

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-101  
 Revised February 10, 1994  
 Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 6 Copies  
 Fee Lease - 5 Copies

AMENDED REPORT

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

Operator Name and Address. Patterson Petroleum LP P.O. Drawer 1416 Snyder, TX 79550		OGRID Number 141928
Property Code 302767	Property Name Bump Po "36" State	API Number 30-025-36047
		Well No. 1

Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	36	17-S	33-E		1880	South	660	East	Lea

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
Proposed Pool 1 Vacuum; Morrow					Proposed Pool 2				

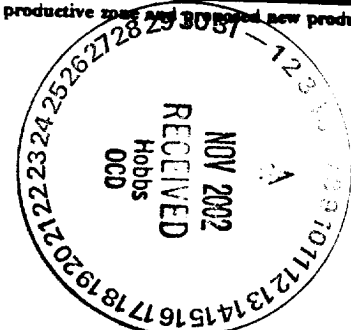
Work Type Code N	Well Type Code G	Cable/Rotary Rotary	Lease Type Code S	Ground Level Elevation 4101'
Multiple No	Proposed Depth 13,800'	Formation Morrow	Contractor Patterson - UTI	Spud Date 11/15/02

Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	400'	500	Surface
12-1/4"	9-5/8"	40#	4800'	1750	Surface
8-3/4"	7"	26#	13,800'	1600	4800'

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.

Drilling fluid synopsis attached  
 BOP: Series 900, 5000# WP - See figure 2.5 attached  
 Additional casing & cementing information attached

Permit Expires 1 Year From Approval  
 Date Unless Drilling Underway



I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Nolan von Roeder*  
 Printed name: Nolan von Roeder  
 Title: Engineer  
 Date: 10/25/02  
 Phone: 915/573-1938

OIL CONSERVATION DIVISION  
 Approved by: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Approval Date: NOV 13 2002  
 Expiration Date: \_\_\_\_\_  
 Conditions of Approval Attached

505

*[Handwritten initials]*



**PATTERSON PETROLEUM LP**

A LIMITED PARTNERSHIP

P.O. Box 1416, Snyder, TX 79550

Phone 915-573-1938 • Fax 915-573-1939

DRILLING FLUID SYNOPSIS

PATTERSON PETROLEUM LP

Bump Po "36" State No. 1

Section 36

T-17-S

R-33-E

Lea County, New Mexico

CASING

13 3/8" at	400'
9 5/8" at	4800'
7" at	13,800'

DEPTH	MUD WT.	VISCOSITY	FLUID LOSS	DRILL SOLIDS	COMMENTS
0' - 400'	8.4 to 9.0	28 to 40	No Control	5%	Spud mud & paper
400' - 4800'	10 to 10.3	28 to 30	No Control	1%	Brine water, paper, caustic
4800 - 12,500'	8.4 to 9.2	28 to 30	No Control	1%	Cut-brine, paper & caustic
12,500 - 13,800'	9.2 to 10.5	36 to 46	10 cc or less	< 5%	Xanthan gum, starch, pac, & caustic



PATTERSON PETROLEUM LP  
PROPOSED CASING & CEMENTING PROGRAM

BUMP PO "36" STATE WELL NO. 1

13 3/8", 48 lb/ft, H-40 Surface Casing Set at 400' - in a 17 1/2" Hole

Circulate to surface with 500 sacks of Class "C" + 2% CaCl<sub>2</sub> + 1/4 lb/sk celloflake

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 cu.ft/sk
Water Requirement:	6.3 gal./sk

9 5/8", 40 lb/ft, J-55 & N-80 Intermediate Casing Set at 4800' - in a 12 1/4" Hole

Lead : 1500 sx of 35:65 Poz Class "C" + 5% salt + 6% gel + 1/4 lb/sk celloflake + 2/10 % antifoamer

Desired TOC = Surface

Slurry Weight:	12.4 ppg
Slurry Yield:	2.15 cu.ft/sk
Water Requirement:	11.99 gal/sk

Tail : 250 sx of Class "C" Neat

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 cu.ft/sk
Water Requirement:	6.31 gal/sk

7" , 26 lb/ft, N-80 & P110 Production String Casing Set at 13,800' - in an 8 3/4" Hole

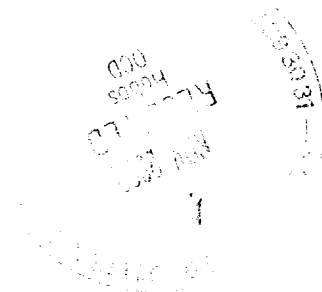
1st Stage Lead : 600 sx of 35/65 Poz H + 5% salt + 6% gel + 1/4 #/sk celloflakes

Desired TOC = 9000'

Slurry Weight:	12.4 ppg
Slurry Yield:	2.13 cu.ft/sk
Water Requirement:	11.81 gal/sk

1st Stage Tail : 250 sx of Class H w/ 6/10% Gasblock + 2/10% antifoamer and 3/10% retarder

Slurry Weight:	16.4 ppg
Slurry Yield:	1.09 cu.ft/sk
Water Requirement:	5.49 gal/sk



PATTERSON PETROLEUM LP

PROPOSED CASING & CEMENTING PROGRAM

BUMP PO "36" STATE WELL NO. 1

Run 7" DV Tool @ ± 9200' from surface & cement as follows:

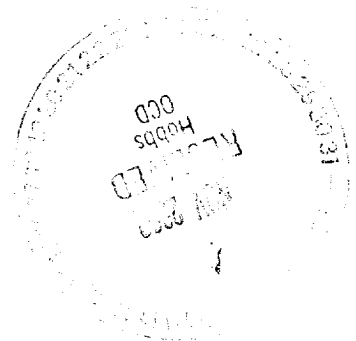
2nd Stage Lead : 500 sx of 35/65 Poz H + 5% salt + 6% gel + 1/4 #/sk celloflakes

Desired TOC = 4800'

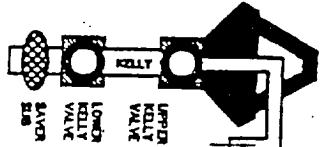
Slurry Weight:	12.4 ppg
Slurry Yield:	2.13 cu.ft/sk
Water Requirement:	11.81 gal/sk

2nd Stage Tail : 250 sx of 50/50 Poz H w/ 2% gel + 2/10% dispersant + 2/10% antifoam and 3/10% retarder

Slurry Weight:	14.2 ppg
Slurry Yield:	1.33 cu.ft/sk
Water Requirement:	5.24 gal/sk



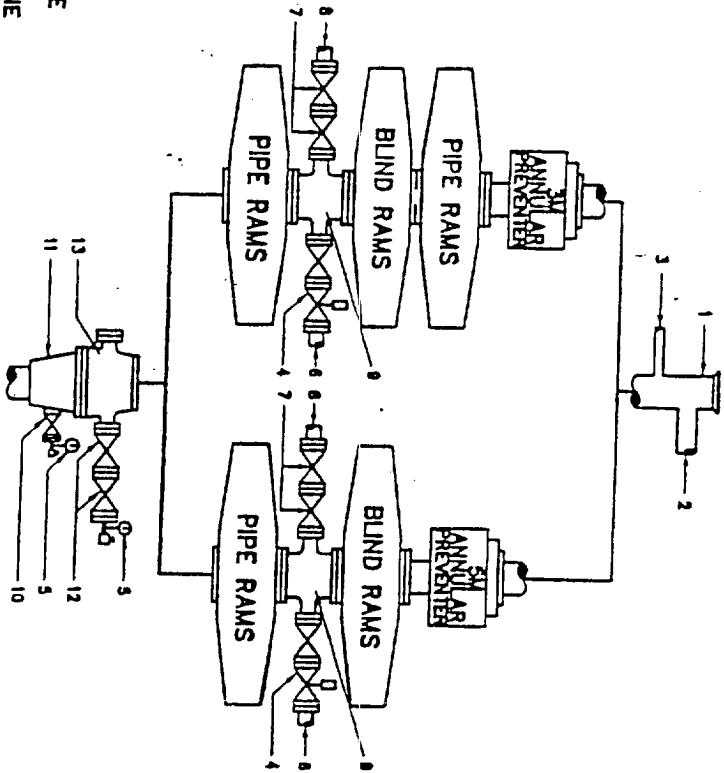
DRILLSTRING CONTROL DEVICES



ON DRILL FLOOR

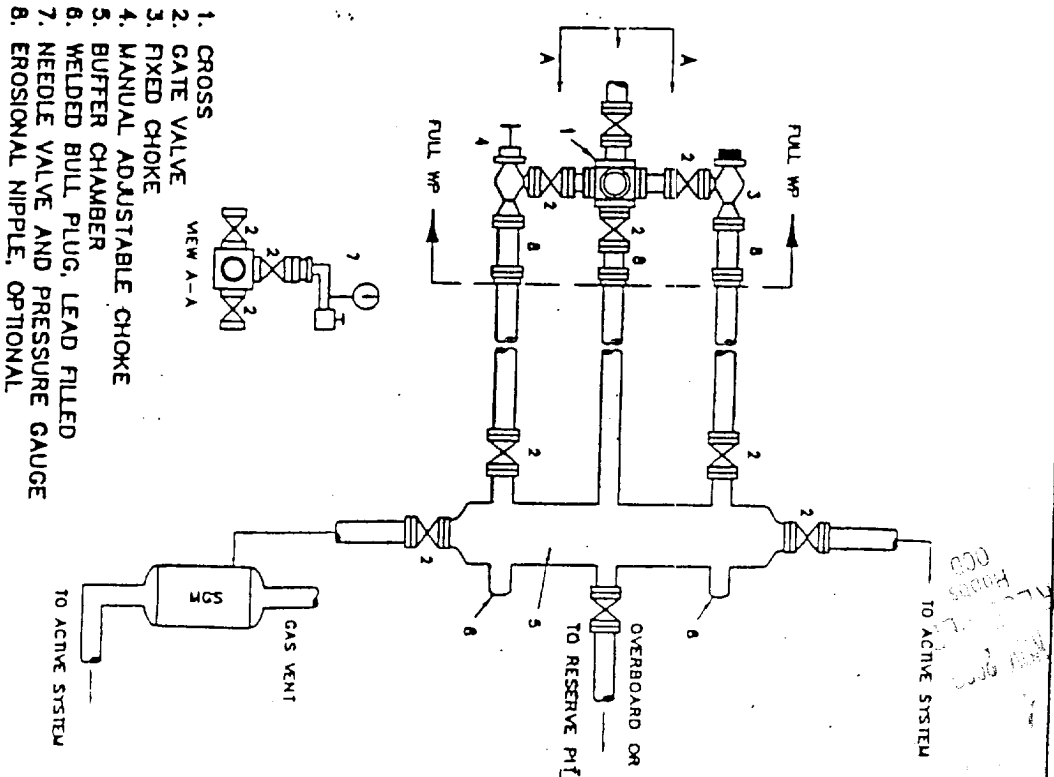


BOP STACK



1. BELL NIPPLE
2. FLOW LINE
3. FILL-UP LINE
4. 2" FE PRESSURE-OPERATED CHOKE LINE VALVE
5. PRESSURE GAUGE
6. 2" FE CHOKE LINE TO CHOKE MANIFOLD
7. 2" FE GATE VALVES
8. 2" FE KILL LINE
9. DRILLING SPOOL
10. 2" SE OR FE GATE VALVE WITH NEEDLE VALVE
11. CASING HEAD HOUSING
12. 2" FE GATE VALVES WITH NEEDLE VALVE
13. CASING SPOOL

CHOKE MANIFOLD



1. CROSS
2. GATE VALVE
3. FIXED CHOKE
4. MANUAL ADJUSTABLE CHOKE
5. BUFFER CHAMBER
6. WELDED BULL PLUG, LEAD FILLED
7. NEEDLE VALVE AND PRESSURE GAUGE
8. EROSIONAL NIPPLE, OPTIONAL

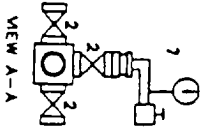


Fig. 2.5. Class 3 BOP and Choke Manifold.

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number <b>30-025-36047</b>	Pool Code 86840	Pool Name Vacuum; Morrow
Property Code <b>30767</b>	Property Name BUMP PO "36" STATE	Well Number 1
OGRID No. 141928	Operator Name PATTERSON PETROLEUM LP	Elevation 4101'

Surface Location

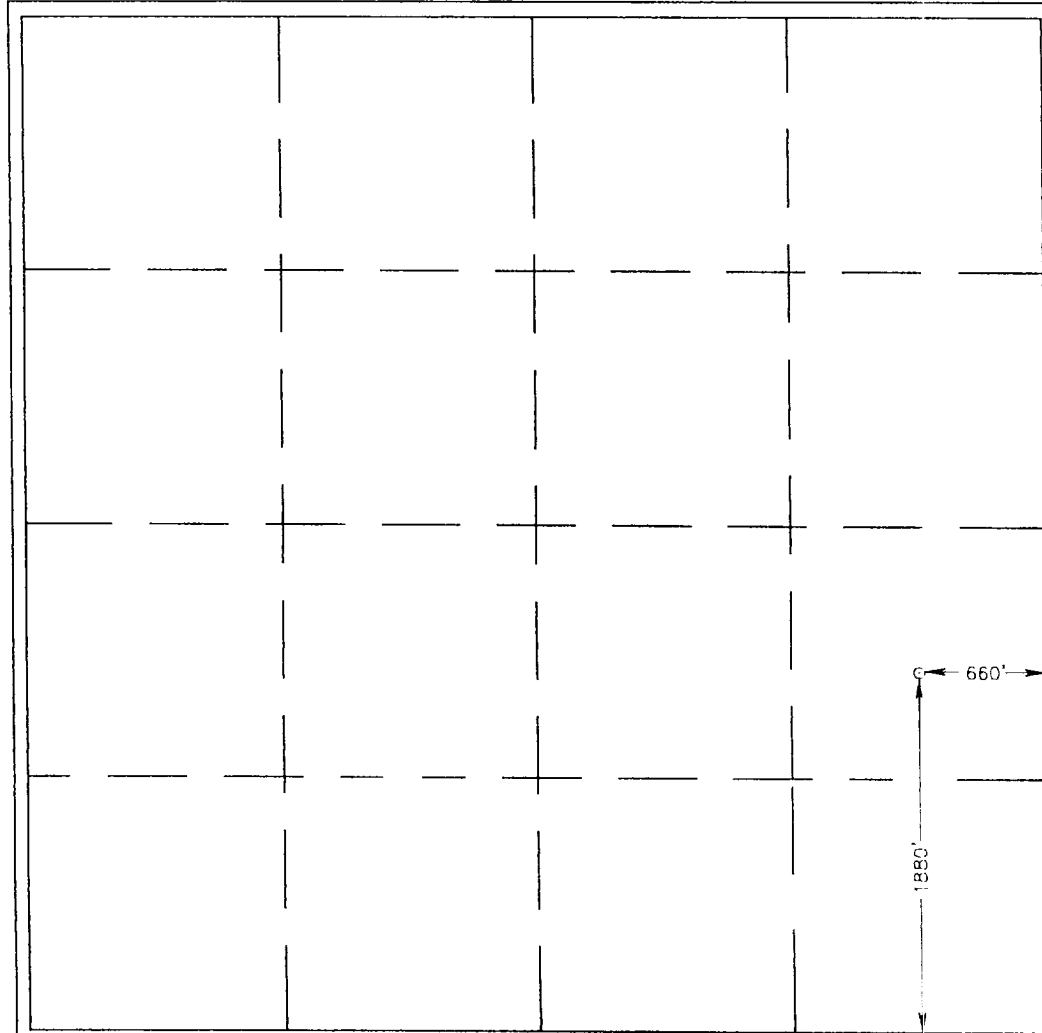
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	36	17-S	33-E		1880	SOUTH	660	EAST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



**OPERATOR CERTIFICATION**

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

*Nolan von Roeder*  
Signature

Nolan von Roeder  
Printed Name

Engineer  
Title

10/25/02  
Date

**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 21, 2002  
Date Surveyed

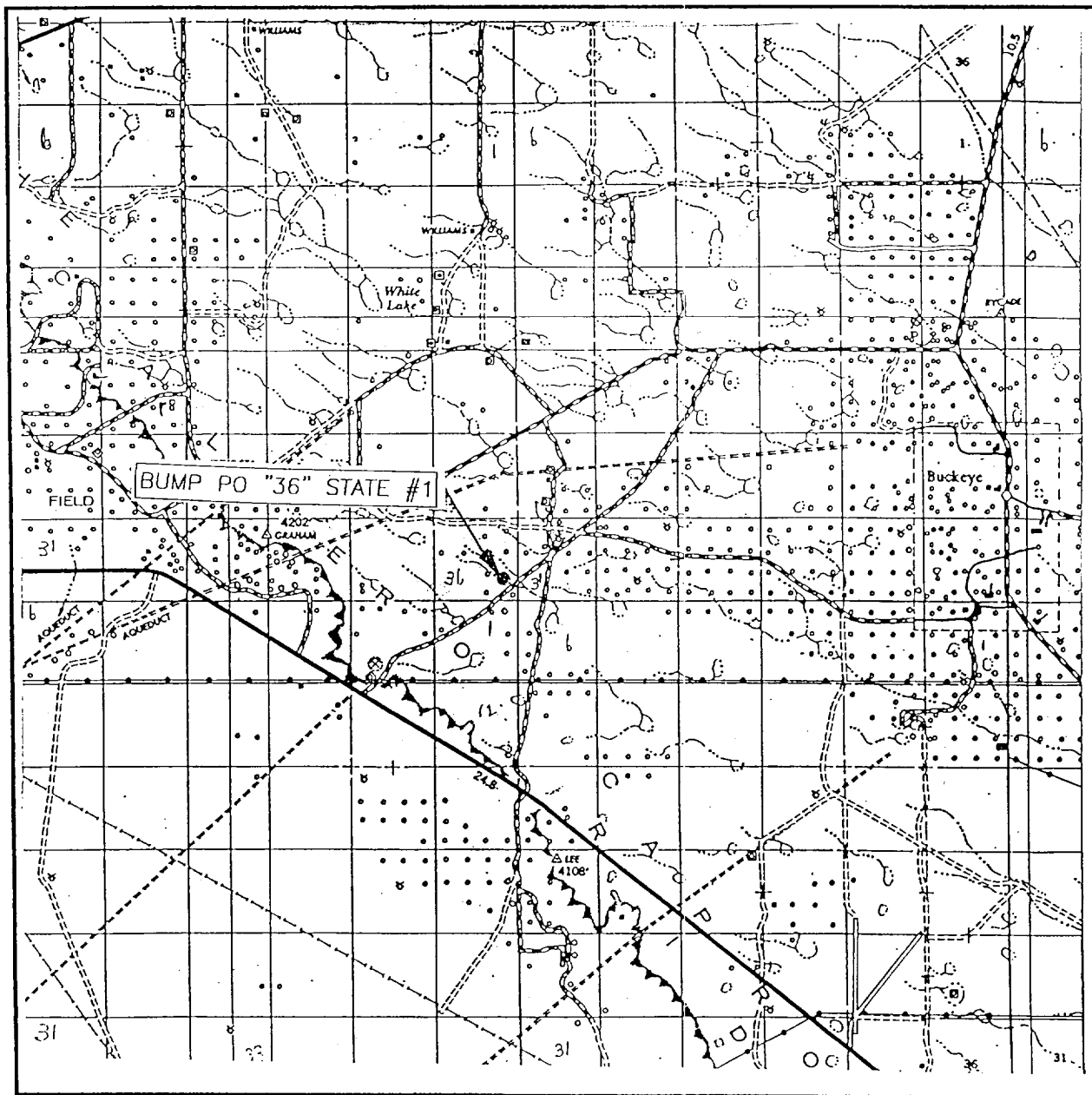
Signature & Seal of Professional Surveyor  
Professional Surveyor

*Ronald J. Eidsen*  
Signature

02.11/0788  
Date

Certificate No. RONALD J. EIDSON 3239  
GARY EIDSON 12641

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 36 TWP. 17-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

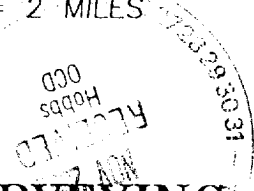
DESCRIPTION 1880' FSL & 660' FEL

ELEVATION 4101'

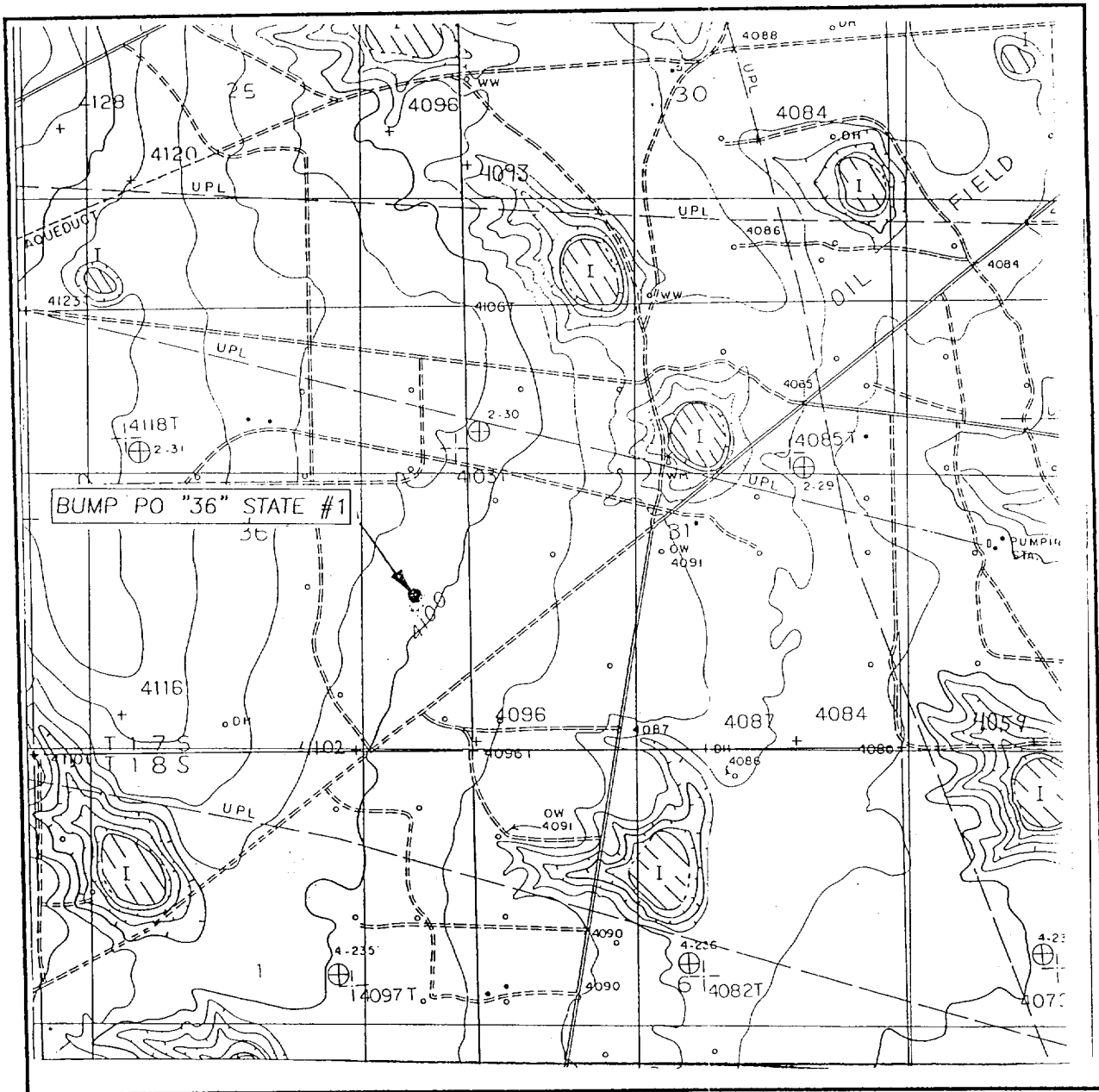
OPERATOR PATTERSON PETROLEUM LP

LEASE BUMP PO "36"

**JOHN WEST SURVEYING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
BUCKEYE, N.M.

SEC. 36 TWP. 17-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1880' FSL & 660' FEL

ELEVATION 4101'

OPERATOR PATTERSON PETROLEUM LP

LEASE BUMP PO "36"

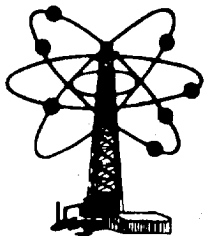
U.S.G.S. TOPOGRAPHIC MAP  
BUCKEYE, N.M.

**JOHN WEST SURVEYING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**



PHONE: 210-496-2466  
FAX: 210-496-9595

19210 HUEBNER ROAD  
SUITE 200



**OLSEN ENERGY, INC.**

*Oil & Gas Development*  
SAN ANTONIO, TEXAS 78258

October 29, 2002

Mr. Chris Williams  
New Mexico Oil Conservation Division  
1625 N. French Dr.  
Hobbs, NM 88240

RE: APD for the Patterson Bump  
Po 36 State #1  
S/2 of Section 36, T-17-S,  
R-33-E, Lea County

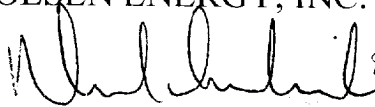
Dear Mr. Williams:

Olsen Energy, Inc. is the record title holder of New Mexico State Lease No. V-3349, which covers the drilling unit for the subject well. Effective July 1, 2002, Olsen entered into a Term Assignment with Mitchel E. Cheney covering the subject lands as to all depths below 5000' only. It is my understanding that Mr. Cheney has transferred the Term Assignment to BP America Production Company, Patterson Petroleum, LP and Phillips Petroleum Company and that these three parties have entered into a mutually acceptable Joint Operating Agreement naming Patterson as operator. If Patterson meets all of NMOCD's permit requirements, please approve same for the drilling of the subject well.

Please do not hesitate to contact me if you have any further questions concerning this matter, and we appreciate your help.

Yours very truly,

OLSEN ENERGY, INC.

  
David Schneider  
Vice President

