

SUBMIT IN TRIPPLICATE*
(Other instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1425.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 So. Cherry Street, Denver, Colorado 80222

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

At surface
E 990' FWL and 1350' FNLAt proposed prod. zone
same

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

Approx. 12 miles south of Bloomfield, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT. 990'
(Also to nearest drlg. unit line, if any)18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 660'

16. NO. OF ACRES IN LEASE

2081.12

19. PROPOSED DEPTH

6700'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

W 320

20. ROTARY OR CABLE TOOLS

Rotary

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

GR 6276'

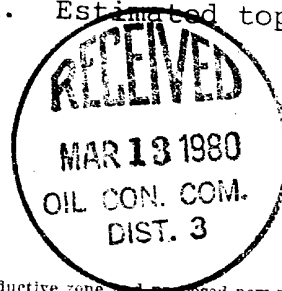
22. APPROX. DATE WORK WILL START*

3/1/80

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24 or 28	+250'	+150 sx
7-7/8"	5-1/2"	15.50	+6700'	3 stage job - total cmt. est. at 700 sx.

We propose to drill the captioned well to test the Dakota formation. We propose to test any shows deemed worthy of testing and to set casing, as above, or to plug and abandon in accordance with instructions received from the U.S.G.S. See attached BOPE sketch and multi-point requirements and attachments for drilling plan. Estimated top of Ojo Alamo - 790'.



IN 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 subsurface locations and measured and true vertical depths. (Give blowout preventer program, if any.)

24.

Gerald D. Gentry

TITLE Drilling Engineer

DATE Feb. 12, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

APPROVED
AS AMENDED

MAR 12 1980

James F. Sims
JAMES F. SIMS
DISTRICT ENGINEER

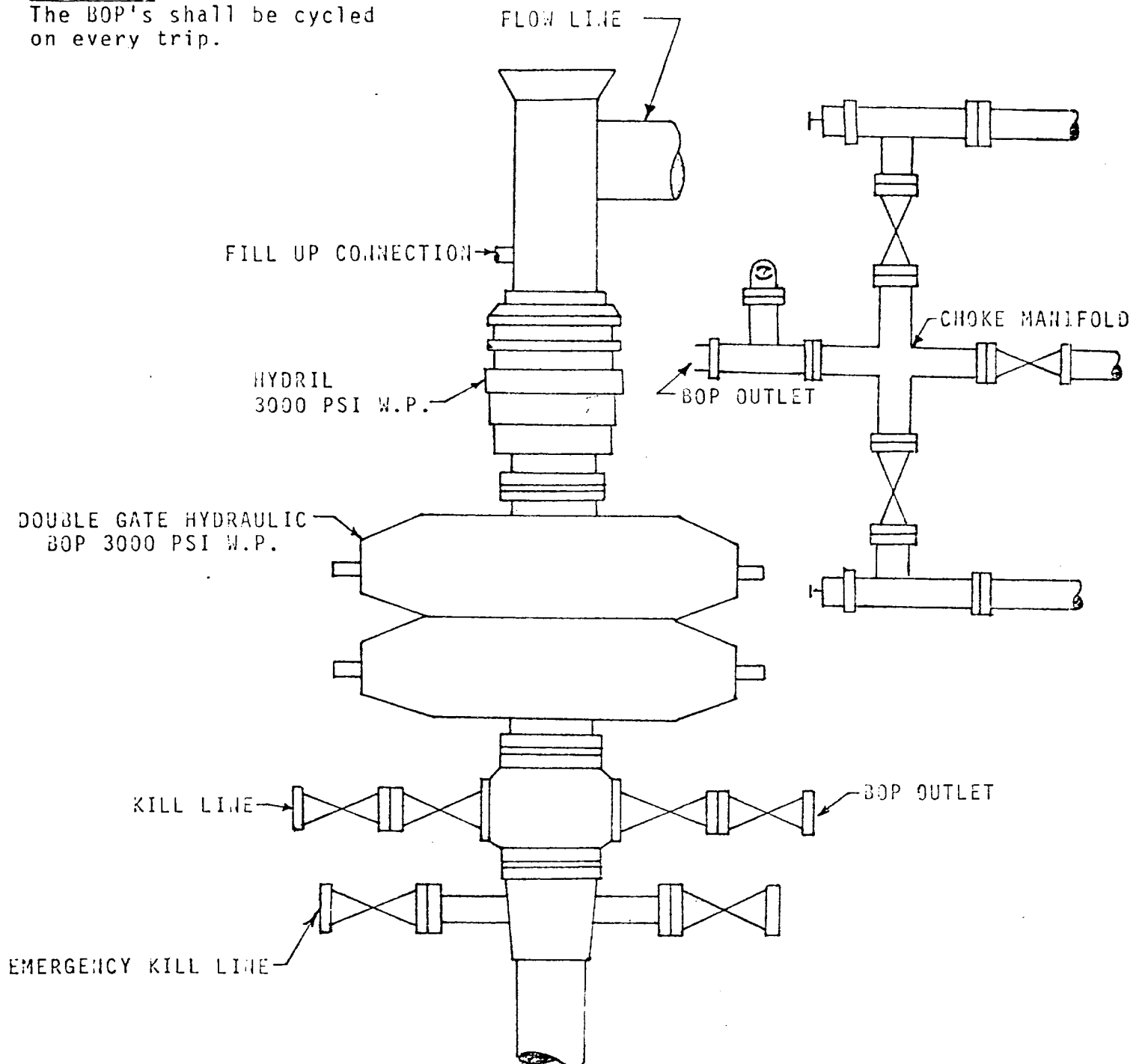
NSL-1150

TEST

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.



SCHEMATIC DRAWING
3000 PSI - BOP Equipment

HUSKY OIL COMPANY
3-E Schwerdtfeger 'D'
Attachment to APD (Form 9-331C)

1. Surface Formation: Nacimientto
2. Important Geological Formations:

Kirtland	890'
Fruitland	1700'
Pictured Cliffs	1945'
Mancos	4570'
Gallup	5485'
Greenhorn	6350'
Graneros Sh	6412'
3. Gas is anticipated in the Dakota formation at 6510'
4. Casing Program:

8 5/8", 24 or 28 #/ft, K-55, ST&C new casing to I250'
5 1/2", 15.50 #/ft, K-55, LT&C new casing to I6700'
5. Pressure Control:

10" x 8 5/8", 900 series casing head for drilling below surface casing.
10", 900 series 3000 #wp dual ram hydraulic blowout preventers for drilling below surface casing. All choke lines, choke manifold, valves, fittings, etc., will have a minimum pressure rating of 3000 psi.
All BOPE will be pressure tested prior to drilling out the surface casing shoe and tested daily for mechanical operation.
6. Mud Program:

0-250' - Mud at company discretion to maintain good hole conditions to run surface casing.
2200' - 6200' - Low solids system with weight 8.8-9.0 ppg and viscosity of 28 - 30 sec./qt.
6200' - TD - Fresh water gel system with weight 8.8-9.2 ppg and viscosity of 35-65 sec/qt.
7. Auxilliary Equipment:

Kelly cock with stabbing valve on floor.
Mud monitoring will be visual only.
8. Testing, Logging and Coring Program:

Logging - Induction Electric Log from TD to base of surface casing.
Testing - No DST'S are planned.
Coring - No cores are planned.

9. Abnormal Hazards:

Neither abnormal pressures, temperatures, nor potential hazards, such as H₂S gas is expected. The maximum BHP should not exceed 2900 psi at TD.

10. Anticipated Spud Date: 3/1/80

Anticipated Duration: 15 days for drilling.

EXHIBITS

- A. Location with Route Marked
- B. Vicinity Topographic Map showing locations and roads within one mile radius
- C. Drilling Layout and Location Cross Sections

1. Existing Roads:

- A. See Exhibits A and B
- B. Take Hwy. #44 south out of Bloomfield 9 miles to NIIP road on right side of highway. Turn right and proceed 100 yds. to dirt road on left side (south). Take dirt road 2.3 miles to tee. Turn right on existing road 1/3 mile. Staking for new access road will be on left side of road.
- C. See exhibit 'B'
- D. NA
- E. See Exhibit 'B'
- F. We plan to grade the existing and access roads as necessary to provide access.

2. Planned Access Roads:

- A. Width: 18'
- B. Maximum Grades: Less than 1%
- C. Turnouts: None needed
- D. Drainage Design: Not required
- E. Culverts, cuts and fills: No culverts should be required and there are no major cuts or fills.
- F. Surfacing Materials: None anticipated for drilling phase. Should materials be necessary, they will be obtained from a commercial source.
- G. Gates, cattleguards or fence cuts: None
- H. New or reconstructed roads: Centerline flagged

3. Location of Existing Wells:

- A.-H. See Exhibit 'B'

4. Location of Existing and/or Proposed Facilities:

- A. Husky does not own existing facilities within 1-mile radius.
- B. Required production equipment will be determined following completion of well.
- C. Plans for Rehabilitation: The facility area will be rehabilitated by filling the pit, levelling, spreading topsoil and reseeded according to NIIP stipulations (See Section 10)

5. Location and Type of Water Supply:

- A. Water will be purchased from Hilltop Stone well
- B. Water will be trucked via existing roads.
- C. No water well will be drilled on location.

6. Source of Construction Materials:

- A.-D. For the drilling operations, any construction materials will come from the site. Should additional materials be needed, they will be purchased from a commercial source.

7. Methods for Handling Waste Disposal:

- 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 operation will be produced into tanks, the water drained to the pit and the 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. After the reserve pit has dried, it will be filled, waste buried and restoration done as per section 10.

8. Ancillary Facilities: None

9. Well Site Layout:

- A.
- B. See Exhibit 'C'
- C.
- D. Pits will be unlined

10. Plans for restoration of the surface:

- A. The topsoil will be stripped and stockpiled on the north side of the location. Upon completion or abandonment of the well, the pits will be fenced on all four sides and allowed to dry, then backfilled, burying waste and levelling and recontouring as is practical.
- B. The topsoil will be spread over that area and reseeded per NIIP specifications. The access road if not needed, will also be reseeded.
- C. Upon release of the rig, the pits will be fenced, and so maintained until clean-up (See A above)
- D. The pits will have overhead flagging installed if oil is present.
- E. Restoration should be completed during the fall of 1980.

11. Other Information:

- A. The location falls on the side of a gently sloping hill. Vegetation is approx. 30% bare, 30% sage, and 40% grass and weeds.
- B. The location falls in the NIIP.
- C. There are no known archaeological, historical or cultural sites in the area.

12. Lessee's of Operators Representative

Gerald D. Gentry Phone: 303/320-4040
600 South Cherry St.
Denver, Co. 80222

13. Certification:

I hereby certify that I; or persons under my direct supervision have inspected the drillsite and access road; that I am familiar with the conditions that presently exist; that my 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.

1/23/80

Gerald D. Gentry

Gerald D. Gentry
Drilling Engineer
Husky Oil Company

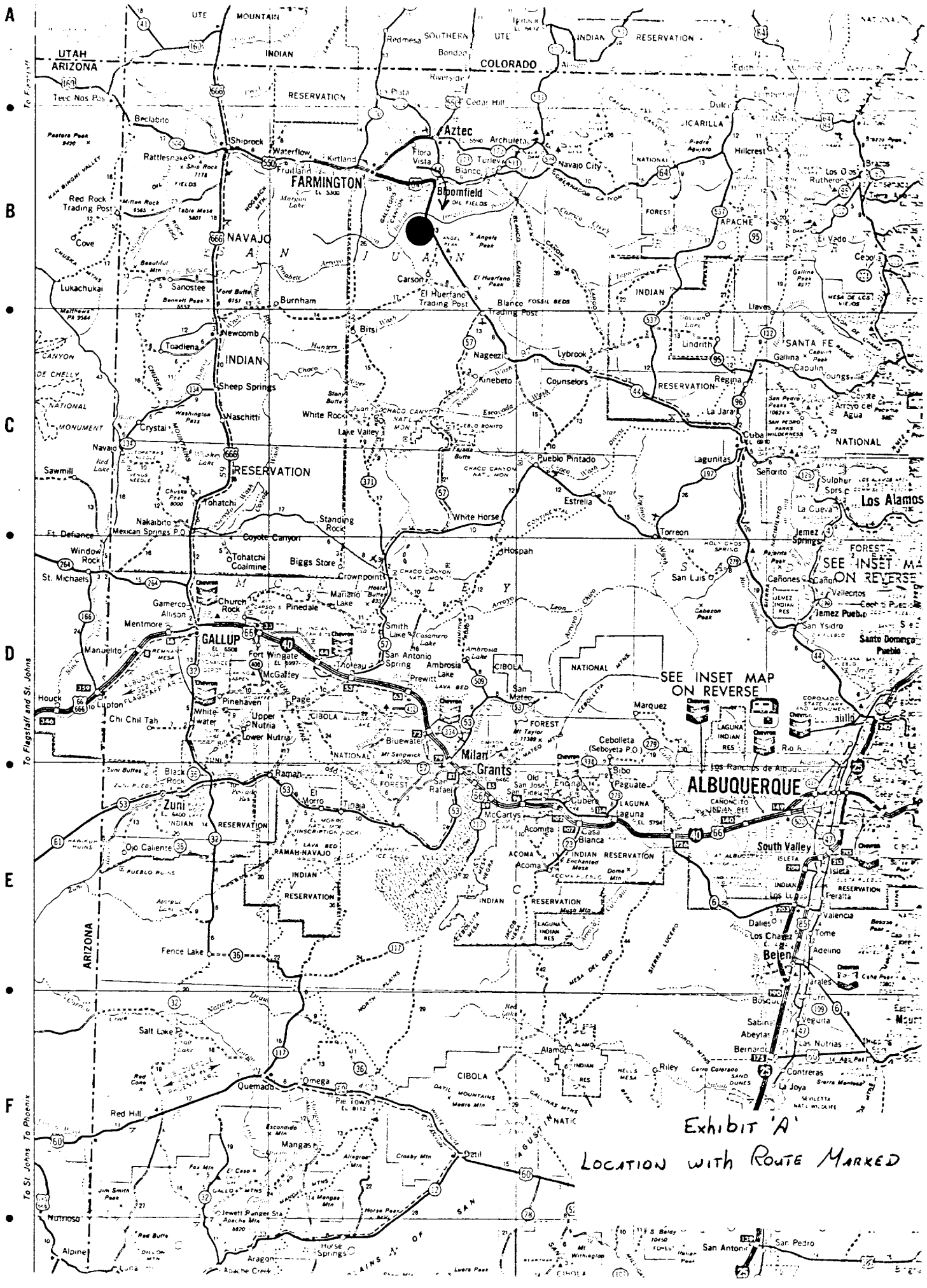
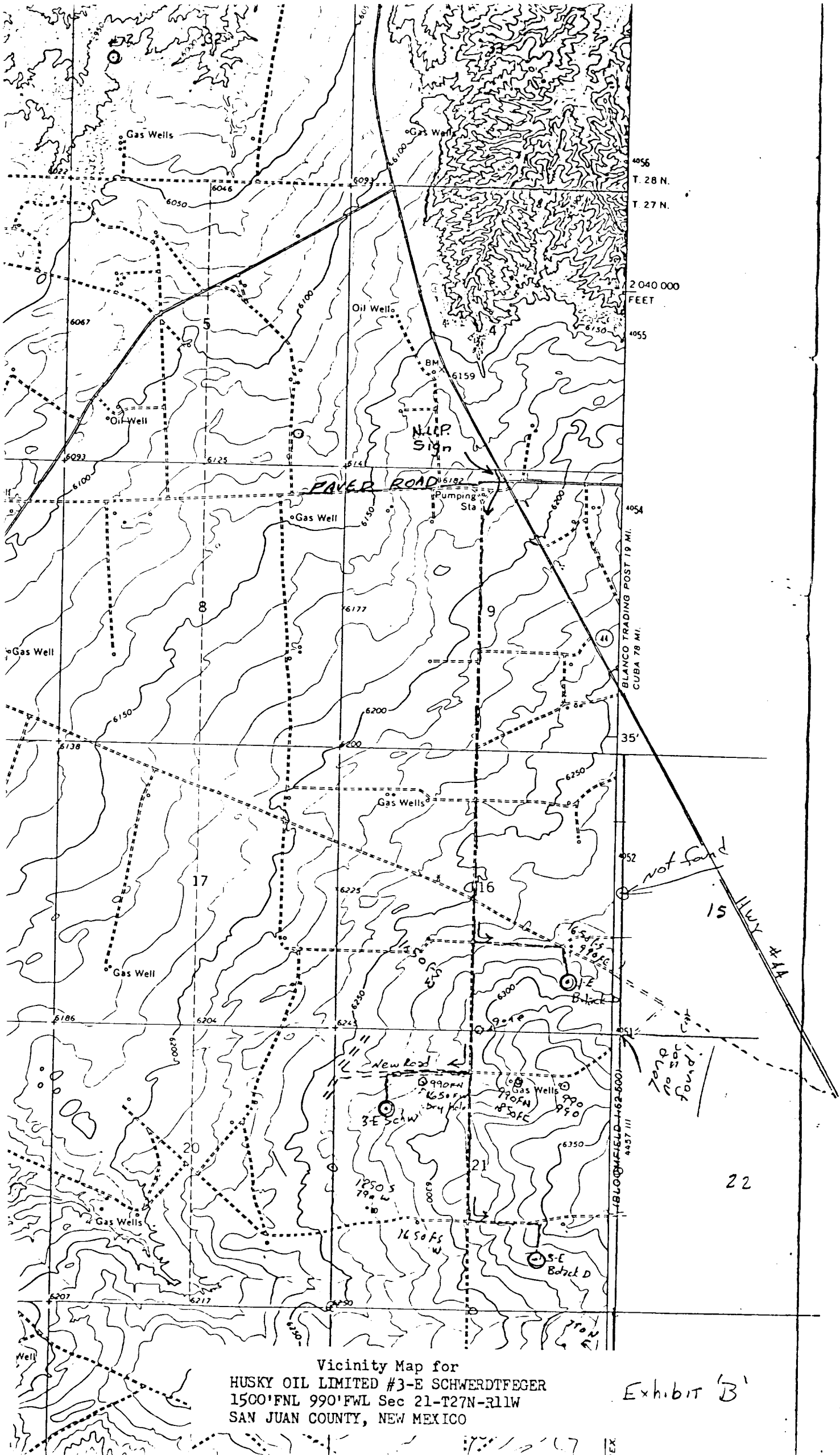


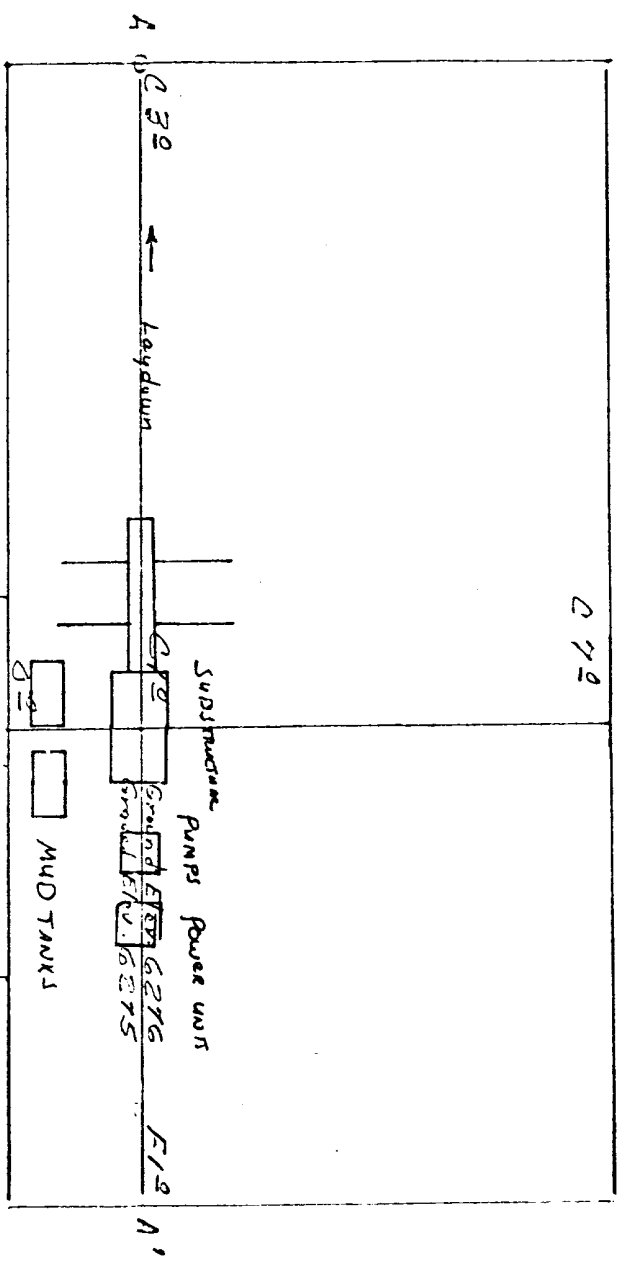
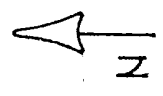
Exhibit 'A'
LOCATION with ROUTE MARKED



Vicinity Map for
HUSKY OIL LIMITED #3-E SCHWERTDFEGER
1500'FNL 990'FWL Sec 21-T27N-R11W
SAN JUAN COUNTY, NEW MEXICO

Exhibit 'B'

Location Profile for
 HUSKY OIL, LIMITED #3-E SCHWERTFEDER
 1350' FNL 990' FNL Sec 21-T27N-R11W SAN JUAN COUNTY, NEW MEXICO



Vert. 1"=40' A-A' Horiz. 1"=100'

6280			
6270			
6260			

B-B' Horiz. 1"=100'

6280			
6270			
6260			

Vert. 1"=40' C-C' Horiz. 1"=100'

D-D' Horiz. 1"=100'

KERR LAND SURVEYING
 Date: 1-21-80

Handwritten signature