

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

HUSKY OIL COMPANY

3. ADDRESS OF OPERATOR

600 S. Cherry St., Denver, CO 80222

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

At surface

1980' FNL & 660' FEL, SE/4 NE/4

At proposed prod. zone

Same

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

Approximately 23 miles NE of Artesia, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.
(also to nearest oil/g. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

2269.90

17. NO. OF ACRES ASSIGNED

TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*

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

3960'

19. PROPOSED DEPTH

8700'

20. ROTARY OR CABLE TOOLS

Rotary

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

3650.3' GR

22. APPROX. DATE WORK WILL START*

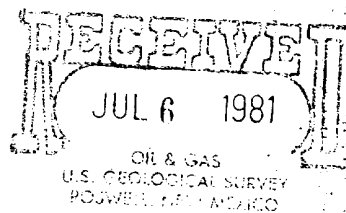
August 1, 1981

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	Apprx 400'	Apprx 300 sx CIRCULATE
12-1/4"	8-5/8"	24#	Apprx 1500'	Apprx 500 sx CIRCULATE
7-7/8"	5-1/2"	15.5# & 17#	Apprx 8700'	Apprx 500 sx

We propose to drill the captioned well to test the Atoka and Grayburg formations. We propose to test all shows deemed worthy of test and to set casing, as above, or to plug and abandon in accordance with instructions received from the U.S.G.S.

The gas is not dedicated.



8. ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on sub-surface locations and measured and true vertical depths. Give blowout prevention program, if any.

24

SIGNED

Kia Chandler

TITLE Engr. Assistant

DATE July 1, 1981

This space for Federal or State office use.

PERMIT NO.

(Or: Sgd.), GEORGE H. STEWART

APPROVAL DATE

APPROVED BY

AUG 20 1981

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

FOR

JAMES A. GILLHAM
DISTRICT SUPERVISOR

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION, LAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

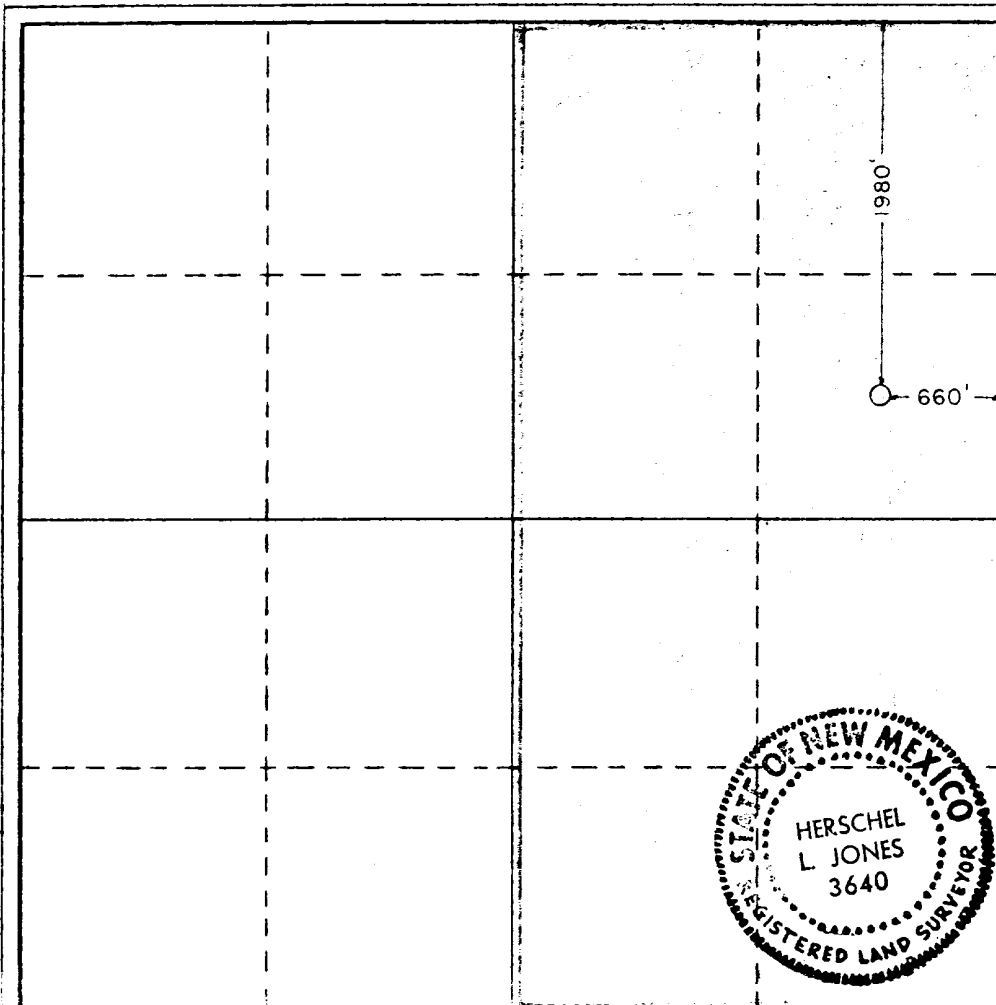
Operator HUSKY OIL COMPANY			Lease Federal		Well No. 4
Unit Letter H	Section 14	Township 16 South	Range 27 East	County Eddy	
Actual Footage Location of Well: 1980 feet from the North line and 660 feet from the East line					
Ground Level Elev. 3630.3	Producing Formation Atoka		Pool Diamond Mound	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). Listed on the back of this form.
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation _____

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 interests, has been approved by the Commission.



CERTIFICATION

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

James E. Yates

Name
James E. Yates

Position
Drilling Engineer

Company
HUSKY OIL COMPANY

Date
July 1, 1981

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
June 10, 1981

Registered Professional Engineer and/or Land Surveyor

Herschel L. Jones

Certificate No.
3640

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

(2) Working Interest Owners for the following leases:

NM 15299: Sec. 14-T16S-R27E, W/2 NE/4

NM 17215: Sec. 14-T16S-R27E, E/2 NE/4 & SE/4

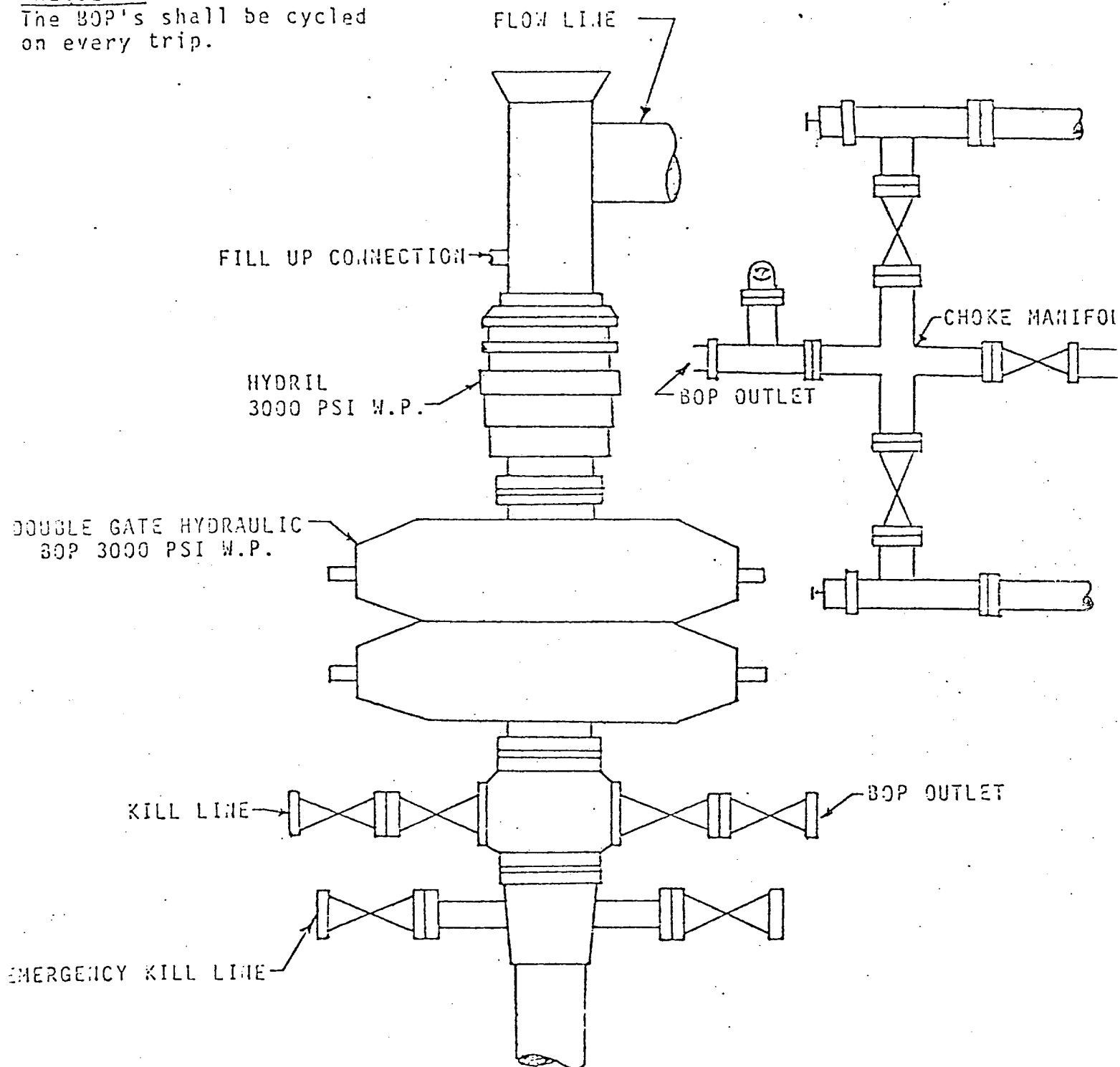
76.4706% - Husky Oil Company

23.5294% - Southland Royalty Company

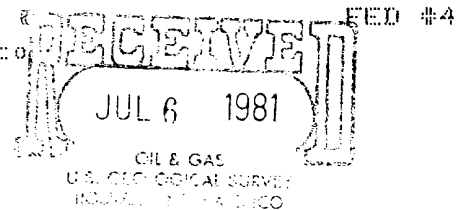
After nipping up on surface pipe,
but before drilling out the cement
plug, the BOP's shall be tested to
the rated working pressure.

FREQUENCY

The BOP's shall be cycled
on every trip.



HUSKY OIL COMPANY
HUSKY-FEDERAL #4
Eddy County, New Mexico



TEN-POINT PROGRAM TO ACCOMPANY FORM 9-331C

1. Surface Formation: Surface sands, gypsum, dolomite
2. Important Geological Formations:

Queen	760
Grayburg	1105
San Andres	1530
Glorieta	2840
Tubb	4200
Abo	4940
Bursum	6960
Strawn	7980
Atoka	8370
Norow	8530
Mississippian	8630

3. Gas is expected in the Atoka @ 8370' and in the Grayburg @ 1105'.

4. Casing Program:

13-3/8", 48# per ft., K-55, ST&C new casing to apprx. 400';
8-5/8", 24# per ft., K-55, LT&C to apprx. 1500'; 5-1/2" 15.5#
& 17# per ft., K-55 & N-80, LT&C to apprx. 8700'.

5. Pressure Control:

13-3/8" X 12" nominal 3000 psi slip-on and weld, flanged casing head for drilling below surface casing.

12", 900 Series, 3000# W.P. Dual Ram Hydraulic Blowout Preventers for drilling below surface casing. All choke lines, choke manifold, valves, fitting, etc. will have a minimum pressure rating of 3000 PSI.

A 3000# W.P. Hydril will be added before drilling below 8-5/8" casing.

All BOP equipment will be pressure tested to a minimum of 100% of rated working pressure or 70% of internal yield (whichever is less) prior to drilling out the surface casing shoe.

6. Mud Program:

9 - 400' Mud at company discretion to maintain good hole

conditions to run surface casing.

300 - 500': Use salt saturated brine.

1500' - TD: Mud weight 8.8# to 9.0# per gallon, water loss 10 cc/30 minutes or less and viscosity of 35 sec./qt. or more.

Mud quantities, as necessary, to maintain the above mentioned properties and drill to total depth are estimated to be appx. 900 barrels.

7. Auxiliary equipment:

Kelly cock with stabbing valve on floor.

8. Testing, Logging, and Coring:

DST may be required in the Grayburg and/or Atoka.

No coring is anticipated.

Logs as follows:

Surface casing to TD: DLL-MSFL + FDC-CNL-GR

Proposed completion program:

Perforate desired intervals. Swab, and, if necessary perform an acid and/or frac job.

9. Abnormal hazards:

Neither abnormal pressures, temperatures, nor potential hazards, such as hydrogen-sulfide gas is expected. The maximum BHP is 3741 PSI at total depth in the Mississippian. This is a normal .43 PSI per ft. gradient.

10. Anticipated spud date: August 1, 1981

11. Anticipated duration: 30 DAYS

EXHIBITS TO ACCOMPANY FORM 9-331C

A. Location map with route marked.

B. Topographic map section showing access roads and location.

- C. Proposed production facilities.
- D. Location layout.
- E. Map of location showing cuts and fills.
- F. Cross sections of location.
- G. Location of existing facilities.

MULTI-POINT REQUIREMENTS TO ACCOMPANY FORM 9-331C

1. Existing Roads:

- A. See Exhibits "A" and "B".
- B. Main Roads:

From Artesia: 13 miles East towards Lovington. Turn North off State 83 at Electric Substation. North 7 miles on Southern Union Gas Pipeline road. Due North on Electric transmission line R/W Road 2-3/4 miles. Location is 260' West.

C. Access Roads:

A 260' access road will be required. See Exhibits "B" & "C". The access road will be located in the SE/4 NE/4 Sec. 14-16S-27E, Eddy County.

- D. N/A
- E. See Exhibit "B".

2. Planned Access Road:

- A. Width: 12' crowned and ditched, total disturbance 20'.
- B. Maximum Grade: 10%
- C. Turnouts: None
- D. Drainage design: No problems anticipated.
- E. Culverts, cuts and fills: None anticipated.
- F. Graveling material: None anticipated for drilling phase.

- G. Gates, Cattle Guards, Fence Cuts: None
 - H. New or reconstructed roads: Centerline flagged.
3. Location of Existing Wells: (See map showing existing wells and facilities.)
- A. Water Wells: None
 - B. Abandoned Wells: None
 - C. Temporarily Abandoned Wells: None
 - D. Disposal Wells: None
 - E. Drilling Wells: None
 - F. Producing Wells: See Exhibit "G".
 - G. Shut-in Wells: None
 - H. Monitor Wells: None
4. Location of Existing or Proposed Facilities:
- A. None owned nor operated by Husky.
 - B. Proposed Facilities:

In the event the well is commercial, a combination production unit heater, separator, condensate tank, and a pit to receive test fluids will be necessary.

A flow line will be necessary to gather the gas for sales and will connect to the sales line.

A Sundry Notice will be filed if we need to disturb any additional acreage.
 - C. Plans for Rehabilitation: The facility area will be rehabilitated by filling the pit, leveling, and re-seeded according to BLM stipulations. See Section 10.
5. Location and Type of Water Supply:
- A. We plan to purchase water from a nearby permitted source.
 - B. We plan to truck purchased water as necessary.
 - C. No water well on the location is anticipated.

6. Source of Construction Materials:

- A. through D. For the drilling operation it is anticipated that any construction materials needed will come from the proposed site. Any additional construction materials will be purchased from a commercial source.

7. Methods of Handling Waste Materials:

- A. Cuttings: Disposed of in reserve pit and buried.
- B. Drilling Fluids: Disposed of in reserve pit and buried after the pit has dried.
- C. Produced Fluids: Liquids produced during the completion operations will be produced into tanks, the water drained to the pit and any oil saved.
- D. Sewage: Portable toilets.
- E. Garbage and other Waste Material: Disposal in a "burn" pit (enclosed with wire mesh screen) and ultimately buried.
- F. The location will be cleaned upon completion or abandonment of the well. All pits will be fenced and overhead flagging installed. After the reserve pit has dried it will be filled, waste buried, and restoration done as per Section 10.

8. Ancillary Facilities: None.

9. Wellsite Layout:

- A. thru C. See location layout & cross-section exhibits.
- D. Pits unlined.

10. Plans for Restoration of the Surface:

- A. The topsoil will be stripped and stockpiled on the north end of the location. Pits will be fenced on three sides for drilg operations. Upon completion or abandonment of the well, the pits will be fenced on all four sides, allowed to dry, then backfilled, buying waste, leveling & recontouring as is practical.
- B. The topsoil will be spread over that area (excluding that area required for production purposes if well is productive) & that area reseeded as per ELM specifications. The access road, if not needed, will also be reseeded.

- C. Upon release of the rig, the pits will be fenced, & so maintained until cleanup. (See "A" above.)
- D. The pits will have overhead flagging installed if any oil is left on the surface.
- E. Restoration should be completed during the fall of 1981.

11. Other Information

- A. The location lies on a relatively flat spot with drainage to the southwest.
- B. Primary use of the land is rangeland. Grazing privileges are held by Bogle Farms, P.O. Box 358, Dexter, NM 88230. No surface owner.
- C. There are no known archaeological, historical, or cultural sites in the immediate area.

12. Lessee's or Operator's Representative:

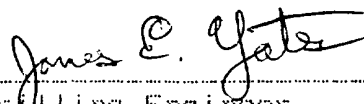
James E. Yates
600 S. Cherry Street
Denver, Colorado 80222
Telephone: 303/370-1325

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the drill-site and access road; that I am familiar with the conditions which presently exist. That the statements made in this 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 Husky Oil Company and its contractors and subcontractors in conformity with this plan and conditions under which it is approved.

July 1, 1981

Date



Drilling Engineer
Husky Oil Company

To Hoswen

R 26E

R 27E

R 28E

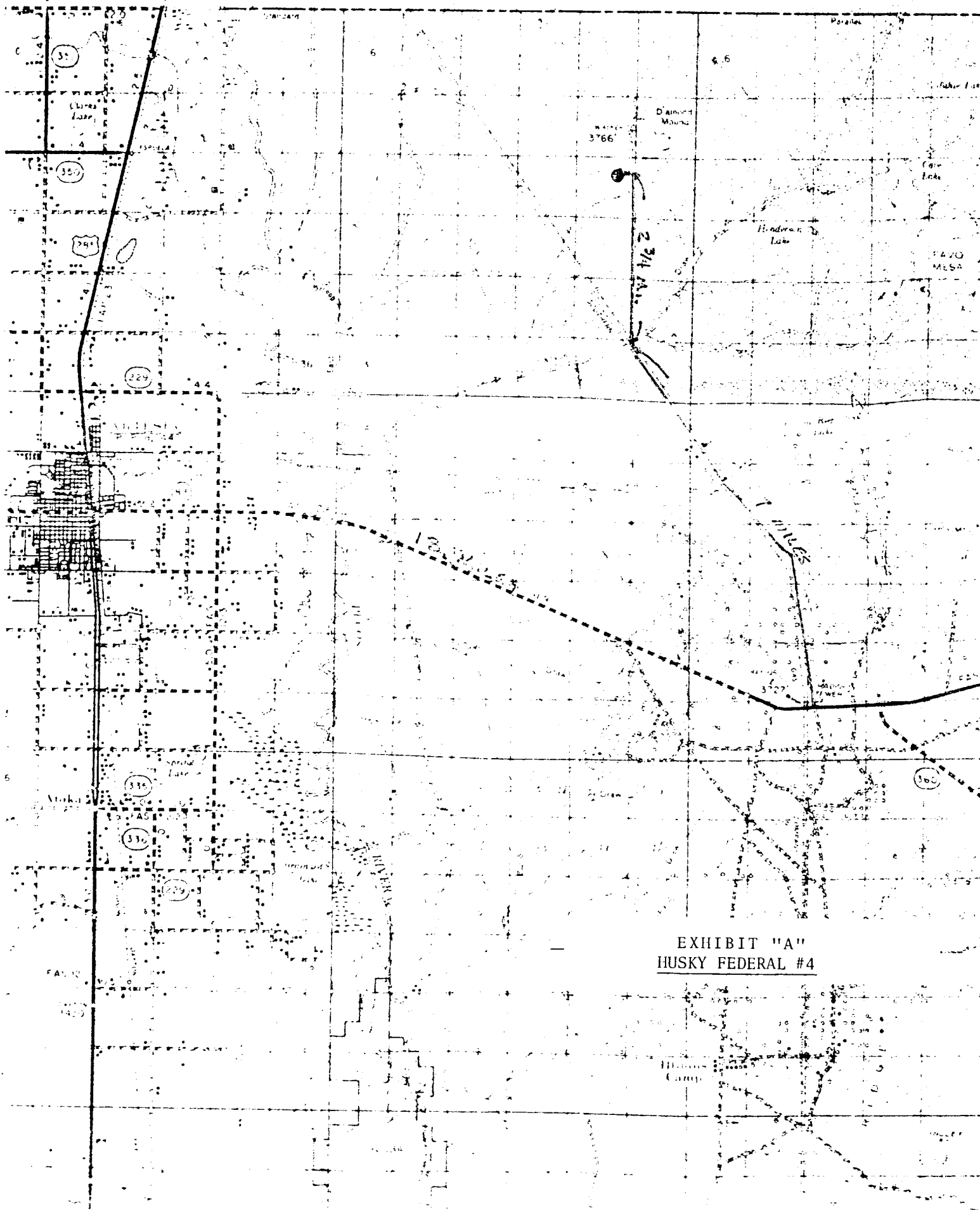


EXHIBIT "A"
HUSKY FEDERAL #4

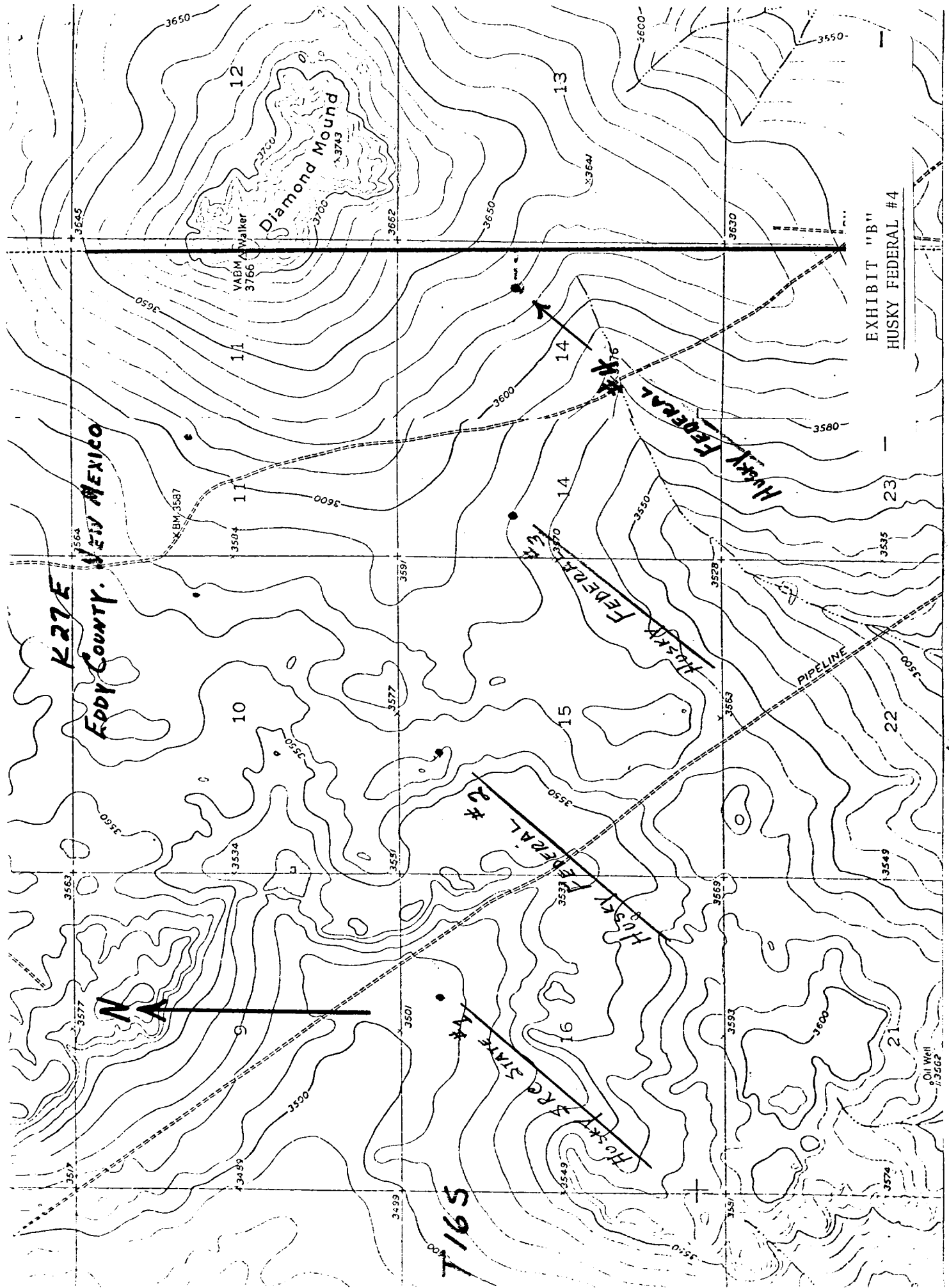
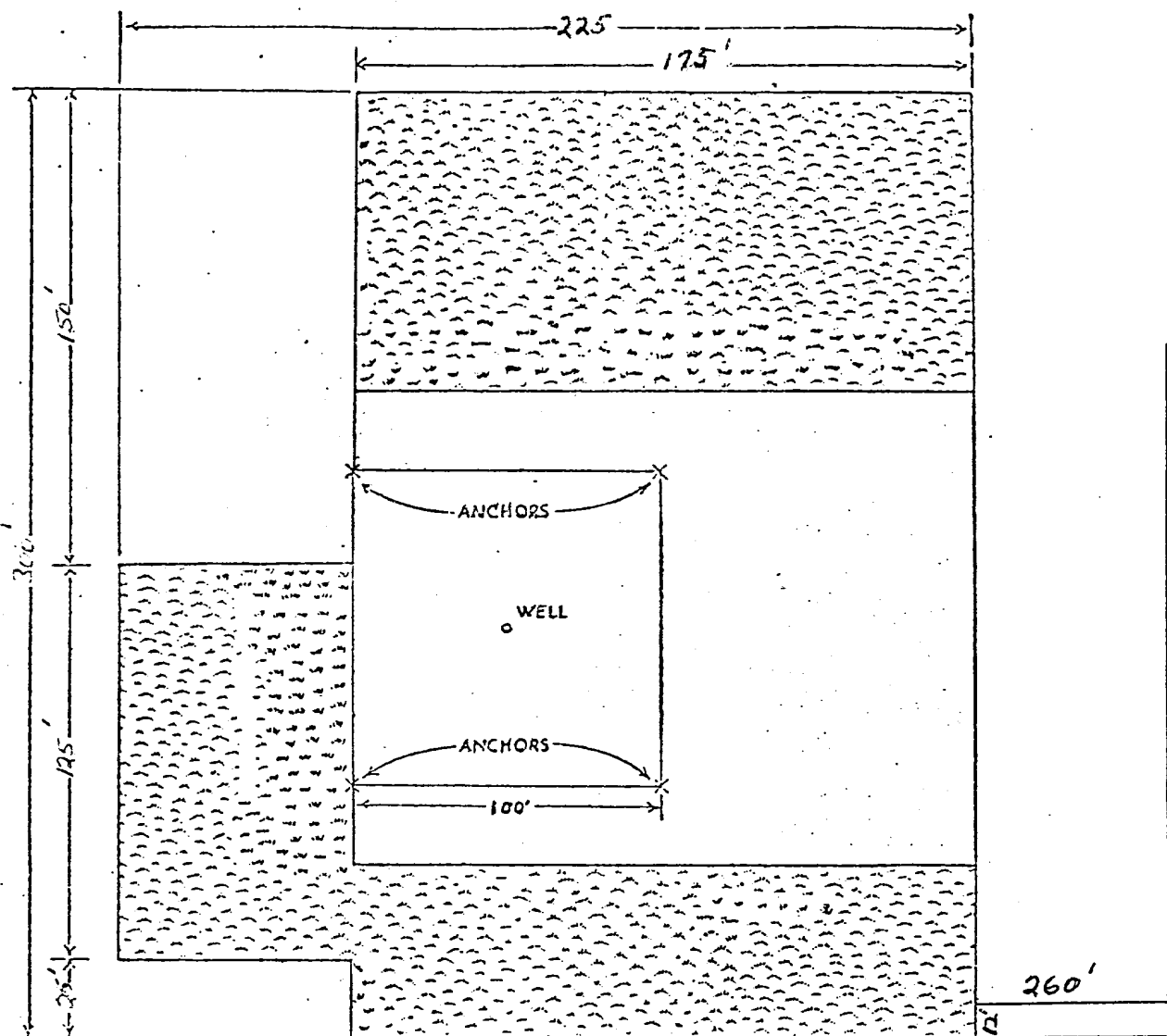
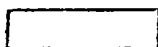


EXHIBIT "B"
HUSKY FEDERAL #4

— EXISTING ROAD



REHABILITATION AREA



EXISTING ACCESS

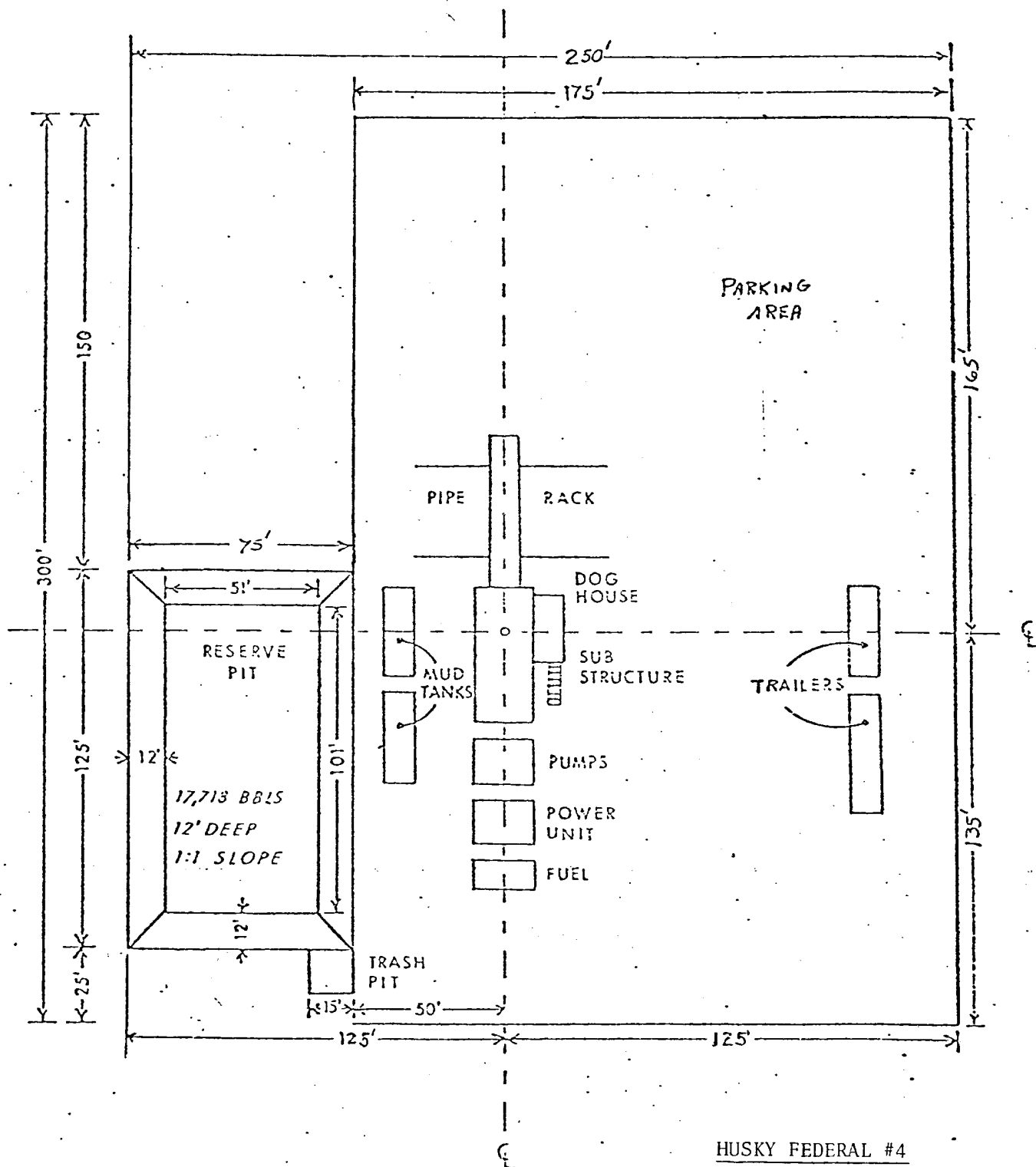


PROPOSED ACCESS

EXHIBIT "C"

PRODUCTION LAYOUT

HUSKY OIL COMPANY
HUSKY FEDERAL #4



HUSKY FEDERAL #4

HUSKY OIL COMPANY
 PRODUCTION DENVER

EXHIBIT "D"
 DRILLING LAYOUT

SCALE: 1" = 50"

DATE: 12/21/79

HUSKY OIL COMPANY

Federal No. 4

1980 FNL and 660 FEL

Sec 14, T. 16 S., R. 27 E.

Eddy County, New Mexico

CONTOURS
2 Foot Intervals

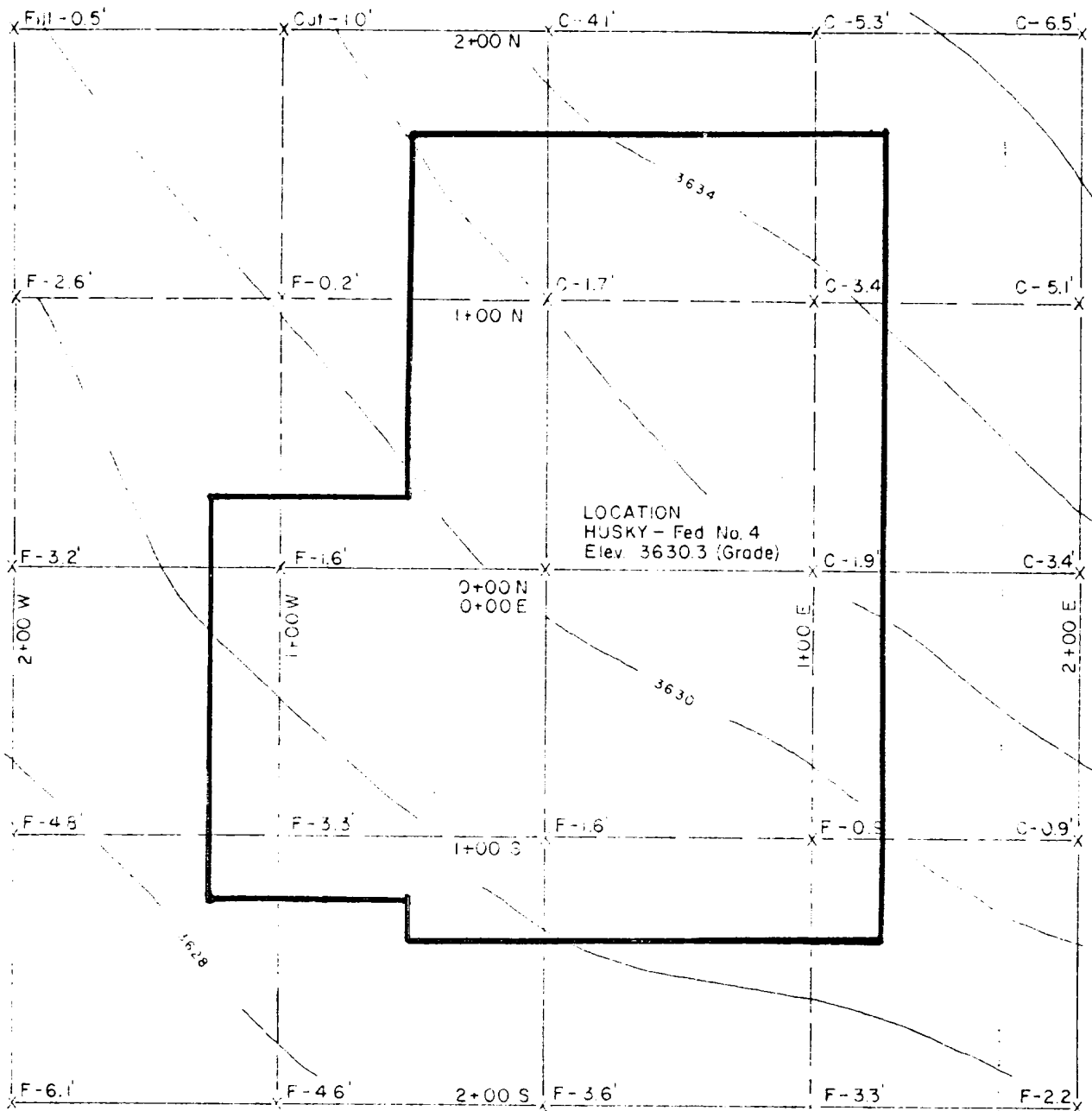


EXHIBIT "E"

HUSKY FEDERAL #4



CERTIFICATE OF SURVEY:

I, Herschel L. Jones, hereby certify that I am the Registered Land Surveyor who prepared the above plat from field notes of actual surveys made under my direction and that the same are true and correct to the best of my knowledge and belief.

Herschel L. Jones
R.L.S. No. 3640

COMPANY	JOB	DATE	SCALE	FILE NO.
HUSKY OIL COMPANY	FEDERAL NO. 4	June 11, 1981	1" = 60'	

GENERAL SURVEYING COMPANY

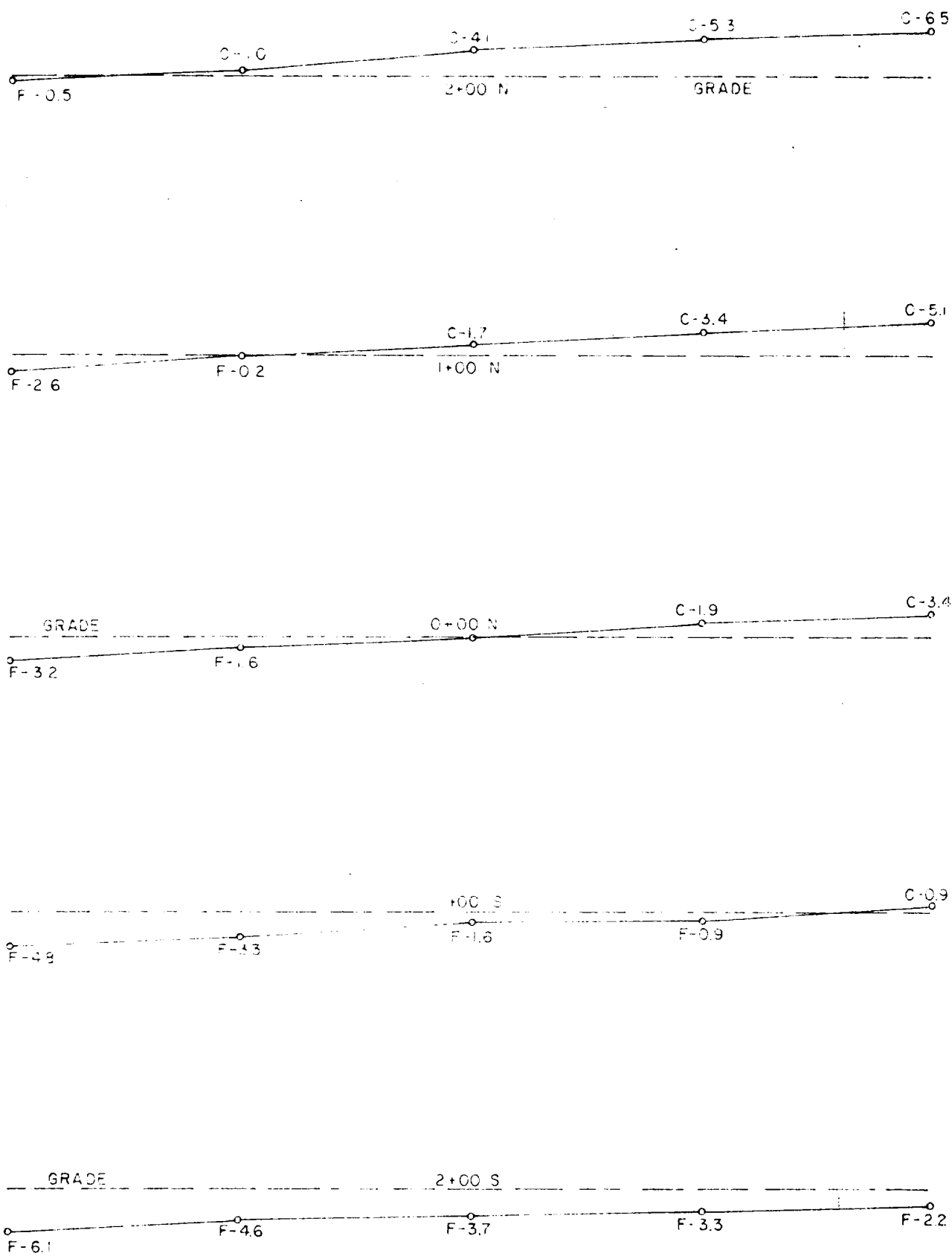
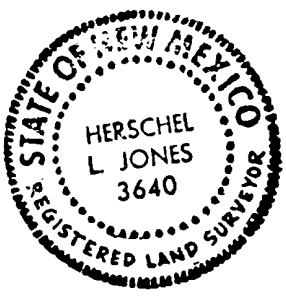


EXHIBIT "F"
HUSKY FEDERAL #4



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I, Herschel L. Jones, hereby certify that I am the Registered Land Surveyor who prepared the above plat from field notes of actual surveys made under my direction and that the same are true and correct to the best of my knowledge and belief.

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COMPANY	JOB	DATE	SCALE	FILE NO.
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GENERAL SURVEYING COMPANY