New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

F-05-03

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

638

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. LC-059152(b)
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	6. If Indian, Allotee or Tribe Name
2. Name of Operator PATTERSON PETROLEUM LP 141928	7. If Unit or CA Agreement, Name and No.
3a. Address P.O. DRAWER 1416 SNYDER, TX 79550	8. Lease Name and Well No. PADDY FEDERAL 24 #1 34942
3b. Phone No. (include area code) 325-573-1938 Maljamar;	9. API Well No. 30.025.37378
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 660' FNL & 400' FEL At proposed prod. zone SAME "A"	10. Field and Pool, or Exploratory ~~WILDCAT~~; PADDOCK, East 97417
	11. Sec., T. R. M. or Blk. and Survey or Area SEC. 24, T17S,R32E
14. Distance in miles and direction from nearest town or post office* 4.5 MILES SE FROM MALJAMAR, NM	12. County or Parish LEA / 13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 400'	16. No. of acres in lease 480	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 260'	19. Proposed Depth 6200'	20. BLM/BIA Bond No. on file UIB0008055
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4109' GL	22. Approximate date work will start* 04/30/2005	23. Estimated duration 20 DAYS

24. Attachments

Keswell Controlled Water Basin

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature Nolan Von Roeder	Name (Printed/Typed) NOLAN VON ROEDER	Date 03/02/2005
Title ENGINEER		
Approved by (Signature) /s/ Tony J. Herrell	Name (Printed/Typed) /s/ Tony J. Herrell	Date JUL 13 2005
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

DECLARED WATER BASIN
CEMENT BEHIND THE 13 3/8"
CASING MUST BE CIRCULATED

DECLARED WATER BASIN
CEMENT BEHIND THE 8 5/8"
CASING MUST BE CIRCULATED

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Cir Rig 4+5 steel pits drilling fluid reserve pit 12mil

* Lie v Bas Reserved to U.S.A. *
* Potash Area Reserved U.S.A. *

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, 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	Pool Code	Pool Name
30-025-37378	97417	Maljamar ~~WILDCAT~~; PADDOCK, East

Property Code	Property Name	Well Number
34942	PADDY FEDERAL 24	1

OGRID No.	Operator Name	Elevation
141928	PATTERSON PETROLEUM, L.P.	4109'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	24	17-S	32-E		660	NORTH	400	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.
40			

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

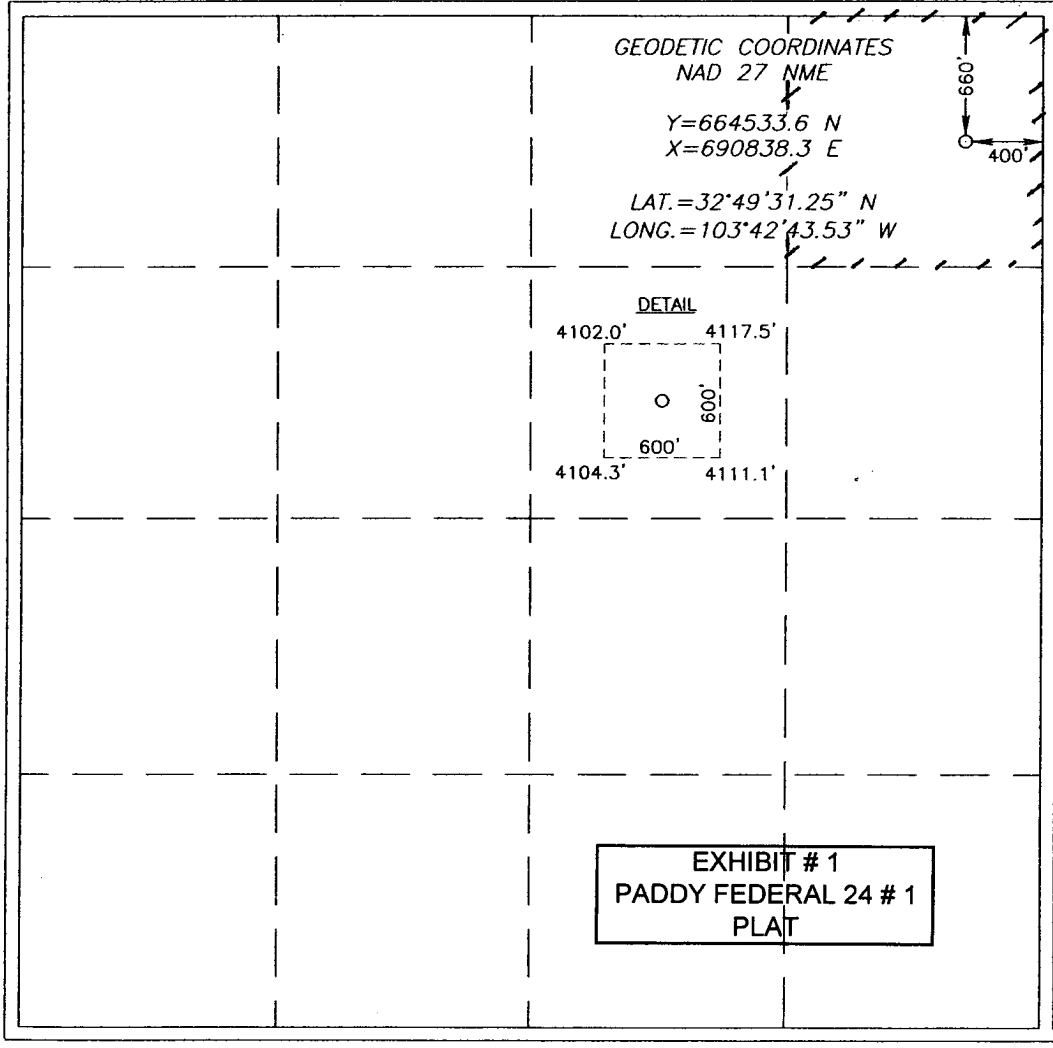


EXHIBIT # 1
PADDY FEDERAL 24 # 1
PLAT

OPERATOR CERTIFICATION

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

Signature

Nolan von Roeder
Printed Name

Engineer
Title

February 25, 2005
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 supervison, and that the same is true and correct to the best of my belief.

JANUARY 27, 2005
Date Surveyed LA

Signature & Seal of Professional Surveyor

GARY L. EIDSON 1/31/05
05.11.0114

Certificate No. GARY EIDSON 12641

NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

SURFACE USE AND OPERATIONS PLAN
Patterson Petroleum, LP
Paddy Federal 24 # 1
660' FNL & 400' FEL
Lot A., Sec. 24, T17S, R32E
Lea Co., NM

1. Existing Roads:

A. The well site and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Surveying Company, Hobbs, New Mexico.

B. All roads to the location are shown in Exhibit #3A. Approximately 99' of new road will be needed. The existing roads are labeled and are adequate for travel during drilling production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.

C. Directions to location: From intersection of Tomahawk Rd and CR 125 (Mescalero), Go Northwest along CR 125 for 1.2 miles. Turn right and go East 0.25 miles to the Caprock Maljamar Unit # 36 well, continue East 260' to the drill stake.

D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

Exhibit #3-A&B shows the existing roads .

Exhibits #3-B,&C show the proposed access road.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well.

4. Location of Existing and/or Proposed Facilities and ROW's:

A. If the well is productive:
1. The well will be tested and if production if commercial a buried pipeline will be laid to the location by a gas purchaser.

2. Any production facilities necessary will be located on the existing well pad.

B. If the well is productive, rehabilitation plans are as follows:

1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after the well is completed).

2. Topsoil removed from the drill site will be used to re-contour the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud systems as outlined in the drilling program. The brine and fresh water will be obtained from commercial water stations in the area and hauled to location on roads shown in Exhibit #3. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and any new access road will be obtained from the drilling pits and/or on site when possible. Any additional caliche will be obtained from approved caliche pits. All roads and pads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Drilling fluids will be contained in steel pits. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 120' x 120' x 6' deep, fenced, and plastic-lined (12 mil thickness).

C. Water produced from the well during completion may be disposed into the reserve pit. After the well is permanently placed on production, produced water will be trucked to approved commercial disposal facilities.

D. Garbage and trash produced during drilling or completion operations will be collected in a trash trailer by a contractor. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.

E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 90 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill and as weather permits the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use.

8. Ancillary Facilities:

None

9. Well Site Layout:

A. The drill pad layout is shown in Exhibit #5. Dimensions of the pad and pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection.

B. Mat Size: 250' X 185', plus 120' X 120' reserve pit on the North.

C. Cut & Fill: Location will require approximately 4 feet of cut to be made from East to West.

D. Exhibit #5 shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around, parking areas and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

E. The reserve pit will be lined with high-quality plastic sheeting (12 mil thickness).

10. Plan for Restoration of the Surface:

A. Upon completion of the proposed operation, if the well is to be abandoned, the pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.

All trash and garbage will be hauled away in order to leave the location in an anesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

C. The reserve pit will be fenced prior to and during drilling operations. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.

D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drill site not needed for production operations or facilities will be removed and used for construction of thicker pads. Any additional caliche required for facilities will be obtained from an approved caliche pit. Topsoil removed from the drill site will be used to re-contour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

BLM
Grazing Leased to Caswell Ranches, 1702 Gilham Dr., Brownfield, Texas 79316.

Surface leasee has been notified.

12. Other Information:

A. The area around the well site is grassland. The vegetation is native scrub grasses with abundant catclaw and mesquite.

B. There is no permanent or live water in the immediate area.

C. An archaeological survey has been requested and will be forwarded to the BLM when completed.

13. Lessee's and Operator's Representative:

The Patterson Petroleum LP representative for assuring compliance with the surface use plan is as follows:

Nolan von Roeder
Patterson Petroleum, LP
PO Drawer 1416
Snyder, Texas 79550
(325) 573-1938 Office
or (325) 573-1930

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Patterson Petroleum, LP and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

Patterson Petroleum, LP

C. G. Talbott

Cloyce Talbott
CEO

DRILLING PROGRAM
Patterson Petroleum, LP
Paddy Federal 24 # 1
660' FNL & 400' FEL
Lot A., Sec. 24, T17S, R32E
Lea Co., NM

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Grayburg	4200'
San Andres	4450'
Paddock	5800'

3. Estimated Depth of Anticipated Oil or Gas:

Paddock below 5800' Oil & Gas

4. Casing Program:

Hole Size	Interval	OC Csg	Weight Grade Jt Cond Type
17-1/2"	0 – 400'	13-3/8"	48#, H-40, 8 rd., ST&C, New
11"	0 – 4800'	8-5/8"	32#, J-55, 8 rd., LT&C, New
7-7/8"	0 – 6200'	5-1/2"	15.5#, J-55, 8-rd., LT&C, New

Cement Program:

13-3/8" Surface Casing:	400' cemented to surface with 500 sx of Class "C"+ 2% CaCl. + .25 #/sk Celloflake.
8-5/8" Intermediate	4800' cemented to surface with 1200 sxs HLPP + additives, and 200 sxs. "C" + 1% CaCL.
5-1/2" Production Casing:	6200' cemented with 500 sxs. "C" 50/50 POZ + 4% gel + 3 #/sk salt and other additives. TOC estimated to be 4000' from surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) is shown in Exhibit #2. They will consist of an annular bag type preventer on top of a double ram 3000# WP BOP. Unit will be hydraulically operated. BOP will be nippled up on the 13-3/8" surface csg and used continuously until TD is reached. BOP and accessory equipment will be tested to API specifications. BOP rams will be operated once every 24 HRS. and blind rams will be operated every time pipe is out of the hole. A 2" kill line and a 2" choke line will be included in the drilling spool. Other accessories to the BOP equipment will include a kelly cock and a stabbing valve.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and brine water mud system. The applicable depth and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)	
40 – 400	FW	8.5	32-36	NC	FWG, paper, lime
400-1130' FW (SSS) 400 – 4800	BW	10.0	28-32	NC	SWG, paper, lime
4800-TD	FW	8.4-9.2	32-50	8-15	FWG, PAC, caustic

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location or available at the nearest stocking point.

7. Auxiliary Well Control and Monitoring Equipment:

A. A kelly cock will be kept in the drill string at all times.

B. A mud logging unit will be continuously monitoring drilling penetration rate and hydrocarbon shows from 4800' to TD.

8. Logging, Testing and Coring Program:

A. Drillstem tests will be run on the basis of drilling shows.

B. The electric logging program will consist of GR-Array Induction log and GR-Compensated Neutron-Density from TD to intermediate casing. Gr-CNL to surface.

C. Sidewall coring may be performed in select intervals if deemed necessary.

D. Further testing procedures will be determined after the production casing has been cemented at TD based on drill shows and log evaluation.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

Possible waterflow from the Grayburg and San Andres formations due to nearby injection wells in the Caprock Maljamar Unit operated by Forrest Oil Co. The estimated bottom hole temperature (BHT) at TD is 110° and estimated maximum bottom-hole pressure (BHP) is 2500 psig. No abnormal concentrations of hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. All H2S operation precautions will be followed (see attached H2S drilling operations plans). No major loss circulation zones have been reported in offsetting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is April 30, 2005. Once commenced, the drilling operation should be finished in approximately 20 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
Patterson Petroleum, LP
Paddy Federal 24 # 1
660' FNL & 400' FEL
Lot A., Sec. 24, T17S, R32E

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H2S).

2. The proper use and maintenance of personal protective equipment and life support system.

3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

3. The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan.

This location is not within 3000' of any public roadway or dwelling. Therefore an H2S Contingency Plan is not necessary.
There will be an initial safety session just prior to commencing operations on the well. The initial session shall include a review of the site's specific H2S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500'.

1. Well Control Equipment:

   A. Annular Preventer to accommodate all pipe sizes with properly sized closing unit.

2. Protective Equipment for Essential Personnel:

   A. Mark II Surviveair 30-minute units located on site.

3. H2S Detection and Monitoring Equipment:

   A. 1 – portable H2S monitor positioned in the rig doghouse with detectors on the floor, BOP, flowline and steel pit area for best coverage and response.

4. Visual Warning Systems:

   A. Guy lines will be flagged and a wind sock will be positioned on location.

   B. Caution/Danger signs shall be posted on roads providing direct access to location.

5. Mud Program:

   The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

   All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service as necessary.

7. Communication:

   Radio communications in company vehicles including cellular telephone and 2-way radio.

8. Well Testing:

   One or two DST's are possible in the Paddock formation.

PATTERSON UTI DRILLING

RIG 495

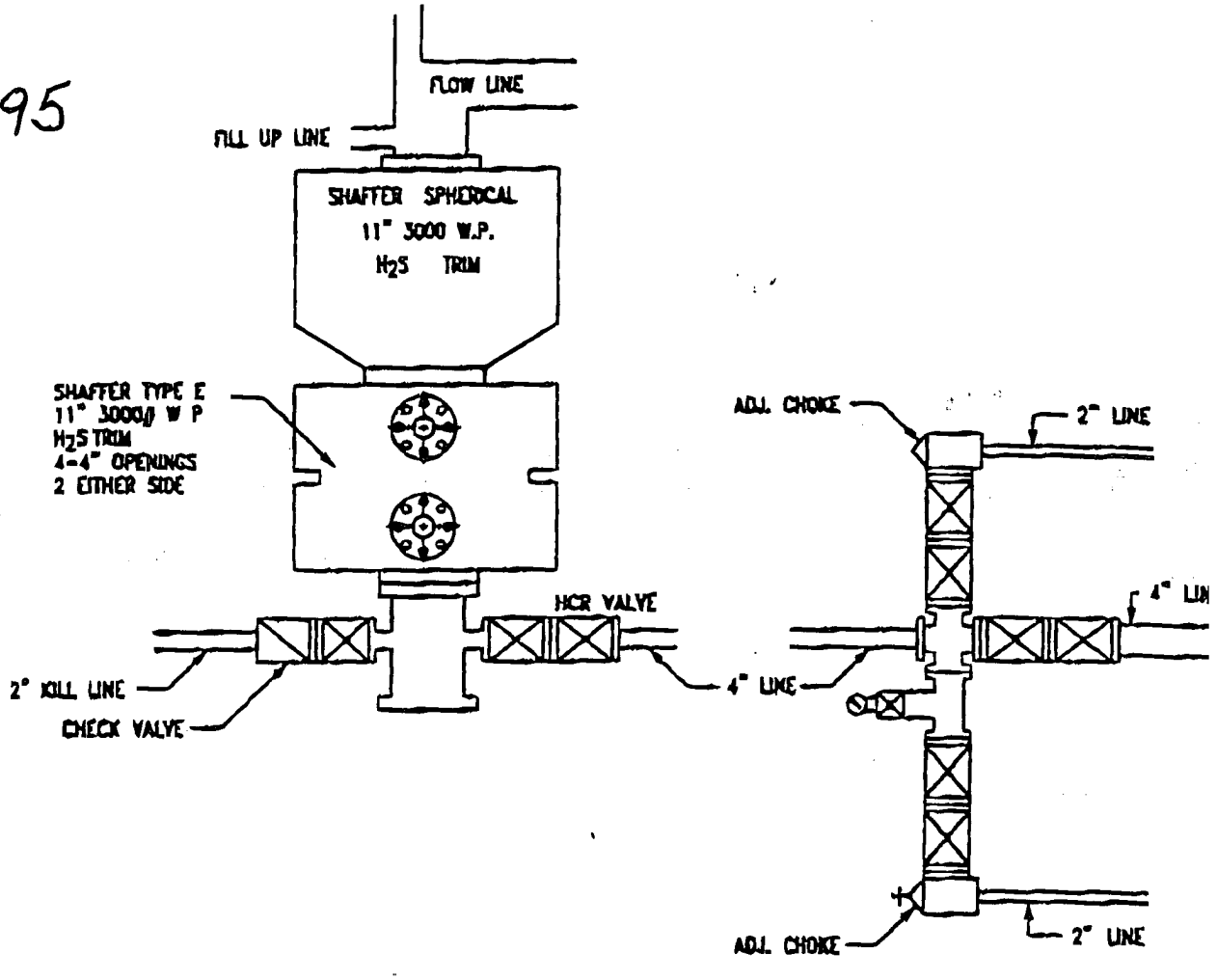
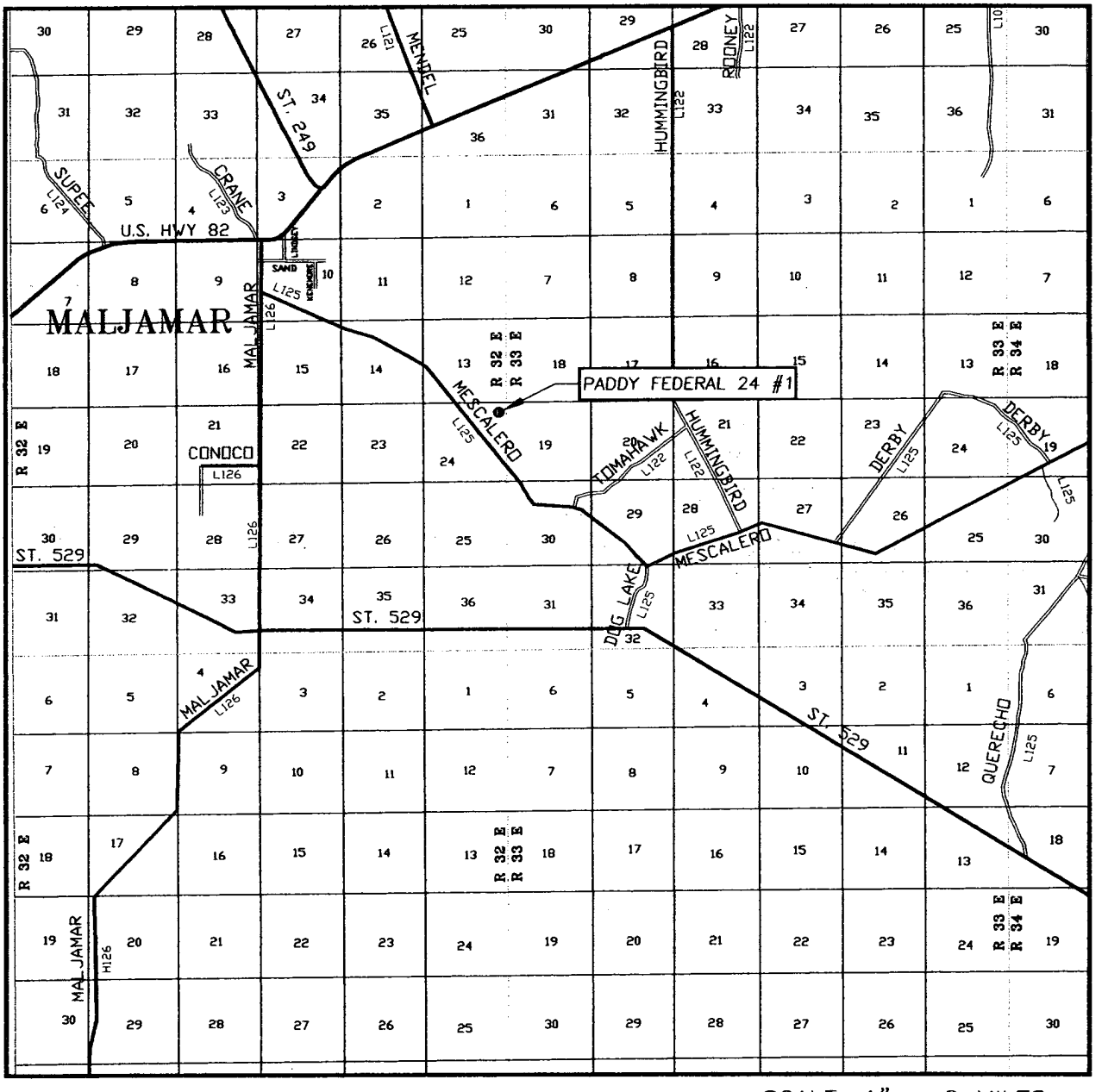


EXHIBIT # 2
PADDY FEDERAL 24 # 1
BOP DRAWING

VICINITY MAP



SCALE: 1" = 2 MILES

EXHIBIT # 3A
PADDY FEDERAL 24 # 1
ACCESS ROADS

SEC. 24 TWP. 17-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FNL & 400' FEL

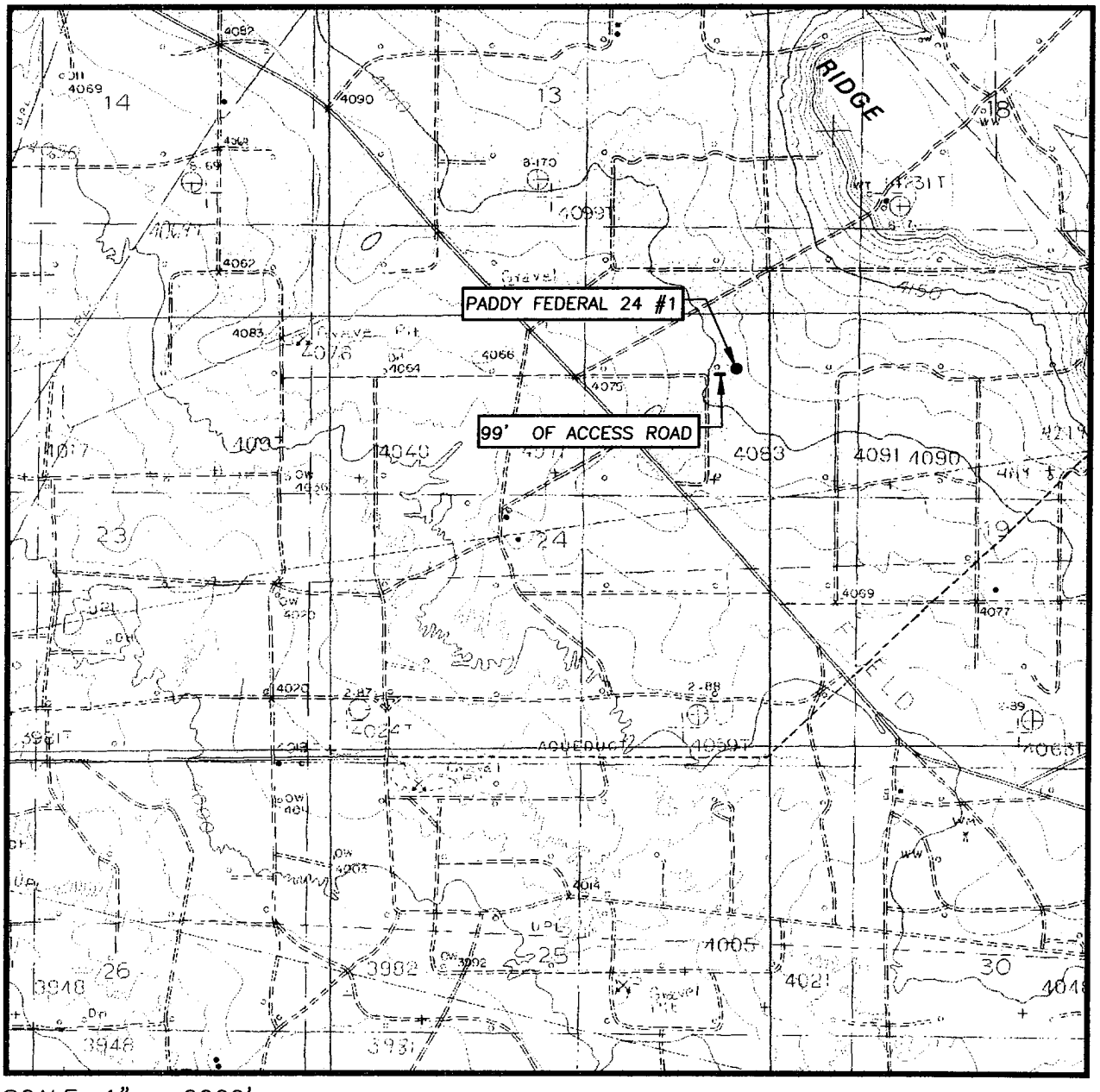
ELEVATION 4109'

OPERATOR PATTERSON PETROLEUM, L.P.

LEASE PADDY FEDERAL 24

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:
DOG LAKE, N.M. – 10'

SEC. 24 TWP. 17-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 400' FEL

ELEVATION 4109'

OPERATOR PATTERSON PETROLEUM, L.P.

LEASE PADDY FEDERAL 24

U.S.G.S. TOPOGRAPHIC MAP
DOG LAKE, N.M.

EXHIBIT # 3B
PADDY FEDERAL 24 # 1
ACCESS ROADS

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

SECTION 24, TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO

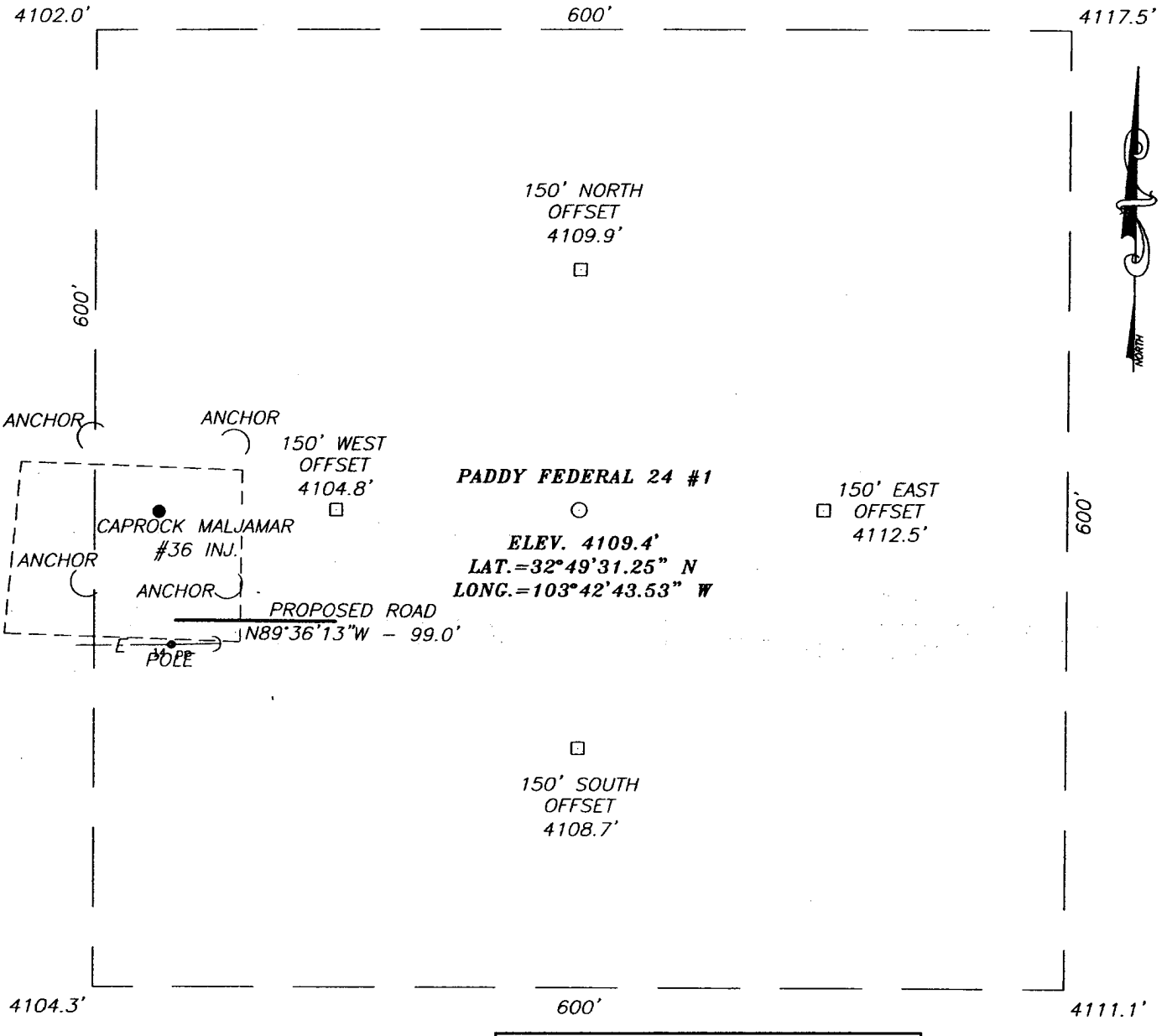


EXHIBIT # 3C
PADDY FEDERAL 24 # 1
LOCATION & ROAD PLAT

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. #125 (DOG LAKE) AND TOMAHAWK RD GO NORTHWEST ALONG CO. RD. #125 FOR 1.2 MILES. TURN ~~LEFT~~ RIGHT AND GO EAST 0.25 MILES AT THE CAPROCK MALJAMAR #36 WELL. THIS WELL IS 260' EAST IN THE PASTURE.

100 0 100 200 Feet

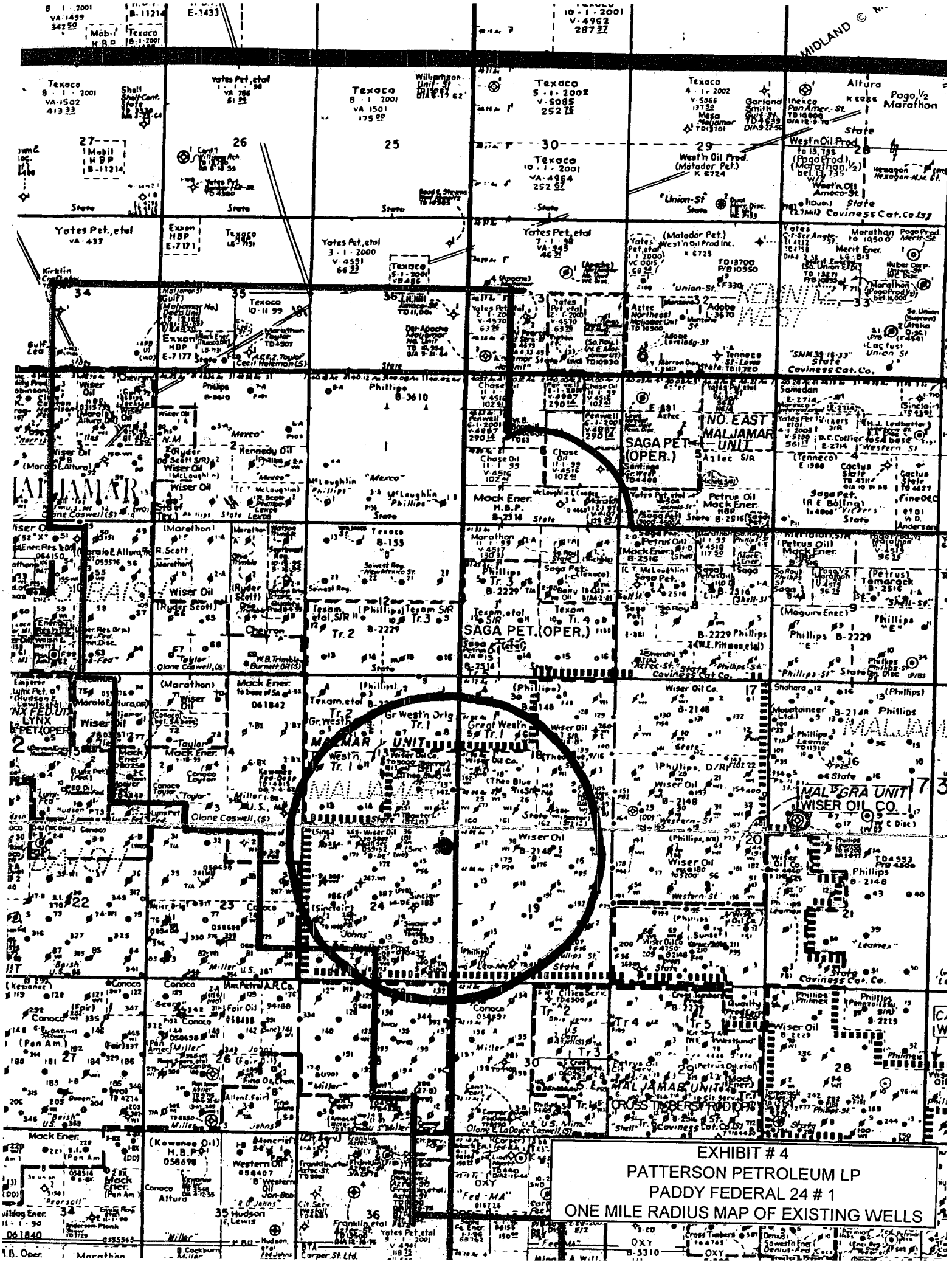
Scale:1"=100'

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

PATTERSON PETROLEUM, L.P.

PADDY FEDERAL 24 #1 WELL
LOCATED 660 FEET FROM THE NORTH LINE
AND 400 FEET FROM THE EAST LINE OF SECTION 24,
TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 1/27/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0114	Dr By: LA	Rev 1:N/A	
Date: 1/31/05	Disk: CD#4	05110114	Scale:1"=100'


MIDLAND
MAL JAMAR UNIT
NO. EAST MALJAMAR UNIT
SAGA PET. (OPER.)
MAL GRA UNIT
WISER OIL CO.
CROSS TIMBERS PROD. CO.
EXHIBIT # 4
PATTERSON PETROLEUM LP
PADDY FEDERAL 24 # 1
ONE MILE RADIUS MAP OF EXISTING WELLS

Patterson-UTI Drilling Company

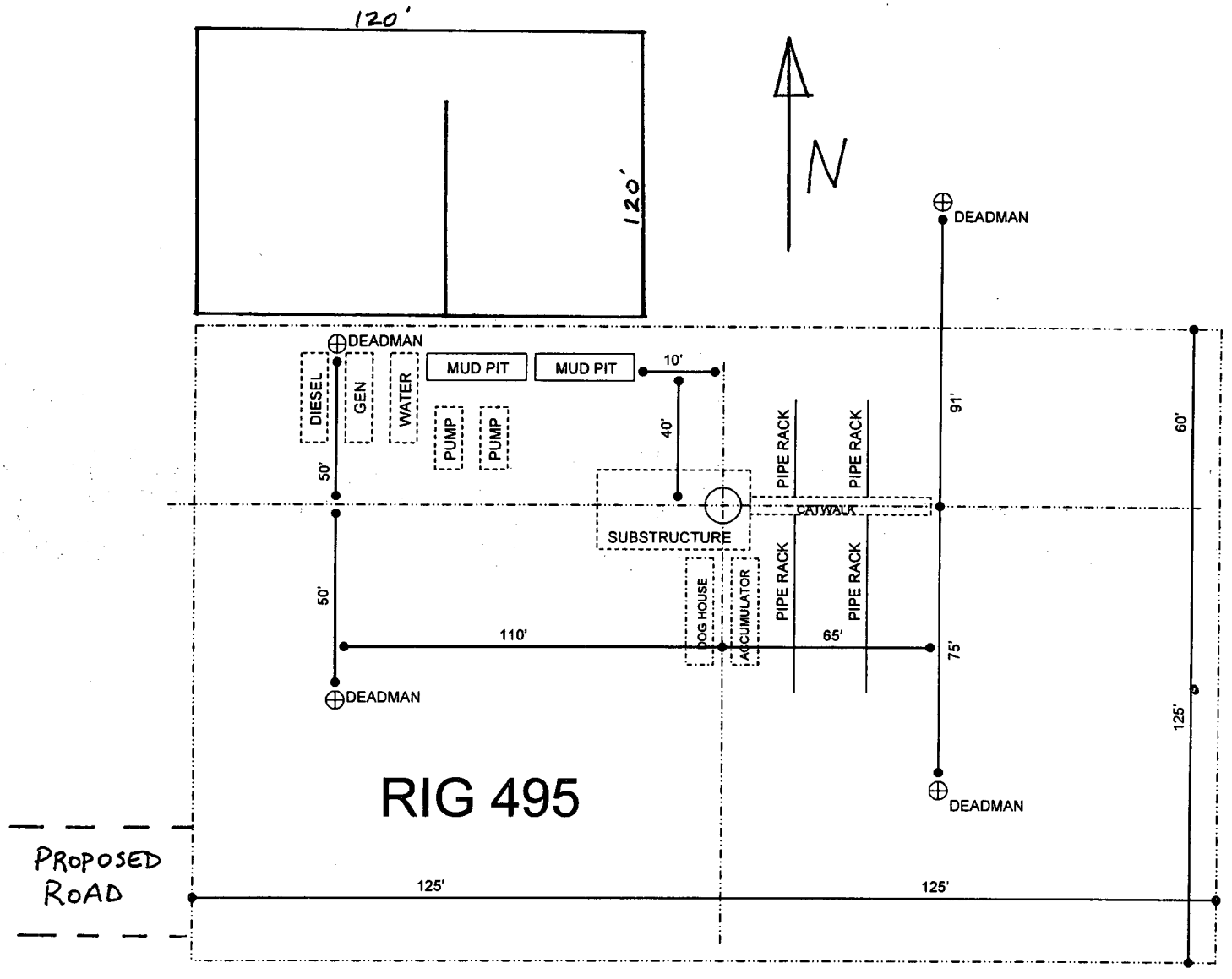


EXHIBIT # 5
PATTERSON PETROLEUM LP
PADDY FEDERAL 24 # 1
DRILLSITE & RIG LAYOUT SKETCH

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Roswell Resource Area
P.O. Drawer 1857
Roswell, New Mexico 88202-1857

Statement Accepting Responsibility for Operations

Operator name:		Patterson Petroleum LP
Street or box	:	P.O. Drawer 1416
City, State	:	Snyder, TX
Zip code	:	79550

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: LC-059152(b)
Paddy Federal 24 #1

Legal description of land: Sec. 24, T-17-S, R32E, Lot A

Formation(s) (if applicable): Paddock

Bond Coverage: (State if individually bonded or another's bond)
State of New Mexico $50,000 Blanket Bond

BLM Bond File No.: UIB0008055

Authorized Signature: C.A. Talbott
Cloyce A. Talbott

Title: CEO

Date: March 2, 2005

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name Patterson Petroleum LP. Well Name & No. Paddy 24 Federal #1
Location 660 F N L & ~~660~~ 400 F E L Sec. 24, T. 17 S, R 32 E.
Lease No. LC-059152-B County Lea State New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

(X) Lesser Prairie Chicken (stips attached)
( ) San Simon Swale (stips attached)
( ) Flood plain (stips attached)
( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other. V-Door West

III. WELL COMPLETION REQUIREMENTS

( ) A Communlitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(X) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

( ) B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus)* 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Boute curtipendula*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobollud airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

(X) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other.

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and it capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from the BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

EXHIBIT B

BLM Serial No.: LC-059152-B
Company Reference: Patterson Petroleum LP

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A
**Four-winged Saltbush	5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the following lands: All of Section 24 T. 17 S., R. 32 E.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a..m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Patterson Petroleum, LP Well No. 1 – Paddy Federal 24
Location: 660' FNL & 400' FEL sec. 24, T. 17 S., R. 32 E.
Lease: LC-058152(b)

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 393-3612 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: **13-3/8** inch **8-5/8** inch **5-1/2** inch

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the **Queen** formation. A copy of the plan shall be posted at the drilling site.

II. CASING:

1. **13-3/8** inch surface casing should be set **at approximately 1160 feet in the top of the Rustler Anhydrite or per the attached ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING,** below usable water and circulate cement to the surface. If cement does not circulate to the surface the Hobbs BLM office shall be notified at (505) 393-3612 and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string. **If the 13-3/8 inch surface casing is set at approximately 400 feet, fresh water mud must be used to drill the 12-1/4 inch hole for the 8-5/8 inch intermediate casing from approximately 400 feet to 1135 feet- per the attached ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING.**

2. Minimum required fill of cement behind the **8-5/8** inch intermediate casing is **sufficient to circulate to the surface-per the attached ALTERNATIVE CONDITIONS OF APPROVAL – DRILLING.** If cement does not circulate to the surface, the Hobbs BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

3. Minimum required fill of cement behind the **5-1/2** inch production casing is **sufficient to tie back 200 feet into the 8-5/8 inch intermediate casing set at approximately 4800 feet.**

III. PRESSURE CONTROL:

1. Before drilling below the **13-3/8** inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

2. Before drilling below the **13-3/8** inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.

3. After setting the **8-5/8** inch intermediate casing string and before drilling into the **Queen** formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The results of the test will be reported to the BLM Hobbs Office at 414 West Taylor, Hobbs, New Mexico 88240.

B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

C. Testing must be done in a safe workman like manner. Hard line connections shall be required.

ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING

Drilling Fluids, Casing and Cementing Requirements for Most of Lea County:

Casing and Cementing

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

Drilling Fluid

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation, fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

BLM Serial Number: LC-059152-B
Company Reference: Patterson Petroleum LP
Well No. & Name: Paddy 24 Federal #1

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS
CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et. seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et. seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et. seq.*) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

/__/ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

/_X_/ Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

/__/ Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

/_x_/ 400 foot intervals.

/__/ _____ foot intervals.

/__/ locations staked in the field as per spacing intervals above.

/__/ locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

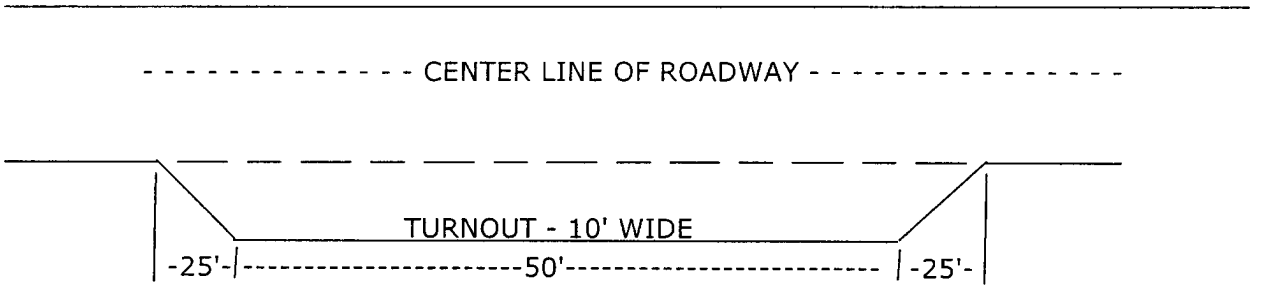
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

spacing interval = $\frac{400'}{\text{road slope in \%}} + 100'$

Example: 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS: