

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Artesia, NM 88210NM OIL CONS. DIVISION
DD

30-005-61160

C/SF
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

SANDERS PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR

3204 Candlelight Dr. N.E., Albuquerque, N.M. 87111

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

At surface

1980' FNL 1980' FWL Sec. 6-7S-27E

At proposed prod. zone

Same

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

30 Miles Northeast of Roswell, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

1980'

16. NO. OF ACRES IN LEASE

878.20

17. NO. OF ACRES ASSIGNED

TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION*

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

2640'

19. PROPOSED DEPTH

4950' ABO

20. ROTARY OR CABLE TOOLS

Rotary

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

3859' G.L.

22. APPROX. DATE WORK WILL START*

Sept. 30, 1981

23.

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# H40	120'	100 sx Circulated
12 1/4"	8 5/8"	24# J55	1600'	800 sx Circulated
7 7/8"	4 1/2"	10.5# K55	TD	500 sx ± To cover to 150' above Abo

This well will be drilled to 4950' to test Abo and intermediate formations.

See attached Supplemental Drilling Data and NTL-6 requirements.

Gas is not dedicated.

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.

SIGNED Jerry H. Long TITLE Agent DATE Sept. 28, 1981

(This space for Federal or State office use)

PERMIT NO.

APPROVED

APPROVAL DATE

APPROVED BY

L. G. S. GEORGE H. STEWART

TITLE

DATE

CONDITIONS OF APPROVAL

OCT 13 1981

FOR

JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

Posted ID-1
API + NL Book
10-23-81

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

Operator Sanders Petroleum Corp.		Lease Isler Federal		Well No. 2
Unit Letter F	Section 6	Township 7 South	Range 27 East	County Chaves
Actual Postage Location of Well: 1980 feet from the North line and 1980 feet from the West line				
Ground Level Elev. 3859	Producing Formation Abo		Pool Undesignated	Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

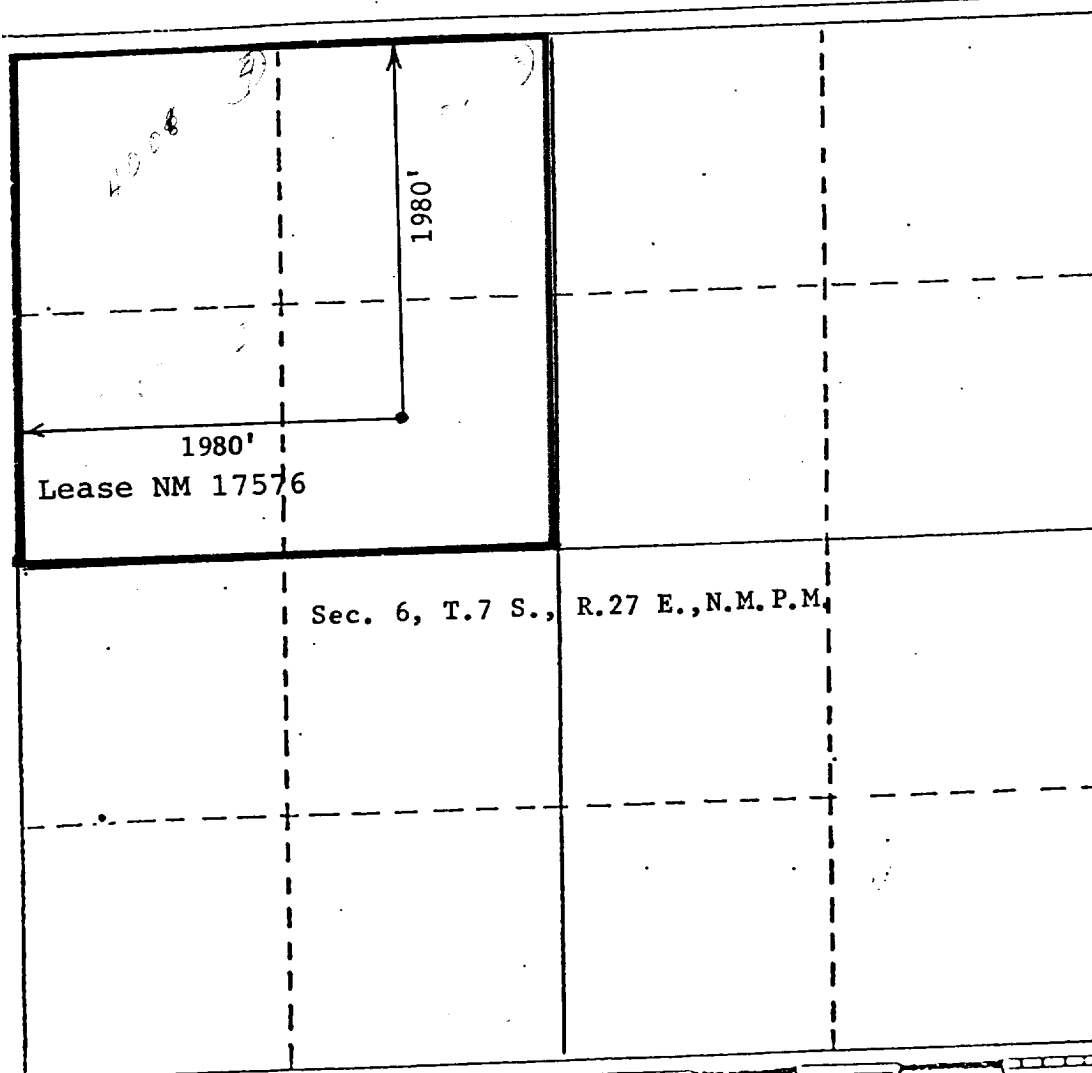
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). **Single lease**

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 Division.



CERTIFICATION

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

Name **JERRY W. LONG**

Position

Agent

Company

SANDERS PETROLEUM CORP.

Date

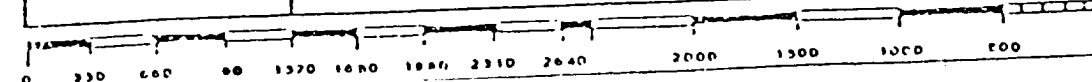
Sept. 28, 1981

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.

JOHN D. JAQUES
NEW MEXICO
Professional Engineer
and/or Land Surveyor
No. **6290**
Date Surveyed
Sept. 21, 1981

John D. Jaques, P.E. & L.S.

Certificate No. **6290**



SUPPLEMENTAL DRILLING DATA

SANDERS PETROLEUM CORPORATION

No.2 Isler

SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec.6-7S-27E

Chaves County, N.M.

NM 17576

The following items supplement Form 9-331C in accordance with NTL-6 instructions.

1. SURFACE FORMATION: Artesia Group of the Permian System

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Salt	220'	Glorietta	2100'
Queen	650'	Tubb	3630'
Penrose	730'	Abo	4300'
San Andres	1075'		

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATIONS:

Fresh water	- Above	200'
Salt water	- Below	200'
Gas	- Below	4000'

4. PROPOSED CASING AND CEMENTING PROGRAM:

Surface: 120' of 48#, 13 3/8", H40, ST&C casing cemented with 100 sx Class "C" + 2% CaCl mixed at 14.8 ppg. Cement will be circulated, using Redimix down the annulus, if necessary. Drill out cement inside the casing after WOC for about 8 hours.

Intermediate: 1600' of 8 5/8", 24#, J55, ST&C casing cemented with 600 sx HLW + 1/4# flocele + 2% CaCl mixed to 12.4 ppg. Tail in with 200 sx Class "C" + 4% CaCl mixed to 14.8 ppg. Cement will be circulated to the surface. If necessary, cement will be circulated to the surface using 1" pipe down the annulus. If severe lost circulation has been encountered while drilling the 11" hole, the cementing job will be preceded with 200 sx thickset cement mixed to 14.8 ppg. Install 8 5/8" x 10" API 3000# casinghead. Nipple up 10" API 3000# WP double ram BOP to drill 7 7/8" hole to total depth. Working condition of BOP rams will be checked at least daily.

Production: 4950' of 4 1/2", 10.5#, K55, ST&C casing will be cemented with 400 sx 65/35 POZ + 1.4% flocele

+ 5# Salt mixed to 12.7 ppg. Tail in with 300 sx 50/50 POZ + 2% gel + 8# salt mixed to 14.1 ppg to raise cement 150' above top of Abo.

5. PRESSURE CONTROL EQUIPMENT: Blowout preventer stack will consist of at least a double-ram blowout preventer rated to 3000# WP. A sketch of the BOP is attached. The BOP will be installed and casing tested to 1200 psi prior to drilling cement out of the 8 5/8" shoe. The pressure control system will include choke, kill and fill lines.

6. CIRCULATING MEDIUM:

0' - 1600'	Use fresh water spud mud with fresh water gel and soda ash or lime. Treat with lost circulation material as recommended by mud contractor. If total lost circulation occurs, mix 2 or 3 viscous slugs with LCM and attempt to regain circulation. If unsuccessful, will attempt drilling without returns to casing point and spot about 150 barrels viscous slug treated with LCM on bottom before running pipe.
1600'-3200'	Drill out 8 5/8" casing with fresh water. Add caustic soda for PH 9.0-9.5 and chemicals for corrosion control. Add LCM as needed to control lost circulation or to sweep the hole.
3200'-TD	Maintain mud weight less than 10 ppg with additions of fresh water while keeping chloride ion concentration of 40,000-50,000 ppm and KCL at 3%. At top of Abo, mud up with starch and soda ash to control water loss to 20-25cc to TD. Salt Water Gel will be added to clean hole to log and run casing.

7. AUXILIARY EQUIPMENT: Full-opening kelly cock, to fit the drill string in use, will be kept on the rig floor at all times.
8. TESTING LOGGING AND CORING PROGRAM: No coring or testing is planned for this well. It is proposed to run a Gamma Ray Neutron log from TD to surface and other logs as recommended by the wellsite geologist.
9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE: None anticipated. Maximum bottom-hole pressure should not

exceed 1500 psi. Bottom hole temperature will be about 110°F.

10. ANTICIPATED STARTING DATE: Drilling will commence about September 30, 1981 and should be completed within 30 days. Completion operations (perforations and stimulation) will follow drilling operations. Due to rig availability it is requested that this application be approved as soon as possible.

PERTINATE INFORMATION

For

SANDERS PETROLEUM CORPORATION
No.2 Isler
SENW Sec.6-7S-27E
Chaves County, N.M.

<u>LOCATED:</u>	30 Miles Northeast of Roswell, N.M.
<u>FEDERAL LEASE NUMBER:</u>	NM 17576
<u>LEASE ISSUED:</u>	February 1, 1973 10 Year Term
<u>RECORD LESSEE:</u>	Coastal Oil and Gas Corporation
<u>AUTHORITY TO OPERATE:</u>	Designation of Operator
<u>BOND COVERAGE:</u>	Lessee's \$25,000 Statewide Bond
<u>ACRES IN LEASE:</u>	878.20
<u>SURFACE OWNERSHIP:</u>	Public
<u>GRAZING PERMITTEE:</u>	Mark Cooper
<u>POOL RULES:</u>	Undesignated Abo Pool 160 Acre Gas Spacing - Statewide Rules
<u>EXHIBITS:</u>	A. Access Road Map B. Contour Map C. Rig Layout D. BOP Diagram E. Lease and Well Map

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

SANDERS PETROLEUM CORPORATION

No.2 Isler

SENW Sec.6-7S-27E

Chaves County, N.M.

NM 17576

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, the magnitude of necessary surface disturbance involved, and the procedures 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 operation.

1. EXISTING ROADS:

- ✓
1
✓
- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 30 miles Northeast of Roswell, N.M.
 - B. Directions: Travel 2 miles North from Roswell City Limits on Hwy. 285. Turn right on Hwy. 70 and go 13.8 miles. Turn North on county road and go 9.8 miles to Cooper Ranch gate. Go 2 miles East. Turn Southeast and go 1.1 mile. Go Northeast (past No.1 Isler well) 1.2 miles to location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new access road will be about $\frac{1}{2}$ mile long and 14' wide. Existing road to the No.1 Isler well, located in the SESW Sec.6, will be utilized.
- B. Surfacing Material: Due to the extremely sandy nature of the soil, the road and well pad will require surfacing with at least six inches of caliche.
- C. Maximum Grade: About 3%
- D. Turnouts: None necessary
- E. Drainage Design: Road will require at least three water turn-outs to minimize erosion.

- F. Culverts: Road construction will require three low water dips. If the well is commercial, culverts may be constructed.
 - G. Cuts and Fills: Construction of road and location will require levelling of 6' high sand dunes.
 - H. Gates, Cattle Guards: One cattle guard will be installed in the allotment fence between the No.1 and No.2 wells.
3. LOCATION OF EXISTING WELLS:
- A. This will be the second well on the lease. The No.1 well is located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec.6.
4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:
- A. Separation and storage facilities will be constructed on the well pad if this well is commercial.
5. LOCATION AND TYPE OF WATER SUPPLY:
- A. Water will be purchased from the Mark Cooper water well.
6. SOURCE OF CONSTRUCTION MATERIALS:
- A. Caliche for surfacing the road and pad will be obtained from a commercial pit in the SE $\frac{1}{4}$ Sec.3, T.6S., R.29E.
7. METHODS OF HANDLING WASTE DISPOSAL:
- A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
 - D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
 - E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by

the wind. Location of the trash pit is shown on Exhibit "C".

- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

If this well proves to be a gas well, marketing of the gas will require construction of a purchasers pipeline and measurement equipment. These facilities would be a separate action.

9. WELL SITE LAYOUT:

- A. Exhibit "C" indicates the relative location and dimensions of the well pad, mud pits, reserve pit and major rig equipment.
- B. The reserve pit will be lined with plastic to prevent loss of water.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the well is non-productive the disturbed area will be rehabilitated to Federal agency requirements and will be accomplished as expeditiously as possible.

11. OTHER INFORMATION:

- A. Topography: The well pad is essentially flat, except for sand dunes that will require levelling. The access road slopes to the north at a maximum 3% grade.
- B. Soil: Sandy loam
- C. Flora and Fauna: The flora consists of typical desert vegetation, such as yucca, mesquite, cactus and various grasses. Fauna consists of desert wildlife such as coyotes, rodents, snakes and birds.

- D. Ponds or Streams: The well is in proximity of several dry washes that are tributary to the Pecos River, which is located about 5 miles west.
- E. Residences and other Structures: The nearest residence is the Mark Cooper Ranch which is about 2½ miles northwest.
- F. Archaeological, Historical and other Cultural Sites: No artifacts were noted in the area of the pad or access roads. An Archaeologist from the Agency for Conservation Archaeology of Eastern New Mexico University has reviewed the impact of this action and provided a favorable recommendation.
- G. Land Use: Grazing
- H. Surface Ownership: The well pad and new road are located on Public surface.

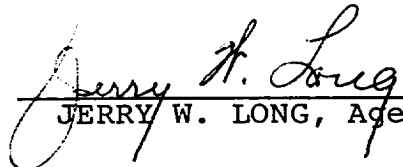
12. OPERATOR'S REPRESENTATIVE:

Charles Sanders
3204 Candlelight Dr. N.E.
Albuquerque, N.M. 87111
Ph. (505) 294-7538

13. CERTIFICATION:

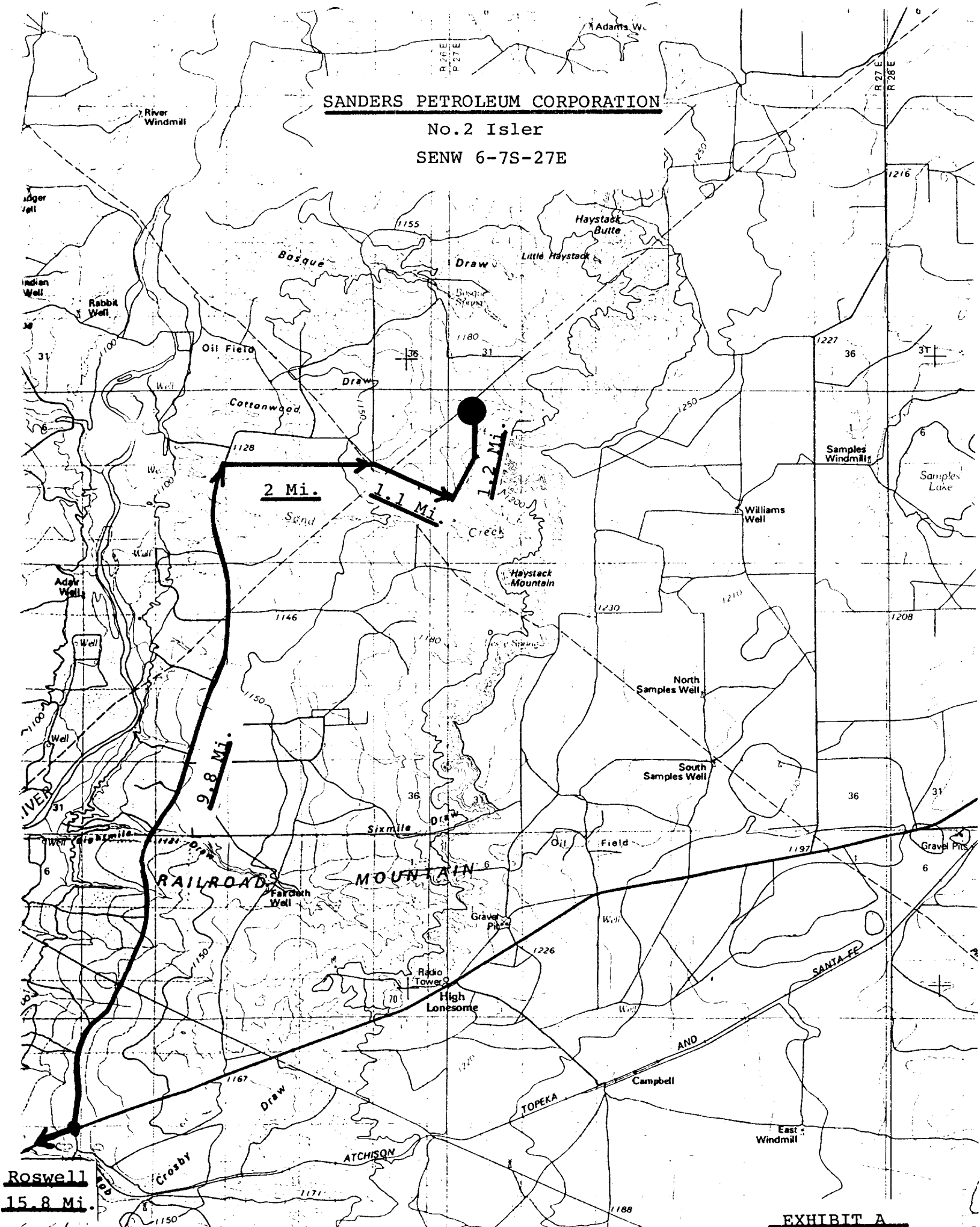
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by SANDERS PETROLEUM CORPORATION and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Sept. 28, 1981
Date:


JERRY W. LONG, Agent

SANDERS PETROLEUM CORPORATION

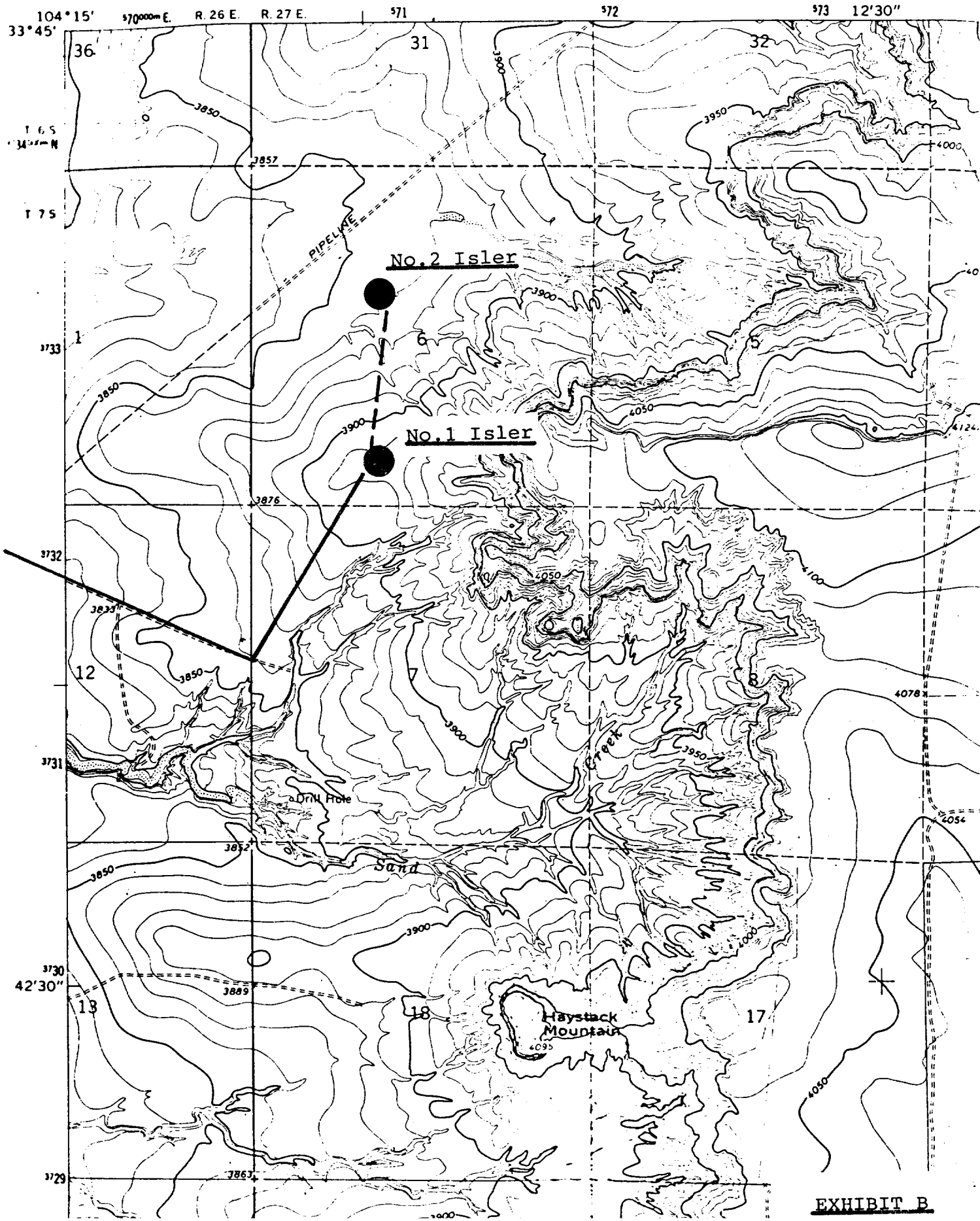
No. 2 Isler
SENW 6-7S-27E



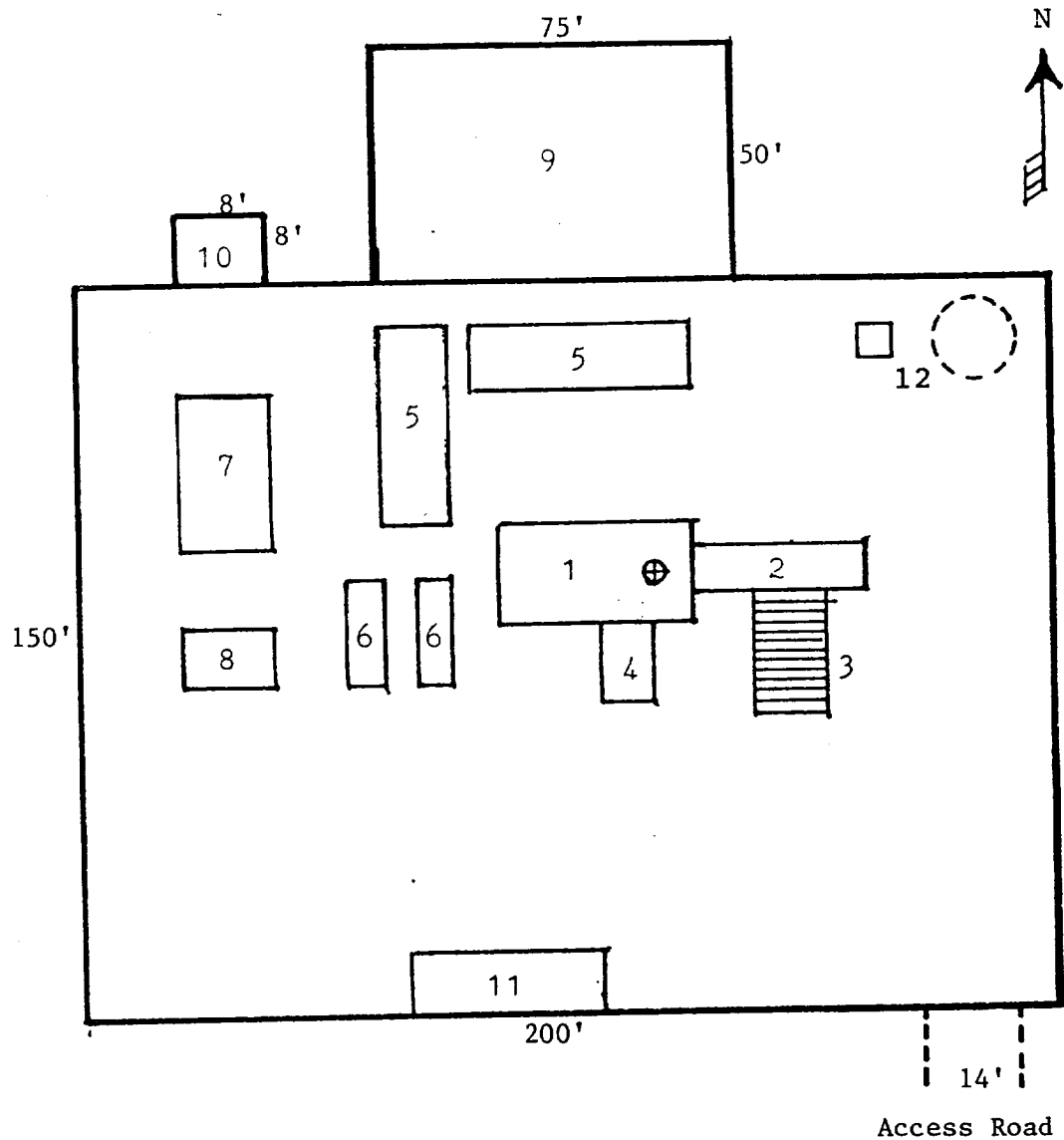
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

No.2 Isler
SENW 6-7S-27E



RIG LAYOUT



- | | |
|-----------------|---------------------------|
| 1. Substructure | 7. Water Tank |
| 2. Catwalk | 8. Light Plant |
| 3. Pipe Rack | 9. Reserve Pit |
| 4. Doghouse | 10. Trash Pit |
| 5. Mud Pits | 11. Trailer House |
| 6. Mud Pumps | 12. Production Facilities |

SANDERS PETROLEUM CORPORATION

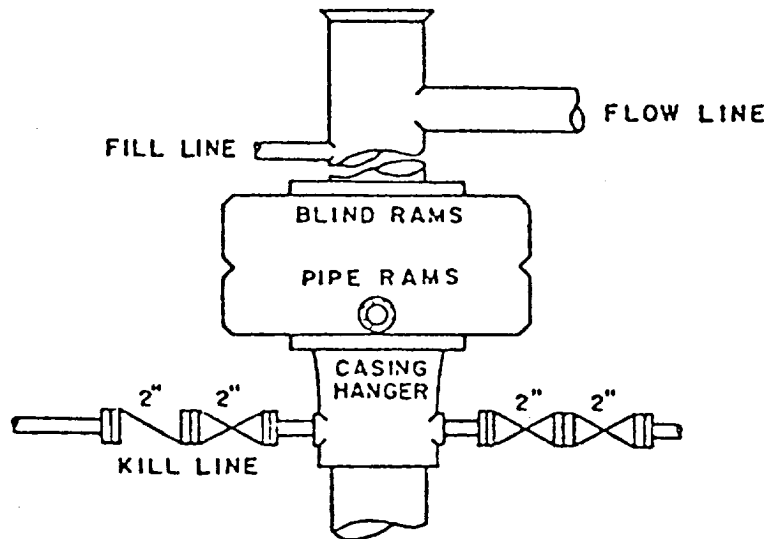
No. 2 Isler

SENW Sec. 6-7S-27E
Chaves County, N.M.

EXHIBIT C

SANDERS PETROLEUM CORPORATION

No.2 Isler
SENW Sec.6-7S-27E
Chaves County, N.M.



BOP STACK

3000 PSI WORKING PRESSURE
Rams Will Be Checked Daily

EXHIBIT D

