

PMESD-611733282

⚠ Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Stogner, Michael, EMNRD

From: Joe Fitzgerald [fitzgeraldj@patenergy.com] **Sent:** Fri 4/21/2006 1:03 PM
To: Stogner, Michael, EMNRD
Cc:
Subject: Request for NSL for Patterson's Gen Montcalm 25 St #1, 25-17-33, Lea County NM
Attachments: Gen Montcalm Unorthodox location request to NMOCD.doc(49KB) APD for the PPLP Gen Montcalm 25 St #1.tif(756KB) Gen Montcalm Target.ppt(67KB)

Mr. Stogner:

Attached is my request letter, APD and some geological information for the subject well. I hope I have provided you with everything you may need for your consideration to this request. Please let me know if you need other information or if I have submitted anything in error. I truly appreciate your consideration to this request and hope it will meet with your approval.

Joe Fitzgerald
 Land Manager
 Patterson Petroleum, LP
 Ph. 432-685-1414
 Fax 432-685-1133

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1:10 PM 4-21-2006

Talked w/ Joe Fitzgerald
 who called to check to see if
 I had received his e-mail
 w/ attachments intact.


PATTERSON PETROLEUM, LP
1004 N. Big Spring, Suite 523
Midland, TX 79707
Ph# (432)685-1414

April 21, 2006

Mike E. Stogner
Chief Examiner
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Request for Administrative Approval of an Unorthodox Location
for the Patterson Petroleum, LP, Gen Montcalm 25 State
#1, Located 1980' FNL & 1260' FEL of Section 25, T-17-S, R-33-
E, Lea County, New Mexico

30-025-37823

Dear Mr. Stogner:

Patterson Petroleum, LP, hereby requests administrative approval of the captioned. The subject location was derived by the use of extensive 3-D seismic data and analysis thereof for a Morrow location. ConocoPhillips and BP are our partners in this well. Attached hereto is a seismic map and brief explanation of same, prepared by BP's geological and geophysical group, showing why this location is necessary.

We have formed an E/2 320 acre pool unit and plan to drill a 13,800' Morrow test. In drilling this well we may encounter a number of other potential pay zones such as the Paddock, Abo, Wolfcamp and Atoka Formations in which we may want to attempt a completion; however, we would be unorthodox at this location for the Paddock, Abo, and Wolfcamp. Therefore we request Administrative Approval of this unorthodox location for the Paddock, Abo and Wolfcamp. Also enclosed with this letter is a copy of our application for permit to drill which we filed with the Hobbs NMOCD office. The C-101 shows the various pools that may be effected

The subject well is located on State Lease B-2148-3. Record title to the subject acreage is owned by ConocoPhillips. Patterson, ConocoPhillips and BP have entered into an operating agreement covering the E/2 of Section 25-17-33, as to all rights below the base of the San Andres Formation.

Please let me know your decision concerning this request. Should you have any question or need further information do not hesitate to call, my toll free phone number is 1-800-470-4200. My email address is fitzgeraldj@patenergy.com.

Sincerely,

Joe Fitzgerald
Land Manager

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

Operator Name and Address PATTERSON PETROLEUM LP P.O. DRAWER 1416 SNYDER, TX 79550		OGRID Number 141928
Property Code		API Number 30 -
Property Name GEN MONTCALM 25 STATE		Well No 1
Proposed Pool 1 VACUUM; MORROW	Proposed Pool 2 VACUUM; ATOKA, WEST	Proposed Pool 3 LEAMEX; PADDOCK
Proposed Pool 4 CORBIN; ABO	Proposed Pool 5 CORBIN; WOLFCAMP, EAST	Proposed Pool 6 LEAMEX; PENN

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	25	17-S	33-E		1980	NORTH	1260	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

Additional Well Information

Work Type Code N	Well Type Code G	Cable/Rotar ROTARY	Lease Type Code S	Ground Level Elevation 4088'
Multiple N	Proposed Depth 13,800'	Formation MORROW	Contractor 1200'	Spud Date 08/01 2006
Depth to Groundwater 150'		Distance from nearest fresh water well 1200'		Distance from nearest surface water 50' TO HIGH MARK OF PLAYA LAKE
Pit: Liner: Synthetic <input checked="" type="checkbox"/> _____ mils thick Clay <input type="checkbox"/>		Pit Volume: 15 000 bbls		Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>
Closed-Loop System <input type="checkbox"/>				

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"	20#	13,800'	2200	4600'

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

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 .

OIL CONSERVATION DIVISION

Approved by:

Printed name: NOLAN VON ROEDER

Title:

Title: ENGINEER

Approval Date:

Expiration Date:

E-mail Address:

Date: 04/10/2006

Phone: 325/573-1938

Conditions of Approval Attached

State of New Mexico

DISTRICT I
1825 N. FRANCE DR. HORDS. NM 86240

Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
1301 W. GRAND AVENUE, ARTESHA NM 86210

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

DISTRICT III
1000 Rio Brazos Ed. Astec. NM 87410

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-37823	Pool Code 86840	Pool Name VACUUM: MORROW (GAS)
Property Code 35602	Property Name GEN MONTCALM 25 STATE	Well Number 1
OGRID No. 141928	Operator Name PATTERSON PETROLEUM, LP	Elevation 4088'

Surface Location

UI or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	25	17-S	33-E		1980	NORTH	1260	EAST	LEA

Bottom Hole Location If Different From Surface

UI or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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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=658217.4 N X=721759.3 E</p> <p>LAT.=32°48'26.81" N LONG.=103°36'41.69" W</p>	<p>1980</p>		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Nelan von Roeder</i> Signature Date 4/21/06</p> <p>Nelan von Roeder Printed Name</p>
	<p>1260</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>MARCH 2, 2006</p> <p>Date Surveyed LA</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Gary E. Hudson</i> 3/13/06</p> <p>06.11.0428</p> <p>Certificate No. GARY HUDSON 12841</p>		
	<p>12841</p>		

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-144
June 1 2004

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

For drilling and production facilities, submit to appropriate NMOCD District Office
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes No

Type of action: Registration of a pit or below-grade tank Closure of a pit or below-grade tank

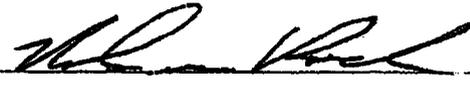
Operator: PATTERSON PETROLEUM LP Telephone: 325-573-1938 e-mail address: _____
 Address: P.O. DRAWER 1416, SNYDER, TX 79550
 Facility or well name: GEN MONTCALM 25 STATE API #: _____ U/L or Qtr/Qtr H Sec 25 T 17S R 33E
 County: LEA Latitude 32 48 26.81 Longitude 103 36 41 69 NAD: 1927 1983
 Surface Owner: Federal State Private Indian

Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>15,000</u> bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not _____
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) <u>100 feet or more</u> (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes (20 points) <u>No</u> (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses)	<u>Less than 200 feet</u> (20 points) 200 feet or more but less than 1000 feet (10 points) 1000 feet or more (0 points)
Ranking Score (Total Points) 20	

If (this is a pit closure): (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite offsite If offsite, name of facility _____ (3) Attach a general description of remedial action taken including remediation start date and end date (4) Groundwater encountered: No Yes If yes, show depth below ground surface _____ ft and attach sample results (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

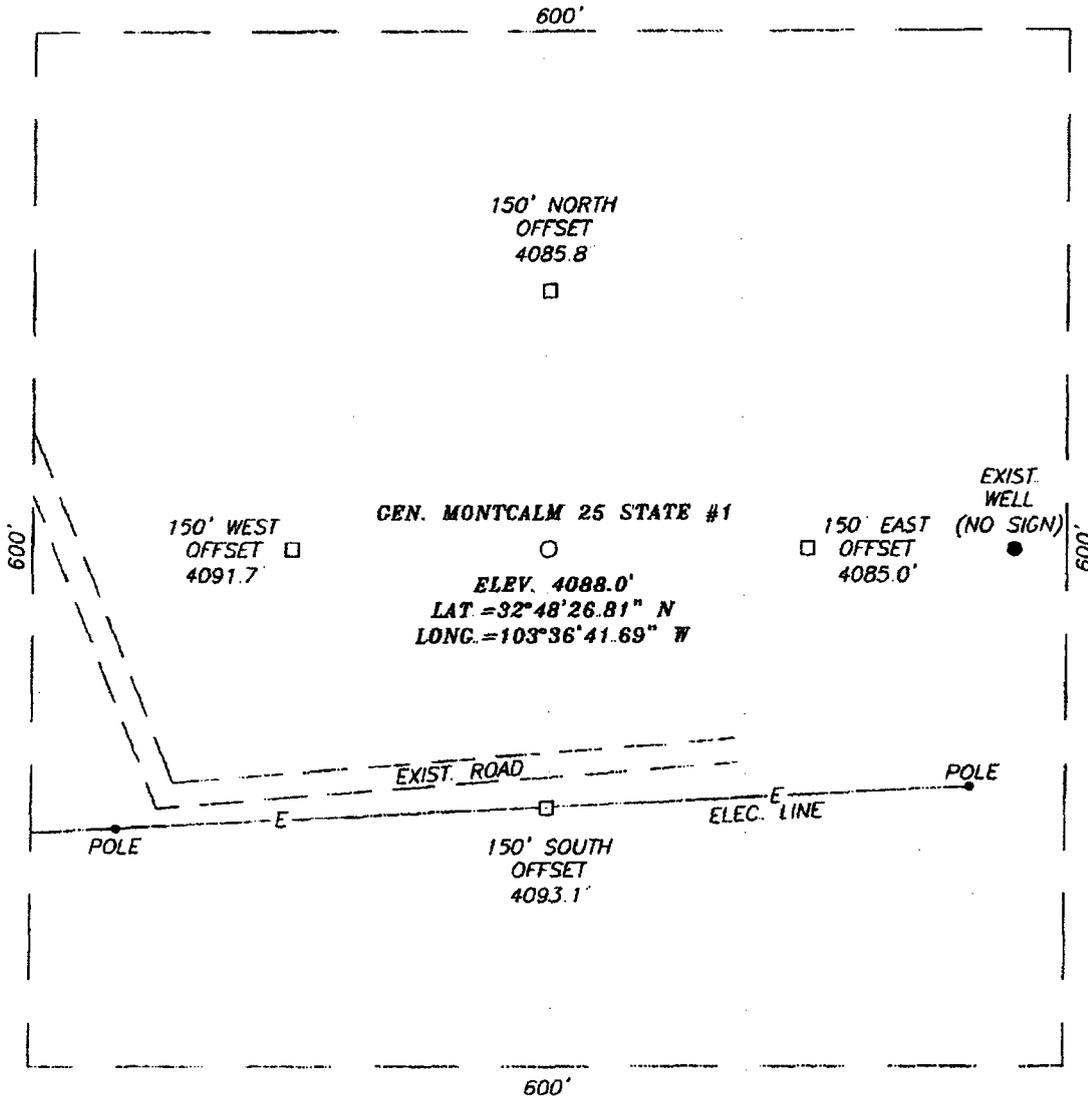
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .

Date: 04/10/2006
 Printed Name/Title NOLAN VON ROEDER ENGINEER Signature 

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state or local laws and/or regulations.

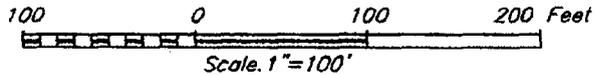
Approval:
 Printed Name/Title _____ Signature _____ Date: _____

SECTION 25, TOWNSHIP 17 SOUTH, RANGE 33 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

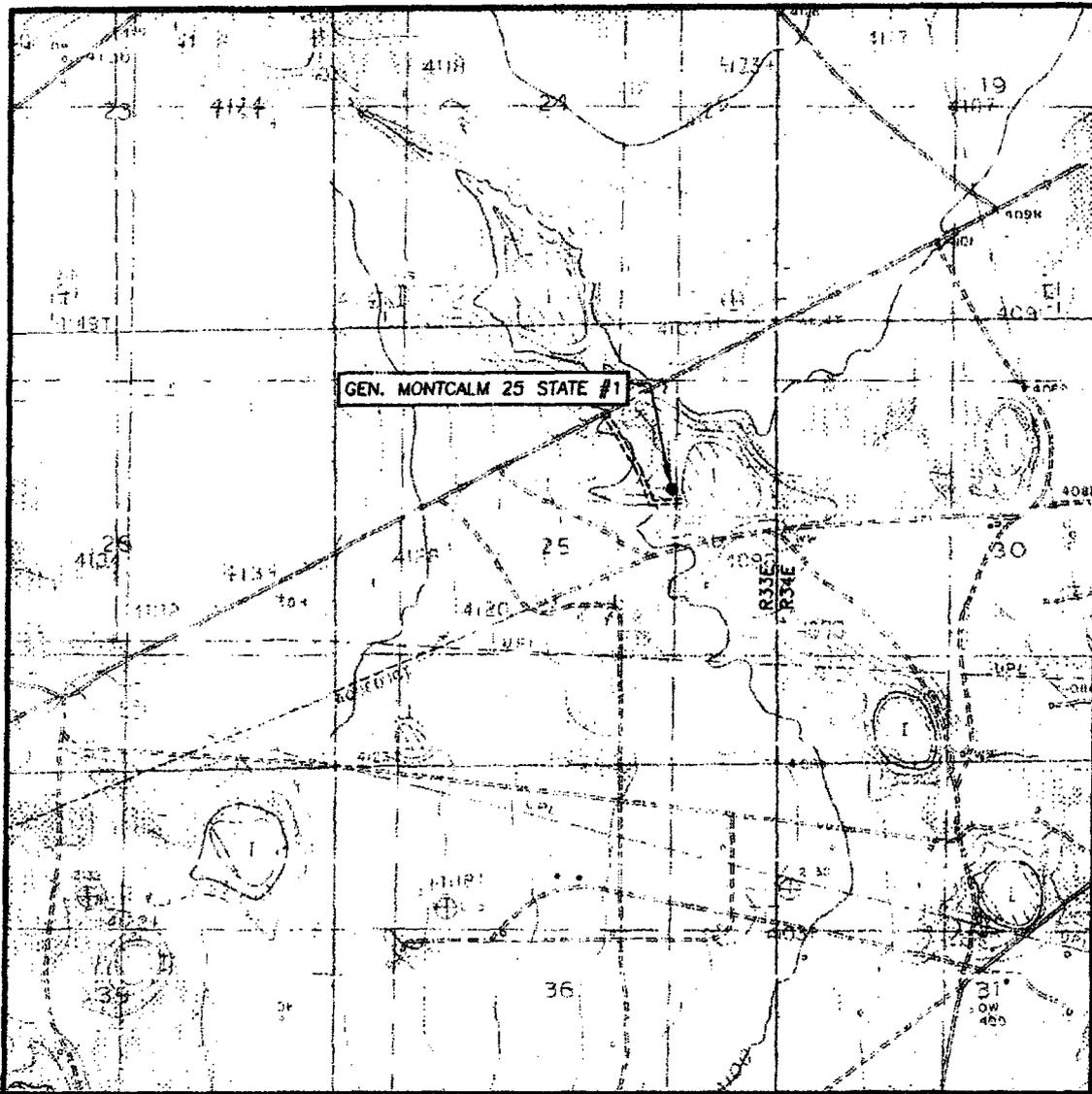
FROM THE INTERSECTION OF CO. RD. L-125 (DOG LAKE RD.) & CO. RD. L-125 (MESCALERO RD.) GO EAST ON MESCALERO ROAD APPROX. 3.96 MILES. TURN RIGHT AND GO SOUTH APPROX. 0.25 MILES. TURN LEFT AND GO EAST APPROX. 250 FEET. THIS LOCATION IS APPROX. 125 NORTH OF ROAD.



PROVIDING SURVEYING SERVICES
 SINCE 1948
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

PATTERSON PETROLEUM, LP			
GEN. MONTCALM 25 STATE #1 WELL LOCATED 1980 FEET FROM THE NORTH LINE AND 1260 FEET FROM THE EAST LINE OF SECTION 25, TOWNSHIP 17 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.			
Survey Date: 3/2/06	Sheet 1 of 1 Sheets		
W.O. Number. 06.11.0420	Dr By: LA	Rev 1.N/A	
Date: 3/8/06	Disk. CD#5	06110420	Scale: 1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC 25 TWP 17-S RGE 33-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1980' FNL & 1260' FEL

ELEVATION 4088'

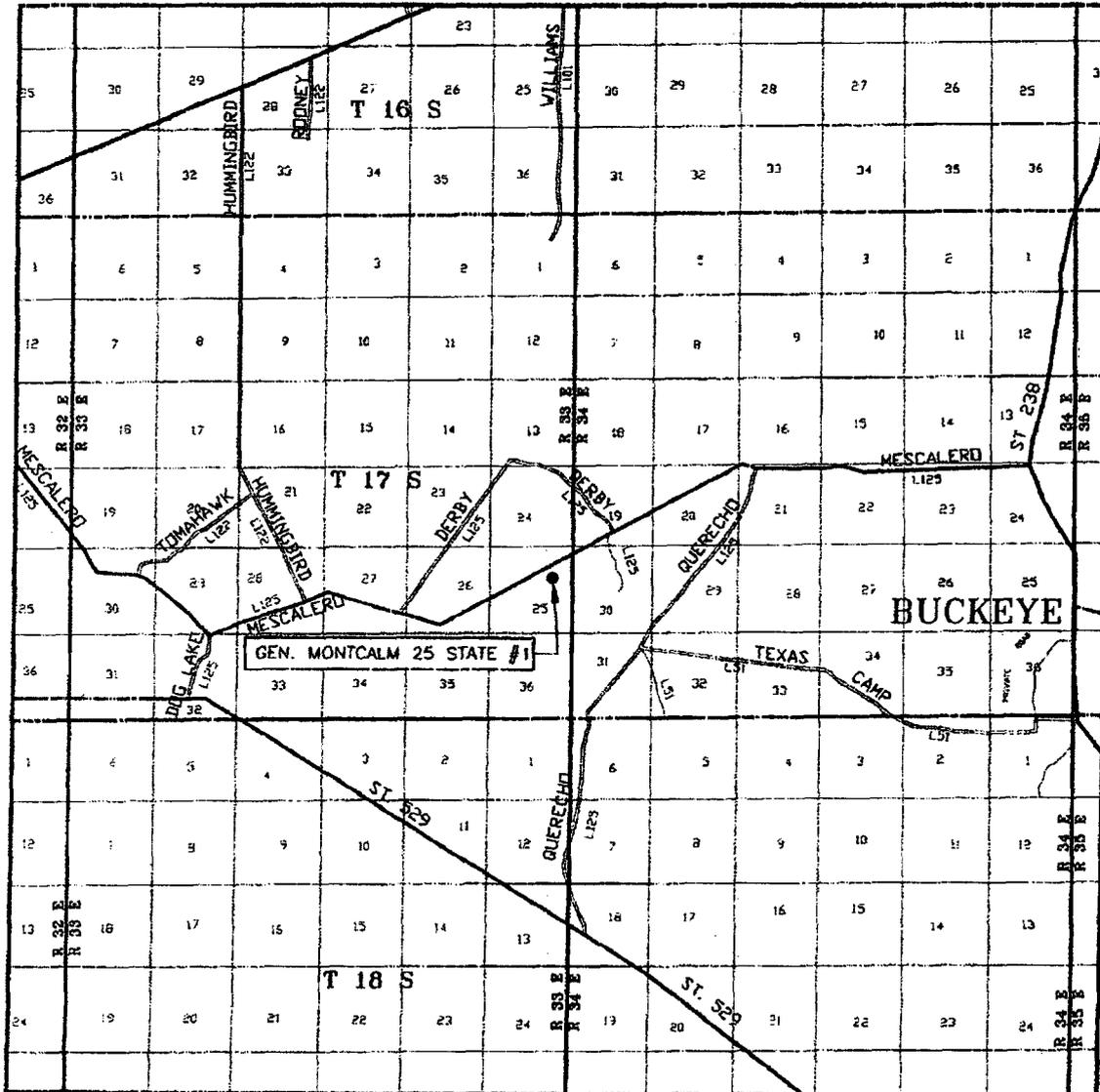
OPERATOR PATTERSON
PETROLEUM, LP

LEASE GEN. MONTCALM 25 STATE

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

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

VICINITY MAP

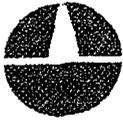


SCALE: 1" = 2 MILES

SEC. 25 TWP. 17-S RGE. 33-E
 SURVEY N.M.P.M.
 COUNTY LEA STATE NEW MEXICO
 DESCRIPTION 1980' FNL & 1260' FEL
 ELEVATION 4088'
 OPERATOR PATTERSON
PETROLEUM, LP
 LEASE GEN. MONTCALM 25 STATE



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



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

Gen. Montcalm 25 State No. 1

Section 25
T-17-S
R-33-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%	FW 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
GEN. MONTCALM 25 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% 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", 20 lb/ft P110 Production String Casing Set at 13,800' - in an 8 3/4" Hole

Desired TOC = 4600'

1st Stage Lead : 800 sx of Halliburton Light H + 5% salt + 3/10% HR-7 retarder

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

1st Stage 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

PATTERSON PETROLEUM LP

PROPOSED CASING & CEMENTING PROGRAM CONTINUED

GEN. MONTCALM 25 STATE WELL NO. 1

5½" DV TOOL @ ± 8500'

2nd Stage Lead : 1000 sx of Halliburton Lite + 5% salt + 3/10% HR-7 retarder

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

2nd Stage Tail : 100 sx "C" neat

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

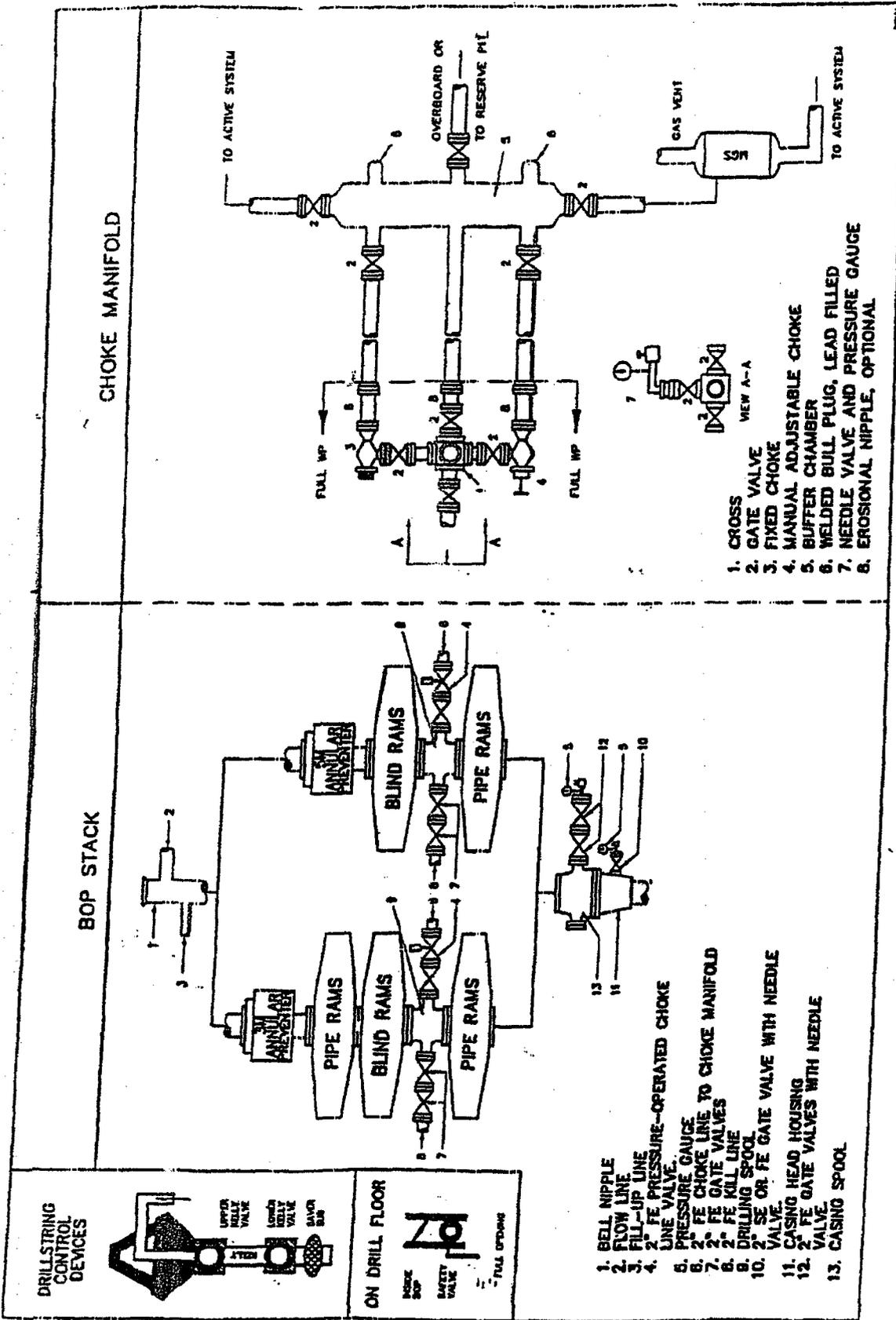
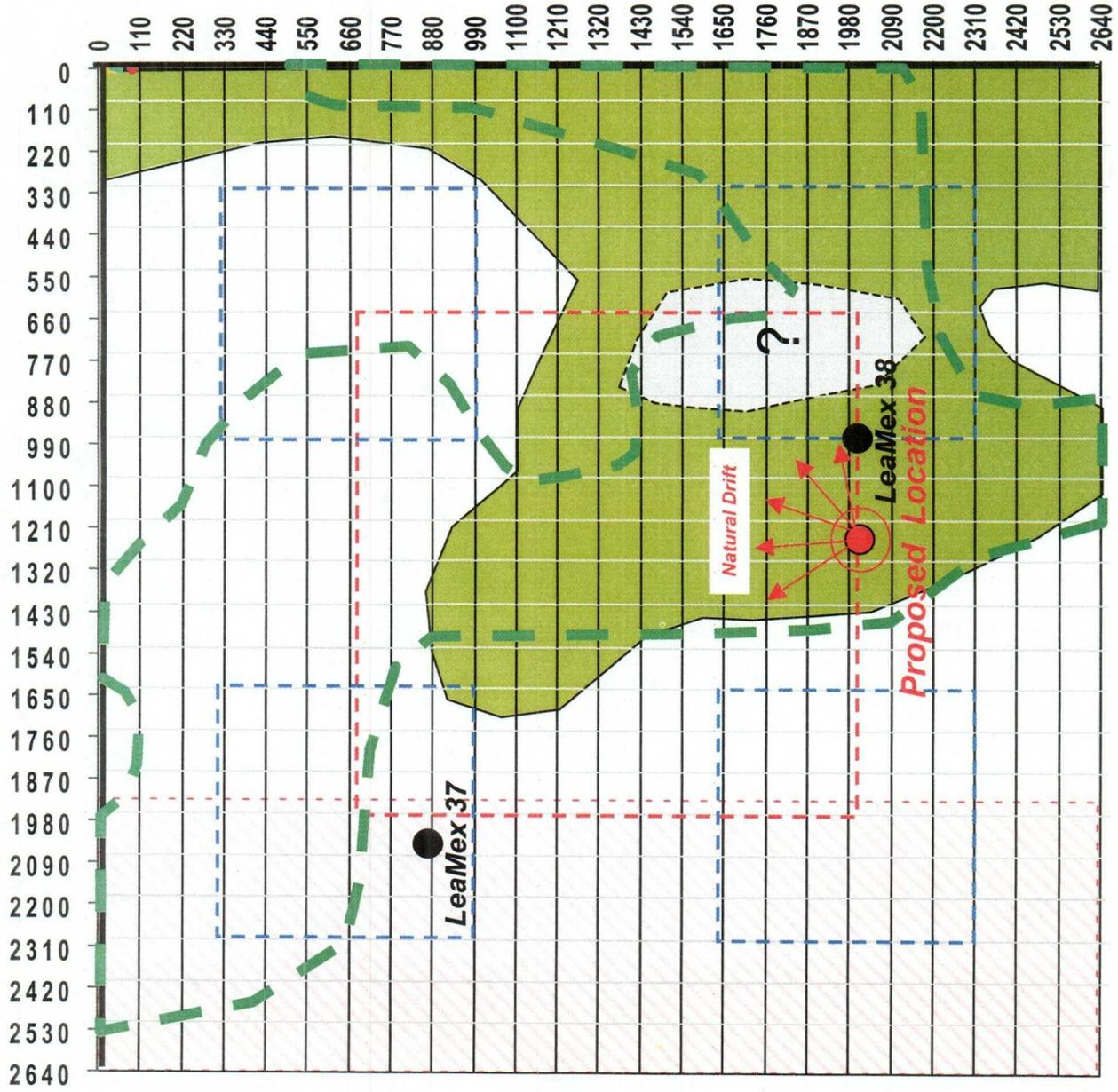


Fig. 2.5. Class 3 BOP and Choke Manifold.

Gen. Montcalm
NE 1/4 Sect 25



Primary Target
(Uncas Sand)



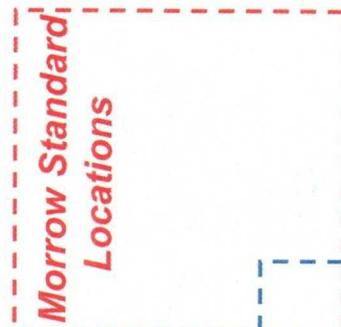
Second Target
(Hawkeye Sand)



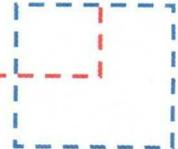
Unreliable 3-D
Data



Morrow Standard
Locations



Oil Standard
Locations



The Gen. Montcalm 25 State #1 has been located to ideally test two seismic features in the Morrow formation that roughly correlated to two different sands producing in nearby wells—a middle Morrow sand in the Hawkeye 30 State #1 and a lower Morrow sand in the Uncas 31 State #1. Although, these anomalies overlap in much of the SE/NE Section 25, there is an area of dim amplitudes that cover most of the possible locations that would be standard for both Morrow gas and shallower oil. The narrow strip (~990 FEL) would be satisfactory if the natural drift of the well was to the north or Northwest. Based on other wells in the area, the most likely direction for drift is northeast. This would cause the bottomhole for the well to be within the dim amplitude zone. By moving the surface To 1260 FEL, both Morrow targets will be penetrated without the need to directionally drill.

There is potential in shallower oil zones (Abo, Wolfcamp, Upper Penn) that will be penetrated by this well (the LeaMex #38 already is producing the San Andres/Grayburg). Since any shallow oil production would be serendipity, no formation specific geologic reasons can be given to support the non-standard oil location. However, the following information should be considered:

- The LeaMex #38 already occupies 1980 FNL 990 FEL.
- The possible oil zones are bail-out zones, not primary targets.
- The location is 12,000' from the nearest Abo production, 6500' from the nearest Wolfcamp production, and 9000' from the nearest Upper Penn production.
- Lease ownership is the same in all adjacent oil spacing units.