

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

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

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

¹ Operator Name and Address PATTERSON PETROLEUM LP P.O. DRAWER 1416 SNYDER, TX 79550		² OGRID Number 141928
³ Property Code 34383	⁴ Property Name DUNCAN "32" STATE COM	⁵ API Number 30 - 025-36942
⁹ Proposed Pool 1 VACUUM; MORROW		¹⁰ Proposed Pool 2 VACUUM; ATOKA, WEST

7 Surface Location

UL or lot no.	Sec3tion	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
H	32	17-S	34-E		2245	NORTH	660	EAST	LEA

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4068'
¹⁶ Multiple NO	¹⁷ Proposed Depth 13,800	¹⁸ Formation MORROW	¹⁹ Contractor PATTERSON-UTI DRLG CO	²⁰ Spud Date 12/20/04
Depth to Groundwater 140'		Distance from nearest fresh water well 4000'		Distance from nearest surface water NONE
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12_mils thick Clay <input type="checkbox"/> Pit Volume: 15,000 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 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"	5-1/2"	17#	13 800'	1000	8000'

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.

Drilling fluid synopsis attached.
BOP: Series 900, 5000# WP - See figure 25 attached.
Additional casing & cementing information attached.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

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: NOLAN VON ROEDER
Title: ENGINEER
E-mail Address: vonroedern@patenergy.com

Date: 10/28/04

Phone: 325/573-1938

OIL CONSERVATION DIVISION

Approved by:

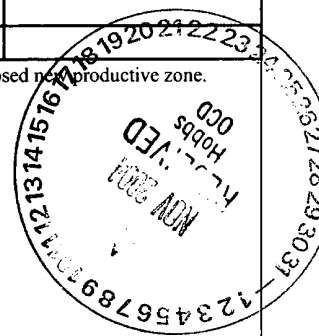
Title: PETROLEUM ENGINEER

Approval Date:

Expiration Date:

NOV 16 2004

Conditions of Approval Attached ☐



DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36942	Pool Code 86840	Pool Name Vacuum Morrow
Property Code 34383	Property Name DUNCAN "32" STATE COM	Well Number 1
OGRID No. 141928	Operator Name PATTERSON PETROLEUM, L.P.	Elevation 4068'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	32	17-S	34-E		2245	NORTH	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

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=652761.5 N X=732798.7 E</p> <p>LAT.=32°47'32.06" N LONG.=103°34'32.81" W</p>	<p>2245'</p> <p>660'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature Joe Fitzgerald Printed Name Attorney-In-Fact Title 11-10-04 Date</p>
		<p>SURVEYOR CERTIFICATION</p> <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>NOVEMBER 3, 2004</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>[Signature]</i> Professional Surveyor 04-11.1358 Certificate No. GARY EIDSON 12841</p>



PATTERSON PETROLEUM LP

A LIMITED PARTNERSHIP

P.O. Box 1416, Snyder, TX 79550

4510 Lamesa Hwy., Snyder, TX 79549

Phone: 325-573-1938 • Fax 325-573-1939

DRILLING FLUID SYNOPSIS

PATTERSON PETROLEUM LP

Duncan "32" State Com No. 1

Section 32

T-17-S

R-34-E

Lea County, New Mexico

CASING

13 3/8" at 400'

9 5/8" at 4800'

5 1/2" 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'	8.4 to 10.3	28 to 33	No Control	1%	Brine water, paper, caustic
4800 - 12,900'	8.4 to 9.2	28 to 30	No Control	1%	Cut-brine, paper & caustic
12,900 - 13,800'	10 to 10.5	36 to 46	10 cc or less	< 5%	Xanthan gum, starch, pac, & caustic

PATTERSON PETROLEUM LP
PROPOSED CASING & CEMENTING PROGRAM

DUNCAN "32" STATE COM 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% CaCl₂ + 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

5 1/2", 17 lb/ft, N-80 & P110 Production String Casing Set at 13,800' - in an 8 3/4" Hole

Lead : 700 sx of Halliburton Light H + 5% salt + 3/10% HR-7 retarder

Desired TOC = 8000'

Slurry Weight:	12.7 ppg
Slurry Yield:	1.95 cu.ft/sk
Water Requirement:	10.48 gal/sk

Tail : 300 sx of Halliburton Super H w/ 0.5% Lap-1+ 0.4% dispersant +
0.25% antifoamer and 0.25% retarder

Slurry Weight:	13.2 ppg
Slurry Yield:	1.60 cu.ft/sk
Water Requirement:	8.21 gal/sk

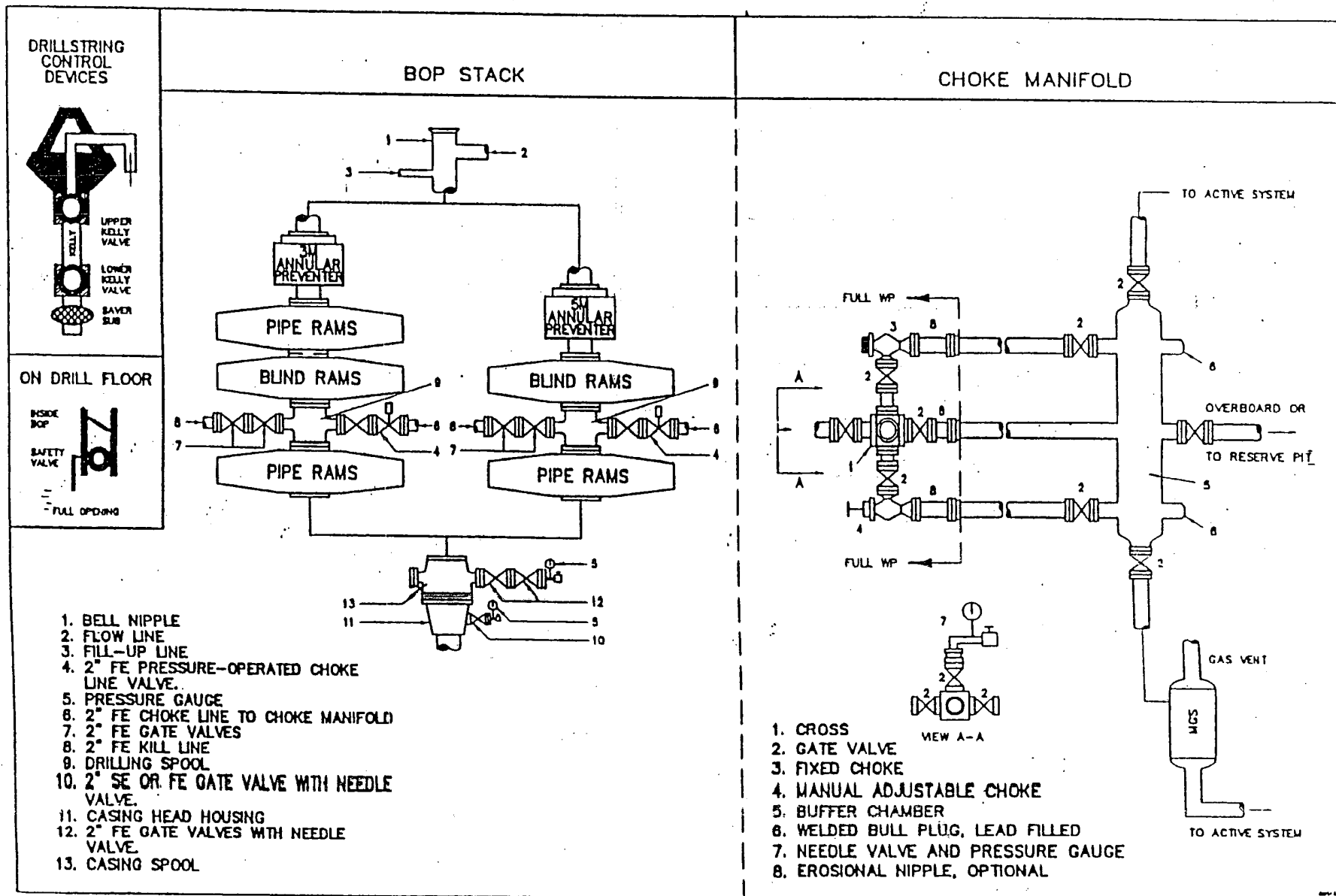
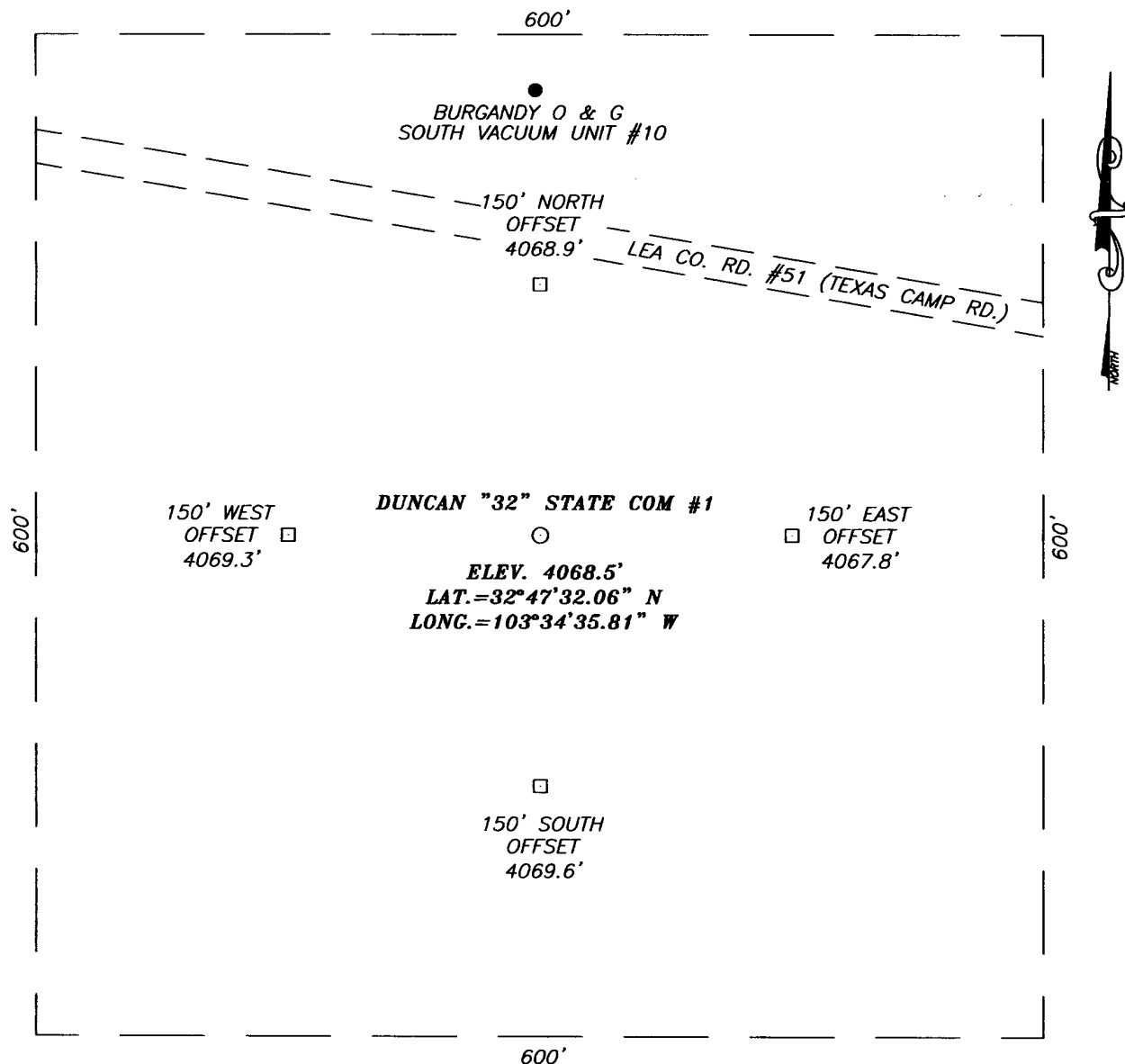


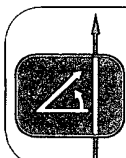
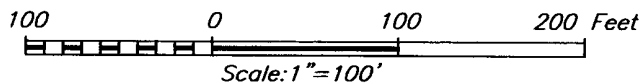
Fig. 2.5. Class 3 BOP and Choke Manifold.

SECTION 32, TOWNSHIP 17 SOUTH, RANGE 34 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF LEA CO. RD. #125 (QUERECHO RD.) AND LEA CO. RD. #51 (TEXAS CAMP RD.) GO EAST ON CO. RD. #51 FOR APPROX. 1.1 MILES. PROPOSED LOCATION IS APPROX. 150' SOUTH.



PROVIDING SURVEYING SERVICES
 SINCE 1948
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 383-3117

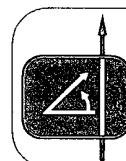
PATTERSON PETROLEUM, L.P.

DUNCAN "32" STATE COM #1 WELL
 LOCATED 2245 FEET FROM THE NORTH LINE
 AND 660 FEET FROM THE EAST LINE OF SECTION 32,
 TOWNSHIP 17 SOUTH, RANGE 34 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 11/3/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.1358	Dr By: J.R.
Date: 11/9/04	Rev 1: N/A
Disk: CD#10	04111358
Scale: 1"=100'	

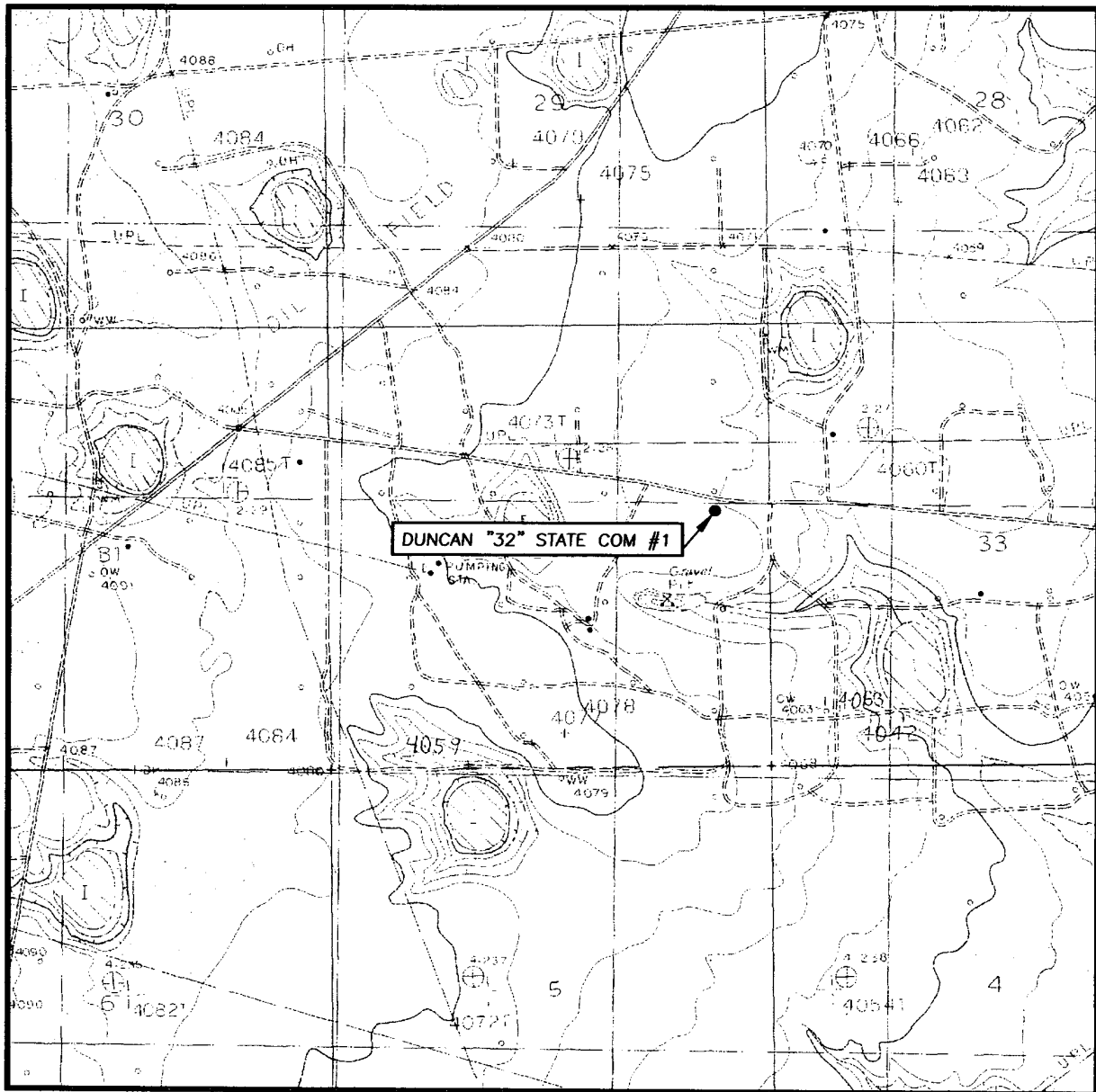
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SEC. 32 TWP. 17-S RGE. 34-E
SURVEY _____ N.M.P.M. _____
COUNTY _____ LEA _____
DESCRIPTION 2245' FNL & 660' FEL
ELEVATION _____ 4068'
OPERATOR _____ PATTERSON
PETROLEUM, L.P. _____
LEASE DUNCAN "32" STATE COM



**PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117**

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BUCKEYE, N.M. - 5'

SEC. 32 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2245' FNL & 660' FEL

ELEVATION 4068'

OPERATOR PATTERSON
PETROLEUM, L.P.

LEASE DUNCAN "32" STATE COM

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

