

N.M.O.C.D. GODY United States Department of the Interior

GLOLOGICAL SURVIA

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May 10, 1979

Depco, Inc. 800 Central Odessa, Texas 79761 DEPCO, INC.

El Paso Federal Com. No. 1 660 FNL 660 FEL Sec. 21, T13S, R30E Chaves County Lease No. NM-19438

Above Data Required on Well Sign

Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 10,250 feet to test the Mississippian is hereby approved subject to compliance with the OIL AND GAS OPERATING REGUALTIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- 3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be not less than $8" \times 5"$ in size and each page should identify the well.
- All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate sandstone brown (Federal Standard No. 595A, color 20318 or 30318).
- Before drilling below the 8-5/8" intermediate casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- 6. A kelly cock will be installed and maintained in operable condition.
- 7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an inde-



pendent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

- 8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- 9. Cement behine the 12-3/4" casing must be circulated.
- 10. Please not that anyone (including contractors and service companies) contacting the Survey on behalf of the operator must indentify the well with all of the information required above for the well sign.

Sincerely yours,

Commence of the second

Joe G. Lara Acting District Engineer

SUBMIT IN TRIPLICATE*

(Other instructi reverse side, Form approved. Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

5. LEASE DESIGNATION AND SERIAL NO. **GEOLOGICAL SURVEY** NM 19438 APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 1a. TYPE OF WORK DRILL X DEEPEN | 7. UNIT AGREEMENT NAME PLUG BACK b. TYPE OF WELL OIL U GAS WELL SINGLE ZONE MULTIPLE ZONE S. FARM OR LEASE NAME OTHER 2. NAME OF OPERATOR El Paso Pederal Com. DEPCO, Inc. 9. WELL NO. 3. ADDRESS OF OPERATOR 800 Central, Odessa, Texas 79761

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) 10. FIELD AND POOL, OR WILDCAT Wildcat Unit Letter A, 660' FN & EL, Sec. 21, T13S, R30E 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA At proposed prod. zone 21-13S-30B 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 12. COUNTY OR PARISH | 13. STATE Chaves 15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, PT. N. M. 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL 660' 280 (Also to nearest drlg. line, if any) 320 18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS None 10,250 Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START* 3875.2 GR On Approval $\overline{23}$. PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH QUANTITY OF CEMENT 17 1/2 12 3/4 34.6 400 450 11 8 5/8 **24 & 32** 2800 650 7 7/3 4 1/2 11.6

Mud Program: Letter from Texas Mud & Chemical Co.

BOP Program: See Exhibit D Gas production not dedicated.

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10,250

MAY 1 4 1979

O. C. C. ARTESIA, OFFICE RECEIVED
DEC 6 1978 U.S. GEOLUGICAL SURVEY ARTESIA, NEW MEXICO

450

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 ang.

SIGNED D. R. MSSOD TITLE	Chief Clerk	DATE 12-1-78
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATE	
APPROVED BY		DATE

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-685231

NEW MEXICO OIL CONSERVATION COMMISSION WELL L ATION AND ACREAGE DEDICATION PL .T

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

normation Well No. Depeo. Inc. El Paso Federal Com. Section 'nit ! etter 21 13 South 30 East Chaves 660 North feet from the line and East feet from the Ground | gvel Elev. Producing Formation Foo! Dedicated Acreage: 3875.2 Mississippian Wildcat 320 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) DEC 6 1978 3. If more than one lease of different ownership is dedicated to the well, have the dated by communitization, unitization, force-pooling. etc? If answer is "no." list the owners and tract descriptions which have actually been which have actually been this form if necessary.) To be communitized upon completion as a No allowable will be assigned. this form if necessary.) To be communitized upon completion as a produced the discountry of the communities of the series and tract descriptions which have actually been the series and the series of the series and the series are the series and the series are the series and the series are th 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 Commis-CERTIFICATION I hereby certify that the information con-NM 19438 W.I. Owners DEPCO 50% D. R. Mason NICOR 50% Chief Clerk Company Royalty Owner U. S. A. DEPCO, Inc. 12-1-78 W. I. Owners DEPCO 50% I hemby certify that the well location NICOR 50% shown on this plat was platted from field NM 18501 Royalty Owner U. S. A. Date Surveyed November 14, 1978 Pegisteres Pricessi : a. F 676

7 6 40

AT ICATION FOR DRILLING

DEPCO, Inc.

No. 1 El Paso Federal Com., Sec. 21, T13S, R30E Chaves County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill, DEPCO, Inc. submits the following items of pertinent information in accordance with USGS requirements.

1. The Estimated tops of geologic markers are as follows:

San Andre s	2695
Glorieta	4100
Tubb	5555
Abo	637 0
Wolfcamp	7 58 0
Cisco	8283
Canyon	865 0
Strawn	9035
Atoka	9385
Morrow	9615
Mississippi Ls.	9885
TD	10,250

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

Water: Approximately 100 feet or less
Oil and gas Strawn 9035-9385
Morrow 9615-9775
Miss. 9885-10,250

- 3. Proposed Casing Program: See Form 9-331C
- 4. Pressure Control Equipment: See Form 9-331C and Exhibit E.
- 5. Mud Program: See Form 9-331C and attached letter from Texas Mud & Chemical Co.
- 6. Auxiliary Equipment: Blowout Preventer, Inside Blowout Preventer, Kelley Cock.
- 7. Testing, Logging and Coring Program:

Drill Stem Test: Strawn -1
Morrow -2
Miss. -1

10-foot samples from 7388' to TD.

Logging: Dual Laterolog and Compensated Neutron/Density with Gamma Ray and C liper.

- 8. No abnormal pressures or temperatures are anticipated.
- 9. Anticipated starting date: As soon as possible.

DEPCO, Inc.

No. 1 E1 Paso Federal Com.
660' FN & EL.

Section 21, T13S, R30E
Chaves County, New Mexico

This plan is submitted with Form 9-331C, Application for Permit to Drill AND THE MEXICO

This plan is submitted with Form 9-331C, Application for Permit to Drill AND THE MEXICO

The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the percessary Surface disturbance the proposed construction activities and operations plan, the necessary Surface disturbance and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS.

- A. Exhibit A is a portion of the USGS Map of Chaves County, New Mexico, on a scale of 1" = 2000' showing the area of the proposed wellsite and the roads in the vicinity. The wellsite is located approximately 30 miles east of Hagerman, New Mexico, and part of the access route to the location is indicated in red on Exhibit A.
- (1) Proceed east on Highway 31 from Hagerman, New Mexico, for approximately 30 miles to the intersection of Highway 31 and Hwy 6205. Go approximately 1 mile east.
- (2) Turn left on caliche road and continue for 0.9 mile, turn right and follow main road north.
- (3) Follow main road north for approximately 9.2 miles to right turn in road. Turn east and go approximately 1.5 miles to a cattleguard.
- (4) Just east of this cattleguard, the proposed access road will run due north 2000' to the location. The location is staked and flagged and clearly visible. The proposed access road is also staked and flagged.
- B. The existing improved access road has numerous turnouts, is in fair condition, and will require some repair.

2. PLANNED ACCESS ROAD.

- A. The proposed new access road will be approximately 2000' in length and 12 feet in width. It will be covered with six inches of compacted caliche. The road will be crowned with drainage on both sides and at least one turnout will be necessary. The new road will enter the drilling pad at the Southeast corner.
- B. The center line of the proposed access road has been staked and can be clearly seen from the existing access road.

3. LOCATION OF EXISTING WELLS.

A. See Exhibit C.

DEPCO, Inc. No. 1 El Pso Federal Com. Page. 2

- 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.
 - A. There are no DEPCO, Inc. production facilities on this lease.
 - B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive of oil, a gas powered self contained unit will be utilized. No power will be required if the well is productive of gas.
- 5. Location and type of water supply.
 - A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from privately owned or commercial sources and will be hauled to the location by truck over the existing and proposed roads on Exhibits A and B.
- 6. SOURCE OF CONSTRUCTION MATERIALS.
 - A. Caliche for construction of the drilling pad and the new access road, and repairs to the existing access road, will be obtained from one of the existing pits in the area.
- 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.
 - C. 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 U.S.G.S. for appropriate approval.
 - D. Oil produced during operations will be stored in tanks until sold.
 - E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
 - F. 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.
 - G. 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.
 - 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.
 - B. The ground surface at this site is rolling mounds 10-15 feet in height, and the well location is on the southeasterly slope of one of these mounds. Approximately 4 cut and fill will be required on the northwest corner to level the pad area, which will be covered with at least six inches of compacted caliche..

DEPCO , Inc. No. 1 El Paso Federal Com. Page 3.

- C. The reserve pits will be plastic lined.
- D. The pad and pit area has been staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE.

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash an junk.
- B. Unguarded pits, if any, containing fluids will be fenced until they have been filled.
- C. This location is on Federally owned surface and will be restored as per federal stipulations covering such restoration.
- D. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION.

- A. Topography: The wellsite is in an area of ridges reaching 10-15 feet in height over a lateral distance of several hundred feet.
- B. The topsoil at the wellsite is moderately hard packed sand.
- C. The vegetation cover at the wellsite is of a sparse amount, and consists primarily of prairie grass, mesquite, miscellaneous weeds, and prairie flowers. No wildlife was observed, but it is likely that typical semi-arid desert wildlife, such as rabbits, coyotes, gophers, rodents and snakes inhabit the area. The area is used for cattle grazing.
- D. There are no lakes, streams, or rivers within several miles of the wellsite. The Brooks tank is approximately 5 miles southwest of the proposed location, Sec. 6, T14s, R30e.
- E. There is one occupied dwelling approximately 4 miles SW in section 31. There is one windmill approximately 2 1/4 miles northwest of this location in Sec. 8, T13S, R30E.
- F. The wellsite is located on federally owned surface and the proposed access road is on federally owned surface.
- G. There is no evidence of any archeological, Historical, or cultural sites in the area.

12. OPERATORS REPRESENTATIVES,

A. The field representatives for assuring compliance with the approved surface use plan are:

Carl Bizzell
Production Superintendent
DEPCO, Inc.
800 Central Drive
Odessa, Texas 79761
Telephone:
9

915-337-1536 (Office) 915-366-2147 (Home) 915-337-5677 (Mobile)

DEPCO, Inc. No. El Paso Federal Com. Page 4

Kenneth Ragsdale

DEPCO, Inc.

Home Address:

Box 646

Artesia, New Mexico 88210

Telephone:

505-746-3685 (Home) 505-365-2593 (Mobile)

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; and, that the work associated with the operations proposed herein will be performed by DEPCO, Inc.and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

/2-4-78 Date

C. O. Bizzell - Production Superintendent

DEPCO, Inc.



TI (AS MUD AND CI EMICAL CO.

P. O. BOX 1988

PHONE A/C 915/381-0400

ODESSA, TEXAS 79760

November 28, 1978

Depco, Inc. 800 Central Odessa, Texas 79761

Attn: Mr. C. O. Bizzell

Dear Carl;

We are pleased to submit a Mud Program for your El Paso Federal Com. #1- to be drilled in Sec.21 ,T-13S, R-30E in Chaves County, New Mexico.

0 - 300' T.M.C. Gel and Lime Vis. 40-45 for hole conditions.

300 - 2,650' Drill with native mud, circulating reserve. Add Mud Seal as needed for seepage. Caustic for P.H. control. 9.5 - 10. Sweep hole with 100 bbl. slug. 45-50 Vis. to run pipe.

2,650 - 6,000' Drill with fresh water, circulating reserve. Caustic for P.H. control, adding Mud Seal if needed for seepage.

6,000 - 7,000' Add brine if needed to raise chloride to 100,000 P.P.M. Add Salt Gel and Visbestos to raise Vis. 33-34. Add 2-3% oil, also, 2-3% K.C.L. to go into Abo shale.

7,000 - 9,000' Maintain Vis. 33-34, Lower W/L 20 cc or less for D.S.T. in Wolfcamp. Maintain 2-3% oil.

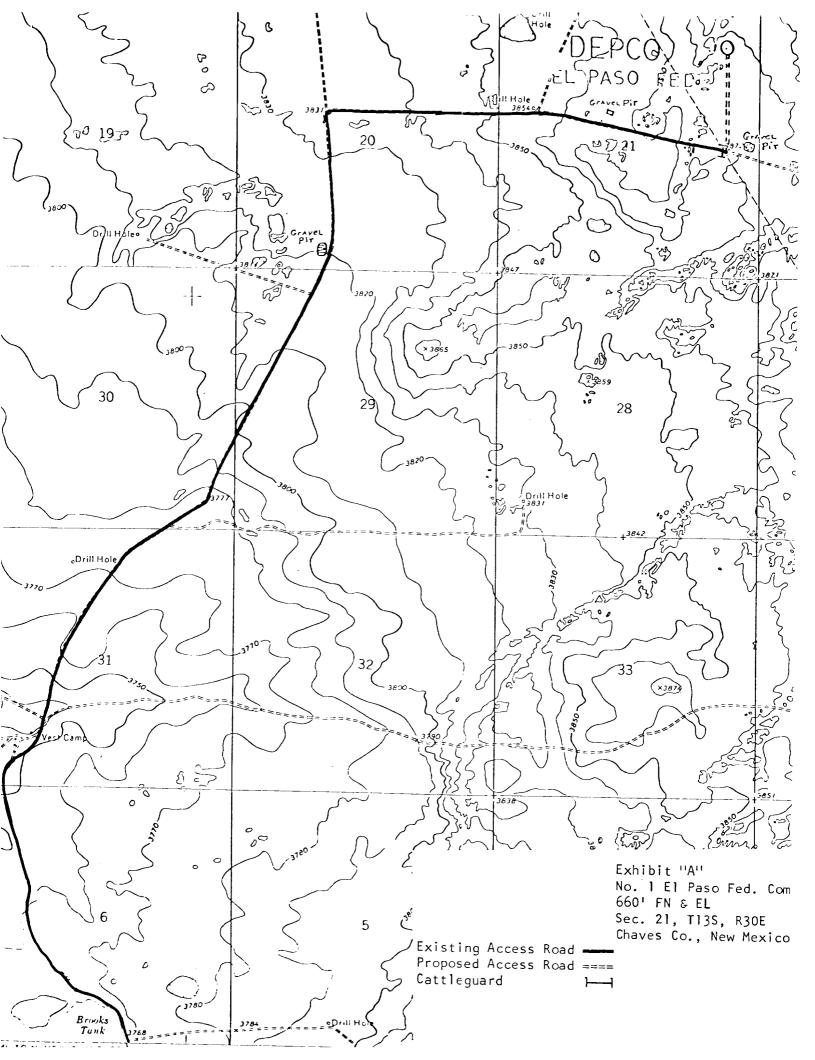
9,000 - T.D. Maintain same characteristic and lower W/L to 5 cc to go into Marrow.

Drlg. Hazards: Possible Abo shale heaving.

Est. Mud Cost: \$20,000.00

Engineer: Ronnie Koonce - Odessa 915/381 0400

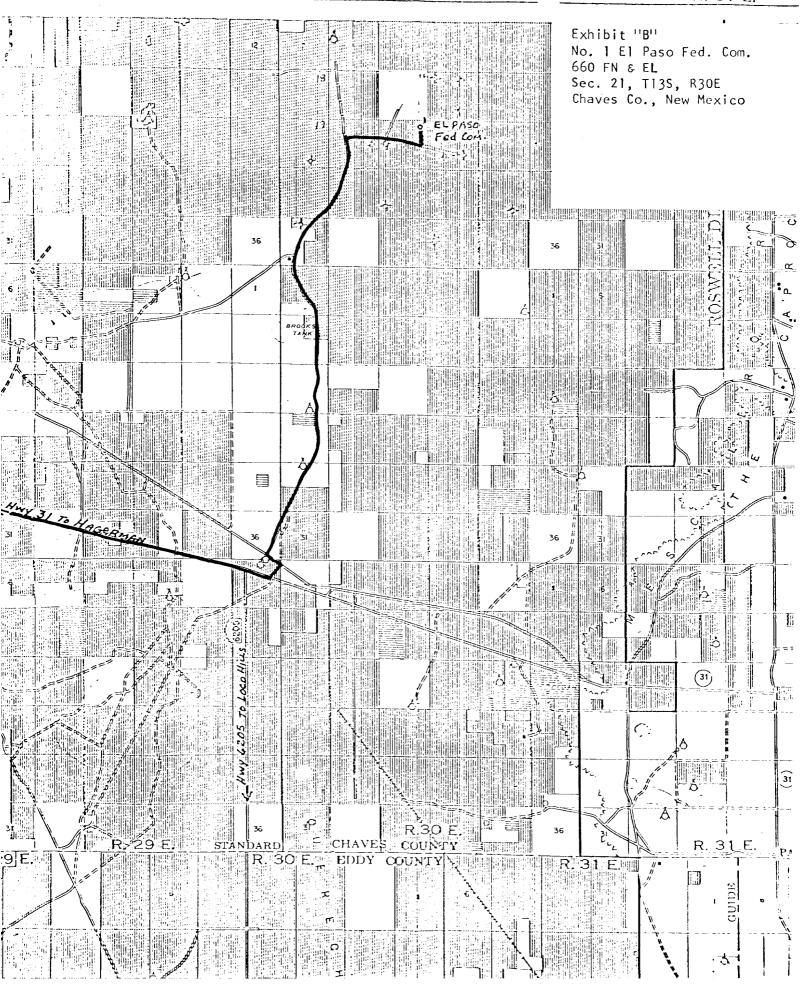
Stock Point: Lovington, New Mexico - call Odessa - 915/381-0400



NEW MEXICO

R. 29 E. R. 30 E. SE-11

R. 31 E.



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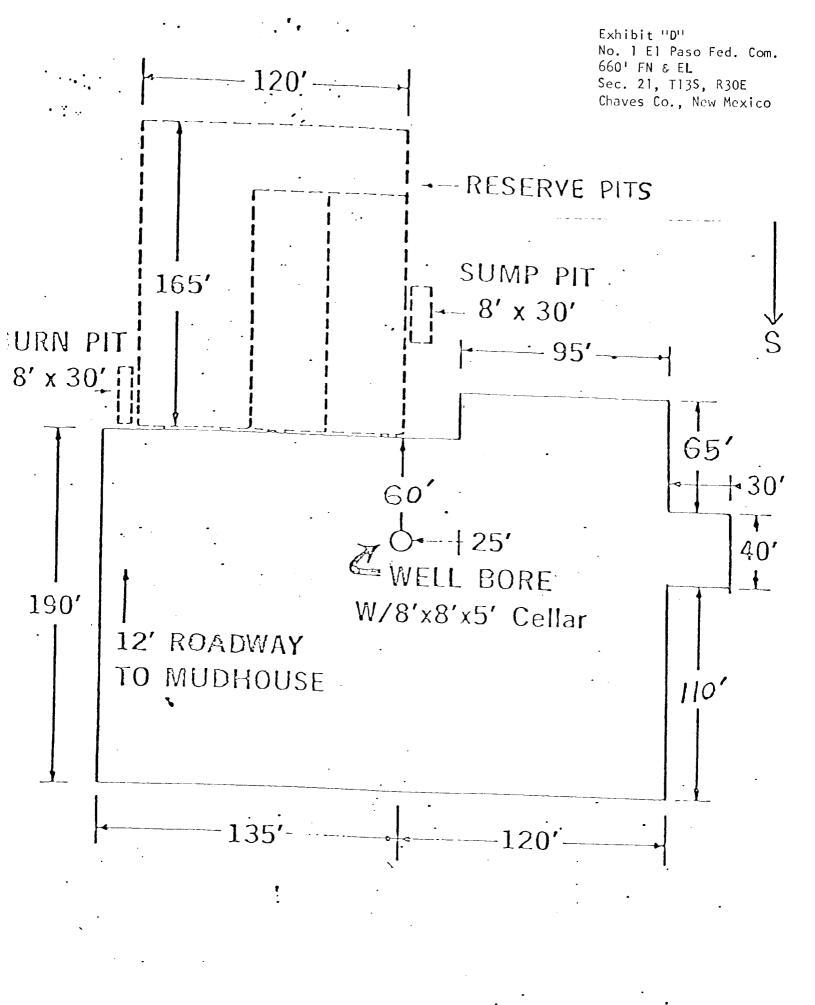


Exhibit "E"
No. 1 El Paso Fed. Com.
660' FN & EL
Sec. 21, T13S, R30E
Chaves Co., New Mexico

