

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE\*  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R1425.

## 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 Seventeenth Street Denver, Colorado 80202

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

At surface

SE $\frac{1}{2}$  - SW $\frac{1}{2}$  Section 5, Township 22North, Range 8West

At proposed prod. zone

1000' FSL & 1640' ~~FSL~~ FWL

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

8 Miles N-NW to Nageezi

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

1000' N

1000' W

## 16. NO. OF ACRES IN LEASE

2096.24

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

4492' NE

## 19. PROPOSED DEPTH

1700

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

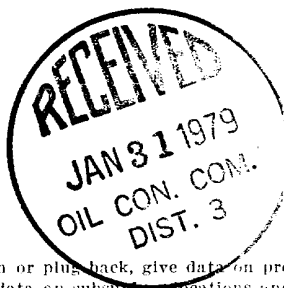
6797 GR

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 $\frac{1}{2}$ "	8 5/8" O.D.	24# K-55	STC New 100'	Cement to Surface
7 7/8"	5 $\frac{1}{2}$ " O.D.	15.5# K-55	LTC New 1700'	150 sxs.

( SEE TEN POINT PROGRAM )



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 B. R. Porter TITLE Drilling Superintendant DATE January 25, 1979

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

NMOC - Revised APD

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

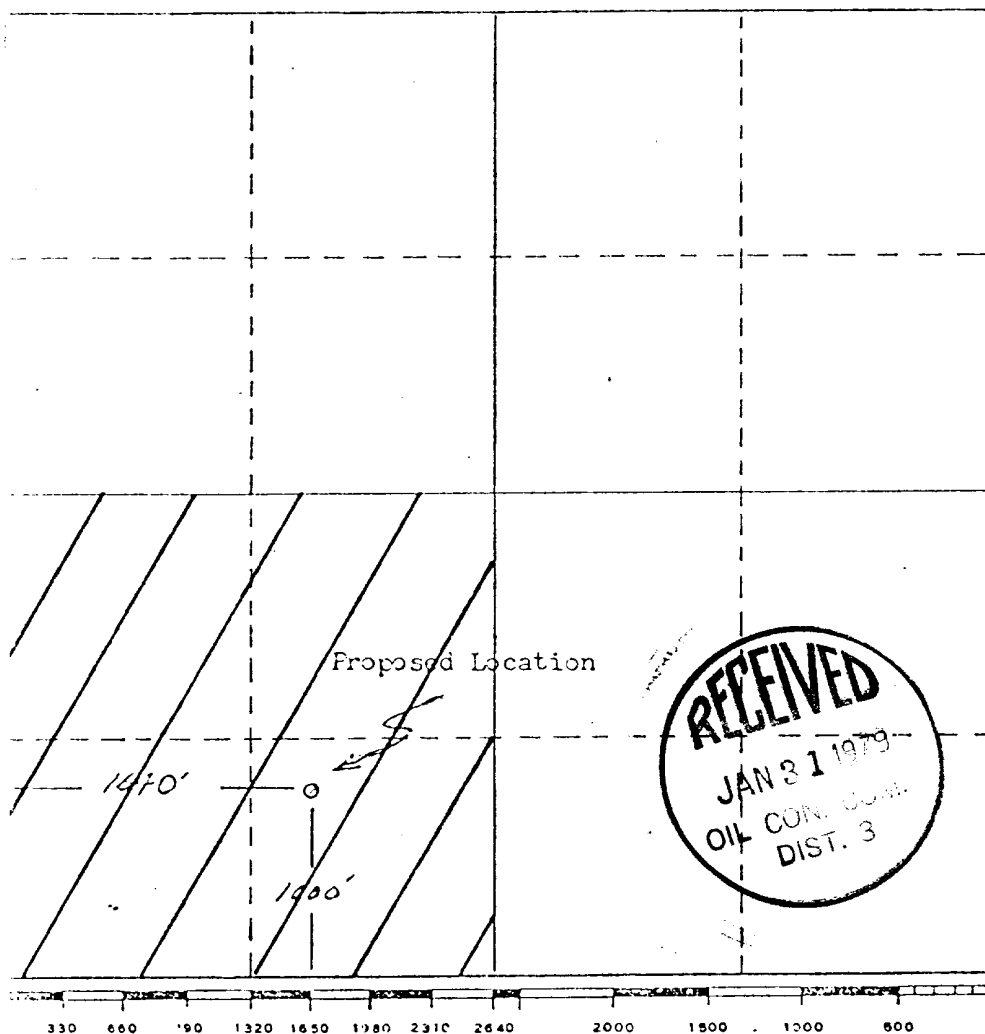
Operator <b>Davis Oil Company</b>			Lease <b>Peard-Federal</b>		Well No. <b>1</b>
Well Letter	Section <b>5</b>	Township <b>22 N</b>	Range <b>8 W</b>	County <b>San Juan</b>	
Actual Footage Location of Well:					
<b>1000</b>	feet from the	<b>South</b>	line and	<b>1640</b>	feet from the
Ground Level Elev. <b>6297</b>	Producing Formation <b>Chacra</b>		Pool <b>Chacra</b>	Dedicated Acreage: <b>16.0</b> 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).
- 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.

Name *McA. E. Hunt*  
Position *Chief Geologist*  
Company *Davis Oil Co.*  
Date *12/28/78*

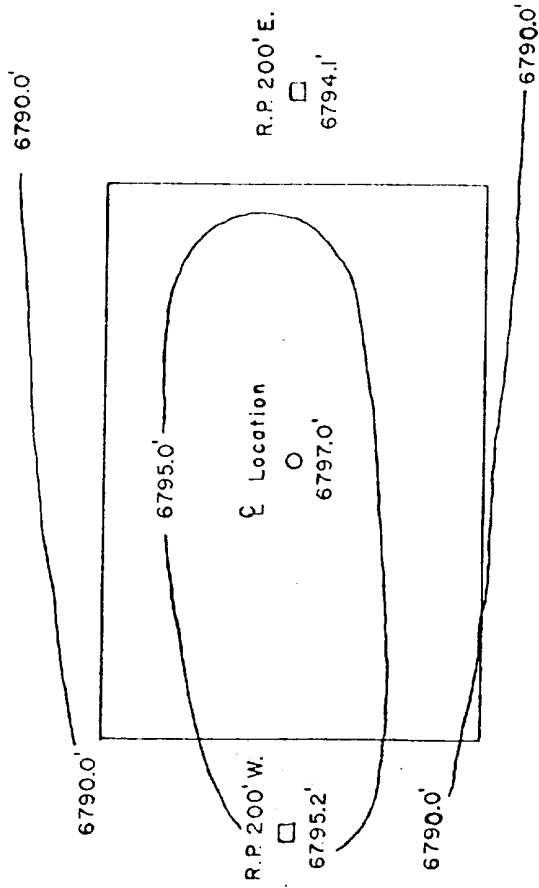
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed *Dec. 22, 1978*

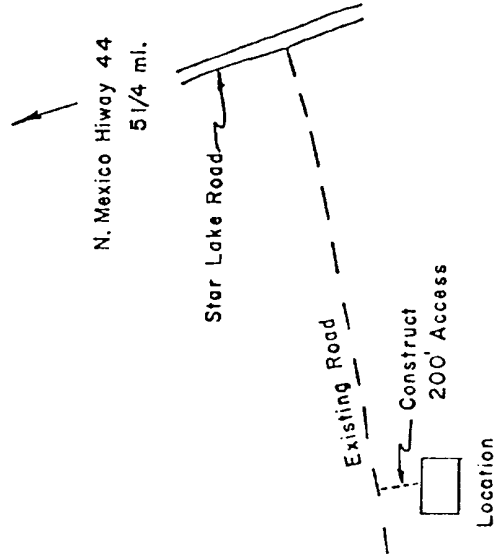
Registered Professional Engineer and/or Land Surveyor:  
*Frederick H. Reed*  
Frederick H. Reed

Certificate No. *3795*

R.P. 200' N.  
□ 6786.4'



R.P. 200' S.  
□ 6786.6'



I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief.

*Fredrick H. Reed*  
FREDERICK H. REED  
Registered Land Surveyor



Davis Oil Company  
Denver, Colorado

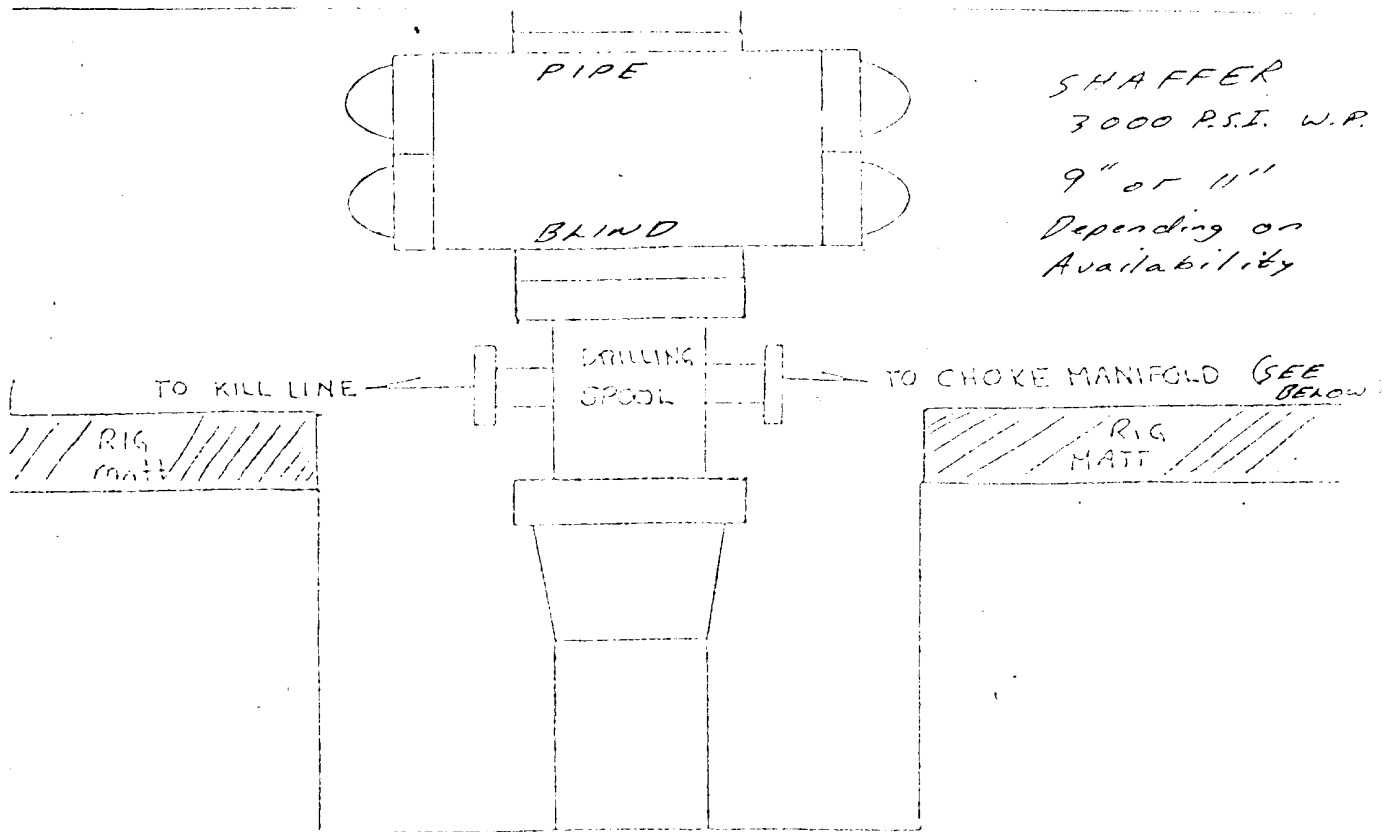
WELL SITE PLAN  
Sec. 5, T22 N, R 8 W  
San Juan Co., N.M.

CLARK REED & ASSOC.  
Durango, Colorado

DATE: Dec. 22, 1978  
FILE # 78083

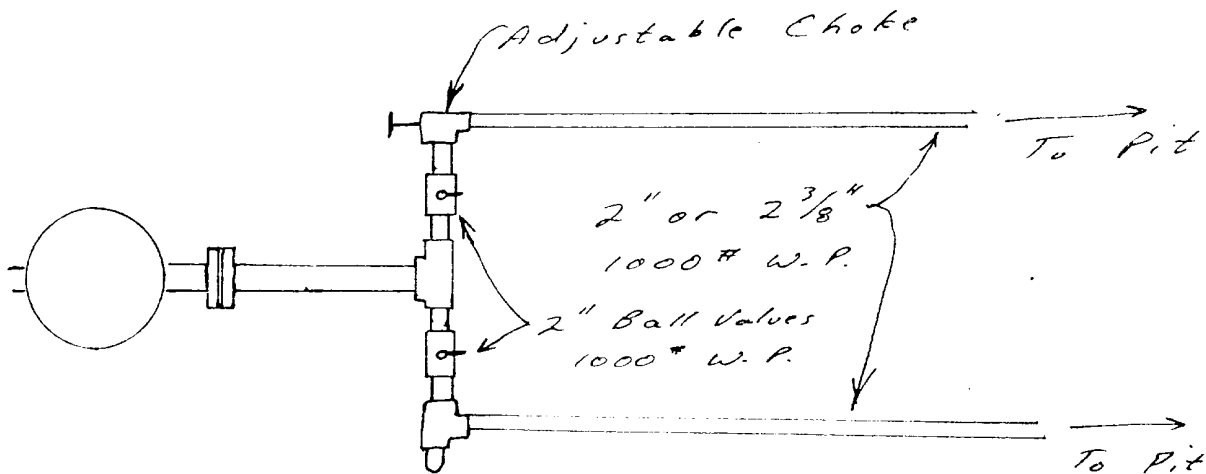
TEN POINT PROGRAM

- 1) GEOLOGIC OBJECTIVE: Mesaverde Formation.
- & 3) ESTIMATED TOPS: (Water, Oil, Gas or Mineral bearing formations)
- |                     |         |  |
|---------------------|---------|--|
| Nacimiento          | Surface | Tite shale   |
| Ojo Alamo           | 193'    | Sandstone, fresh water, no oil or gas.                       |
| Kirtland            | 413'    | Tite shale   |
| Picture Cliffs      | 871'    | Sandstone and some thin coals, brackish water, no oil or gas |
| Chacra              | 1243'   | Interbedded sandstone and shale, possible gas productive.    |
| Menefee             | 1567'   | Interbedded sandstone and shale, possible gas productive.    |
| Cliff House         | 1641'   | Sandstone and thin interbedded coal, possible gas productive |
| ( Top of Mesaverde) |         |  |
| Total Depth         | 1700'   |  |
- 4) CASING PROGRAM: 100' , 8 5/8" OD, 24#, K-55, STC, New, cement to surface.  
1700', 5 1/2" OD, 15.5#, K-55, LTC, New, 150 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:
- |           |   |
|-----------|---|
| 0-100'    | Spud Mud  |
| 100-1400' | Treated Water   |
| 1400'-TD  | LSND, 9.0-9.5 ppg (Mud wt. as required to control formation pressure), Vis 35-40, Less 10cc WL, pH 10-10.5. Sufficient mud materials to maintain mud properties, control lost circulation and to contain blowout will be available at wellsite. |
- 7) AUXILLIARY EQUIPMENT:
1. Kelly cock
  2. Drill Pipe Float (Except for lost circulation drilling conditions)
  3. Monitoring of Mud System will be visual unless otherwise specified.
  4. A sub on the floor with a full opening valve to be stabbed into drill pipe when Kelly is not in the string.
- 8) LOGGING: Dual Induction Laterolog from base of surface casing to total depth.  
Compensated Neutron Formation Density from base of surface casing to total depth.
- TESTING: No Testing.
- CORING: No coring.
- STIMULATION: Mesaverde Formation - Approx. 50,000 gals. gelled Kcl water frac. with 30,000# 10/20 sand. Actual volume of treatment will be dependent upon thickness of pay and evaluation of zone of interest.
- 9) ABNORMAL PRESSURE: Abnormal pressures, temperatures of other hazards are not anticipated during the drilling operations of this well.
- ESTIMATED BOTTOMHOLE PRESSURE: 600 psi
- 10) ANTICIPATED STARTING DATE: Within 30 to 45 days from date of Government approval.
- DURATION OF OPERATION: San Juan Basin 20-25 days



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 Beard Federal WELL NUMBER 1, SESW SEC. 5 T 22N R 8W  
FEDERAL LEASE NUMBER NM-8904 COUNTY San Juan, 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 Bbon Field, New Mexico drive southeast  
38 miles on Hiway 44 then south on the  
Star Lake Road 5.3 miles, then southwest  
on a trail 1.8 miles to the proposed new road  
then south 0.1 mile to location.*

*SEE MAP "A"*

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:  
*Star Lake Road - 1.8 miles Crowned-ditched dirt surface  
Trail - to within 0.1 mile of location - possibly needs  
upgrading - to be determined at pre-site  
meeting*

E. EXISTING ROADS WITHIN 1 MILE ( IF DEVELOPMENT WELL: ) See maps "A"  
and/or "B" attached.

F. PLANS FOR ROAD IMPROVEMENT AND/OR MAINTENANCE: All new construction and  
upgraded trails will be built with an 18' wide crowned running surface  
with bar-ditches on both sides. \_\_\_\_\_ culverts \_\_\_\_\_ inches diameter  
and \_\_\_\_\_ feet in length will be installed as indicated on the maps.  
Existing roads will be maintained to as good or better condition as  
found. *Upgrading to commence if well is proved  
to be producable*

2. PLANNED ACCESS ROADS:

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

- (1) Width: 16' to 18' wide crowned running surface.
- (2) Maximum grades: 2 percent.
- (3) Turnouts: As needed - ( See maps. )
- (4) Drainage: Bar-ditches both sides - culverts as needed ( See maps )
- (5) Location and size of culverts:  
*To be determined at pre-site meeting*
- (6) Surfacing material and source:  
*To be determined at presite meeting*
- (7) Gates, cattleguards, fence cuts: ( See maps )
- (8) Roads have been center-line flagged if practical. If serious doubts  
about alignment of road were present, center line will be flagged  
in the presence of U.S.G.S. and B.L.M. during predrill inspection.

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:

*Trucking - source to be determined at time of pre-site meeting*

C. Water well to be drilled on lease (yes) (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:

*None needed at present time*

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.

(3) Produced Fluid: Will be contained in reserve pit and/or will be burned in pit and buried when pit is dry.

(4) Sewage: Sanitation holes will be dug approximately 24" diameter by 20'-30' deep for each trailer and for rig " outhouses ".

(5) Garbage and other waste: Burnable garbage will be contained in trash pit and burned. Pit will be fenced with chicken wire. Unburnable trash will be buried upon completion of operations.

(6) Trash will be picked up if scattered and contained in trash pit as soon as practical after the rig is moved off. Trash pit will then be burned and fully enclosed until such time that it can be buried. Reserve pit will be fenced on all four sides and left until dry at which time it will be buried.

8. ANCILLARY FACILITIES: See maps "A" and/or "B"

*None needed*

9. WELL SITE LAYOUT: See Plat "D" and/or Plat "E". Pits (are) (are not) to be lined. If lined material will be \_\_\_\_\_.

10. PLANS FOR RESTORATION OF SURFACE:

(1) Backfilling, leveling, and contouring will be commenced as soon as practical after reserve pit is dry.

(2) Revegetation and rehabilitation will be commenced as soon as practical after backfilling and contouring are completed. Specific season and seeding will be determined by the Surface Management Agency.

(3) Pits will be fenced on three sides prior to beginning drilling operation. Fourth side will be fenced when rig is removed and so maintained until backfilling is commenced. ( Five strands of barbed wire will be used.)

(4) Pits will be overhead flagged or covered with wire fencing material if oil is left on surface.

(5) Rehabilitation will normally commence within 1-2 years of completion of drilling operations and will be determined by the length of time required for reserve pit to dry adequately. The rehabilitation will normally be completed within 30-60 days (exclusive of seeding) from time work begins. Seeding will be done the fall following completion of rehabilitation work providing adequate men and equipment are available at this time.



11. OTHER INFORMATION:

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

A. Topography:

*Location and road located on ridge top with gentle slopes of 0%-4%, surrounded by drainages*

B. Vegetation:

Major Existing Species:

Per-Cent

*Brush*  
*Grasses*

Seed mix to be determined by Surface Management Agency.

C. Fauna:

Types Observed:

*None observed - types to be ascertained at time of pre-site meeting*

D. Soils and Geology:

*Clay and sandy clay*

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

Conditions of Acceptance:

(2) Surface Ownership:

	ACCESS	DRILL SITE	MINERALS
Federal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
State	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

*Unknown - to be determined at time of pre-site meeting*

12. LESSEES OR OPERATIONS REPRESENTATIVES:

<i>David F. Banko</i>	<i>307 362-5339</i>
Bert H. Chew .....	307+ 362-2839
Davis Oil Company .....	307+ 382-2862
1424 Tenth Street	
Rock Springs, Wyoming 82901	

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 *Davis Oil Company* and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

*1-24-79*

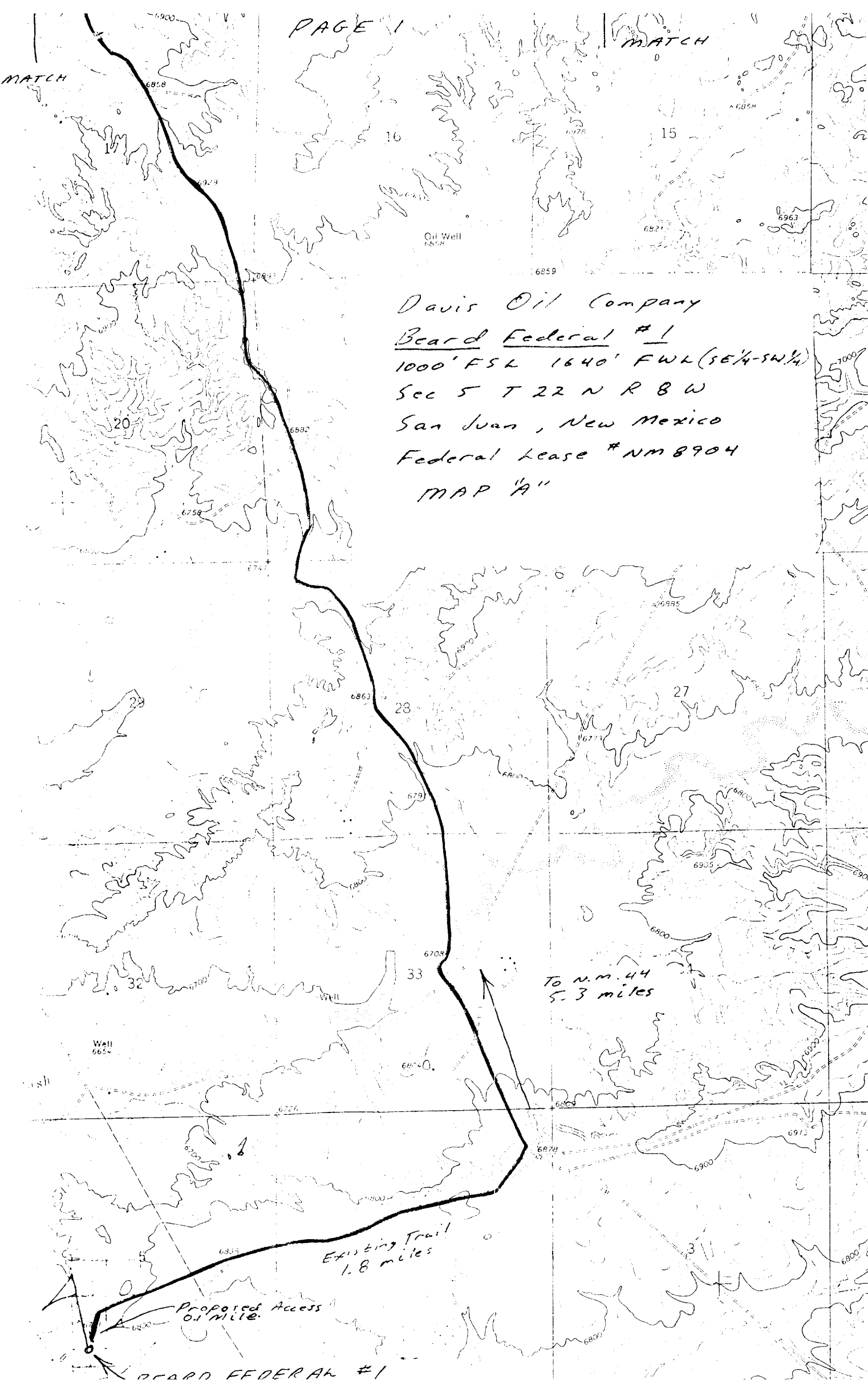
Date

*David F. Banko*

Name and Title

*Field Representative*





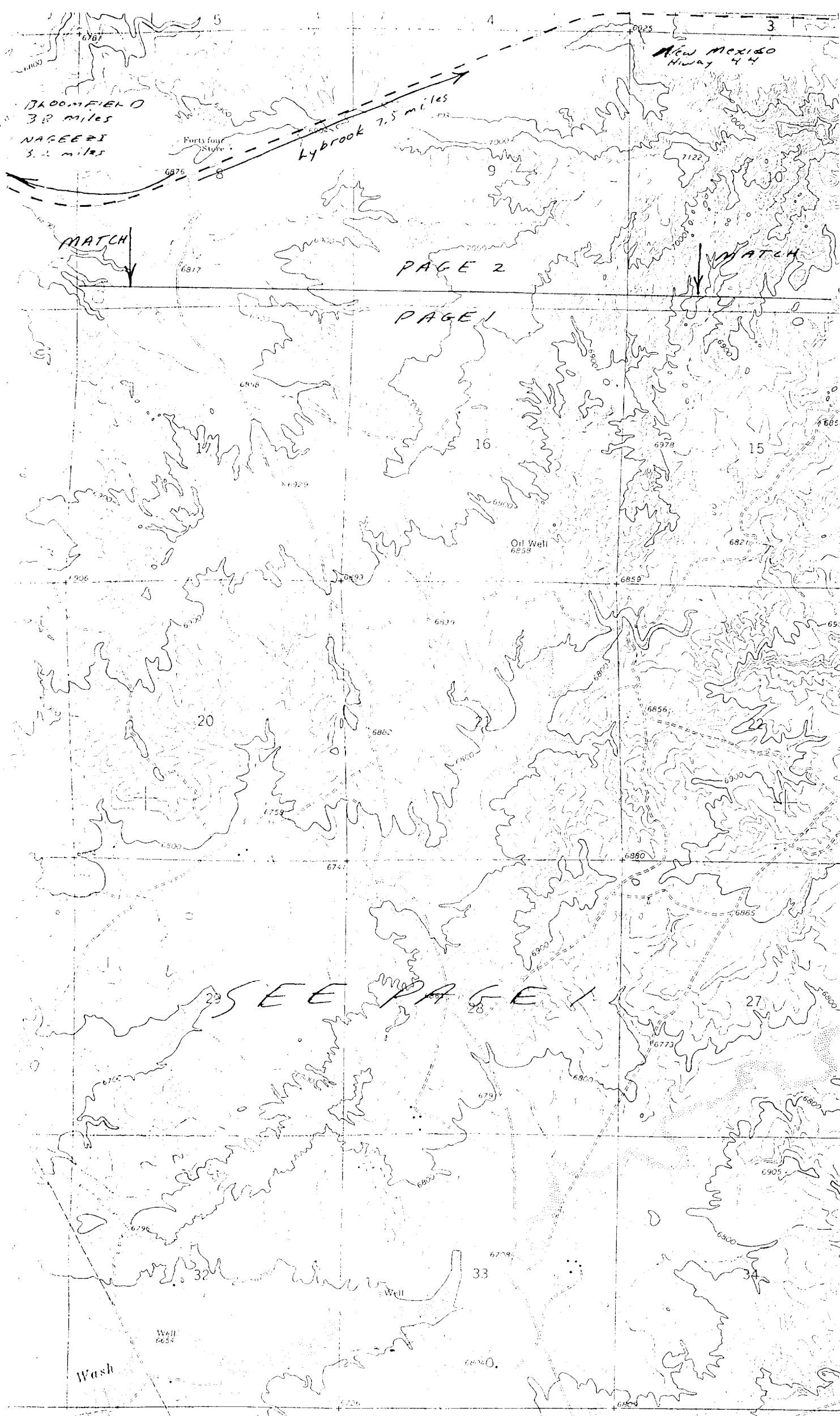
Davis Oil Company  
Beard Federal #1  
 1000' FSL 1640' FWL (SE 1/4-SW 1/4)  
 Sec 5 T 22 N R 8 W  
 San Juan, New Mexico  
 Federal Lease # NM 8904  
 MAP "A"

To N.M. 44  
 5.3 miles

Existing Trail  
 1.8 miles

Proposed Access  
 0.1 mile

BEARD FEDERAL #1



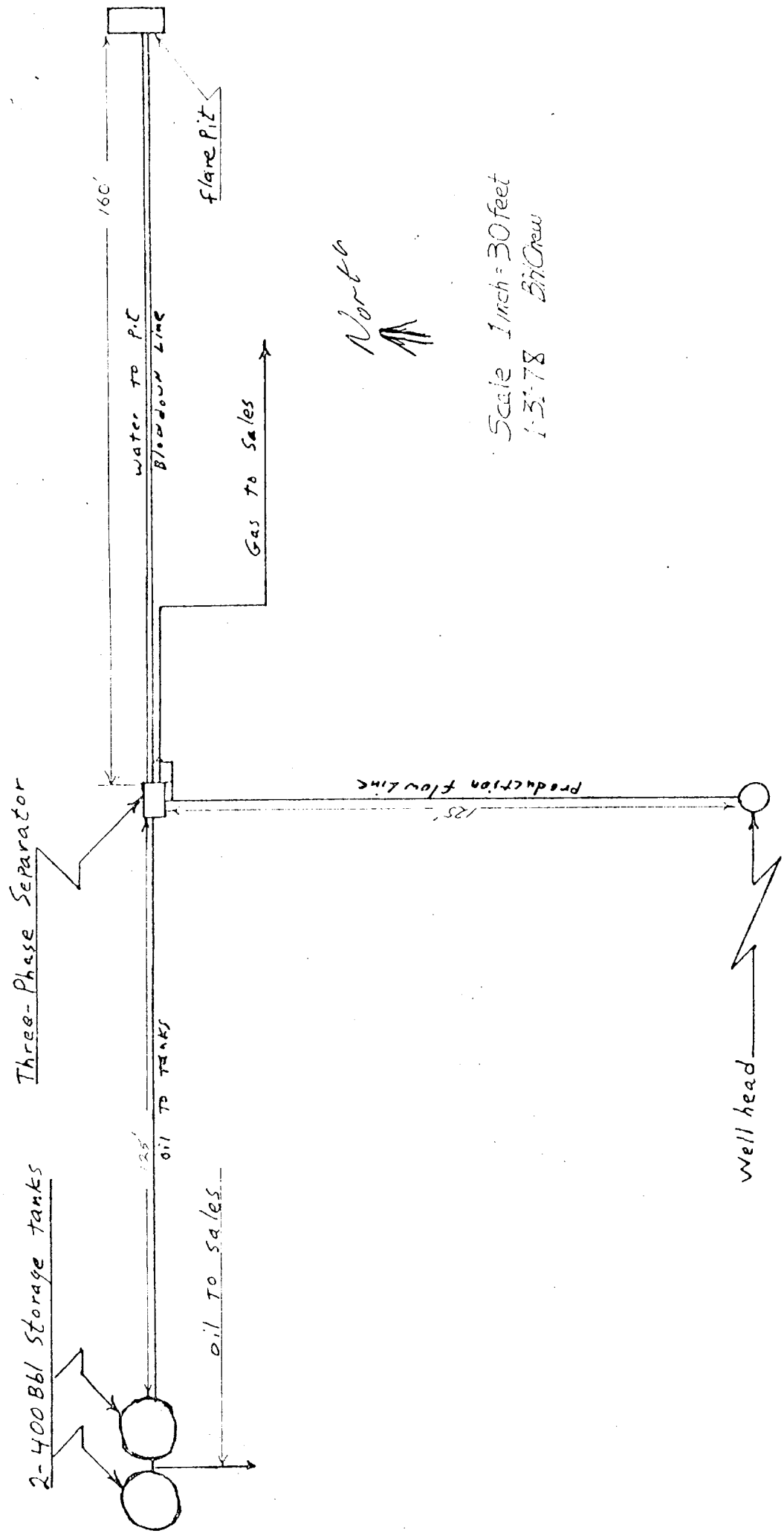
Location of Tank Battery  
Plat -C-

Davis Oil Company

Lease Bessel Federal No. 1

Sec 5 Twp 22N Rge 8W

County San Juan State New Mexico



Relatively flat  
location

Davis Oil Company Plat "D"

Lease Name: Leard Federal Well No. 1

SE-SW Section 5, T 22 N, R 8 W

San Juan County, New Mexico

Scale - 1" = 50'

Contours = Approximately one ft.

Base RI 13 No

North  
N

