

File

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAR
WELL ☐

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Socorro Petroleum Company

3a. Area Code & Phone No.
505/677-2360

3. ADDRESS OF OPERATOR

Loco Hills, NM 88255

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

At surface

1305' FEL S 1305' FSL

At proposed prod. zone

1305' FEL S 1305' FSL

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

11 mi. NE of Loco Hills, New Mexico

15. DISTANCE FROM PROPOSED

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1305'

16. NO. OF ACRES IN LEASE

639.56

17. NO. OF ACRES ASSIGNED
TO THIS WELL

20

18. DISTANCE FROM PROPOSED LOCATION

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

912'

19. PROPOSED DEPTH

4000'

20. ROTARY OR CABLE TOOLS

Rotary

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

3919' GL

22. APPROX. DATE WORK WILL START

6/1/91

PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24 #	J-55 CIRCULATE 8 Rd.		625'	300 sx. C1. "C"
7-7/8"	5-1/2"	17 #	J-55 (tie back) 8 Rd.		4000'	200 sx. C1. "C"
					(SJS)	+ 600 sx. LW

Mud Program

0 - 625' Drill with fresh water
625 - TO Drill with brine water

BOP Program

Will install on the 8-5/8" surface casing a 10" Series 900 Type "E"
Shaffer double hydraulic BOP & will test before drilling into Queen
Formation.

Part ID-1
7-19-91
New loc & API

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.

SIGNED John Gould, Jr. TITLE Manager DATE 5/15/91

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY Orig. Signed by Richard L. [unclear] AREA MANAGER
CONDITIONS OF APPROVAL, IF ANY: _____ TITLE CARLEAD RESOURCE [unclear] DATE 7-10-91

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

*See Instructions On Reverse Side

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

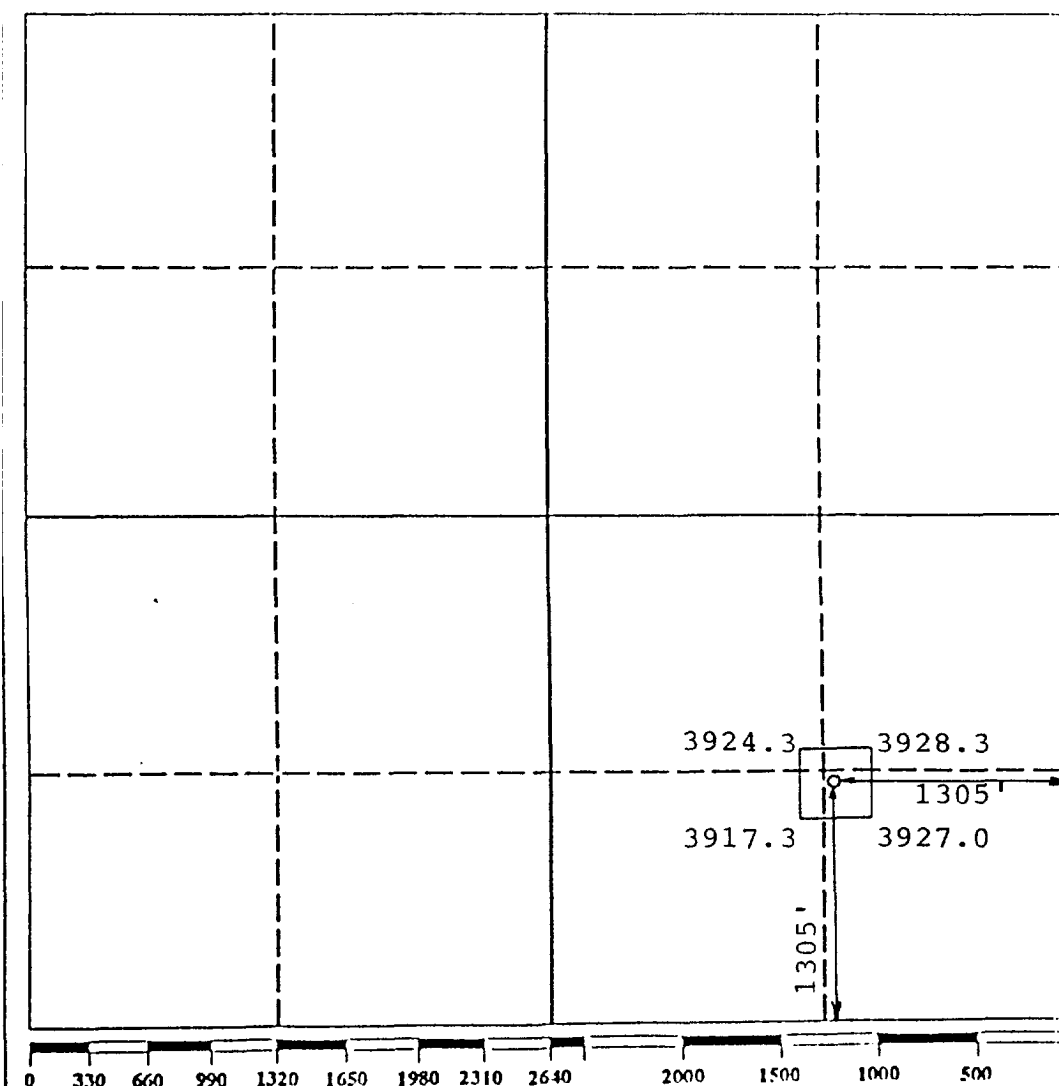
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Socorro Petroleum Company			Lease H.E. West "A"		Well No. 19
Unit Letter P	Section 4	Township 17 South	Range 31 East	County Eddy	
Actual Footage Location of Well: 1305 feet from the South line and 1305 feet from the East line					
Ground level Elev. 3919		Producing Formation Grayburg		Pool Grayburg Jackson	
				Dedicated Acreage: 20 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).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, 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 communization, 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

Ben D. Gould

Printed Name

Manager

Position

Socorro Petroleum Co.

Company

5/15/91

Date

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.

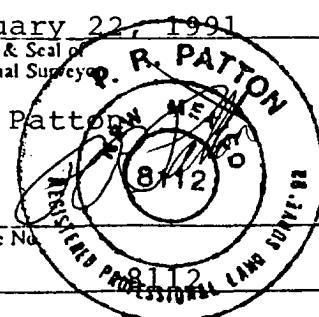
Date Surveyed

February 22, 1991

Signature & Seal of
Professional Surveyor

P.R. Patton

Certificate No.



APPLICATION FOR DRILLING

SOCORRO PETROLEUM COMPANY
H. E. WEST "A", Well No. 19
1305' FEL & 1305' FSL, Sec. 4-T17S-R31E
Eddy County, New Mexico
Lease No.: LC-029426-A

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

1. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geological markers are as follows:

Rustler Anhydrite	640'	Grayburg	3212'
Top of Salt	780'	Premier Sand	3400'
Base of Salt	1712'	San Andres	3542'
Yates	1962'	Lovington Sand	3660'
Seven Rivers	2200'	Lower S.A. "M"	3740'
Queen	2820'	T. D.	4000'

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

Water: Random fresh water from surface to 300' +/-, and water flow from injection wells possible at around 2800'.

Oil: Grayburg at approximately 3212' or below.

Gas: None anticipated.

4. Proposed Casing Program: See Form 3160-3.

5. Proposed Control Equipment: See Form 3160-3.

6. Mud Program: See Form 3160-3.

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: None planned.

Logging: LDT/CNL	T.D. - 1775'
DLL RXD NGT.	T.D. - 1775'
GRN	T.D. - Surface

Coring: None planned.

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.

10. Anticipated starting date: 6/1/91
Anticipated completion of drilling operations: Approximately 20
days.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are production facilities on the lease at this time. See Exhibit "C".
- B. If the oil well proves to be commercial, the necessary production facilities will be installed on the drilling pad and flow lines will be installed along the proposed and existing access roads to the storage tanks.

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCES OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing access roads and the wellsite pad will be obtained from a Federal pit in the SE4SE4 of Section 5-T17S-R31E. The pit has been staked and cleared by the archaeologist. The topsoil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access roads.

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 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 papers, garbage and junk will be buried in a

dirt. All waste materials will be contained to prevent scattering by the wind.

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

8. ANCILLARY FACILITIES:

- A. None required.

9. WELLSITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged.
- B. Mat Size: 140' x 210' plus reserve pits.
- C. Cut & Fill: The area has 5 to 12 foot sand dunes and deflation basins to be leveled.
- D. The surface will be topped with compacted caliche and the reserve 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 needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced 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 within 90 days after abandonment.

11. OTHER INFORMATION:

- A. Topography: The wellsite and access road are located in the Mescalero Pediment, north of the Querecho Plains, within an area draining generally southwest towards Cedar Lake Draw, ca 4.2 miles SW. The area is characterized by deep, sandy aeolian topography, characterized by a large NW/SE trending dune ridge system, with dunes up to 4 metres high, and large, elongate, and often interconnected deflations basins. The western half of the west access road is within eleven to undulating aeolian topography.

SURFACE USE AND OPERATIONS PLAN

Socorro Petroleum Company

H. E. West "A", Well No. 19

-Page 4-

- B. Soil: Kermit-Berino fine sands.
- C: Flora and Fauna: The vegetation cover is grassland formation scrubgrass scrub disclimax community. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D: Ponds and Streams: Closest permanent water is Nakee Ishee Lake, ca 16.8 miles W/NW.
- E: Residences and Other Structures: None
- F: Land Use: Cattle grazing
- G: Surface ownership: The proposed wellsite and existing access road is on Federal surface and minerals.
- H: Archaeological survey revealed the occurrence of one isolated find, which does not appear significant past the level of field recording. The survey was performed by Archaeological Survey Consultants of Roswell, N. M., and a copy of their report has been furnished to the BLM - Carlsbad Resource Area.

12. OPERATOR'S REPRESENTATIVE:

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

John Gould, Jr.
Socorro Petroleum Company
P. O. Box 38
Loco Hills, New Mexico 88255
(505) 677-2360

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drillsite 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 Socorro Petroleum Company and its contractors and subcontractors in conformity with this plan and their 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.


Socorro Petroleum Company

on lands administered by the
Department of the Interior
Bureau of Land Management
Roswell District, New Mexico

ASC PERMIT NO.: 18-2920-90-E
ASC Job No.: 91-39; Socorro
Petroleum Company H.E. West A
Fed. Well # 19 & Access Road

1. ABSTRACT: intensive archaeological survey of the Socorro Petroleum Company H.E. West "A" Federal Well No. 19 (400 ft. sq., 3.67 acres), and access road R/W (450 ft. long X 100 ft. wide, 1.03 acres) with a total federal land surface of 4.7 acres inspected for cultural remains. The access road is parallel to & partially within the R/W of an extant pipeline.

Archaeological survey revealed the occurrence of 1 Isolated Find, which does not appear significant past the level of field recording. Therefore, archaeological **CLEARANCE** for Socorro Petroleum Company H.E. West "A" Federal Well No. 19 and access road R/W is **RECOMMENDED**.

2. WELL PAD LOCATION: T17S, R31E, Section 4, SE $\frac{1}{4}$ SE $\frac{1}{4}$ [1305 FSL, 1305 FEL]. **ACCESS ROAD R/W LOCATION:** T17S, R31E, Section 4: SW $\frac{1}{4}$ SE $\frac{1}{4}$. Eddy County, New Mexico.

Map Reference: U.S.G.S. 7.5 minute series, MALJAMAR, NEW MEXICO, 1985. **Land Status:** BLM, Roswell District/Carlsbad Resource Area, New Mexico.

3. PROJECT DESCRIPTION: well pad (400 ft. sq., 3.67 acres), and access road R/W (450 ft. long X 100 ft. wide, 1.03 acres) with a total federal land surface of 4.7 acres inspected for cultural remains. The access road is parallel to & partially within the R/W of an extant pipeline.

TOPOGRAPHY: Mescalero Pediment, north of the Querecho Plains, to the east of the Nimenim Ridge, within an area draining generally southwest towards Cedar Lake Draw, ca. 4.2 miles SW. The area is characterized by deep sandy, aeolian topography, characterized by a large NW/SE trending dune ridge system, with dunes up to 4 metres high, and large, elongate, and often interconnected deflation basins. The western $\frac{1}{2}$ of the west access road is within level to undulating aeolian topography. **Soils:** Kermit-Berino fine sands. **Permanent Water:** Nakee Ishee Lake, ca. 16.8 miles W/NW. **Potential Water:** Taylor Draw, ca. 3.03 miles SE. **Elevation:** 3917 ft. to 3931 ft. **Slope:** 0.57° to 11.3°. **Aspect:** S/SW. **Lithic Resources:** not available in the project vicinity. **Vegetation:** Grassland Formation, Scrub-grass scrub disclimax community.

4. EXAMINATION PROCEDURE: straight and zig-zag transects, spaced no greater than 15 metres apart. Ca. 3.0 work hours on ground. Project area staked by client representative. **Visibility:** ca. 60% to 75%. **Weather:** sunny.

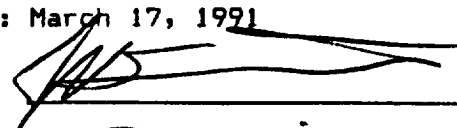
5. FINDINGS: BLM records (Ruebelmann, 3/04/1991) indicate the recording of NM-06-4943 & LA43,311 in Section 4 (T17S, R31E). The sites will not be endangered by construction activity.

Archaeological survey revealed the occurrence of 1 Isolated Find, which does not appear significant past the level of field recording.

I.F. # 1: UTM Zone 13; 605,705 m.E; 3,636,075 m.N. T17S, R31E, Section 4, NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, Eddy County, New Mexico. Elevation: 3919 ft. Situated in a crescent-shaped, 66 m. NS x 50 m. EW x 2.0 m. deep (E side) deflation basin in an area of oakbrush, yucca, grama, three-awn, bluestem, sagebrush vegetation. Artifacts: 1 impure chert, prepared platform, quarternary flake (2.9 x 3.2 x 1.4 cms. thick); 1 tan chert, interior flake, medial segment (3.2 x 3.3 x 0.6 cms. thick); 1 chalcedony, cortex platform, interior flake, distal end (1.2 x 1.5 x 0.4 cms. thick); 1 brown quartzite, cortex platform, interior flake (4.0 x 3.4 x 0.6 cms. thick); 1 gray ortho-quartzite, prepared platform, interior flake, proximal end (1.6 x 2.0 x 0.5 cms. thick); 1 tan chert, possible Darl-type, projectile point base-shoulder fragment, with a concave sided stem & base (length, 1.6 cms.; stem length, 1.0 cms.; base width, 1.3 cms.; shoulder width, 1.4 cms.; thickness, 0.3 cms.). The specimen, if Darl, dates to ca. A.D. 1 - A.D. 1000 (Suhm & Jelks 1962: 179); the specimen was collected for curation by the Museum of New Mexico.

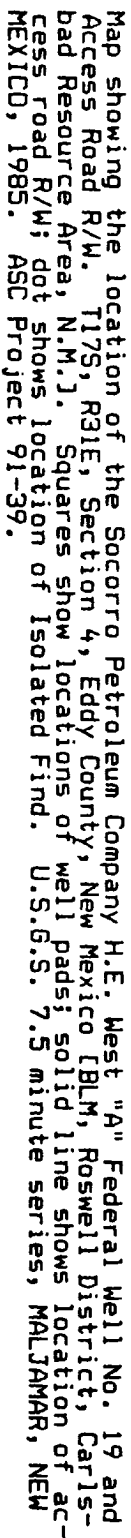
6. RECOMMENDATIONS: archaeological **CLEARANCE** for the Socorro Petroleum Company H.E. West "A" Federal Well No. 19 and access road R/W is **RECOMMENDED**.

Date(s) of Examination: March 17, 1991

Project Archaeologist: 

D.M. Griffiths.

Principal Investigator: D.M. Griffiths.



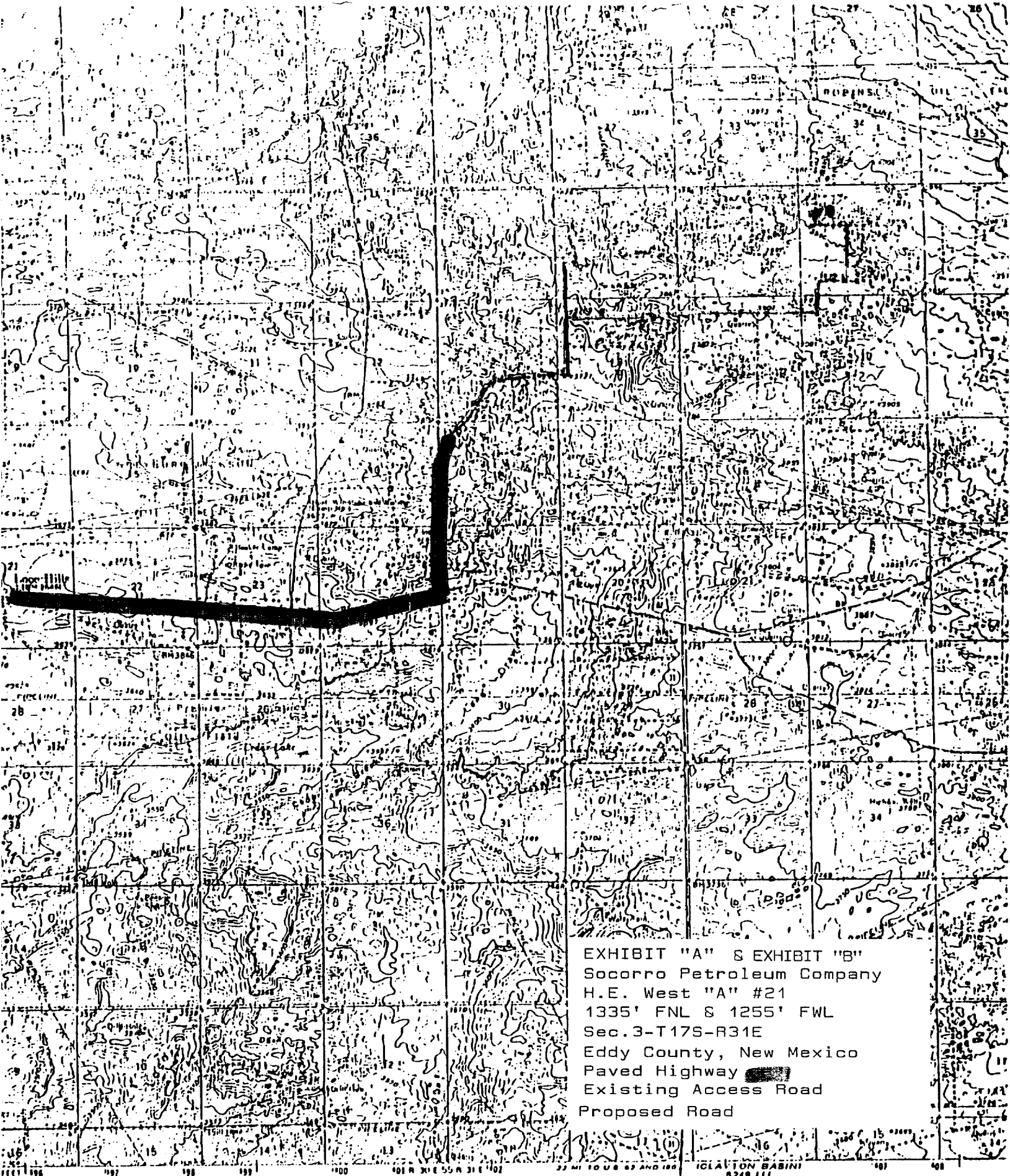
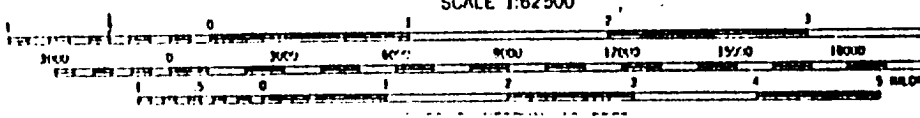


EXHIBIT "A" & EXHIBIT "B"
Socorro Petroleum Company
H.E. West "A" #21
1335' FNL & 1255' FWL
Sec. 3-T17S-R31E
Eddy County, New Mexico
Paved Highway
Existing Access Road
Proposed Road

ished by the Geological Survey

Methods from aerial photographs
able surveys 1963



5175

to London -

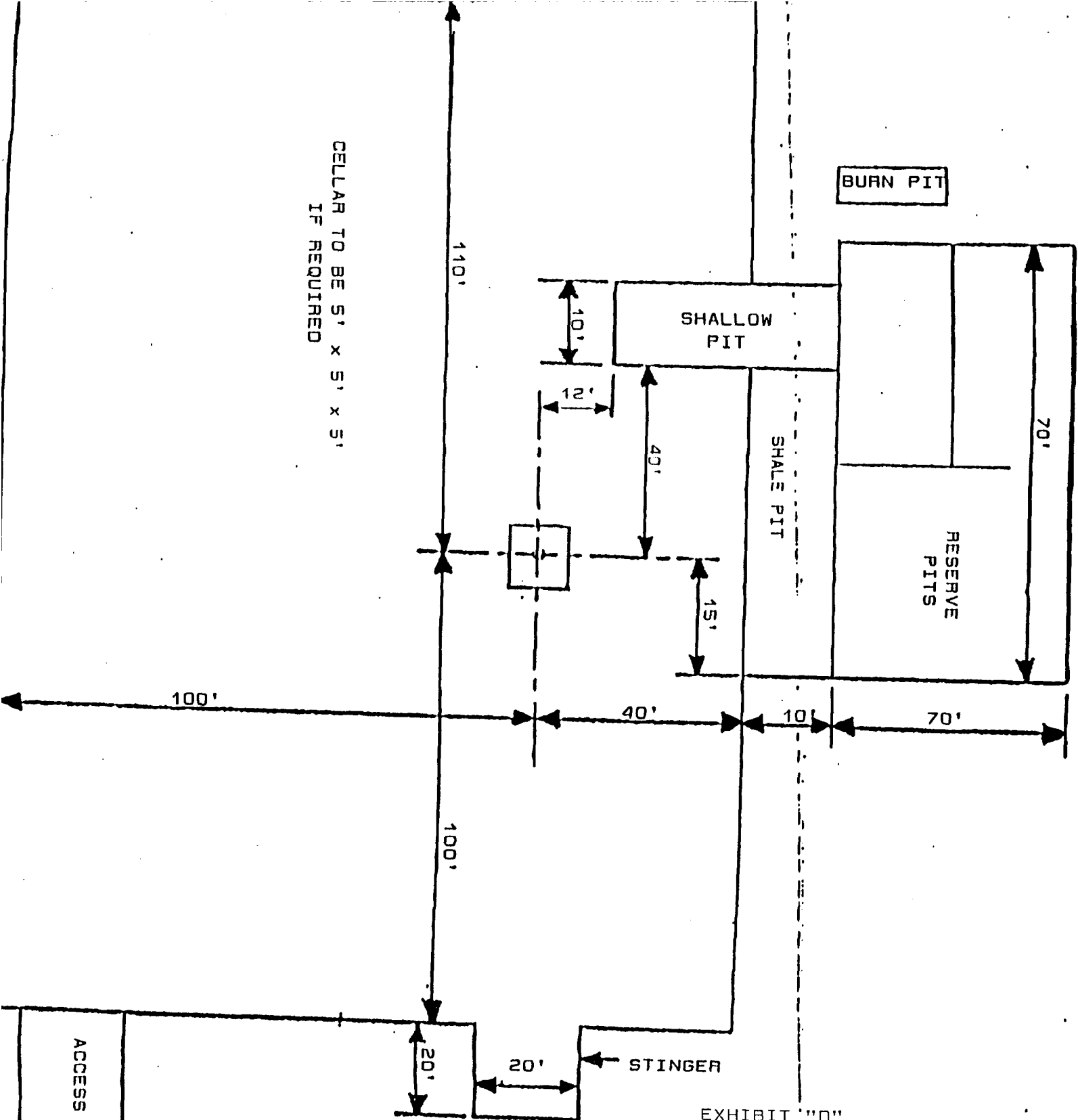
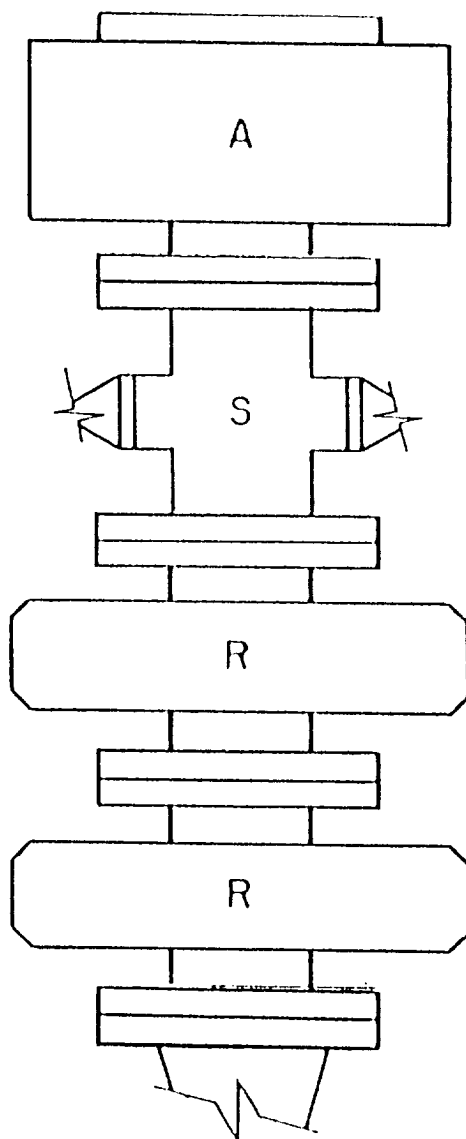


EXHIBIT "D"
 Socorro Petroleum Company
 H.E. West "A" #19
 1305' FEL & 1305' FSL
 Sec.4-T17S-R31E
 Eddy County, New Mexico
 Rig Layout



A - Stripping Rubber

R - Blind and Pipe Rams

EXHIBIT "E"
Socorro Petroleum Company
H.E. West "A" #19
1305' FEL & 1305' FSL
Sec.4-T17S-R31E
Eddy County, New Mexico
BOP Diagram