

Form 3160-3  
(December 1990)

NM OIL CONS. COMMISSION

Drawer DD

Artesia, NM 88411

SUBMIT IN TRIPLICATE  
(Other instructions on  
reverse side)

30-015-22380

Form approved.

Budget Bureau No. 1004-0136

Expires: December 31, 1991

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER ☐

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Mewbourne Oil Company

30-015-22380

3. ADDRESS AND TELEPHONE NO.

P. O. Box 5270 Hobbs, New Mexico 88241 505 393-5905

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1980' FNL & 1650' FWL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

13 miles west of Loco Hills, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

1650'

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

none

16. NO. OF ACRES IN LEASE

320

19. PROPOSED DEPTH

10,300'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3581 GR

22. APPROX. DATE WORK WILL START\*

March 1, 1993

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	New LS, 13 3/8"	48.0#	400' +	400 sacks of Class "C" <b>CIRCULATE</b>
12 1/4"	New LS, 9 5/8"	36.0#	2600' +	1,000 sacks of Class "C" <b>CIRCULATE</b>
8 3/4"	Used N-80, S-95, 5 1/2"	17.0#	10,300' +	700 sacks of Class "H" <b>CIRCULATE</b>

Mewbourne Oil Company proposed to drill to a depth sufficient to test the Morrow formation for gas. If productive, 5 1/2" casing will be cemented at T.D. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulations. Specific programs are outlined in the following attachments.

Drilling Program

Surface Use and Operating Plan

Schedule #1

Exhibit #1 - Location and elevation plat.

- " #2, 2A, 2B Attachment - Blowout Preventor & Choke Manifold Equipment.
- " #3 - Existing and planned access road w/location.
- " #4 - One - half mile radius map with attachment.
- " #5 - Proposed production facilities layout.
- " #6 - Proposed drilling rig layout.

Gas is not dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Bill Prince

TITLE Drilling Superintendent

DATE Jan. 28, 1993

(This space for Federal or State office use)

PERMIT NO

APPROVAL DATE

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:

(ORIG. SGD.) RICHARD L. MANUS

AREA MANAGER

MAR 31 1993

APPROVED BY

TITLE

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

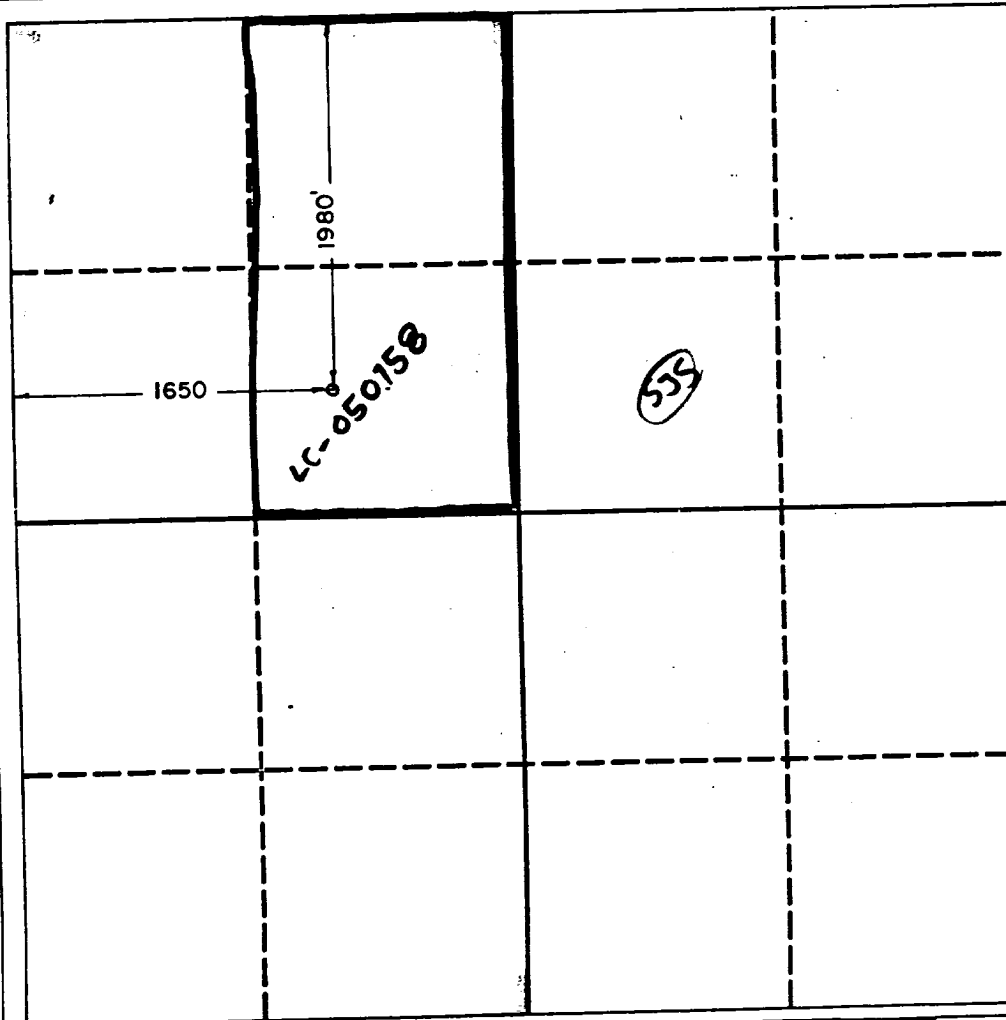
DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT  
All Distances must be from the outer boundaries of the section

Operator MEWBOURNE OIL COMPANY			Lease CHALK BLUFF 35 FEDERAL		Well No. 2
Unit Letter F	Section 35	Township 17 SOUTH	Range 27 EAST	County EDDY	
Actual Footage Location of Well: 1980 feet from the NORTH line and 1650 feet from the WEST line					
Ground level Elev. 3581	Producing Formation Morrow		Pool Illinois Camp Morrow North		Dedicated Acreage: 320 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☒ Yes ☐ No If answer is "yes" type of consolidation Communitization  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature  
*Bill Pierce*

Printed Name  
Bill Pierce

Position  
Drilling Superintendent

Company  
Mewbourne Oil Company

Date  
January 25, 1993

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.

Date Surveyed  
4/2/92

Signature & Seal of  
Professional Surveyor  
L. JONES  
3640

Certificate No.  
3640

## DRILLING PROGRAM

Attatched to Form 3160-3  
Mewbourne Oil Company  
Chalk Bluff "35" Federal #2.  
Lease # LC-050158  
Unit Letter "F"  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface
Base of Salt	N/A
Yates	470'
Queen	1,034'
Grayburg	1,346'
San Andres	1,833'
Delaware	N/A
Abo	5,380'
Bone Spring	N/A
Wolfcamp	6,644'
Cisco/Canyon	7,602'
Strawn	8,808'
Atoka	9,393'
Morrow	9,696'
Barnett Shale	10,024'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	100'	Fresh Water
Yates	470'	Oil
Queen	1,034'	Oil
Grayburg	1,346'	Oil
San Andres	1,833'	Oil
Abo	5,380'	Oil
Wolfcamp	6,644'	Gas
Cisco/Canyon	7,602'	Oil
Atoka	9,393'	Gas
Morrow	9,696'	Gas

No other formations are expected to contain oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" surface casing at 400' and circulating cement back to the surface. Troublesome shallow oil zones (zones less than 2600' in depth) will be cased off with 9 5/8" intermediate casing and cement will be tied back into the surface casing. Any zones below intermediate casing setting depth and above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a cementing stage tool (D. V. Tool) into the 5 1/2" production casing which will be run to TD.

#### 4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csg.</u>	<u>Wt., Grade, Cond.</u>
17 1/2"	0 - 400'	13 3/8"	48.0#, LS new stc
12 1/4"	400-2600'	9 5/8"	36#, LS new stc
8 3/4"	2600-10,300'	5 1/2"	17#, used, N-80 & S-95, LTC 8-RD.
	(see schedule #1)		

#### Cement Program:

13 3/8" surface casing:	Cemented to surface with 200 sacks of Class "C" Lite containing 10#/sack Gilsonite + 1#/sack cellophane flakes + 3% CaCL2 + 200 sacks of Class "C" Neet + 3% CaCL2.
9 5/8" Intermediate casing:	Cement tied back into the surface casing with 800 sacks of Class "C" Lite containing 5#/sack Gilsonite + 1#/sack cellophane flakes + 2% CaCL2 followed by 200 sacks of Class "C" Neet containing 3% CaCL2.
5 1/2" production casing:	Cemented with 700 sacks of Class "H" containing .7% fluid loss additive + .3% friction reduction additive + 5# compressive strength enhancer + 5% KCL. This cement slurry is designed to bring the TOC to approximately 7500'. Shallower productive zones will be cemented by

placing a D.V. tool below the zones of interest if necessary and cementing with a "Lite" slurry of cement with necessary additives.

Mewbourne Oil Company reserves the right to change the cement types and volumes depending on hole conditions encountered during drilling operations. This area has possible severe loss circulation problems and if encountered may dictate a change in cement types and volumes.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #2 will consist of a double ram-type (5M psi WP) preventer and a bag-type (Hydril) preventer (5M psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on bottom and 4 1/2" drill pipe rams on top. A bag-type (Hydril) preventer (3M psi WP) will be installed on the 13 3/8" surface casing and will be used to drill the intermediate hole. This Hydril is capable of closing on any size drill pipe or drill collar and also is capable of completely sealing off if nothing is in the preventer. Both BOP'S will be used on the production portion of the hole until TD is reached. The Hydril will be tested to 1,000# psi before drilling out of surface casing. Before drilling past the Wolfcamp zone, the ram-type BOP and accessory equipment will be tested to 3,000# psi and the Hydril preventer will be tested to a pressure of (1500# psi). Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 4" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 5000# psi upstream WP. A rotating drilling head will also be utilized on the BOP stack from the top of the Wolfcamp zone to TD.

See also EXHIBITS 2A, 2B, and Attachment sheet.

6. Types and Characteristics of the Proposed Mud System:

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

Depth	Type	Weight (ppg)	Viscosity (sec.)	Waterloss (cc's)
0-400'	Fresh Wtr. (spud)	8.5	35-45	N.C.
400-2600'	Fresh water	8.5	28-30	N.C.
2600-9000'	Cut Brine	8.8-9.3	28	N.C.
9000-TD	Cut Brine	9.3-9.7	32-36	<10

Sufficient mud materials to maintain mud properties and meet minimum loss circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- (A.) A kelly cock will be kept in the drill string at all times.
- (B.) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C.) An electronic pit-volume-totalizer system (PVT) will be used continuously below the Wolfcamp zone to monitor the mud and pump system. The drilling fluids system will also be visually monitored at all times.
- (D.) A mud logging unit will be continuously monitoring drilling penetration rate and hydrocarbon shows from the Wolfcamp zone to TD. A company geologist will monitor drilling penetration rate and hydrocarbon shows from 800' to the top of the Wolfcamp.

8. Logging, Testing and Coring Program:

- (A.) Drillstem tests will be run on the basis of shows while drilling.
- (B.) The electric logging program will consist of GR-Dual Laterolog-Micro Guard from TD to intermediate casing and GR-Spectral Density Dual Spaced Neutron from TD to surface.
- (C.) No cores either conventional or sidewall are anticipated.

(D.) Further testing procedures will be determined after production casing/liner has been cemented at TD based on drill shows, log evaluations, and drill stem test results.

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

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 165 degrees F and estimated maximum bottom hole pressure (BHP) is 3600# psig. No Hydrogen Sulfide or other hazardous gases or fluids have been encountered, reported, or known to exist at this depth in this area. Some major loss circulation zones have been encountered in off-setting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been recieved from the BLM. The anticipated spud date is March 1, 1993. Actual spud date will depend on the availability of contractors' rig. Once spudded, the drilling operation should be finished in approximately 40 days. If production casing/liner is run, an additional 30 days will be required for completion and testing.

## SURFACE USE AND OPERATING PLAN

Attatched to Form 3160-3  
Mewbourne Oil Company  
Chalk Bluff "35" Federal #2.  
Lease # LC-050158  
Unit Letter "F"  
1980' FNL & 1650' FWL  
Section 35 -T17S -R27E  
Eddy County, New Mexico

### 1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #1. The communitized acreage is outlined in green.
- B. All roads to the location are shown in Exhibit #3. The existing roads are illustrated in pink and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined by our on-site inspection.
- C. From the intersection of U.S. Highways 285 & 82 in Artesia, New Mexico; proceed east on U.S. 82 for nine miles. Turn right (south) on Eddy County Road #204 and proceed 1/10 of a mile. Turn right (west and south) on Eddy County Road #225 and proceed one and one-quarter miles. Turn right (west) on caliche lease road and proceed one-quarter of a mile to the location.
- 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 shows the necessary amount of new road to be constructed and is illustrated in yellow. The road will be constructed as follows:

- A. The maximum width of the running surface will be 15'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4' wide. Water will be diverted where necessary to avoid ponding.



prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.

- B. The average grade will be less than 3%.
- C. No turnouts are planned.
- D. No culverts, cattleguards, gates, low-water crossings, or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche for surfacing material should come from the location itself. In the event surfacing material is not available from the location, caliche will be obtained from the nearest pit available whether that pit is on private, state, or a BLM approved pit.
- F. The proposed access road as shown in Exhibit #3 has been centerline flagged by the surveyors.

3. Location of Existing Wells:

Exhibit #4 with attachment shows wells within a one-half mile radius of the proposed well and lists them.

4. Location of Existing and/or Proposed Facilities:

- A. No existing facilities are where the proposed well is staked. (See Exhibit #5)
- B. If the well is productive, contemplated facilities will be as follows:
  - (1.) Gas Well Completion: Production equipment necessary for a gas well production will consist of a 500MM BTU, 3 phase gas production unit, a 210 bbl. fiberglass water tank, and a 300 bbl. steel production tank.
  - (2.) Any additional caliche required for firewalls or tank pads will either come from the location itself or from other sources cited in item #2, subparagraph "E".
  - (3.) No power will be required if the well is productive of gas. However, if productive of oil, it may be necessary to run an electric power line down existing road R-O-W.

- (4.) If productive of natural gas, it will be necessary to lay a natural gas pipeline to an existing natural gas sales line in the immediate area. Securing of all necessary R-O-W across BLM land will of course be handled through the proper BLM departments and approved prior to any construction of said line.

C. 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 180 days after the well is completed).
- (2.) Within 90 days of completion of drilling and/or completion operations, all equipment not needed for producing operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as is reasonably possible.
- (3.) All production facilities left on location will be painted to conform with BLM painting stipulations within 180 days of completion.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to the location by transport trucks over the existing and proposed road system in Exhibit #3.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and repair of existing roads will hopefully be obtained from the drill site itself. In the event caliche for the drill pad is not available at the drill site, caliche will be obtained from either a private, state or BLM approved pit depending on what type of pit is closest. In the event caliche is obtained from a BLM approved pit, it will be BLM pit # (no BLM pit use is anticipated). All roads and pad will be constructed with 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed of in the reserve pit.
- B. Drilling fluids will be circulated through the earthen, lined reserve pit. The pit will also 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 125' X 125' X 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following removal of the rig. The reserve pit will be plastic-lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with cut-brine water. After mudding-up, drilling fluids will be circulated through steel drilling pits and the cutting disposed of in the reserve pits.
- C. Water produced from the well during completion may be disposed of in the reserve pit. After the well is permanently placed on production, produced water will be collected in tanks (fiberglass or steel) and held until hauled by transports to a BLM approved disposal. Produced oil/condensate will be collected in steel tanks and held until sold.
- D. Garbage and waste material produced during drilling operations will be collected in a trash container and disposed of in an approved sanitary landfill. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced by drilling/completion operations will be disposed of in 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 out. When the reserve pit is dry enough to breakout and fill and, as weather permits, the pit site will be leveled and reseeded as per BLM stipulations. In the event of a dry hole, only a dry hole marker appropriately inscribed will remain.

8. Ancillary Facilities:

No airstrip, campsite, or other facilities will be built as a result of the operations on this well.

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #6. Dimensions of the pad and pits and location of major rig components are shown. Because the site is almost level, no major cuts or fills will be required.
- B. Exhibit #6 shows the planned orientation for the rig and associated drilling equipment, reserve pit, DST pit, pipe racks, and access road. No permanent living facilities are planned but a temporary engineer/toolpusher's facility will be on location during the drilling operations.
- C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

10. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, if the well is to be abandoned, the location and road will be ripped up and reseeded per BLM stipulations. The reserve pit area, after allowing to dry, will be broken out and leveled. The entire location will be leveled and contoured to as nearly the original topography as reasonably possible.

All trash, garbage and pit lining will be buried or hauled away in order to leave the location in an aesthetically pleasing condition as reasonably possible. All pits will be filled and the location leveled within 180 days after abandonment.

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

NOT  
AUTHORIZED  
ON-SITE.

575

- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the fourth side to prevent livestock from being entrapped. The fencing will remain in place until the pit area is cleaned up and leveled.
- 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. Any additional caliche required for production facilities will be obtained from the same source described in the location construction paragraph.

11. Surface Ownership:

The wellsite and lease is located entirely on BLM land.

12. Other Information:

- A. The area around the well site is mixed desert scrub/grassland and the top soil is made up of silty clay loams and clay loams. The vegetation is made up of javelina bush, all thorn, creosote bush, plains yucca, mesquite, thread-leaf groundsel, wavy-leaf thistle, desert holly, six weeks gramma and poverty threeawn.
- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

13. Lessee's and Operator's Representative:

The Mewbourne Oil Company representative responsible for assuring compliance with the surface use program during drilling operations is:

W. A. (Bill) Pierce, Drilling Superintendent  
Mewbourne Oil Company  
701 South Cecil Street  
P. O. Box 5270  
Hobbs, New Mexico 88241  
Phone: 505 393-5905 (office)  
505 392-8859 (home)

The Mewbourne Oil Company representative responsible for assuring compliance with the surface use program during completion and producing operations is:

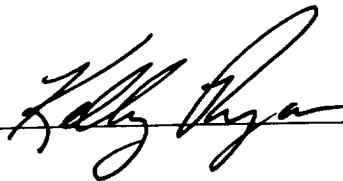
: Brent Thurman, Production Superintendent  
Mewbourne Oil Company  
701 South Cecil Street  
P. O. Box 5270  
Hobbs, New Mexico 88241  
Phone: 505 393-5905 (office)  
505 392-7754 (home)

CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Mewbourne Oil Company and its' contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: January 28, 1993

Signed: \_\_\_\_\_

  
Kelly Ryan  
District Superintendent  
Mewbourne Oil Company  
701 South Cecil Street  
P. O. Box 5270  
Hobbs, New Mexico 88241  
505 393-5905

WELL NAME: CHALK ELMITE "35" FED. #2 TYPE OF CSG STRING: PRODUCTION  
 LEGALS: SEC 35-1'S-27E DEPTH OF CSG: 10,300

### CASING MINIMUM PERFORMANCE PROPERTIES

CSG TYPE	K-FACTOR	COLLAPSE	BURST	TENSION
1 5 1/2" 17# S-95 LT&C	1,017,210	8580	9190	392000
2 5 1/2" 17# N-80 LT&C	844,000	6380	7740	348000
3 5 1/2" 17# S-95 LT&C	1,017,210	8580	9190	392000
4				
5				

GRADE OF CASING: 85 % OF NEW

CSG TYPE	COLLAPSE	BURST	TENSION
1 5 1/2" 17# S-95 LT&C	7293	7812	333200
2 5 1/2" 17# N-80 LT&C	5423	6579	295800
3 5 1/2" 17# S-95 LT&C	7293	7812	333200
4 0	0	0	0
5 0	0	0	0

SETTING DEPTH (WT. OF CSG IN AIR)		CASING	INTERVAL	INTERVAL	CUMMULATIVE
FROM	TO	WT. (LB/FT)	LGTH (FT.)	WT. (LBS)	WT. (LBS)
1 0	100	17	100	1,700	175,100
2 100	9,500	17	9400	159,800	173,400
3 9,500	10,300	17	800	13,600	13,600
4 0			0	0	0
5 0			0	0	0

### WELLBORE CONDITIONS

MUD WEIGHT: 9.6 PPG  
 BOUYANCY FACTOR 0.853 (AIR = 1)  
 DISPLACEMENT FLUID WT: 8.5 PPG

DEPTH		ANNULAR HYDROSTATIC PRESSURE	COLLAPSE W/AXIAL LOADING	HOLE HYDROSTATIC PRESSURE	TENSION
	0	0		0	149,360
1	100	50	5725	44	147,910
2	9500	4742	5334	4199	11,601
3	10300	5142	7293	4553	0
4	0	0	ERR	0	0
5	0	0	ERR	0	0

### FINIAL CASING DESIGN

### SAFTEY FACTORS

	FROM	TO	LENGTH	COLLAPSE >1.125	BURST >1.00	TENSION >2.00
0	0	0	0	ERR	ERR	ERR
0	0	0	0	ERR	ERR	ERR
5 1/2" 17# S-95 LT&C	10,300	9,500	800	1.418	1.716	28.722
5 1/2" 17# N-80 LT&C	9,500	100	9400	1.125	1.567	2.000
5 1/2" 17# S-95 LT&C	100	0	100	114.677	176.731	2.231

BOP SCHEMATIC

1 1/4" INTERMEDIATE HOLE

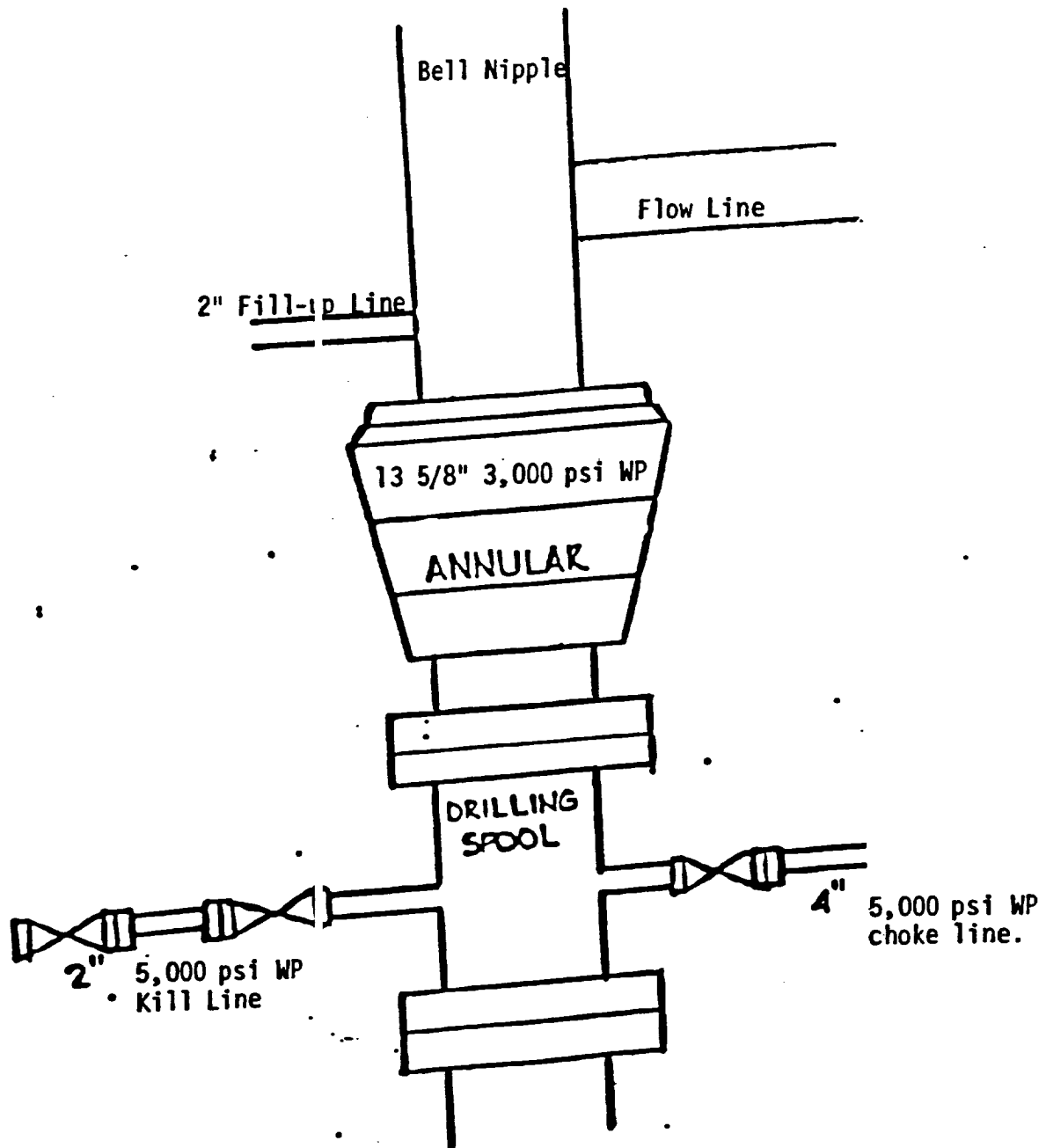


EXHIBIT #2  
Mewbourne Oil Company  
Chalk Bluff "35" Federal #2  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico  
Lease # LC - 050158



BOP SCHEMATIC  
8 3/4" Production Hole

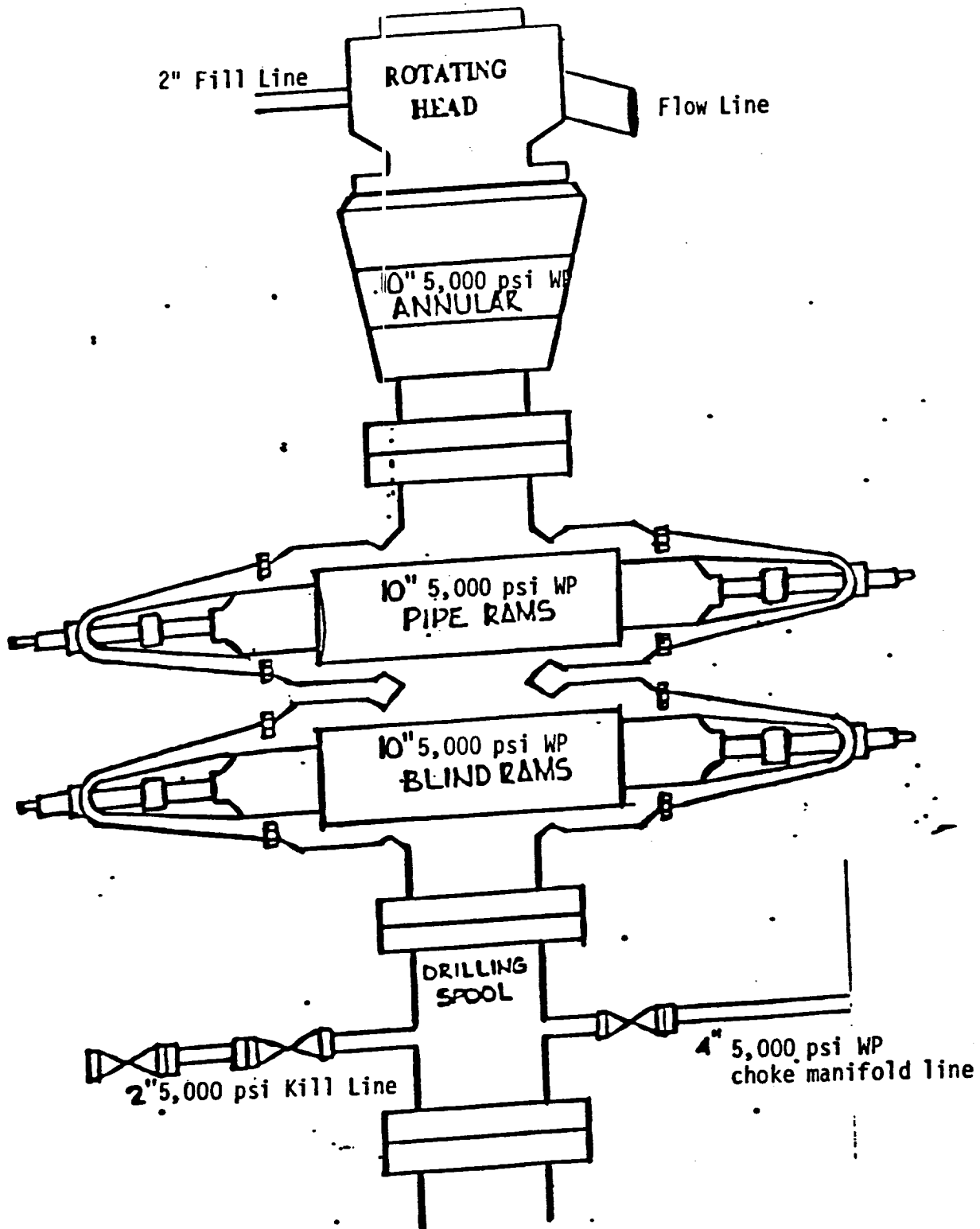


EXHIBIT #2A  
Mewbourne Oil Company  
Chalk Bluff "35" Federal #2  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico  
Lease # LC - 050158

CHORE MANIFOLD REQUIREMENTS  
(5,000 psi upstream WF)

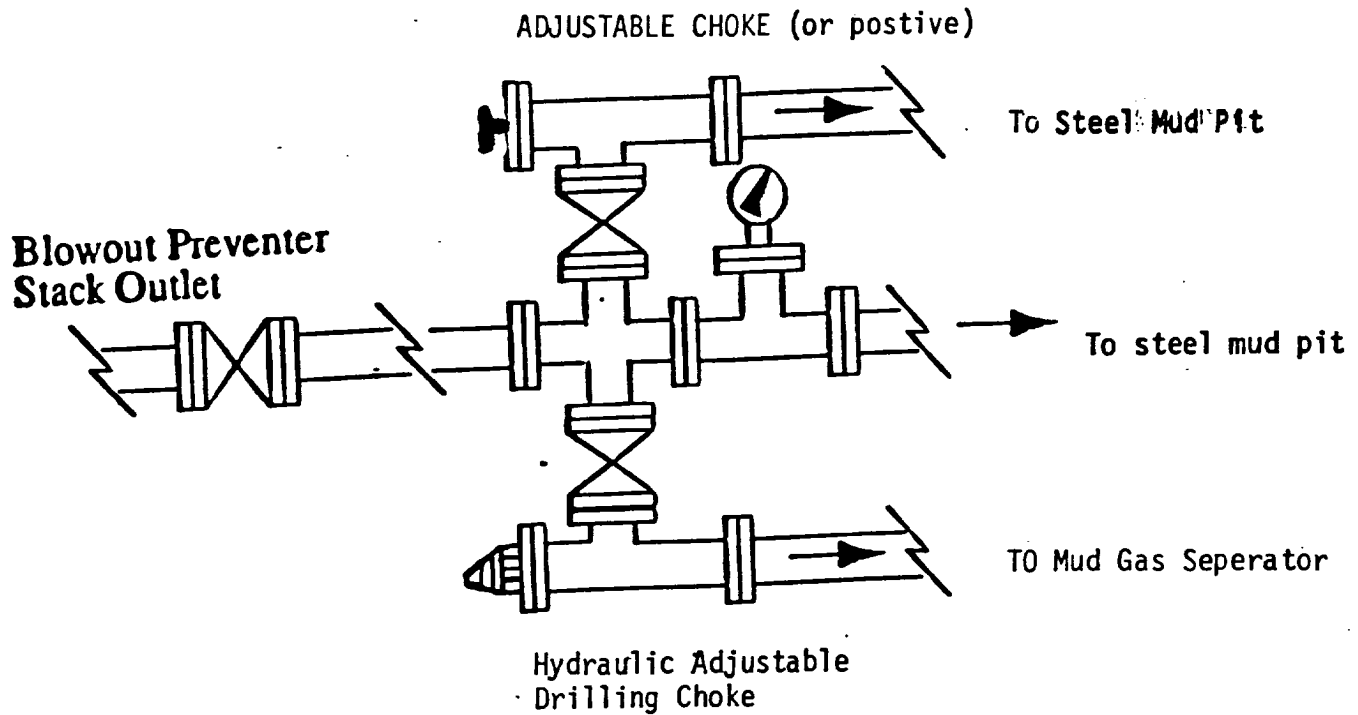


EXHIBIT # 2B  
Mewbourne Oil Company  
Chalk Bluff "35" Federal #2  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico  
Lease # LC - 050158

ATTACHMENT TO EXHIBIT #2  
Notes Regarding The Blowout Preventers  
Chalk Bluff "35" Federal #2  
Lease # LC-050158  
1930' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico

1. Drilling nipple (bell nipple) to be so constructed that it can be removed without the use of a welder through the rotary table opening, with minimum I. D. equal to the preventer bore.
2. Blowout preventer and all fittings must be in good condition, 3,000 psi W. P. minimum.
3. Safety valve must be available on rig floor at all times with proper connections; valve to be full bore 3000 psi W. P. minimum.
4. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
5. Kelly cock on kelly.
6. Blowout preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on closing unit, and meet all API specifications.

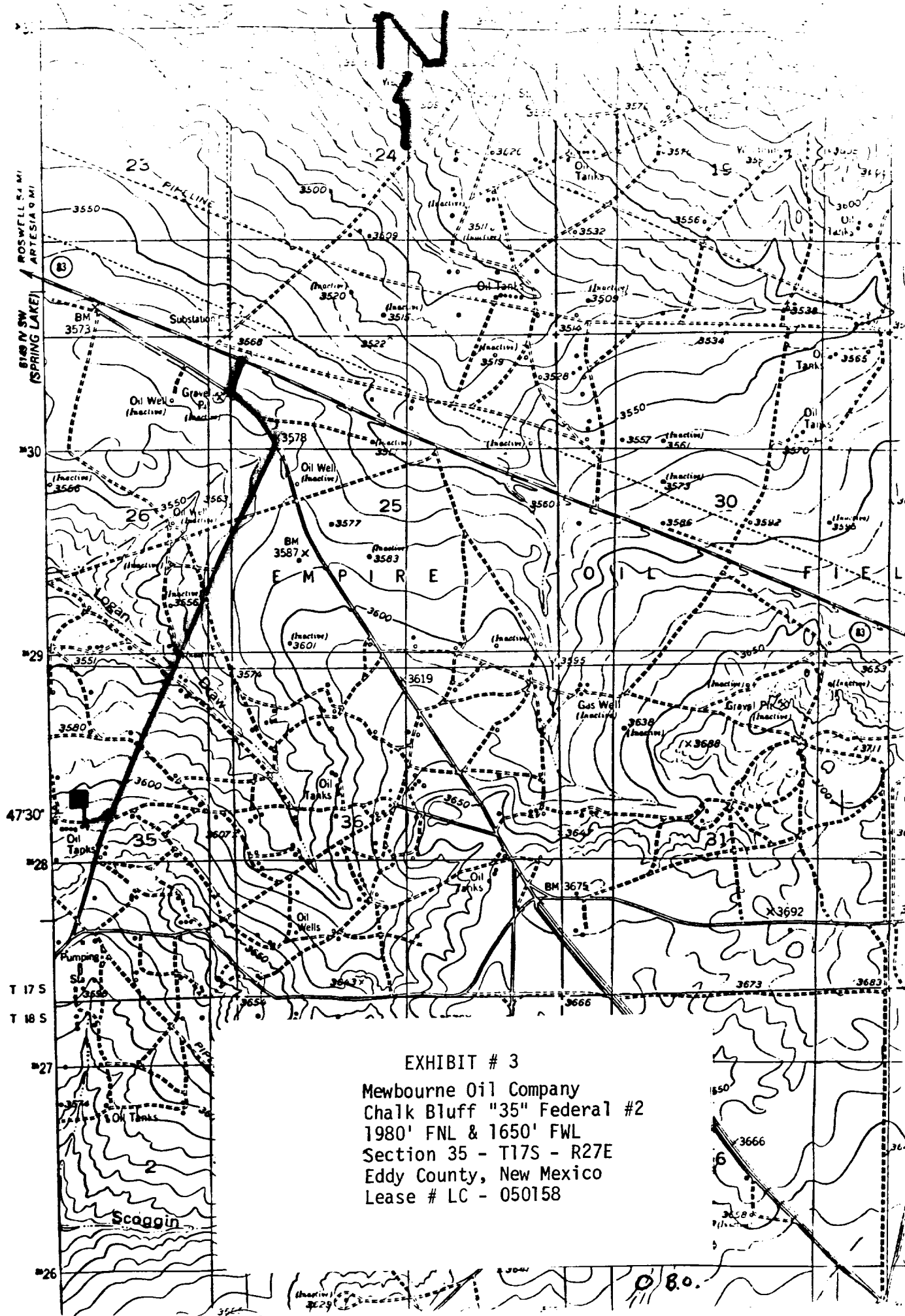
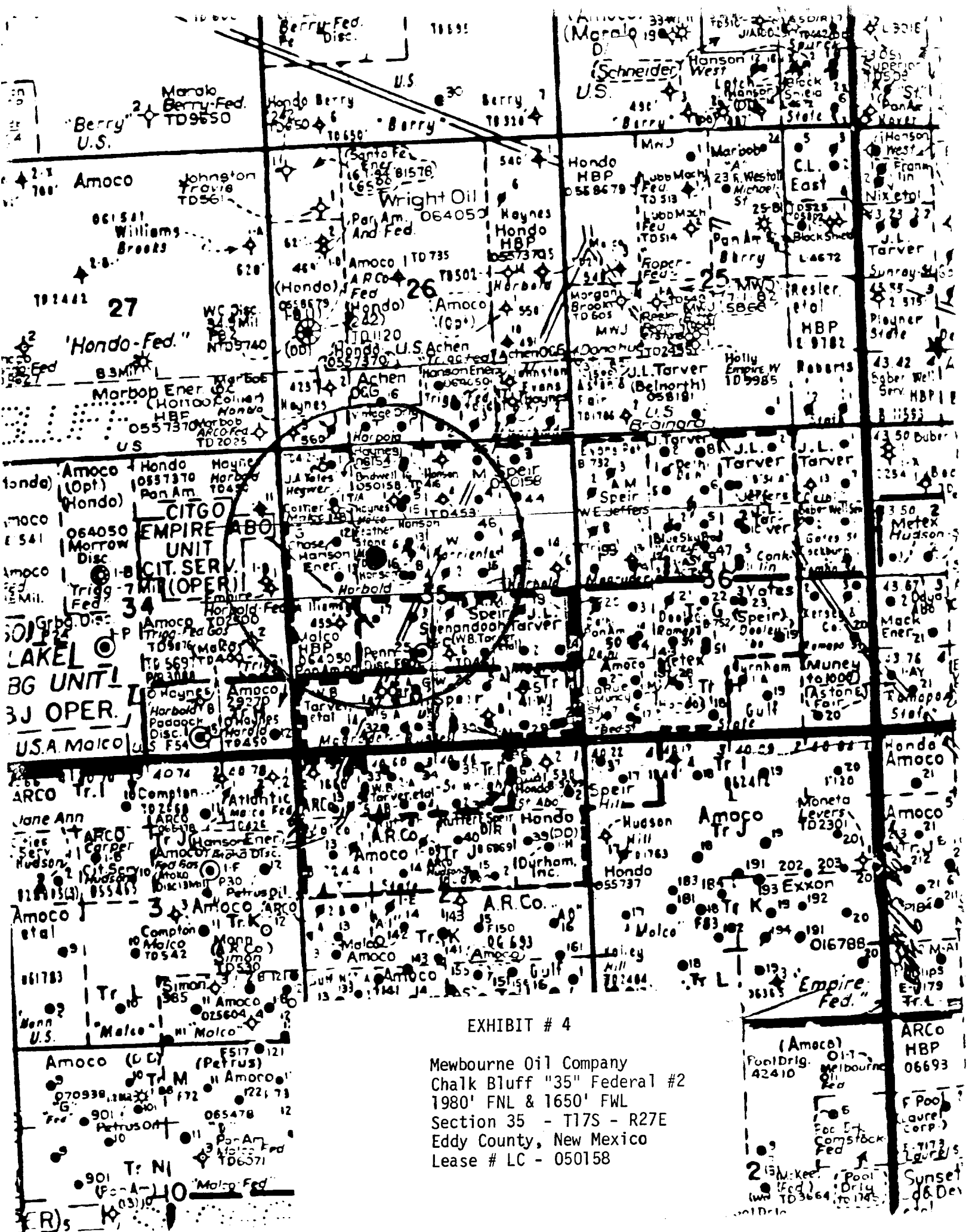


EXHIBIT # 3

Mewbourne Oil Company  
Chalk Bluff "35" Federal #2  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico  
Lease # LC - 050158



ATTACHMENT TO EXHIBIT #4

Status of Wells Within One-Half Mile Radius  
Chalk Bluff "35" Federal #2  
Lease # LC-0050158  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico  
January 1993

SECTION 35-T17S-R27E

Unit Letter "B"

S & J Operating                      South Red Lake Grayburg Unit #45  
988' FNL & 1664' FEL                      Oil Well

Unit Letter "B"

S & J Operating                      South Red Lake Grayburg Unit #4  
988' FNL & 1664' FEL                      Oil well

Unit Letter "C"

Hanson Energy                      Harbold Federal #12  
2310' FWL & 2310' FNL                      P & A

Hanson Energy                      Harbold #15  
990' FNL & 2200' FWL                      Oil well

Hanson Energy                      Harbold #15  
369' FNL & 2250' FWL                      Oil Well

Unit Letter "E"

Owen Haynes                      Harbold #13  
2310' FNL & 990' FWL                      P & A

Unit Letter "F"

Hanson Energy                      Harbold Federal #3  
2310' FNL & FEL                      Oil Well

James Warren Hanson                      Harbold Federal #14  
1848' FNL & 2282' FWL                      Oil Well

Paul Slayton                      Harbold Federal #13  
1650' FNL & 2310' FWL                      P & A

S & J Operating                      South Red Lake Grayburg Unit #6  
1700' FNL & 2310' FWL                      Water Injection Well

S & J Operating                      South Red Lake Grayburg Unit #16  
2310' FNL & 2310' FWL                      Oil Well

Unit Letter "G"

S & J Operating      South Red Lake Grayburg Unit #15  
2305' FSL 1664' FEL      Oil Well

George H. Williams      Barrientos #2  
1320' FNL & 1320' FEL      P & A

Unit Letter "H"

S & J Operating      South Red Lake Grayburg Unit #7  
1650' FNL & 990' FEL      Water Injection Well

S & J Operating      South Red Lake Grayburg Unit #14  
2080' FNL & 560' FEL      Oil Well

Unit Letter "I"

Cities Service Oil Co.      Magruder "A" #2  
1650' FSL & 990' FEL      P & A

S & J Operating      South Red Lake Grayburg Unit #19  
2310' FSL & 990' FEL      Water Injection Well

S & J Operating      South Red Lake Grayburg Unit #24  
1650' FSL & 330' FEL      Oil well

Unit Letter "J"

Cities Service Oil Co.      Magruder "A" #1  
1650' FSL & 1650' FEL      P & A

S & J Operating      South Red Lake Grayburg Unit #18  
2304' FSL & 2310' FEL      Water Injection Well

Unit Letter "K"

Cities Service Oil Co.      Magruder "A" #3  
2310' FWL & 1320' FSL      P & A

Cities Service Oil Co.      Magruder "C" #15  
2310' FWL & 1650' FEL      P & A

S & J Operating      South Red Lake Grayburg Unit #25  
1703' FSL & 2310' FWL      Oil well

Unit Letter "N"

Cities Service Oil Co.      Russell "C" #5  
990' FSL & 2310' FWL      P & A

Oxy USA Inc.      Citgo Empire Abo Unit Tract 1 #11  
990' FSL & 1880' FWL      Gas Injection Well

Oxy USA Inc.      Citgo Empire Abo Unit Tract 1 #9  
330' FSL & 1500' FWL      Gas Well

Unit Letter "O"  
S & J Operating      South Red Lake Grayburg Unit #26  
990' FSL & 2310' FEL      Oil well

SECTION 26 - T17S - R27E

Unit Letter M  
Marbob Energy      Harbold #1  
330' FSL & 990' FWL      P & A

Unit Letter N  
Achen Oil & Gas      Harbold #16  
660' FSL & 1900' FWL      Oil Well

Vintage Drilling Co.      Harbold #7  
330' FSL & 2310' FWL      Oil Well

Vintage Drilling Co.      Harbold #1  
660' FSL & 2310' FWL      Oil Well

SECTION 34 - T17S - R27E

Unit Letter A  
Owen Haynes      Harbold #11  
990' FNL & 330' FEL      P & A

Unit Letter H  
Owen Haynes      Harbold #9  
2260' FNL 330' FEL      P & A

Unit Letter I  
Amoco Production Co.      Trigg Federal Gas Comm. #2  
660' FEL & 1980' FSL      Gas Well



W

N

E

Access Road

Access Road

Access Road

PROPOSED PRODUCTION FACILITIES  
SCHEMATIC

- Flow Line
- Oil Dump Line
- Water line
- Non sealing valve
- Sealing Valve

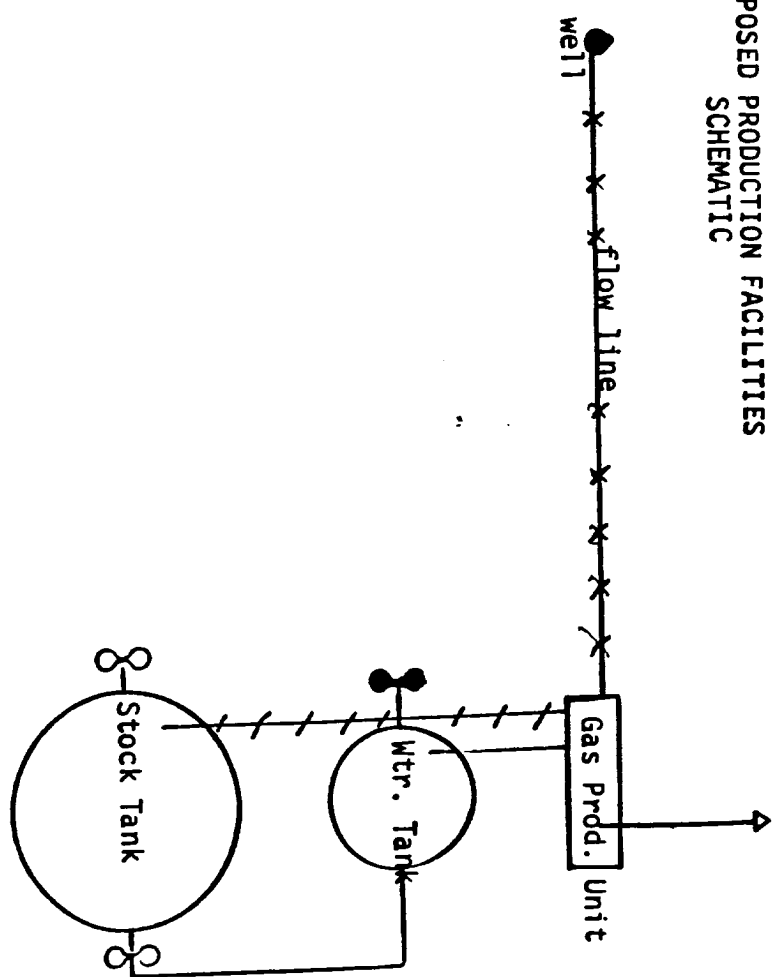


EXHIBIT #5  
Mewbourne Oil Company  
Chalk Bluff "35" Federal #2  
1980' FNL & 1650' FWL  
Section 35 - T17S - R27E  
Eddy County, New Mexico  
Lease # LC - 050158

Access Road

S

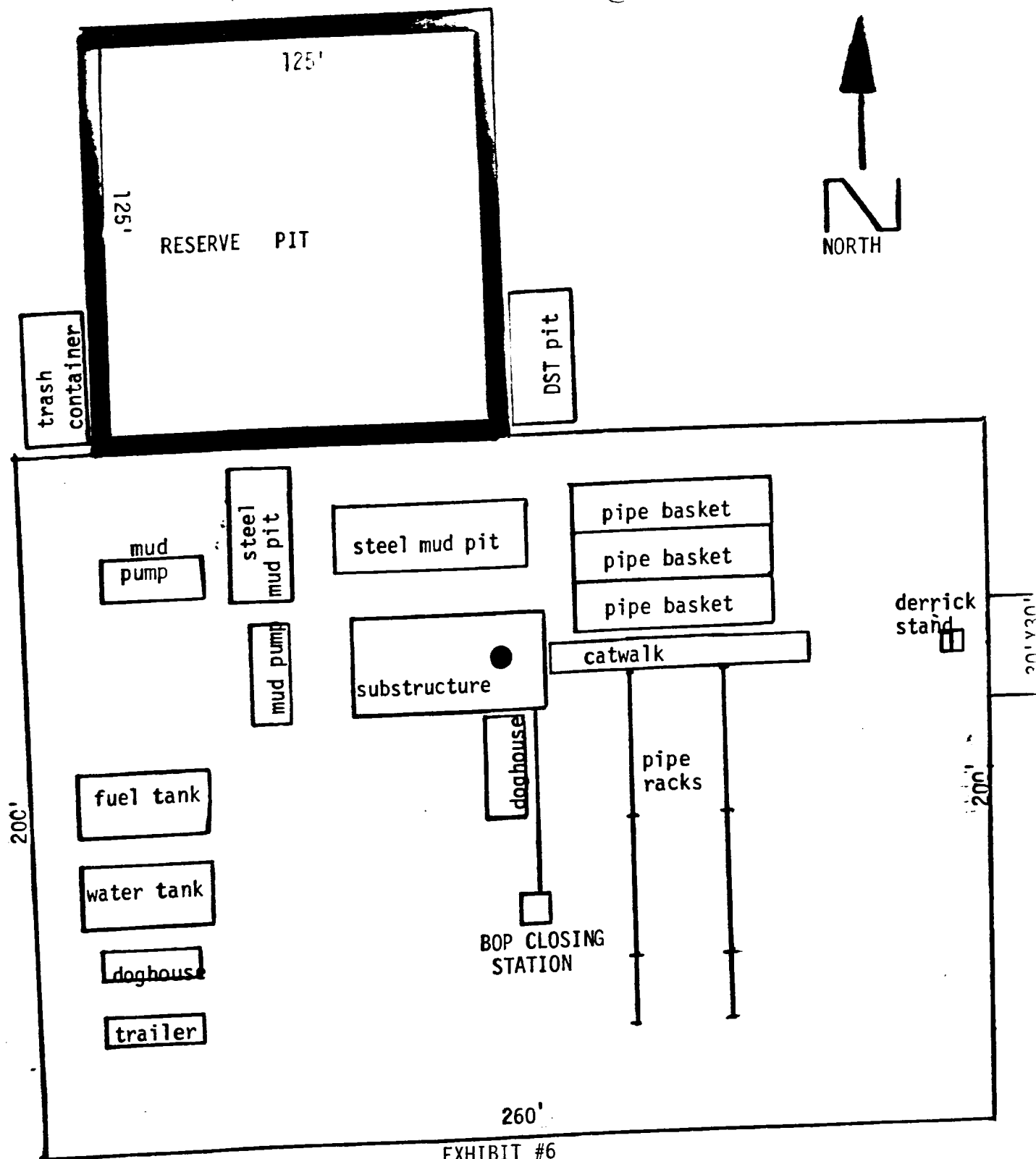


EXHIBIT #6  
 Mewbourne Oil Company  
 Chalk Bluff "35" Federal #2  
 1980' FNL & 1650' FWL  
 Section 35 - T17S - R27E  
 Eddy County, New Mexico  
 Lease # LC - 050158