

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

DAVIS OIL COMPANY

3. ADDRESS OF OPERATOR

410-17th Street, Suite 1400 Denver, Colo. 80202

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

At surface

NWNW Sec. 34 T21N-R6W 790' FNL & 790' FWL

At proposed prod. zone

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

Counselor - 20 Miles North

15. DISTANCE FROM PROPOSED*

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

790' FNL

18. DISTANCE FROM PROPOSED LOCATION*

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

None

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH

1550'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

6823' Gr

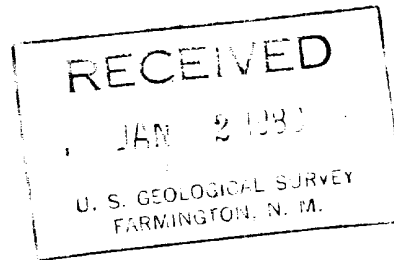
22. APPROX. DATE WORK WILL START*

Upon Approval

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"	24#, K55, STC	New, 0-150'	75 sxs. Est.
7 7/8"	5 1/2"	15.5#, K55, LTC	New 0-1550'	250 sxs. Est.

(SEE TEN POINT PROGRAM)

FOLLOWING OPERATIONS AUTHORIZED ARE
GAS NOT DEBITED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present production 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

ED LAFAYE

TITLE Chief Geologist

(This space for Federal or State office use)

PERMIT NO.

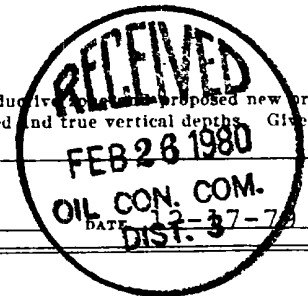
APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY

TITLE

DATE



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

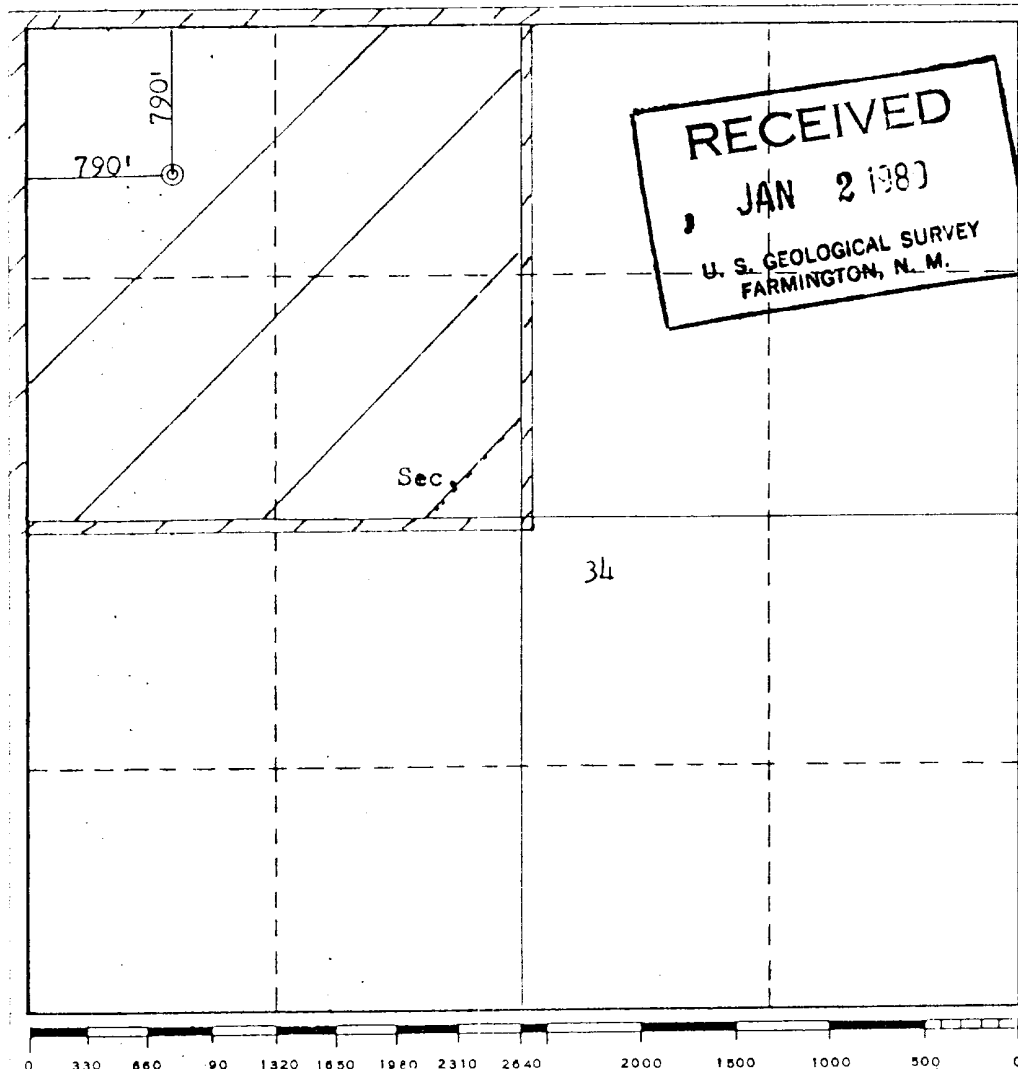
Operator DAVIS OIL COMPANY			Lease CASTLE-FEDERAL		Well No. 1
Unit Letter D	Section 34	Township 21N	Range 6W	County SANDOVAL	
Actual Footage Location of Well:					
790 feet from the North line and		790 feet from the West line			
Ground Level Elev. 6823	Producing Formation Chacra Monette	Pool Wildcat	Dedicated Acreage: 160 Acres		

- 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). **N/A**
- 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 Commission.



CERTIFICATION

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

David T. Barber
Name
Permit Supervisor
Position
Davis Oil Company
Company
Dec 28, 1979
Date

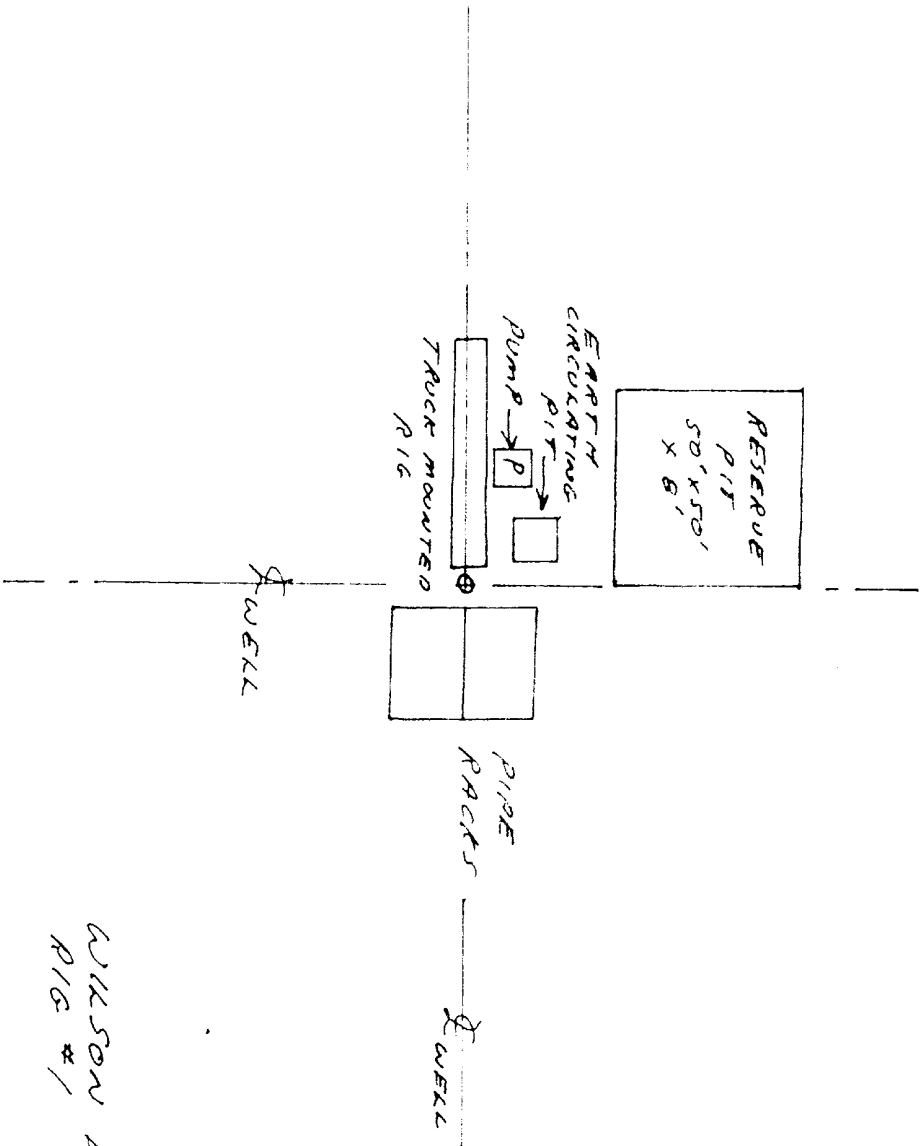
I hereby certify that the well location shown on this plat was plotted from field notes and/or surveys made by me or under my supervision, and that the same is correct to the best of my knowledge and belief.

RECEIVED
FEB 26 1980
OIL CON. COM.
DIST. 3

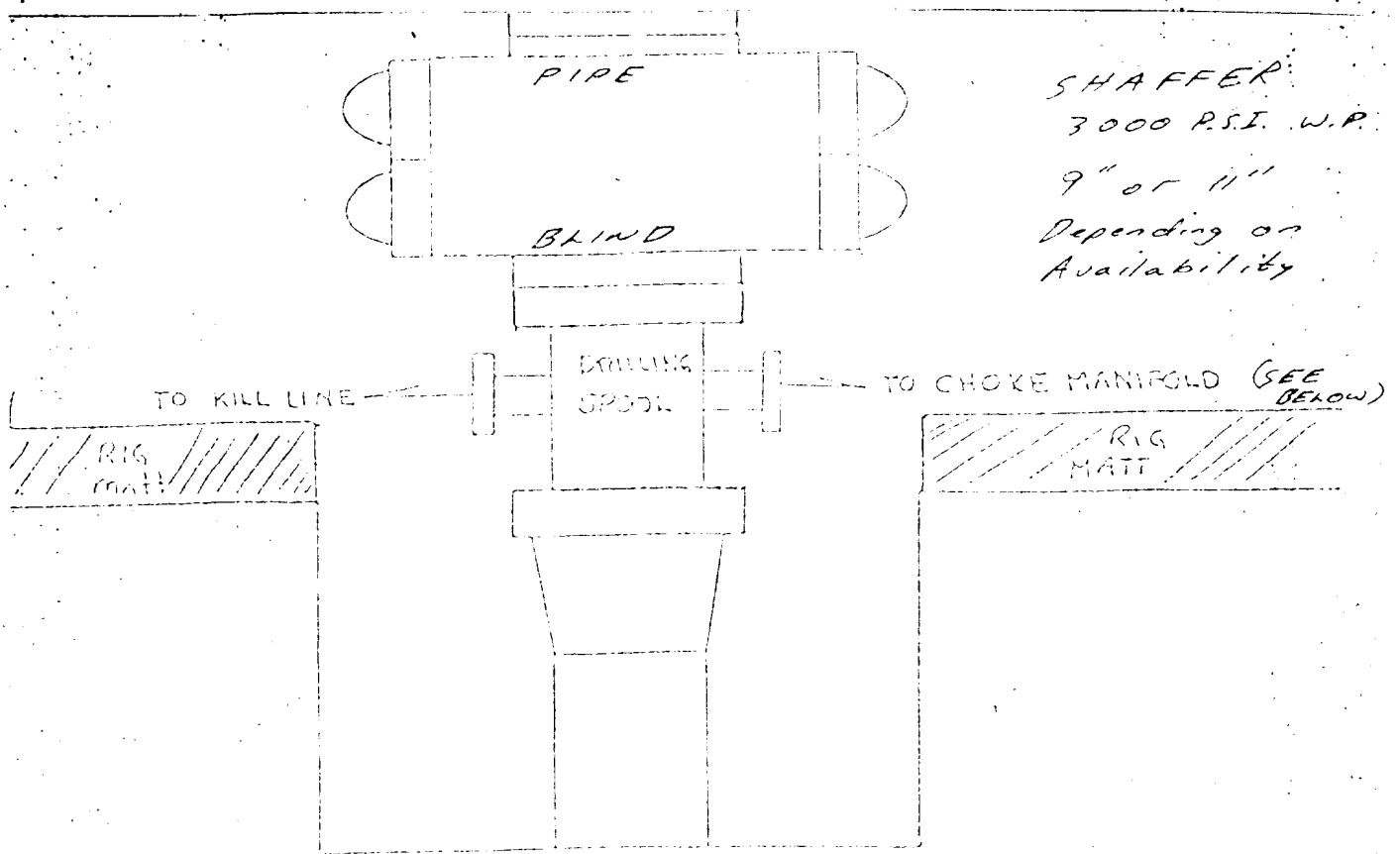
Date Surveyed
November 16, 1979
Registered Professional Engineer
and/or Land Surveyor
Fred B. Kerr Jr.
Certificate No. *3950*
B. KERR, JR.

TEN POINT PROGRAM

- 1) SURFACE FORMATION: Nacimiento Formation
- 2 & 3) ESTIMATED TOPS: (Water, Oil, Gas or Mineral bearing formations)
- | | | |
|----------------|---------|--------------------------|
| Nacimiento | Surface | Fresh water where porous |
| Ojo Alamo | 100' | Fresh water |
| Kirtland Shale | 230' | Tite |
| Fruitland | 650' | Brackish water |
| Picture Cliffs | 820' | Brackish water |
| Chacra | 1120' | Possible Gas Productive |
| Menefee | 1490' | Possible Gas Productive |
| Total Depth | 1550' | |
- 4) CASING PROGRAM: 8 5/8", 24#, K55, STC, New, 0-150', 75 sxs. Est.
5 1/2", 15.5#, K55, LTC, New, 0-1550', 250 sxs. Est.
- 5) PRESSURE CONTROL EQUIPMENT: (See attached schematic diagram) BOP's and choke manifold will be installed and pressure tested before drilling out under surface casing and then will be checked daily as to mechanical operating condition.
- 6) MUD PROGRAM: 0-150' Spud Mud
150-1550' Gel- Chemical 8.6-9.0 (Mud wt. as required to control Formation Pressure) 35-45 vis., 15 cc WL., PH 9.5.

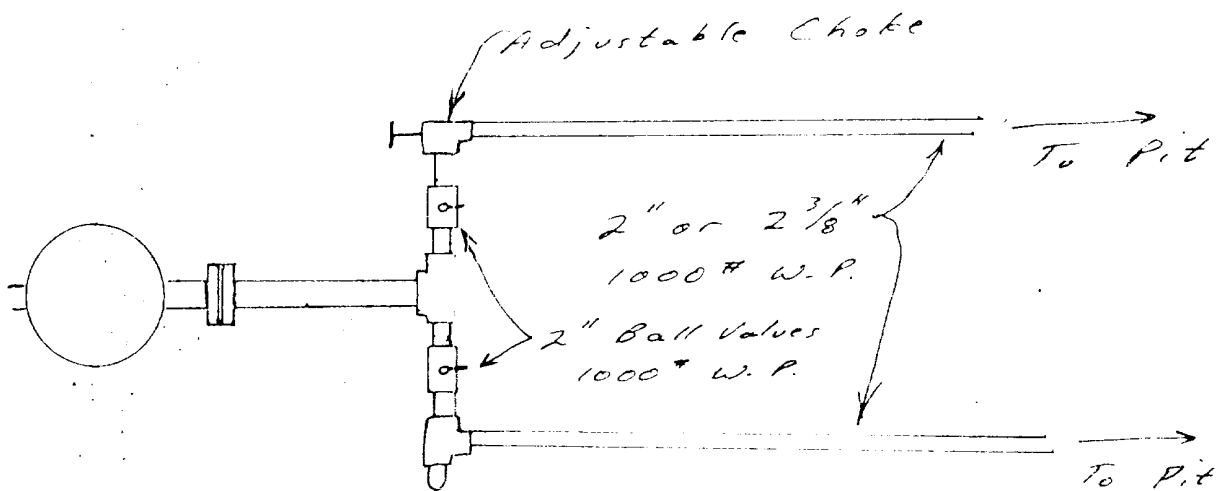


WILSON DRILLING
RIG #1



SHAFER
3000 P.S.I. W.P.
9" or 11"
Depending on
Availability

BOP STACK		BY	DATE
		NO.	



CHOKE MANIFOLD

DAVIS OIL COMPANY
MULTIPOINT SURFACE USE PLAN
(Per NTL 6)

LEASE NAME Castle Federal WELL NUMBER 1, NW-NW SEC. 34 T 21N R 6W
FEDERAL LEASE NUMBER NM - 35522 COUNTY Sandoval, STATE New Mexico

1. EXISTING ROADS:

A. PROPOSED WELL SITE: See Surveyors Plat and maps "A" and/or "B" attached.

B. DIRECTIONS TO LOCATION:

From Farmington travel East 12.5 miles to Bloomfield, then South on Highway 44 for 55 miles to Counselor Post, then South 14.4 miles, then turn West 3.4 miles, then turn right 200 feet to location.

C. ACCESS ROADS TO LOCATION: (See maps "A" and/or "B") Existing roads, No upgrading needed: Purple. Existing roads and/or trails requiring upgrading: Orange. Proposed New Road Construction: Red.

D. EXISTING ROADS WITHIN 3 MILES (IF EXPLORATORY WELL:) See maps "A" and/or "B" attached. Present surface and condition of existing roads:

3. LOCATION OF EXISTING WELLS: SEE MAPS "A" AND/OR "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. See maps "A" and/or "B" and Plat "C"

B. See maps "A" and/or "B" and Plat "C".

Reserve pit will be fenced on 3 sides prior to beginning of drilling operations. The 4th side will be fenced when the rig moves off. Pit will be over-head flagged if oil residue is left on surface. Good oilfield methods will be employed in all construction.

C. Plans for Restoration:

Topsoil will be stockpiled for reuse and disturbed areas no longer needed will be restored as requested by the Surface Management Agency and U.S.G.S.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. See maps "A" and/or "B" attached.

B. Method of transporting water:

Water hauler will be responsible for getting water and he will comply with State & Federal requirements.

C. Water well to be drilled on lease ~~XXXXX~~ (no)

6. SOURCE OF CONSTRUCTION MATERIALS:

A. See maps "A" and/or "B" attached.

B. Surface ownership (Federal) (Indian) (State) (Fee)

C. Type, source and point of use of construction materials:

N/A

D. Access roads needed to source of construction materials:

N/A

7. METHODS FOR HANDLING WASTE DISPOSAL:

(1) Cuttings will be buried in reserve pit.

(2) Drilling Fluid: Will be buried in reserve pit when pit is dry

11. OTHER INFORMATION:

(1) Topography, flora and fauna, soils and geology:

A. Topography:

Gently rolling alluvial slope with Southerly drainage.

B. Vegetation:

Major Existing Species:	Per-Cent
<u>Artemisia tridentata</u>	<u>Big Sagebrush</u>
<u>Bouteloua gracilis</u>	<u>Blue grana</u>
<u>Brassica species</u>	<u>Mustard</u>
<u>Gutierrezia sarothrae</u>	<u>Broom Snakeweed</u>
<u>Stipa comata</u>	<u>Needle & Thread grass</u>
<u>Opuntia species</u>	<u>Prickly Pear</u>
<u>Yucca species</u>	<u>Yucca (Soapweed)</u>

Seed mix to be determined by Surface Management Agency.

C. Fauna:

Types Observed:

Horses were observed, Cattle, Cottontail rabbit and deer are
suspected.

D. Soils and Geology:

Sandy and sandy, clayey loam

E. Water well desired by B.L.M.?

Conditions of Acceptance:

N/A

(2) Surface Ownership:

	ACCESS	DRILL SITE	MINERALS
Federal	☒	☒	☒
State	☐	☐	☐
Private	☐	☐	☐

(3) Proximity of surface water, dwellings, Archaeological, Historical, or Cultural sites:

DAVIS OIL COMPANY

Castle Federal #1

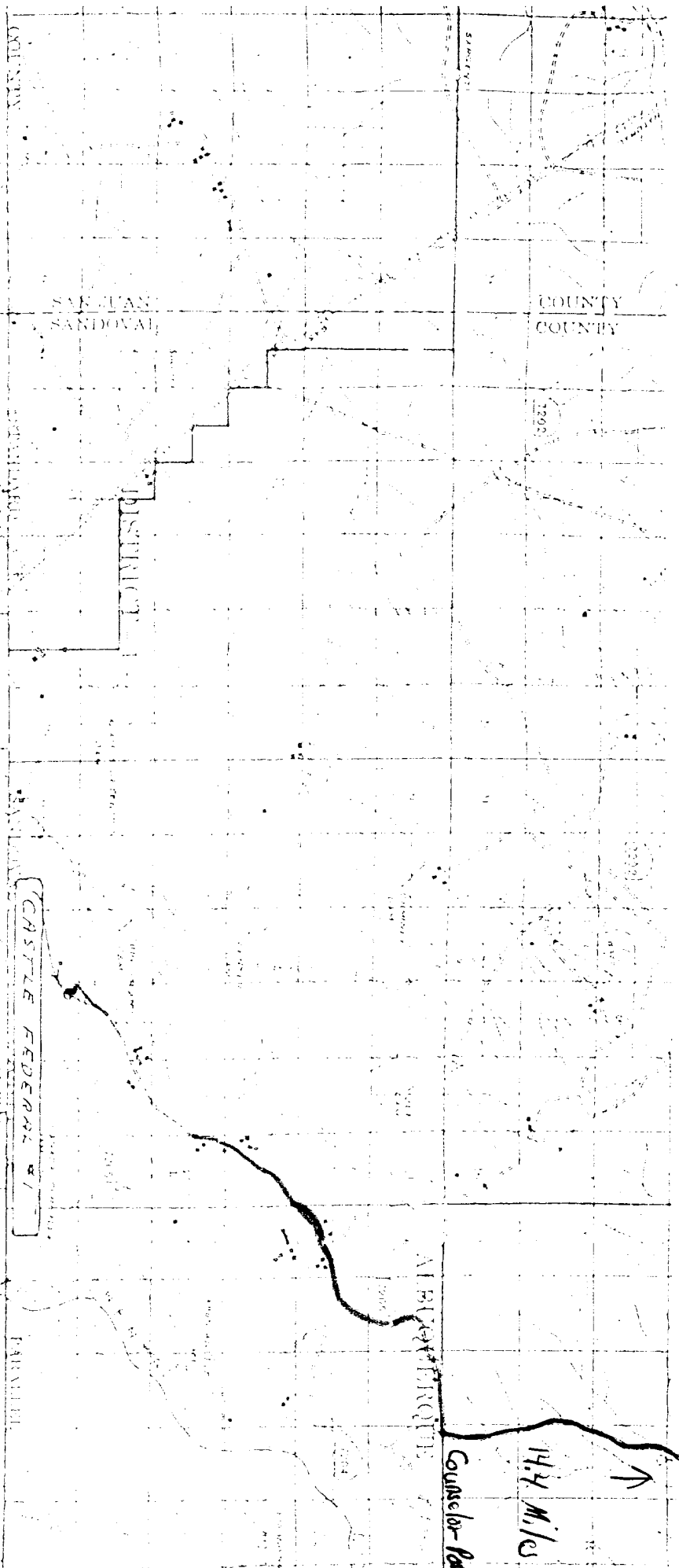
NEW SEC 34

T 21 N R 5 W

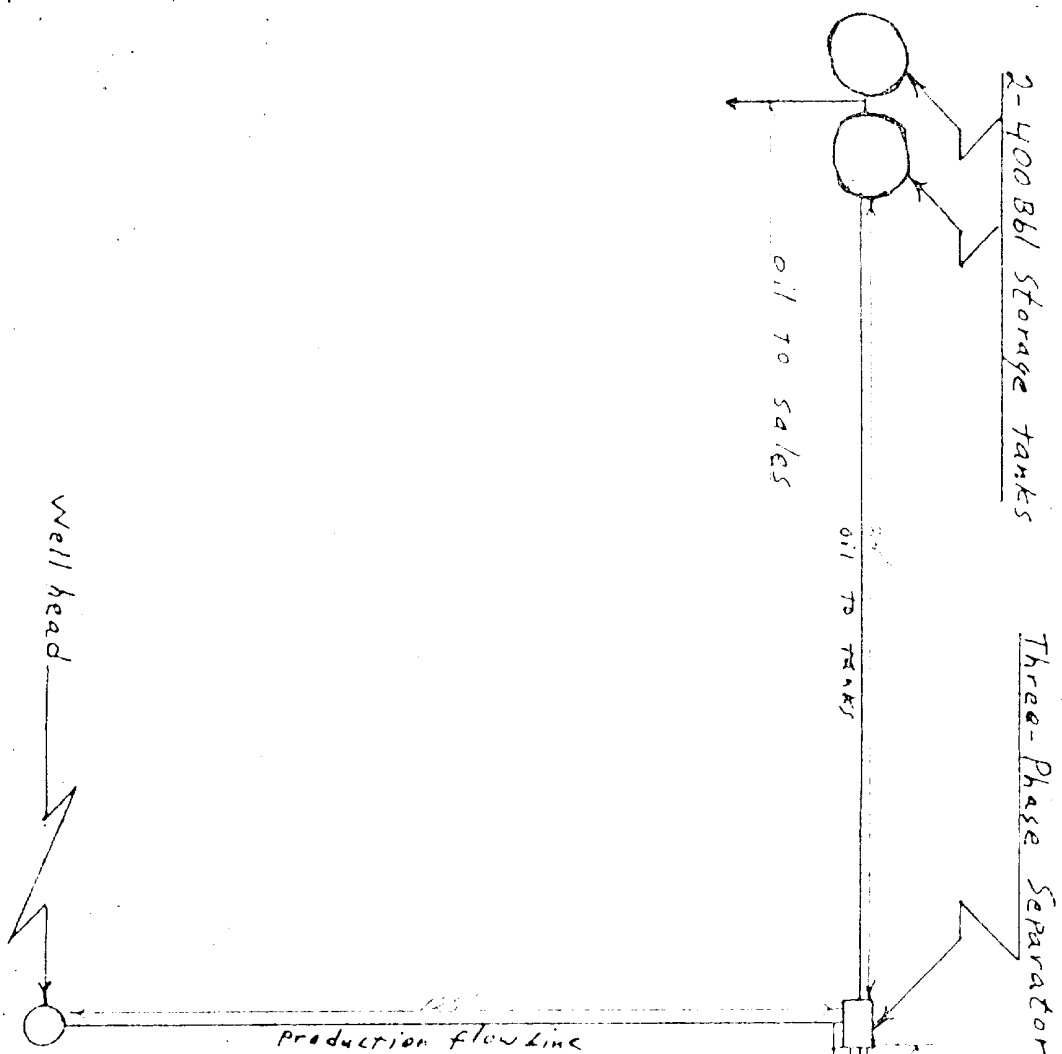
Sandborn Co. New Mexico

NEAR

44-775



Location of Tank Battery
Plat -C-

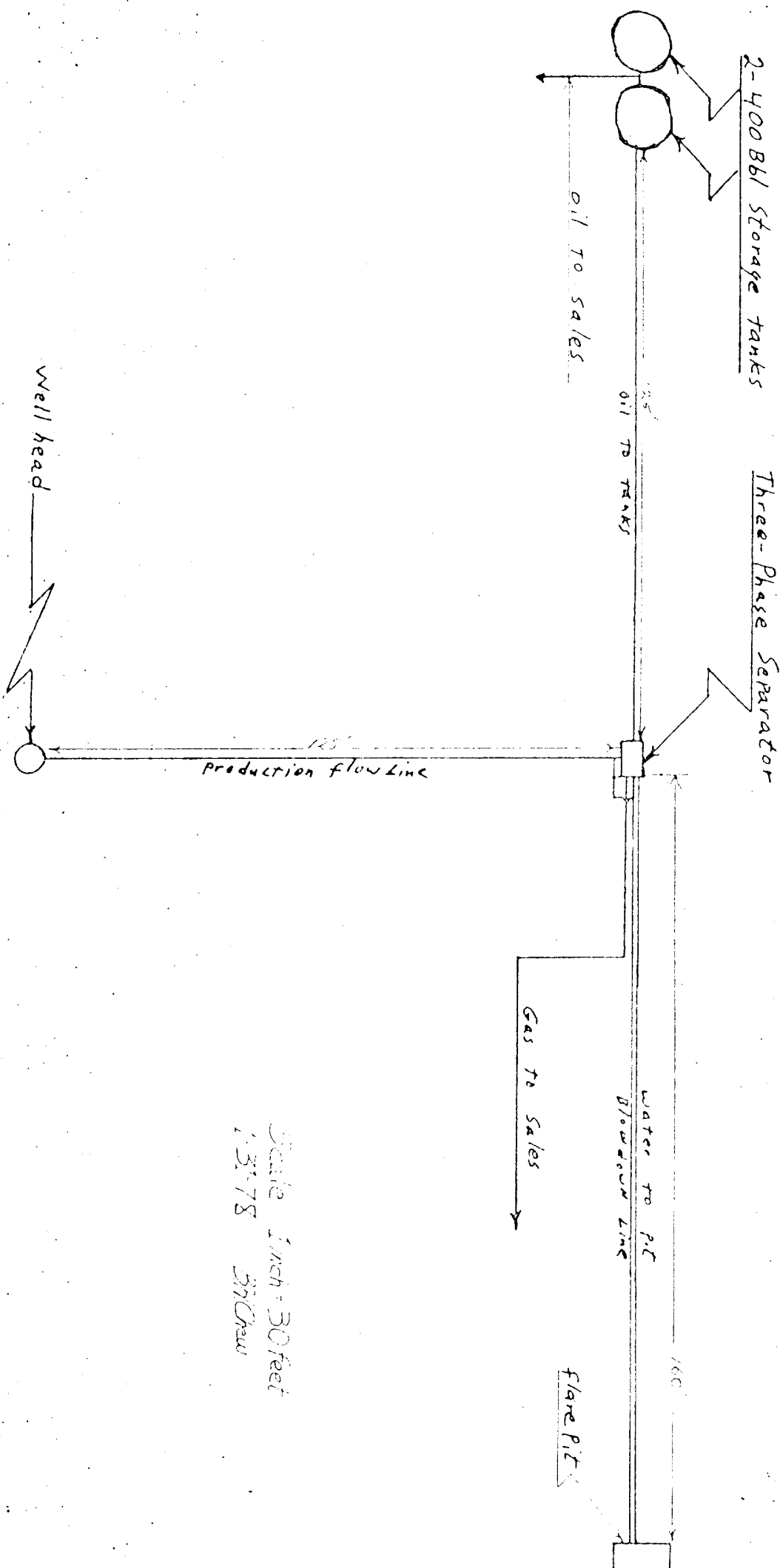


1) From 1970-72 built in 1970, Oct.
 2) From 1972-74 built in 1972, Oct.
 3) From 1974-76 built in 1974, Oct.
 4) From 1976-78 built in 1976, Oct.
 5) From 1978-80 built in 1978, Oct.
 6) From 1980-82 built in 1980, Oct.
 7) From 1982-84 built in 1982, Oct.
 8) From 1984-86 built in 1984, Oct.
 9) From 1986-88 built in 1986, Oct.
 10) From 1988-90 built in 1988, Oct.
 11) From 1990-92 built in 1990, Oct.
 12) From 1992-94 built in 1992, Oct.
 13) From 1994-96 built in 1994, Oct.
 14) From 1996-98 built in 1996, Oct.
 15) From 1998-2000 built in 1998, Oct.
 16) From 2000-2002 built in 2000, Oct.
 17) From 2002-2004 built in 2002, Oct.
 18) From 2004-2006 built in 2004, Oct.
 19) From 2006-2008 built in 2006, Oct.
 20) From 2008-2010 built in 2008, Oct.
 21) From 2010-2012 built in 2010, Oct.
 22) From 2012-2014 built in 2012, Oct.
 23) From 2014-2016 built in 2014, Oct.
 24) From 2016-2018 built in 2016, Oct.
 25) From 2018-2020 built in 2018, Oct.
 26) From 2020-2022 built in 2020, Oct.
 27) From 2022-2024 built in 2022, Oct.
 28) From 2024-2026 built in 2024, Oct.
 29) From 2026-2028 built in 2026, Oct.
 30) From 2028-2030 built in 2028, Oct.

REVISIONS			
NO	DATE	BY	
1			CHANGES FOR 10/10/10
2			7/11/11
3			10/10/10
4			10/10/10
5			10/10/10

Location of Tank Battery
Plat -C-

Davis Oil Company
Lease CASTLE FEDERAL No. 1
Sec 34 T22N R9E 6W
COUNTY Sandhollow STATE NM.



Scale 1 inch = 30 feet
1-31-78 B. Chaw

DAVIS OIL COMPANY

410 - 17TH STREET, SUITE 1400
DENVER, COLORADO 80202
TELEPHONE: 303-623-1000

NEW YORK
NEW ORLEANS
HOUSTON
TULSA



December 28, 1979

Mr. Philip T. McGrath
U.S.G.S.
Oil and Gas Division
Box 959
409 Petroleum Plaza
Farmington, New Mexico 87401

Re: #1 Castle Federal
NW NW Sec. 34 T21N-R6W
Sandoval, New Mexico

Dear Mr. McGrath:

Enclosed please find for your approval, an original and five copies of the Application for Permit to Drill on the captioned proposed test.

Your early attention to the approval of said application will be appreciated.

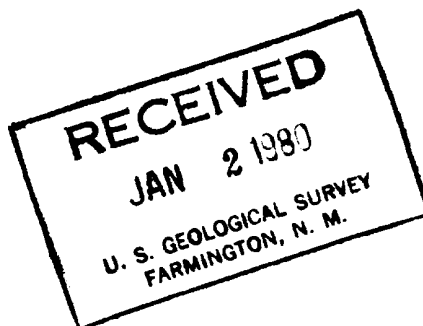
Very truly yours,

DAVIS OIL COMPANY

A handwritten signature in black ink, appearing to read "Dave Banko". The signature is fluid and cursive.

Dave Banko
Permit Supervisor

Enclosures



U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

