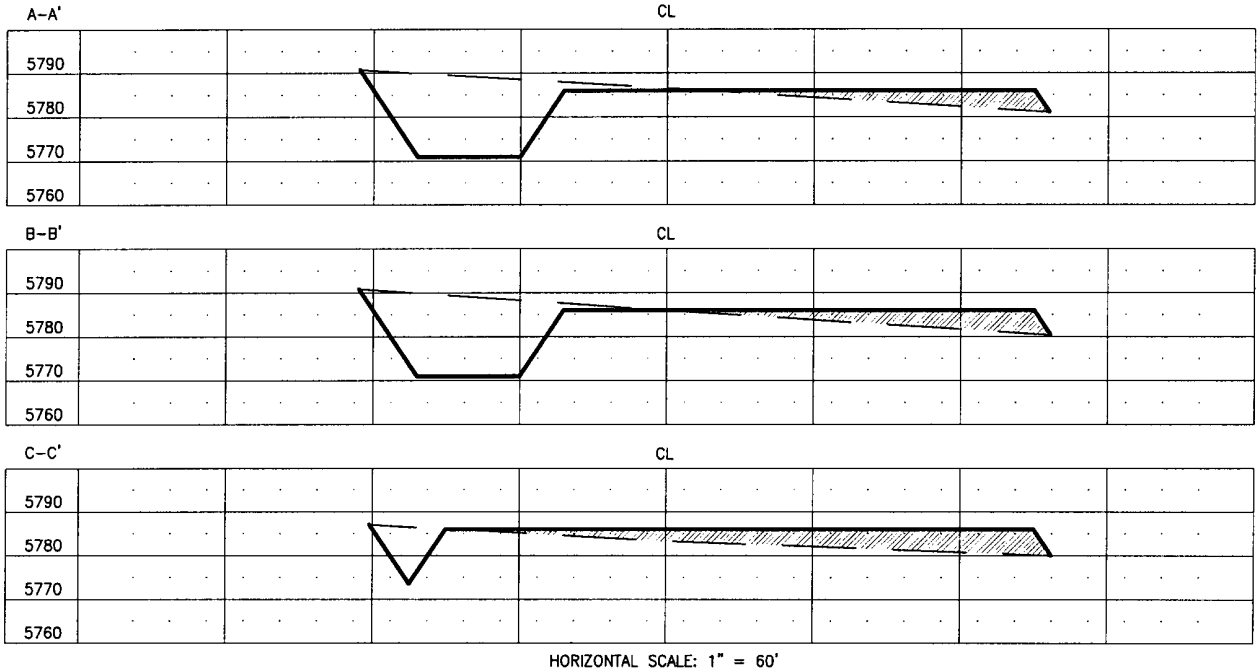
PLAT NOTE

SURFACE OWNER

WALTERS, PATRICK M. & JOLEEN H.

100' 50' 0 100'

SCALE: 1"= 100'



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: 09/23/04	DRAWN BY: AEM	DATE DRAWN: 09/29/04	REVISION DATE:	FILE NAME: JACQUEZ020402

CLIENT

PATINA OIL & GAS CORPORATION

PREPARED BY

TRIGON

ENGINEERING • PROCUREMENT • CONSTRUCTION

Sep 29, 2004 - 2:56pm by emayhew - Path = K:\JOBS\2014-02 Patina Huerfano 2005 PUD\Jacquez 2-04\JACQUEZ020402.dwg