

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

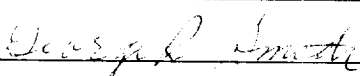
FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

dsf

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-03677
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Manzano Oil Corporation		7. If Unit or CA Agreement, Name and No. 30955
3a. Address P.O. Box 2107 Roswell, NM 88202		8. Lease Name and Well No. Sand Pounder Federal, Well #1
3b. Phone No. (include area code) (505) 623-1996		9. API Well No. 30-015-32552
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 660' FNL & 1980' FEL At proposed prod. zone Unders. Scanlon Morrow		10. Field and Pool, or Exploratory Burton Flat East Morrow
11. Sec., T., R., M., or Blk. and Survey or Area Sec. 29-T20S-R29E		12. County or Parish Eddy
13. State NM		
14. Distance in miles and direction from nearest town or post office* 17 road miles northeast of Carlsbad, NM	15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of Acres in lease 2150.97
17. Spacing Unit dedicated to this well 320	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A	19. Proposed Depth 12,100'
20. BLM/BIA Bond No. on file NM-2567	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3254' GL	22. Approximate date work will start* December 2, 2002
23. Estimated duration 4 - 5 weeks	24. Attachments Capitan 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 	Name (Printed/Typed) George R. Smith	Date 10/29/02
Title Agent for Manzano Oil Corporation		
Approved by (Signature) /s/ Mary J. Rugwell	Name (Printed/Typed) /s/ Mary J. Rugwell	Date DEC 10 2002
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.

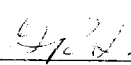
APPROVAL FOR 1 YEAR

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 reverse)

Lease Responsibility Statement: Manzano Oil Corporation accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**


George R. Smith, agent

District I
1625 N. French Dr. Hobbs, NM 88240

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, N M 87505

Form C-102

Revised March 17, 1999
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name Burton Flats East Morrow	
Property Code	Property Name SAND POUNDER FED.			Well Number 1
OGRID No.	Operation Name MANZANO OIL CORP.			Elevation 3254

Surface Location

UL or Lot No. B	Section 29	Township 20 S	Range 29 E	Lot Idn.	Feet from the 660	North/South line NORTH	Feet from the 1980	East/West line EAST	County EDDY
---------------------------	----------------------	-------------------------	----------------------	----------	-----------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------

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 320		Joint or Infill	Consolidation Code	Order No.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

OPERATOR CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Signature

Printed Name **George R. Smith**

Title **agent**

Date **October 29, 2002**

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 KNOWLEDGE AND BELIEF.

OCTOBER 29, 2002

Date of Survey

Signature and Seal of Professional Surveyor

5412
REGISTERED LAND SURVEYOR ENGINEER
NEW MEXICO
NM PE&PS #5412
Certificate Number

APPLICATION FOR DRILLING

MANZANO OIL CORPORATION

Sand Pounder Federal, Well No. 1
660' FNL & 1980' FEL, Sec. 29-T20S-R29E
Eddy County, New Mexico
Lease No.: NM-03677
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Manzano Oil Corporation submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Base of Salt	900'	Wolfcamp	9,250'
Yates	1,050'	Strawn	10,400'
Capitan Reef	1,500'	Atoka	10,650'
Delaware	3,175'	Morrow	11,050'
Bone Spring	5,900'	T.D.	12,100'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.

Oil: Possible in the Bone Spring

Gas: Possible in the Atoka below 10,650' and the Morrow below 11,050'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94.0#	J-55	ST&C	400'	Circ. 500 sx "C"
17 1/2"	13 3/8"	48.0#	J-55	ST&C	4,100' 960' - 1030'	Circ. 1000 sx Prem Plus + add.
11"	8 5/8"	32.0#	J-55	ST&C	3,500' - 3,20'	Circ. 800 sx Interfill "C" cement + add..
7 7/8"	5 1/2"	17.0#	N-80/P110	LT&C	12,100'	1250 sx of Premium + add TOC to 3000'.

5. Proposed Control Equipment:

A 12" 5000 psi wp Shaffer Type LWS Double Gate BOP will be installed on the 13 3/8" casing to be operated as a 3000-psi wp system. Request that casing and BOP be tested as described in Onshore Oil & Gas Order No. 2 with rig pump before drilling out with the 11". The 8 5/8" casing will be tested to a maximum of 1500 psi as per Onshore Order No. 2 before drilling out with the 7 7/8". See Exhibit "E".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 400': Fresh water mud:	8.4 - 8.5 ppg	30 - 45	No W/L control
400' - 1,100': Brine mud:	10.0 - 10.4 ppg	29 - 32	No W/L control
1,100' - 3,200': Fresh water mud	8.4 - 8.6 ppg	28 - 32	No W/L control
3,200' - 10,000': Fresh water mud	8.4 - 8.8 ppg	28 - 32	No W/L control
10,000' - 12,100': Cut brine mud	9.1 - 9.5 ppg	30 - 36	W/L control 10 cc +/-

7. **Auxiliary Equipment:** Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: As deemed necessary.

Logging: TD - 3500': GR-Azimuthal Laterlog, and GR-Compensated Density-Neutron w/optional Sonic log
3500' - surface: GR/CNL.

Coring: As dictated by logs.

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated partially evacuated surface pressure = 2640 psi with a temperature of 180°.

10. H₂S: None expected based on information from surrounding wells.

11. Anticipated starting date: December 2, 2002.
Anticipated completion of drilling operations: Approximately 30 – 40 days.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

MANZANO OIL CORPORATION
Sand Pounder Federal, Well No. 1
660' FNL & 1980' FEL, Sec. 29-T20S-R29E
Eddy County, New Mexico
Lease No.: NM-003677
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM color quad map showing the location of the well as staked. The well site location is approximately 17 road miles northeast of Carlsbad, New Mexico. Traveling east of Carlsbad on U.S. Highway 62/180 and county roads No. 243 and 238 there will be approximately 16 miles of paved highway and 1.3 miles of gravel oilfield/ranch roads.
- B. Directions: Travel east of the Pecos River in Carlsbad, NM on U.S. Highway 62/180 for approximately 7.9 miles; turn north on CR 243 (Magnum Rd) for 5.7 miles to paved CR 238 (Burton Flats Rd.). Turn right (east) onto the county road for 2.2 to a gravel road on the south side of road. Turn south onto a gravel road and continue south for .2 mile to a gate and then .7 mile to the start of the proposed access road on the west side of the two-track road. The proposed access road will run southwest and west for approximately 2000 feet to the southeast corner of the proposed location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be constructed to a width of 12 feet and will be approximately 2000 feet in length. The proposed access road is color coded red on Exhibit "A".
- B. Construction: The proposed access road will be constructed by blading and topping with compacted caliche and will be properly drained.
- C. Turnouts: One turnout at midpoint will be required increasing the width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: One required on two-track road.
- G. Off Lease R/W: None required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no production facilities for Manzano Oil Corp. on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery, if required, will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the access road and well site pad will be obtained on location, if possible, or from an approved Federal pit in SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Sec. 17-T20S-R29E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The well pad and pit area have been staked and flagged, 400' X 400'.
- B. Mat Size: 250' X 205', plus 60' X 130' reserve pits on the north.
- C. Cut & Fill: None required
- D. The surface will be topped with compacted caliche and the dirt pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced and screened until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are sufficiently dried.

11. OTHER INFORMATION:

- A. Topography: The well site and access road are located in a very flat area with an overall .3 % slope to the southwest from a 3254' GL elevation.
- B. Soil: The topsoil at the well site is a fine tan gypsum loam of the Reeves Gypsum soils complex.
- C. Flora and Fauna: The vegetation cover on the proposed access road and location is a sparse to fair grass cover of grama, three-awn, burro grass and other misc. native grasses along with plants of yucca, broomweed, cactus plus miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in the area.
- E. Residences and Other Structures: None.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and the access road are on Federal surface and minerals.
- H. There is no evidence of archaeological, historical or cultural sites in the area. Archaeological Survey Consultants, P. O. Box 2285, Roswell, NM 88202, is conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

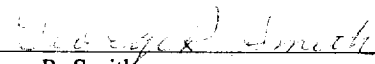
Ronnie Carre
P.O. Box 3
Loco Hills, NM 88255
Office Phone: (505) 623-1996
Home Phone: (505) 677-3454

Kenneth Barbe
Manzano Oil Corporation
P. O. Box 2107
Roswell, NM 88202
Office Phone: (505) 623-1996

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Manzano Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

October 29, 2002



George R. Smith
Agent for: Manzano Oil Corporation

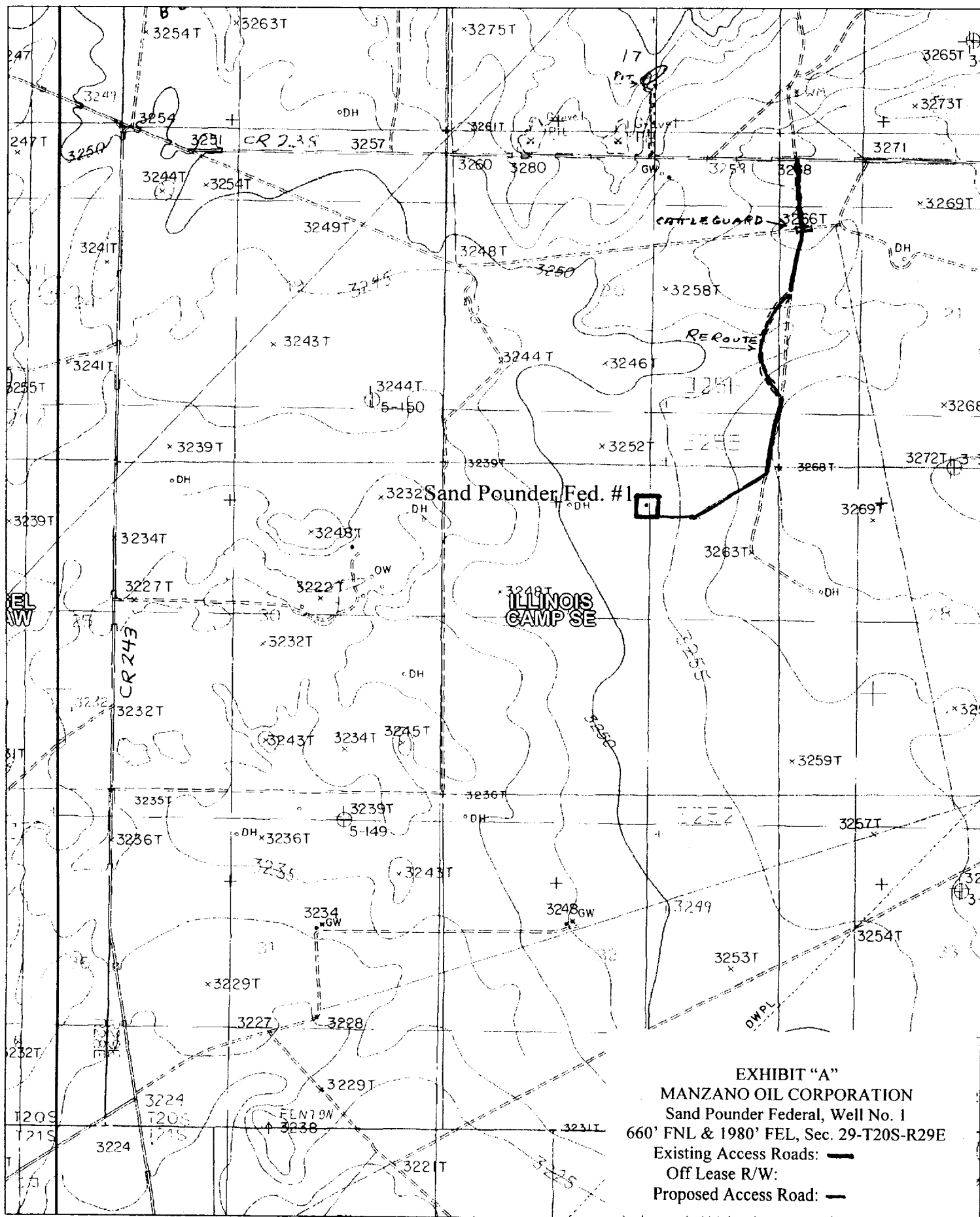




EXHIBIT "C"
MANZANO OIL CORPORATION
Green Flash Federal Com., Well No. 1
660' FNL & 1980' FEL, Sec. 29-T20S-R29E
Existing Wells



McVAY DRILLING COMPANY
Post Office Box 924
Hobbs, New Mexico 88241
(800) 387-3311
(505) 393-3744

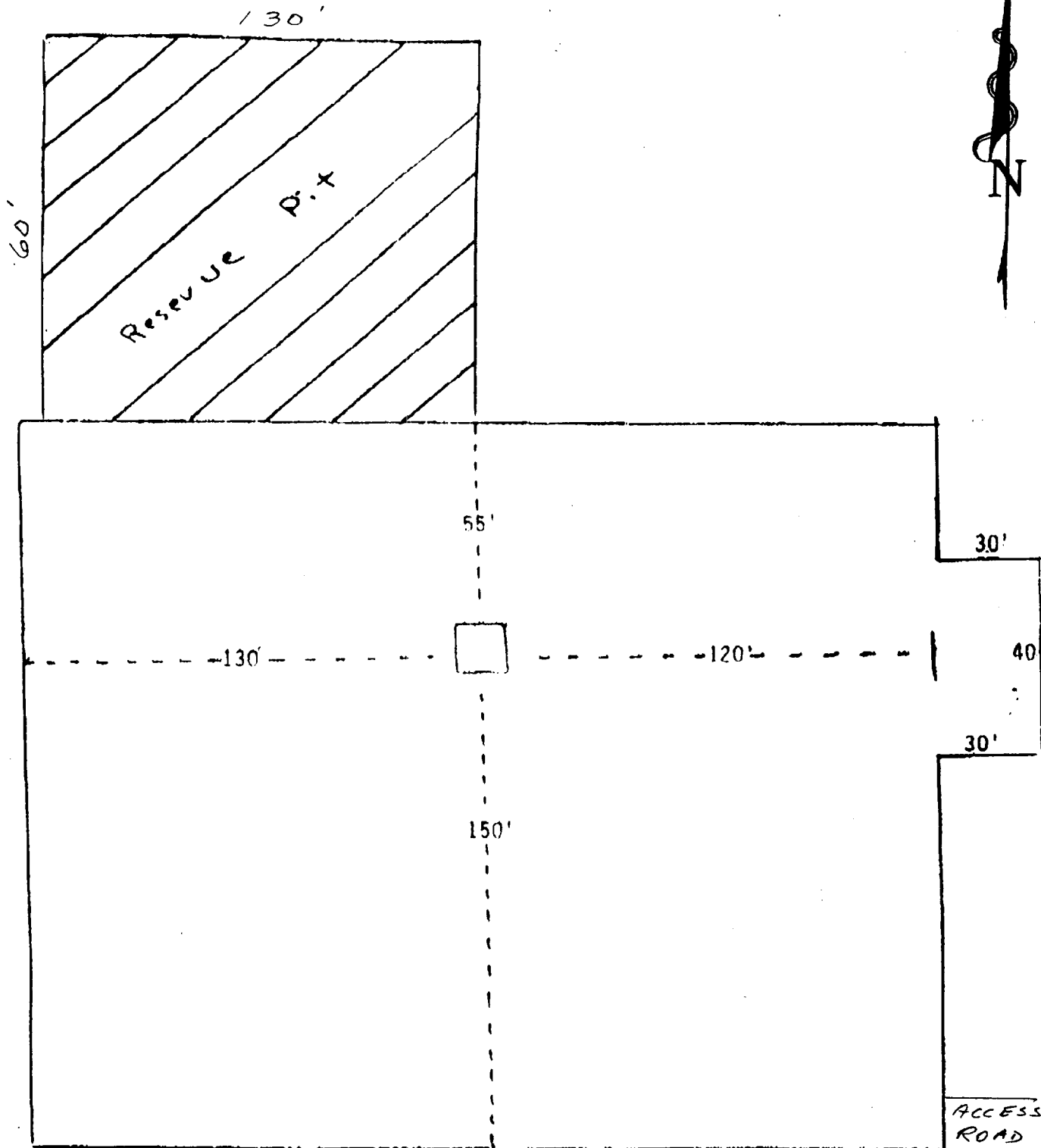


EXHIBIT "D"
MANZANO OIL CORPORATION
Sand Pounder Federal, Well No. 1
Pad & Pit Layout

PROPOSED 5-M BOP AND CHOKE ARRANGEMENT OPERATE AS A 3M SYSTEM

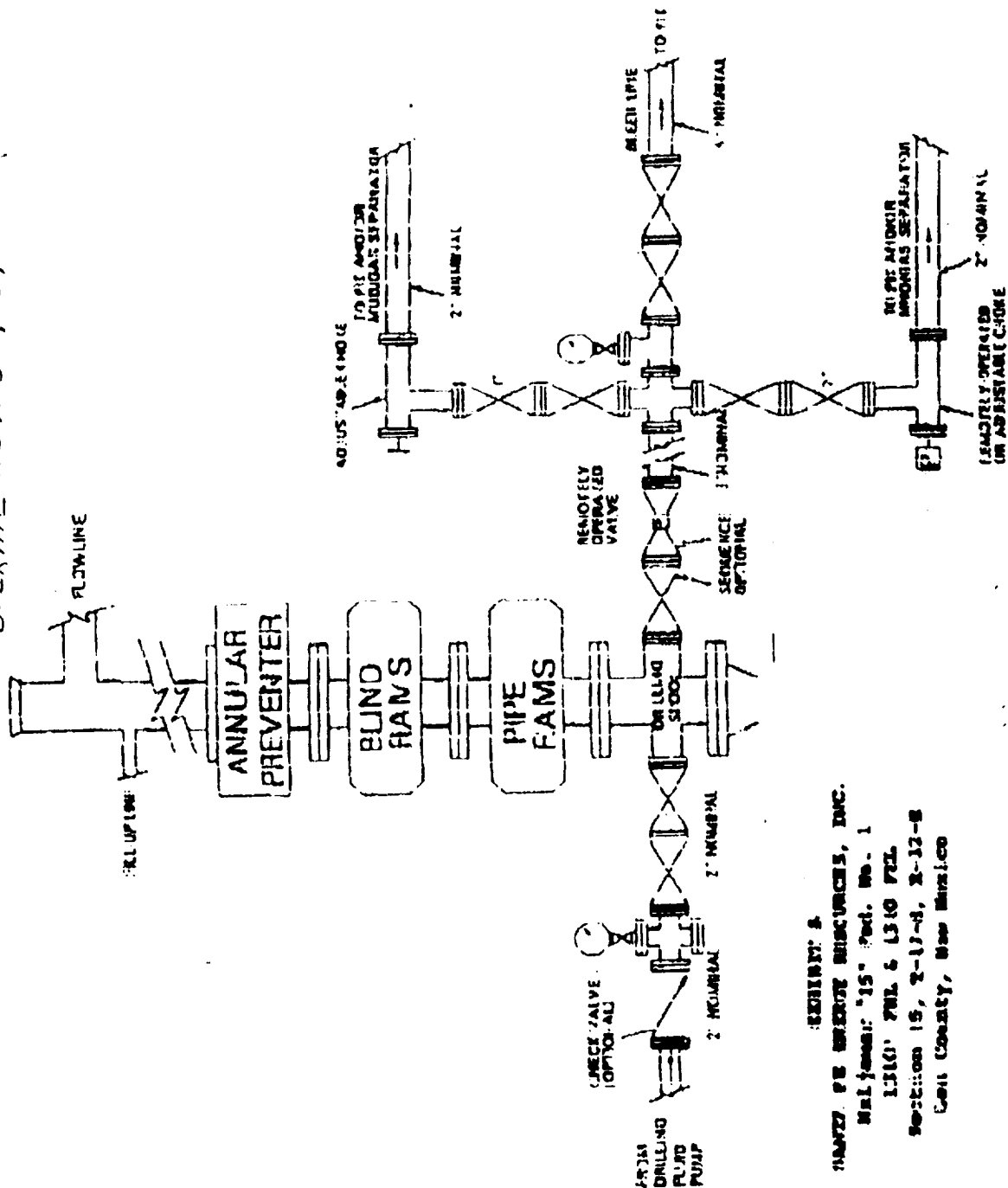


EXHIBIT 2
MANZANO OIL CORPORATION, INC.
Well Name: "15" Prod. No. 1
15161 PUL & L310 PUL
Section 15, T-17-S, R-12-S
Culb County, New Mexico