



# United States Department of the Interior

GEOLOGICAL SURVEY  
P. O. Drawer U  
Artesia, New Mexico 88210

October 2, 1979

Dale C. Cheesman, Jr.  
1822 Bank of the Southwest Bldg.  
Houston, Texas 77002

Gentlemen:

DALE C. CHEESMAN, JR.  
Well No. 1 U.S.A.  
660 FNL 660 FEL Sec. 12 T.14S R.30E  
Chaves County Lease No. NM 17227

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 2,650 feet to test the Queen formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the 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 this approval including the GENERAL REQUIREMENTS.
3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
5. Cement behind the 8-5/8" casing must be circulated.
6. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

(SIGNED) GEORGE H. STEWART

George H. Stewart  
Acting District Engineer



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-005-20710

5. LEASE DESIGNATION AND SERIAL NO.

NM-17227

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

U.S.A.

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Caprock Queen

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

12-14S-30E

12. COUNTY OR PARISH 13. STATE

Chaves

New Mexico

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

Or

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Dale C. Cheesman, Jr.

3. ADDRESS OF OPERATOR

1822 Bank of the Southwest Building, Houston, Texas 77002

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

At surface 666' FNL &amp; 660' FEL SECTION 12, T 14S, R30E

Chaves County, New Mexico

At proposed prod. zone

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

22-1/2 miles North of Maljamar, New Mexico

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

1,120

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

N/A

19. PROPOSED DEPTH

2,650'

20. ROTARY OR CABLE TOOLS

Rotary

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

3,969.2 Ground Level

22. APPROX. DATE WORK WILL START\*

September 23, 1979

## 23. 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	23.0#	350'	150 sacks
7-7/8	4-1/2	9.5#	2,650'	250 sacks

1. Drill 12-1/4" hole to 350'.
2. Run 8-5/8" casing with float shoe & 3 centralizers.
3. Let cement set 6 hours. Install BOPE. Test to 1500 PSI.
4. Drill 7-7/8" hole to coring point if core is taken.
5. D.S.T. cored portion of hole.
6. Ream core hole to T.D., Log well, Plug & abandon or,
7. Run 4-1/2" production casing with guide shoe, collar, etc.
8. Cement casing in place.
9. Land casing and release drilling rig.

(BOPE - 10" Shaffer, 3000 PSI W.P., W/Blind & pipe rams,  
kill line and choke manifold)

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

*Dale C. Cheesman, Jr.*

TITLE

Agent

DATE

August 24, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

## 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: 1974-781-025/VIII-239

RECEIVED  
OCT - 5 1974  
O.C.D. HOBBS. OFFICE

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section

Owner: LALE C. CHEESMAN, JR.		Lease: U.S.A.		Well No: 1	
Section: 1	Range: 14 SOUTH	Meridian: 30 EAST	County: CHAVES		
Distance from North line: 660		Distance from East line: 660		Distance from South line: 660	
Producing Formation: Queen		Rock: Caprock		Estimated Acreage: 40	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 N/A

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary) N/A

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.

RECEIVED

AUG 2 1979

U.S. GEOLOGICAL SURVEY  
ARTECH, NEW MEXICO

660'  
660'

CERTIFICATION

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

*Russell A. Cox*

Name

Russell A. Cox

Position

Agent

Company

Dale C. Cheesman, Jr.

Date

8-24-79

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

AUGUST 15TH, 1979

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No.

John W. West

676

Ronald J. Eidson

3239

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

SUPPLEMENTAL REQUIRED INFORMATION ACCOMPANYING FORM 9331-C,  
DATED AUGUST 24, 1979.

OPERATOR: DALE C. CHEESMAN, JR.  
1822 BANK OF THE SOUTHWEST BUILDING  
HOUSTON, TEXAS 77002

WELL : U.S.A. NO. 1 (PROPOSED DEPTH 2,650')

1. LOCATION DESCRIPTION - 660' FROM THE NORTH LINE AND 660' FROM THE EAST LINE OF SECTION 12, T.14S, R.30 E, CHAVES COUNTY, NEW MEXICO.
2. THE ELEVATION ABOVE SEA LEVEL FOR THIS LOCATION IS 3,969.2 FEET.
3. THE GEOLOGIC NAME OF THE SURFACE LOCATION IS RECENT (QUATERNARY).
4. THIS WELL WILL BE DRILLED WITH A CONVENTIONAL ROTARY RIG UTILIZING A CONVENTIONAL CIRCULATED LIQUID MUD SYSTEM.
5. THE PROPOSED DEPTH OF THIS WELL IS 2,650'.
6. ESTIMATED TOPS OF GEOLOGIC MARKERS:

ANYHYDRITE	675'
SALT-TOP	775'
SALT-BOTTOM	1,400'
YATES	1,750'
QUEEN	2,600'

7. ESTIMATED DEPTHS OF ANTICIPATED OIL OR WATER: PRESENCE OF SHALLOW FRESH WATER VARIES FROM LOCATION TO LOCATION IN THIS AREA, FROM NON-EXISTANT TO VERY LIMITED VOLUME. OIL OR GAS IS ANTICIPATED IN THE QUEEN SAND AT  $\pm$  2,550'.
8. PROPOSED CASING PROGRAM:

SURFACE CASING	:	8-5/8", 23#, X-42, ST&C, RANGE 3 CASING.
PRODUCTION CASING	:	4-1/2", 9.50#, J-55, ST&C, RANGE 3 CASING.

9. SETTING DEPTH OF CASING:

8-5/8" @ 350' CEMENTED WITH 150 SACKS OF CLASS  
"C" CEMENT MIXED 2% CALCIUM CHLORIDE.

4-1/2" @ 2,650' CEMENTED WITH 250 SACKS OF CLASS  
"C" 50/50 POZMIX WITH 6#/SALT PLUS 2% GEL.

10. PRESSURE CONTROL EQUIPMENT:

SHAFFER 10" SERIES 900 TYPE "B" BLOW OUT PREVENTER  
WITH 4-1/2" PIPE RAMS AND BLANK RAMS. 3,000 PSI  
WORKING PRESSURE, 6,000 PSI TEST PRESSURE. HYDRAULIC  
REMOTE CONTROLS FOR ABOVE. KILL LINE AND CHOKE  
MANIFOLD. TOTAL SYSTEM WILL BE PRESSURE TESTED  
TO 1,500 PSI BEFORE DRILLING OUT BELOW SURFACE  
CASING. PIPE RAMS WILL BE CHECKED FOR OPERATION  
DAILY AND BLANK RAMS ON ALL BIT TRIPS.

11. ANTICIPATED MUD PROGRAM:

HOLE WILL BE DRILLED TO 2,400' WITH SALT SAUTRATED  
SYSTEM WITH NECESSARY SALT GEL TO KEEP HOLE CLEAN.  
(34 - 36 SECONDS VISCOSITY, 9.8 - 9.9#/GAL WEIGHT).  
LOWER WATER LOSS WITH CHEMICALS TO 8 - 10CC WITH  
MUD WEIGHT 9.9 - 10.0#/GAL. TO T.D. (2,650').

12. EVALUATION (TESTING, CORING & LOGGING):

TESTING : OPEN HOLE DRILL STEM TEST OF QUEEN  
SAND. 2,550  $\pm$  TO T.D.

CORING : POSSIBLE CONVENTIONAL CORE OF QUEEN SAND  
TO BE DETERMINED BY WELL SITE GEOLOGIST.

LOGGING : DUAL INDUCTION LATEROLOG, GAMMA, DENSITY,  
AND NEUTRON LOGS. (NO MUD LOGGING IS  
ANTICIPATED).

13. THERE ARE NO UNUSUAL HAZARDS IN THIS AREA. NUMEROUS AREA WELLS  
HAVE BEEN DRILLED WITHOUT DIFFICULTY. SURFACE CASING PROGRAM AND  
BLOW OUT PREVENTER SYSTEM SHOULD BE TOTALLY ADEQUATE TO  
DEAL WITH ANY PROBLEMS.

14. SUBJECT TO APPROVAL WE PLAN TO START THIS WELL ON OR ABOUT  
SEPTEMBER 23, 1979. APPROXIMATELY FIVE DAYS WILL BE REQUIRED  
TO DRILL THIS WELL. THE DESIGNATED OPERATOR BY FARMOUT  
AGREEMENT IS REQUIRED TO COMMENCE THIS WELL BY THE ABOVE DATE.

15. W.E.K. DRILLING COMPANY, ARTESIA WILL BE THE CONTRACTOR FOR THIS WELL. CONVENTIONAL ROTARY DRILLING RIG WILL BE UTILIZED.

SURFACE USE PLAN

Dale C. Cheesman, Jr.  
Well No. 1 U.S.A. LEASE NO. NM-17227  
660'/N&E SECTION 12 T. 14-S, R. 30 - E  
Chaves County, New Mexico

RECEIVED  
AUG 2 1977  
U.S. BUREAU OF LAND MANAGEMENT  
ALBUQUERQUE, NEW MEXICO

This plan is submitted with the application 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 re-habilitating 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:

- A. Exhibit "A" is a portion of a U.S.G.S. Sectional Map (Scale 1: 250,000) showing the location of the proposed well as staked. Eight and six/tenths miles North-Northwest of the intersection of N.M. State Highways 31 and 172, this intersection being nine miles North of Maljamar, New Mexico. The route to the location exits Highway 172, 11.7 miles North of the intersection with Highway 31 and follows an existing improved (Caliche) lease road two miles West, one mile south, 3/4 miles West, 1/4 miles North, then 3/10 of a mile Northwest to an abandoned location. (Paradox-Malco Federal No. 1, 330'/S & E. Section 7, T. 14-S., Range 31-E.). It is proposed that an access road will be constructed from this point to the subject well site.. This access road is described below in this report.
- B. Exhibit "B" is a plat showing all existing roads within a minimum of two miles of the planned well site, and the planned access road. The well site is less than two miles from a producible well.
- C. Existing lease roads (all currently in use) will be graded and eroded or thin spots will be brought up to a standard of 6" caliche watered and compacted to existing road width.

2. PLANNED ACCESS ROADS:

- A. Length and width: New road required will be 12' wide and 7,075' long. This new road is labeled and color coded red on exhibit "B". The centerline of the proposed new road from the beginning to the wellsite has been staked and flagged with the stakes being visible from any one to the next. The proposed new access road will be constructed by leveling existing sand and top leveled road bed with 6" deep X 12' wide watered compacted caliche.
- B. Turnouts: Five approximately equally spaced turnouts will be constructed along the proposed new access road. This construction will increase the width of the new road to 20 feet for a distance of 30 feet.
- C. Culverts: None required.
- D. Cuts and fills: None required.
- E. Gates, cattleguards: One cattleguard will be installed in an existing fence approximately 3,900' southeast from the wellsite on the access road to be constructed.

3. LOCATION OF EXISTING WELLS:

- A. There are no existing facilities.
- B. If the proposed well is completed for production the location of the proposed facilities will be located on the well pad. A schematic diagram of these facilities is included as Exhibit "C".

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. Water will be purchased and trucked to the location from approximately 4-1/2 miles east of the well site. Source of the water is the Ogallala fresh water formation.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the road and the well pad will be obtained from an existing pit in the NE/4 NW/4 Sec. 16, T.14 S., R. 31 E. This open pit is located on federal lands. Operator's dirt contractor will obtain clearance before removing calache from this pit.

7. METHODS OF HANDLING WASTE DISPOSALS:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced while testing will be disposed of in the drilling pits. Oil produced while testing will be stored in test tanks until cleared and sold.
- D. Current laws and regulations pertaining to 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 dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "D".
- F. All trash and debris will be buried or removed from the wellsite 30 days after finishing drilling and/or completion operations.

8. ANCILIARY FACILITIES:

- A. No permanent housing camps, airstrips or facilities are anticipated.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit, and location of major rig components.
- B. Only minor leveling of the wellsite will be required. No significant cuts and fills will be necessary.
- C. The pad and pit area has been staked and flagged.
- D. All staking and flagging (road and location) performed by West Engineering Company, Hobbs, New Mexico.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations all equipment and other materials not needed for operations will be removed. Pits will be filled and

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. After abandonment, any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days of abandonment.

11. OTHER INFORMATION:

- A. TOPOGRAPHY: Land surface is flat with some undulations with a few scattered sand dunes; approximately one or two to each quarter section.
- B. SOIL: Deep, fine, unconsolidated sand underlain by caliche.
- C. FLORA AND FAUNA: The vegetation consists of a few scattered mesquite three to four feet tall, shinnery, yucca, and sparse native grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove, quail, and a few antelope.
- D. PONDS AND STREAMS: There are no rivers, streams, lakes or ponds in the area.
- E. RESIDENCES AND OTHER STRUCTURES: The nearest dwelling is five miles East-Southeast of the wellsite. An oilfield tank battery is located 2-1/2 miles Southeast of the wellsite.
- F. LAND USE: Grazing and hunting in season.
- G. SURFACE OWNERSHIP: Wellsite is on Federal surface. The proposed new road construction is also on Federal surface.

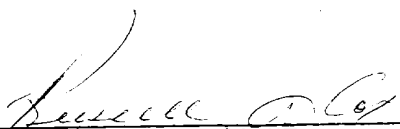
12. OPERATORS REPRESENTATIVE: The Field Representatives responsible for assuring compliance with the approved surface use and operations plan as follows:

Russell A. Cox  
1822 Bank of the Southwest Building  
Houston, Texas 77002  
Office Phone: 713/652-5866  
Home Phone: 713/784-3685

Lorenzo B. Taylor  
1822 Bank of the Southwest Building  
Houston, Texas 77002  
Office Phone: 713/652-5866  
Home Phone: 713/782-6073

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 that 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 Dale C. Cheesman, Jr., designated operator, and his contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
\_\_\_\_\_  
RUSSELL A. COX, AGENT

8/24/79  
\_\_\_\_\_  
DATE

EXHIBIT "A"

Dale C. Cheesman, Jr.  
Well No. 1 U.S.A. LEASE NO. NM-17227  
660'/N&E SECTION 12 T. 14-S, R. 30 - E  
Chaves County, New Mexico

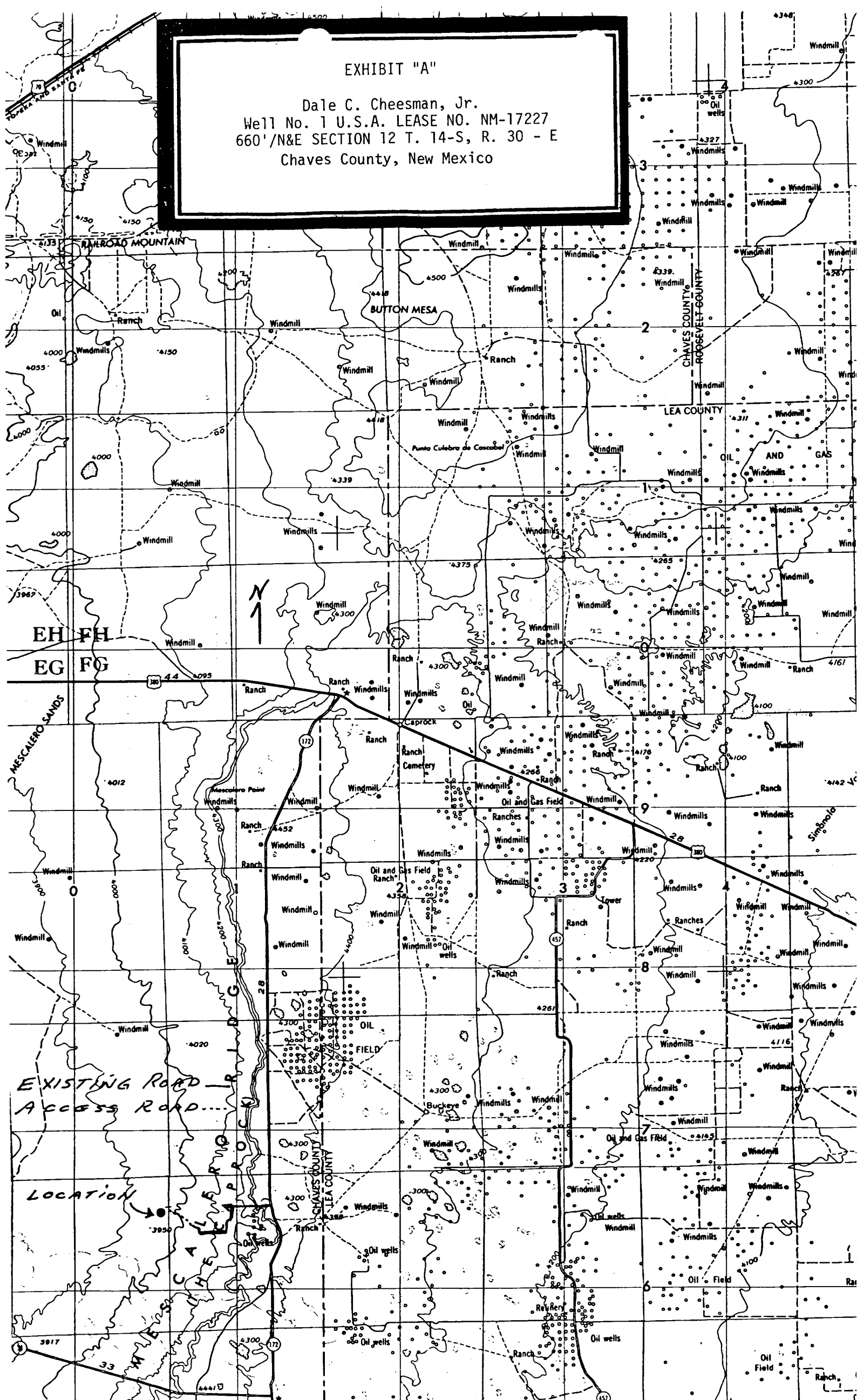
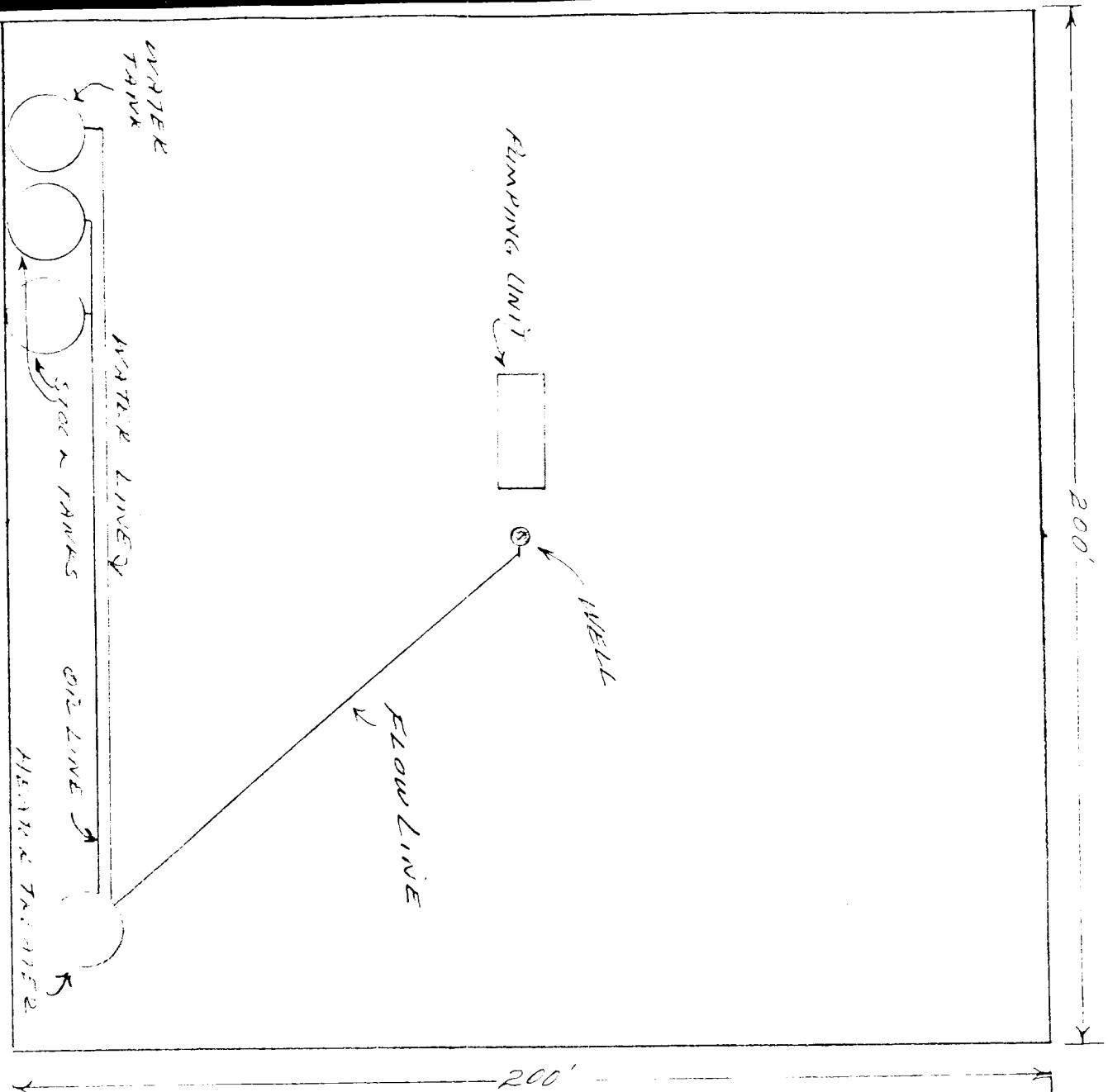
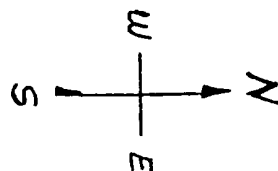


EXHIBIT "C"

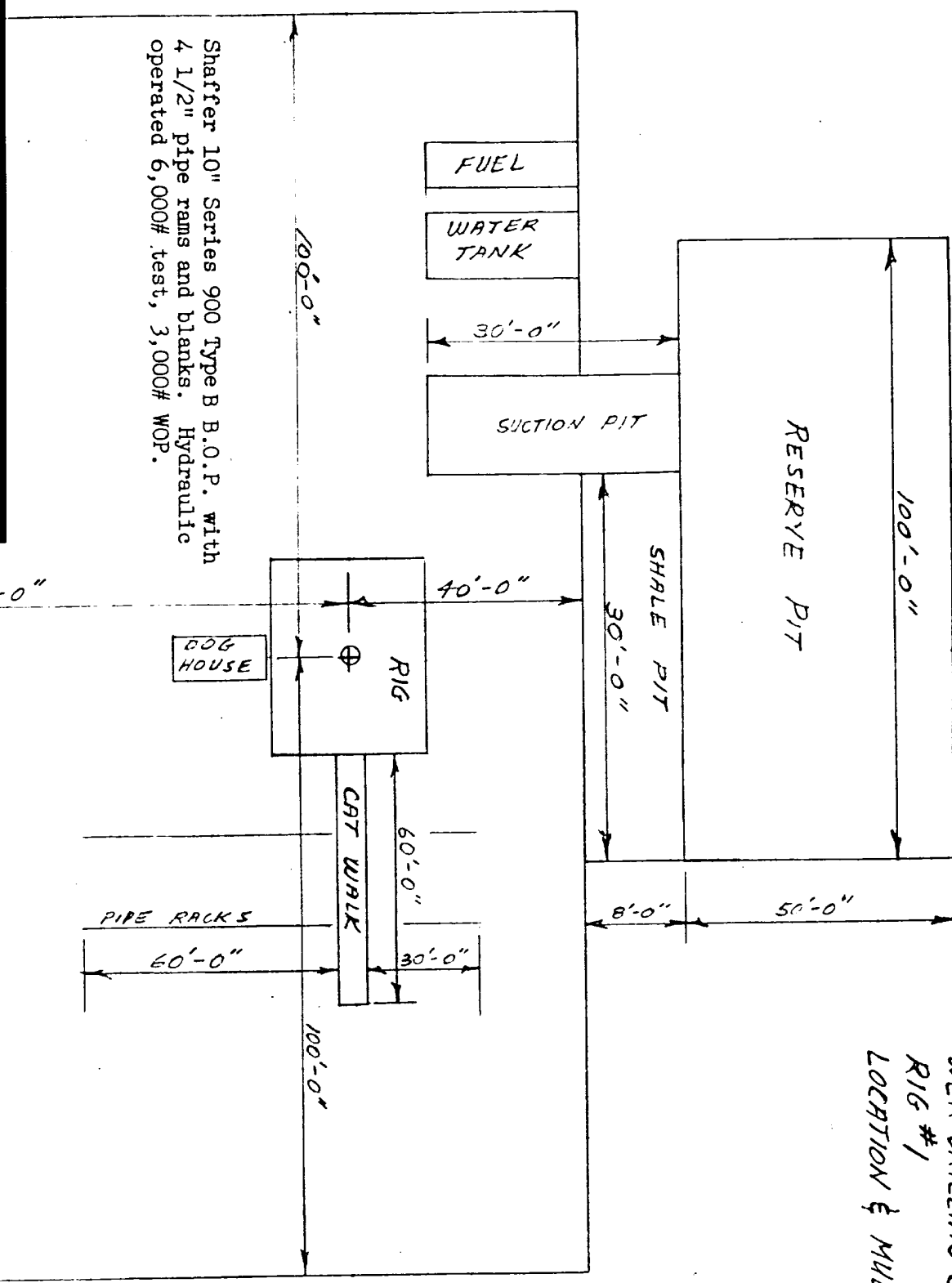
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Well No. 1 U.S.A. LEASE NO. NM-17227  
660'/N&E SECTION 12 T. 14-S, R. 30 - E  
Chaves County, New Mexico



SCALE 1" = 30'



WEK DRILLING CO., INC.  
RIG #1  
LOCATION & MUD PIT SPECS.



Shaffer 10" Series 900 Type B B.O.P. with  
4 1/2" pipe rams and blanks. Hydraulic  
operated 6,000# test, 3,000# WOP.

EXHIBIT "D"

Dale C. Cheesman, Jr.  
Well No. 1 U.S.A. LEASE NO. NM-17227  
660' N&E SECTION 12 T. 14-S, R. 30 - E  
Chaves County, New Mexico

TRASH  
PIT

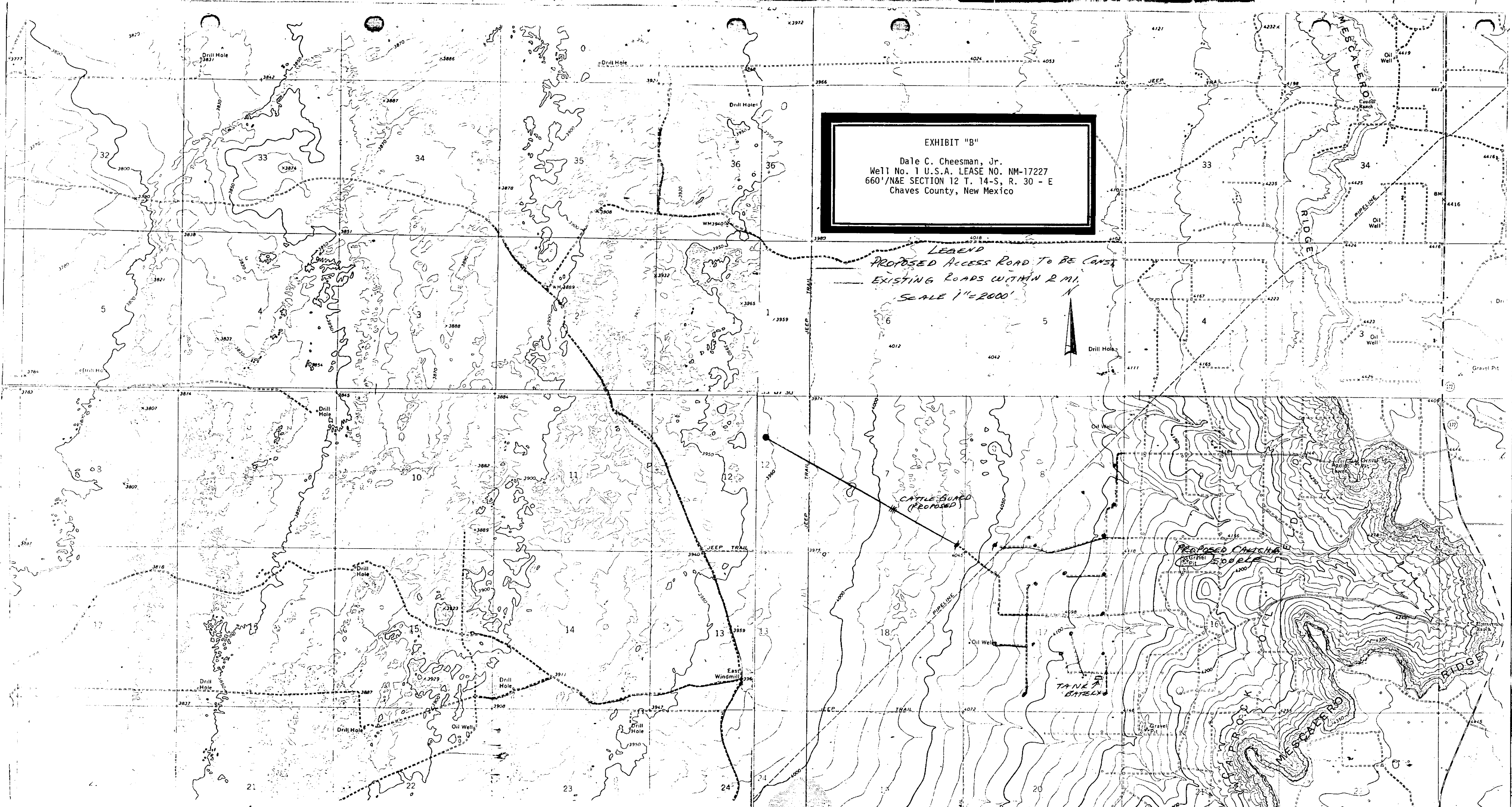


EXHIBIT "B"

Dale C. Cheesman, Jr.  
Well No. 1 U.S.A. LEASE NO. NM-17227  
660' N&E SECTION 12 T. 14-S, R. 30 - E  
Chaves County, New Mexico

LEGEND  
PROPOSED ACCESS ROAD TO BE CONST.  
EXISTING ROADS WITHIN 2 MI.  
SCALE 1"=2000'



CATTLE GUARD  
(PROPOSED)

PROPOSED CATCHMENT  
AREA

TANK  
BATTERY