

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

Union Oil Company of California

3. ADDRESS OF OPERATOR

P. O. Box 2620 - Casper, WY 82601

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

At surface

1500' FNL & 1150' FWL

At proposed prod. zone

Dakota

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

24 miles south of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED*

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

1150'

16. NO. OF ACRES IN LEASE

158.99

17. NO. OF ACRES ASSIGNED
TO THIS WELL

N/318.99

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

None on Lease

19. PROPOSED DEPTH

6300'

20. ROTARY OR CABLE TOOLS

Rotary

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

6482' G.L.

22. APPROX. DATE WORK WILL START*

4-23-76

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#	750'	300 sacks or to surface
7-7/8"	5-1/2"	15.5#	6300'	400 sacks

PROPOSED PROGRAM:

Drill 12-1/4" hole to 750'. Run and cement 8-5/8" casing. Drill 7-7/8" hole to 6300'. Log and if production is indicated, run and cement 5-1/2" casing. The well will be completed with 2-3/8" tubing.

The B.O.P. will be given a daily operational test and each test logged.

NOTE: Subject acreage is not dedicated to a gas purchaser.

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 R. G. Ladd, Jr. TITLE District Drilling Supt. DATE 4-2-76

(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

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

(STATE)
Form C-102
Supersedes C-128
Effective 1-1-65

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

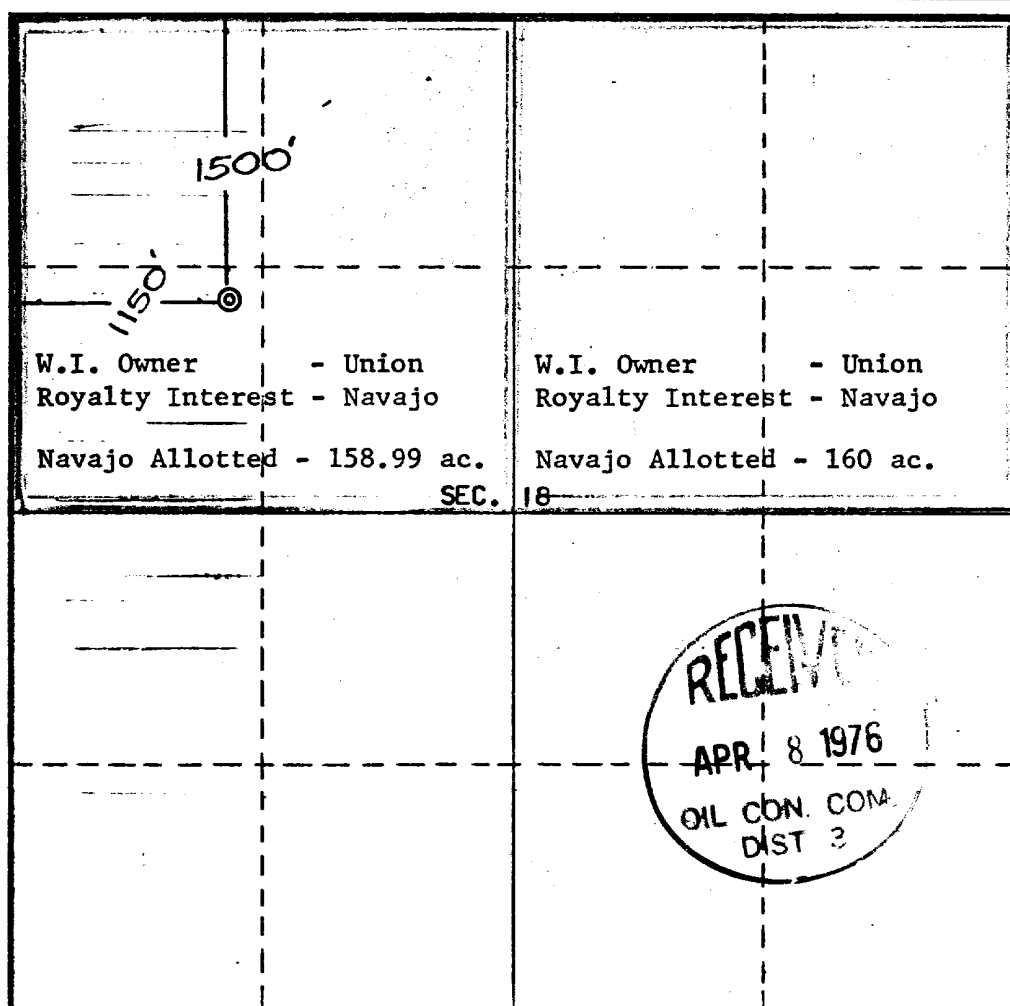
Operator Union Oil Company of California			Lease Navajo		Well No. 5 (E18)
Unit Letter E	Section 18	Township 25 North	Range 10 West	County San Juan	
Actual Footage Location of Well: 1500 feet from the North line and 1150 feet from the West line					
Ground Level Elev. 6482	Producing Formation Dakota	Pool Basin Dakota		Dedicated Acreage: 318.99 Acres	

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).
3. 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 (SEE REVERSE SIDE)

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

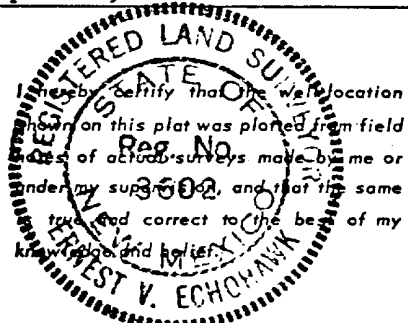
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



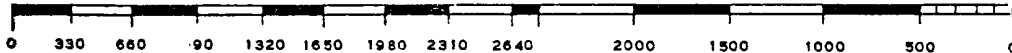
CERTIFICATION

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

Name R. A. Ladd Jr.
Position
District Drilling Supt.
Company
Union Oil Co. of Calif.
Date
April 2, 1976



Date Surveyed
March 29, 1976
Registered Professional Engineer and/or Land Surveyor
E. V. Echohawk
Certificate No. **3602**
E.V.Echohawk LS



Area to be Communitized

Lease Lines

Union Oil Company of California

Sub 1000

Tract 10

Tract 15

10

10

Tract

1000

Tract 1

1000

1000

Union owns W.I. under both tracts and plans to communitize the N $\frac{1}{2}$ of Section 18, Township 25 North, Range 10 West after the well is drilled.

SEC 18

March 23, 1956

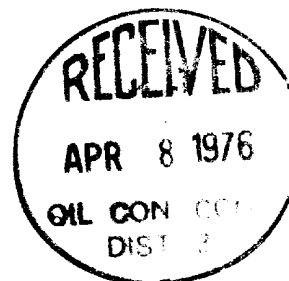
U.S.
V. Richardson

NAVAJO NO. 5-E18
SAN JUAN COUNTY
NEW MEXICO

12-POINT SURFACE USE PLAN

1. The proposed location is approximately 6 miles west of Huerfano Trading Post and N.M. Highway No. 44.
2. The access road to the location will be approximately 2700' long and will branch off the location of Navajo No. 8-L18 (See attached map.). Road construction will be kept to a minimum. The access road will consist of only blading away existing vegetation. Existing roads will be used wherever possible. In event the well is a commercial producer, the access road will be improved in whatever manner is customary in the area.
3. The location is 1500' FNL & 1150' FWL of Section 18, Township 25 North, Range 10 West, San Juan County, New Mexico, as shown on the attached map, with other wells within 1 mile.
4. Lateral roads to other locations are depicted on the attached map. No new roads will be constructed.
5. The flow line to the subject well will be laid to a tank battery location on the well location.
6. Water will be hauled to the location from Giegus Wash at the Carson Trading Post, located approximately 13 miles northwest of the wellsite.
7. Waste material and cuttings will be disposed of in the reserve pit and garbage will be disposed of in a small burn pit.
- 8 & 9. No camps or airstrips will be constructed.
10. A diagram of the drilling rig is attached.
11. The surface will be restored as nearly as possible to its original condition. Top soil will be stockpiled and later distributed evenly over the site. The site will be reseeded with a recommended seed mixture.
12. The topography is rolling sand hills sparsely covered with sagebrush and native grass. The location will require a cut of 4 to 6 feet on the south side and a fill of 2 to 4 feet on the north side of the location. The subsoil that is cut from the location will be used as fill on the low areas of the location.

Union Oil Company of California
DLE/4-1-76

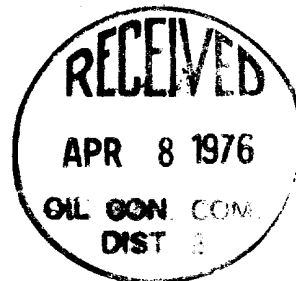


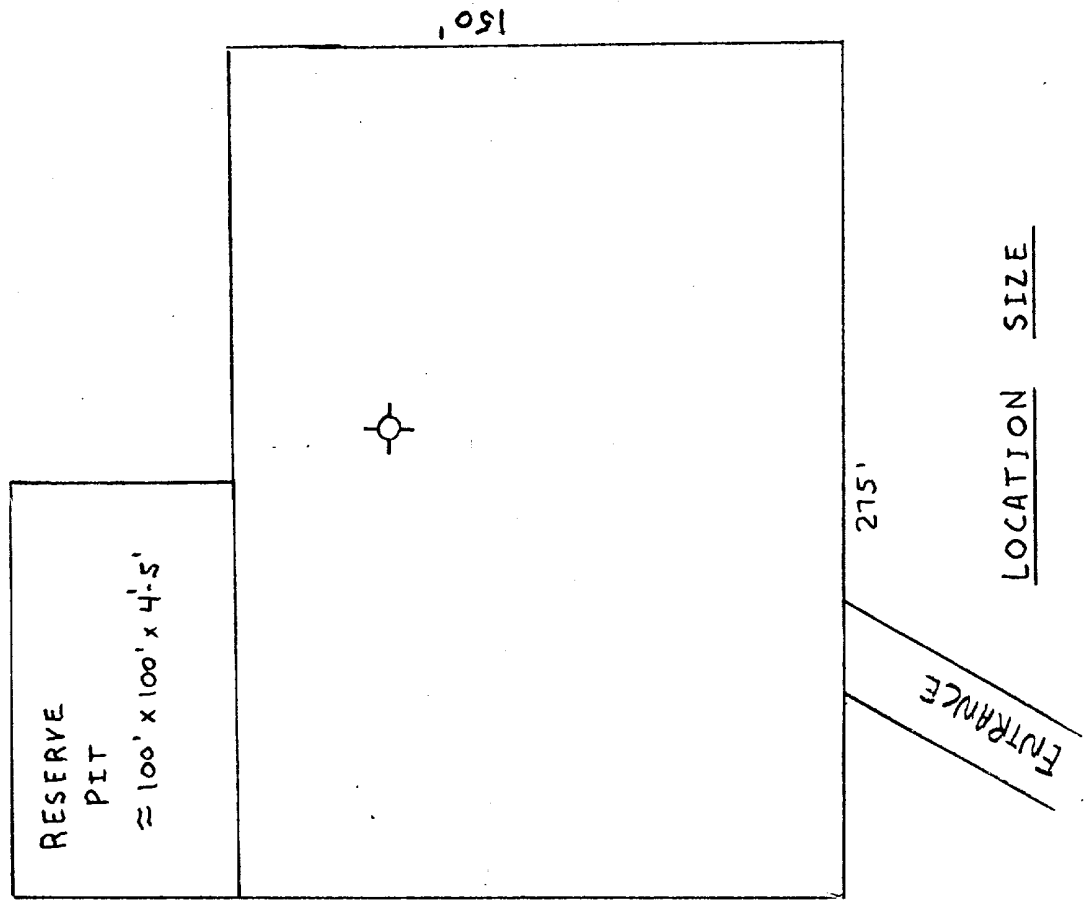
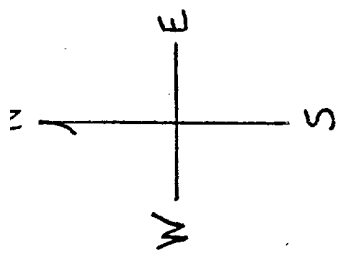
NAVAJO WELL NO. 5-E18
SAN JUAN COUNTY
NEW MEXICO

ADDITIONAL INFORMATION

1. Surface Casing: 8-5/8", 24#, K-55, New.
2. See attached well head schematic.
3. No intermediate casing will be run.
4. See attached schematic of BOP and manifold. BOP will be operationally tested daily and recorded.
5. Auxiliary equipment to consist of a kelly cock and a safety valve that can be stabbed into the string when the kelly is not in service.
6. Maximum anticipated bottom hole pressure is 2200 psi.
7. Drilling fluid will be water and native clay to approximately 5600', then fresh water with commercial bentonite, barite and chemical added to maintain a 9.2#/gallon mud weight to total depth.

Union Oil Company of California

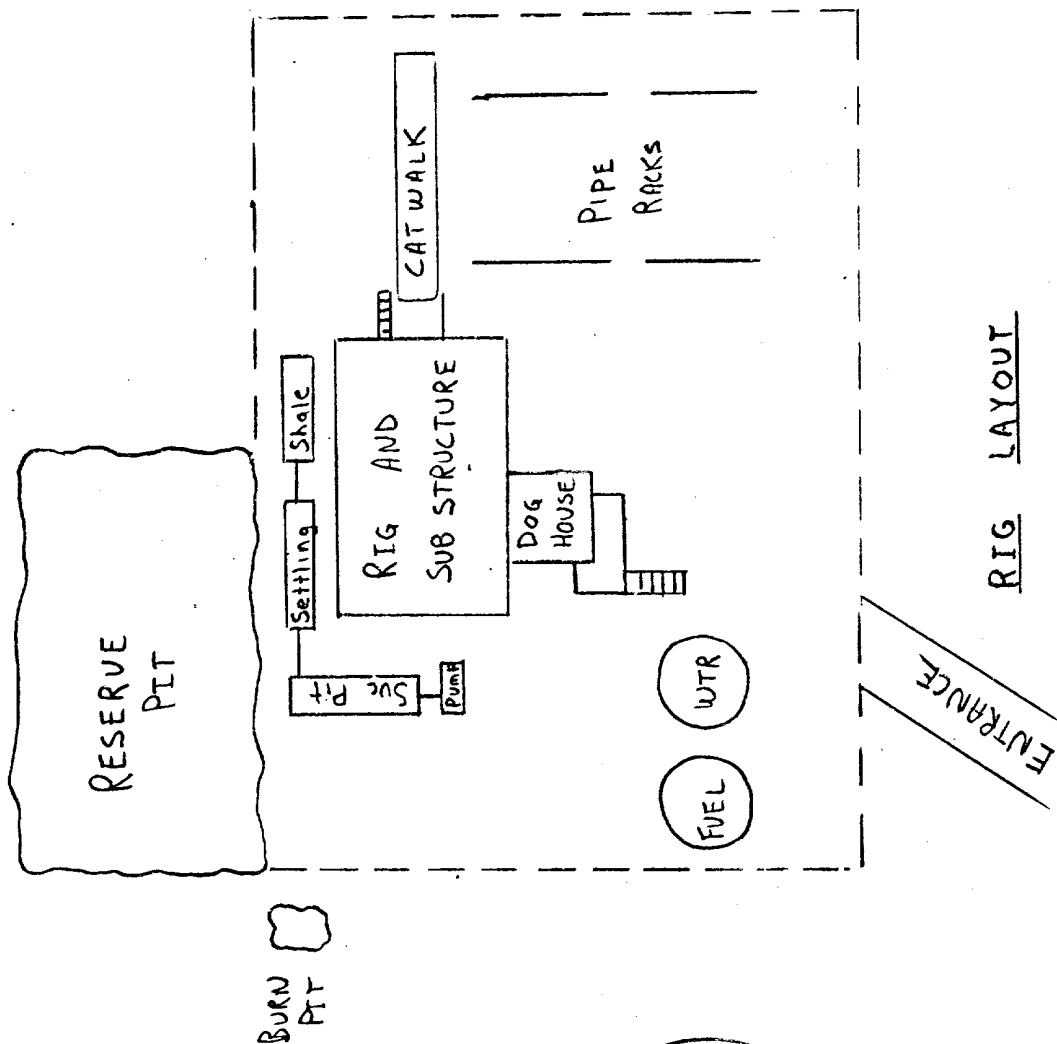
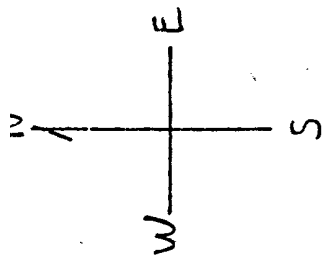




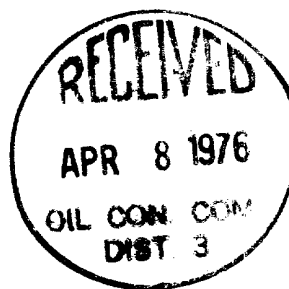
Burn
Pit



Navajo No. 5-E18
DE/4-1-76



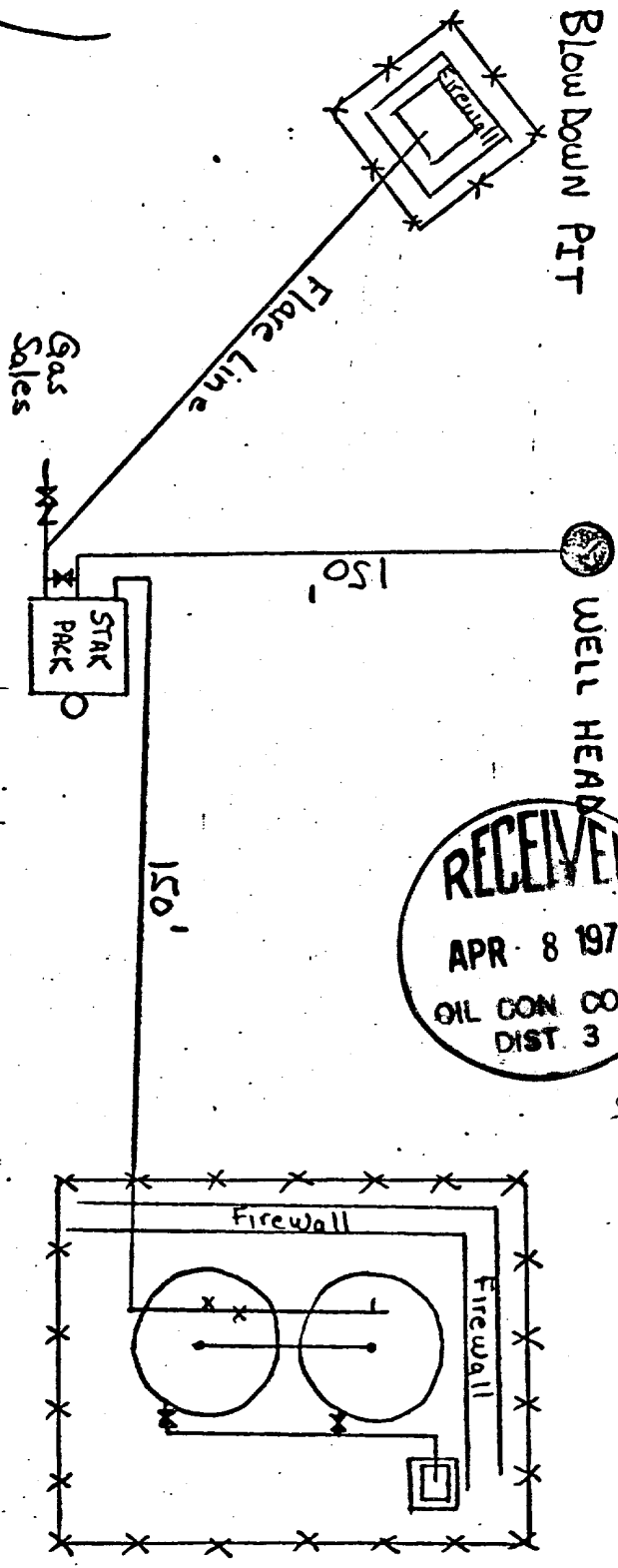
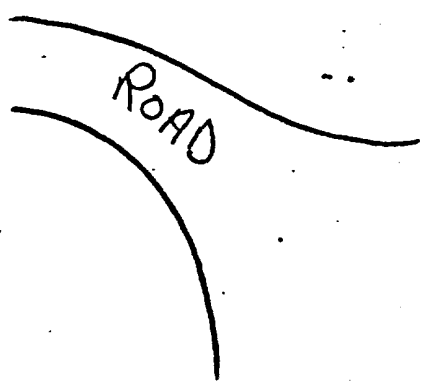
RIG LAYOUT



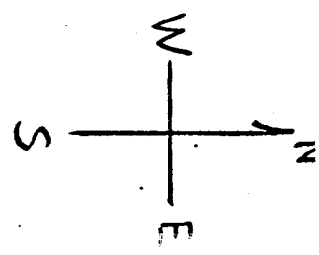
Navajo No. 5-E18
DLE/4-1-76

Nuvajo No. 5-E18
DLE/4-5-76

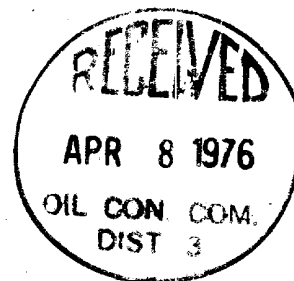
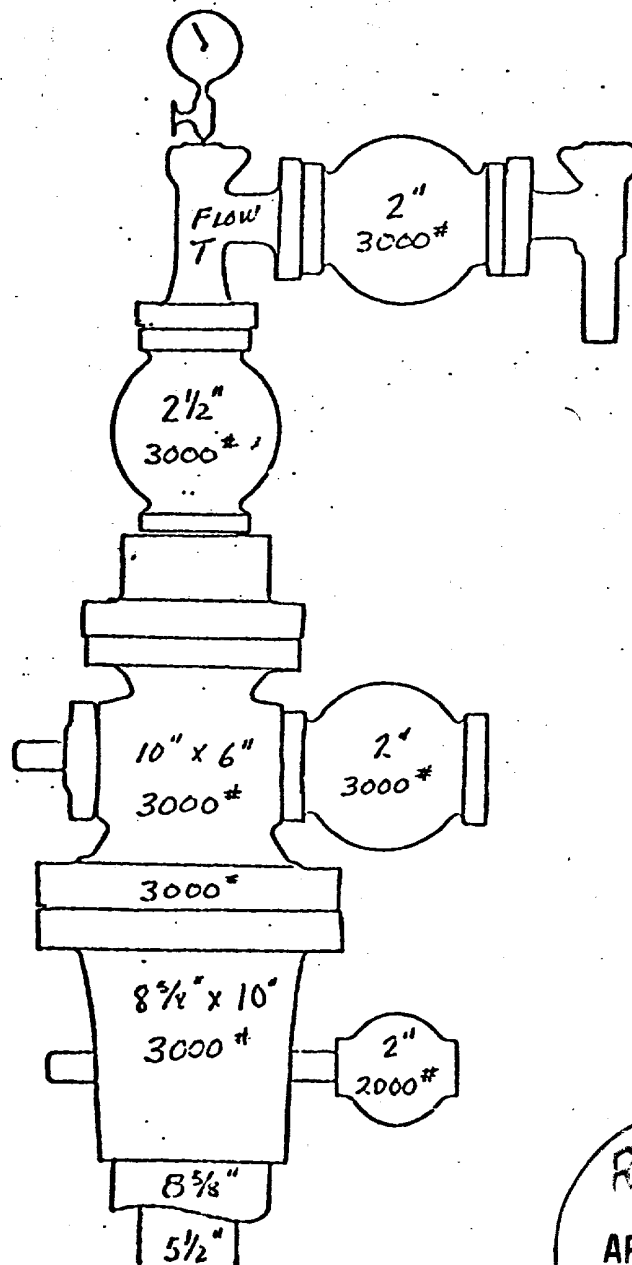
PRODUCTION FACILITIES



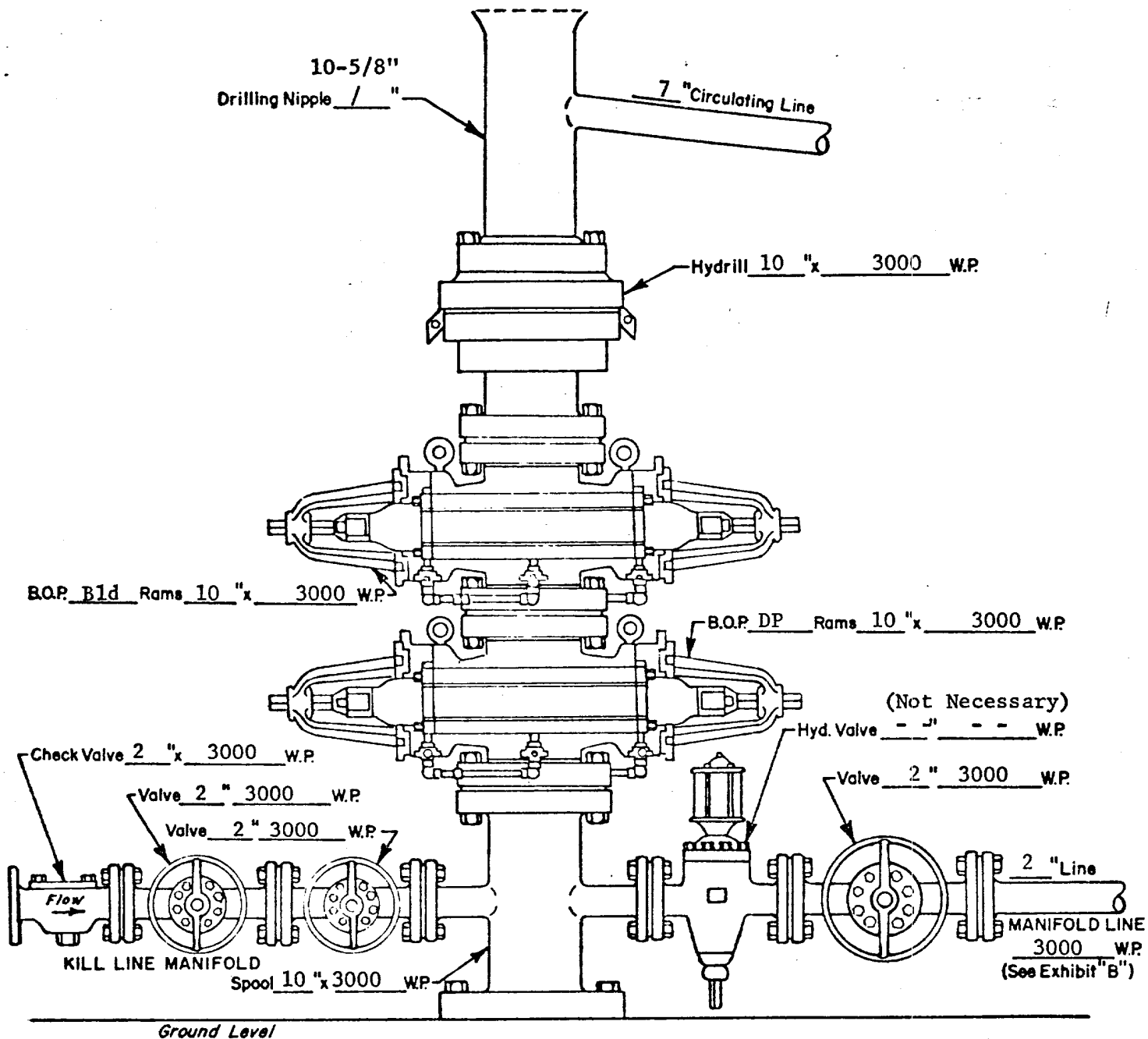
RECEIVED
APR 8 1976
OIL CON. COM.
DIST. 3



Firewall:
32' x 22' x 21'

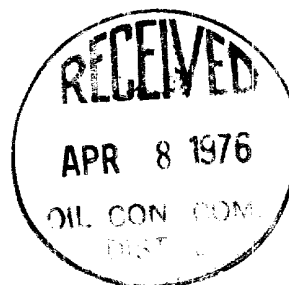


Union Oil Company of California
 Navajo Well No. 5-E18

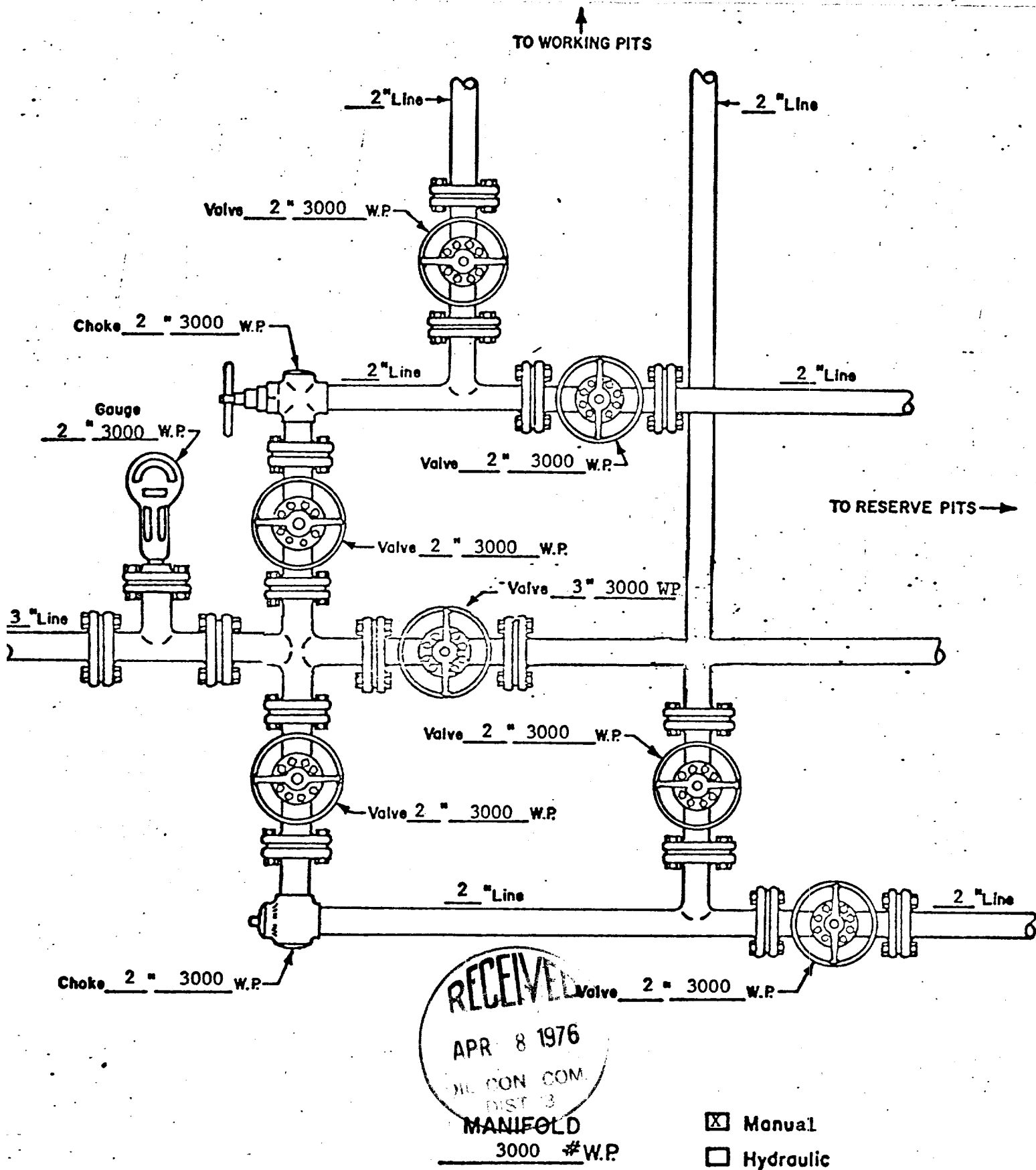


WELL HEAD B.O.P.
3000 # W.P.

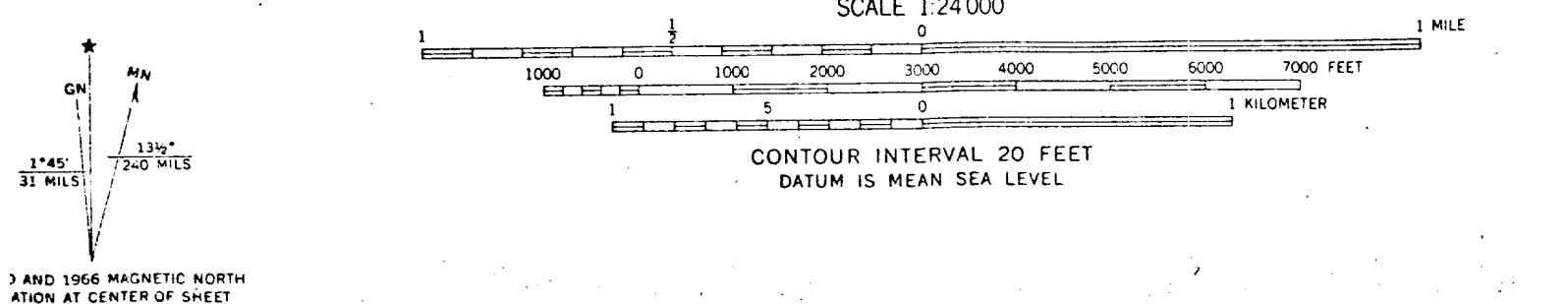
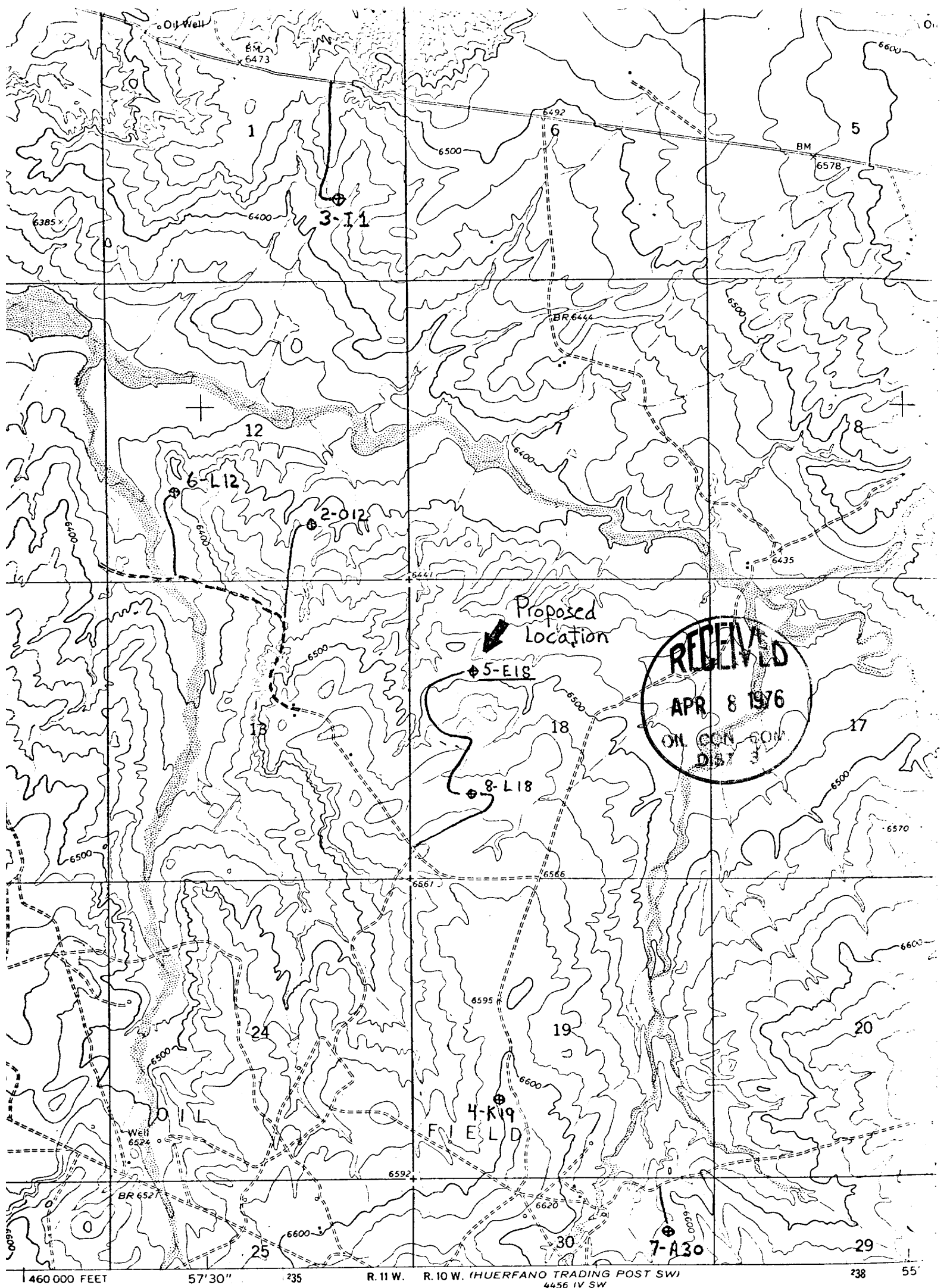
☐ Manuel
☒ Hydraulic



Union Oil Company of California
Navajo Well No. 5-E18



Union Oil Company of California
Navajo Well No. 5-E18



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
1000 RIO BRAZOS RD. - AZTEC

87410

LAND COMMISSIONER
PHIL R. LUCERO



STATE GEOLOGIST
EMERY C. ARNOLD

DIRECTOR
JOE D. RAMEY

April 13, 1976

Mr. R. G. Ladd, Jr.
Union Oil Company of California
P. O. Box 2620
Casper, Wyoming 82601

Re: Dedicated acreages for your Navajo well #2, #3, #4, #5, #6, #7 & #8

Dear Mr. Ladd:

When the dedicated acreage for each of the above listed wells has been communitized please send us a letter to that effect.

We do not want a copy of the communitization agreement.

The communitization must be completed prior to production of each well.

If there are questions, please contact us.

Yours very truly,

A. R. Kendrick
Supervisor, District #3

ARK:mc

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. N00-C-14-20-3772
2. NAME OF OPERATOR Union Oil Company of California		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo
3. ADDRESS OF OPERATOR P. O. Box 2620 - Casper, WY 82601		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1500' FNL & 1150' FWL		8. FARM OR LEASE NAME Navajo (E-18)
14. PERMIT NO.		9. WELL NO. 5
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6482' G.I.		10. FIELD AND POOL, OR WILDCAT Basin Dakota
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 18, T.25N., R.10W.
		12. COUNTY OR PARISH San Juan
		13. STATE New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	Supplementary Well History <input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled to 6315' T.D. Ran Dual Induction Log, Compensated Neutron Log and FDC with Caliper.

Ran & cemented 5-1/2" casing at 6,314.60'. D.V. tool at 4,247'. Cemented first stage with 250 sacks pozmix cement. Bumped plug and released pressure; float held O.K. Dropped bomb and opened two-stage D.V. collar. Cemented second stage with 600 sacks pozmix cement. Bumped plug and closed D.V. tool, O.K. Released pressure and D.V. tool O.K. Released rig at 6:00 a.m., 6-4-76.

Moved in and rigged up well service unit. Installed B.O.P. Ran 4-3/4" bit on 2-3/8" tubing to top of cement at 4312'. Drilling cement and two-stage collar at 4342'. Pressured casing to 1500#, O.K. Displaced water with 5% KCl water in casing and tubing. Pulled up to 6128'. Spotted 250 gallons regular acid. P.O.O.H. E.T.D. 6294'. Ran PDC log and perfed at 6065-67', 6094-95', 6104-06' & 6117-28' with 2 holes/ft. Ran packer on 2-3/8" tubing and set at 5877'. Treated perfs at 3-1/2 to 5 bpm at 2500# to 3000# increasing to 3250# with balls on perfs. Dropped 2 balls/bbl. fluid pumped for total 45 ball sealers. ISDP 1200#. 450#/15. Total load 90 bbls. Swabbed F.L. to 5800' / 3 runs. Recovered gas-cut water. Swabbed 3 hours. F.L. scattered from 1500' to 5800'. Recovered heavy gas-cut water with very little gas between runs. Left open on 1/4" choke overnight. Well flowing gas this a.m. with oily water mist. FTP 40#.

(CONTINUED ON ATTACHED SHEET)

18. I hereby certify that the foregoing is true and correct

SIGNED R. G. Ladd, Jr.TITLE District Drilling Supt.DATE 6-18-76

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

*See Instructions on Reverse Side

JUN 21 1976

Union Oil Company of California

Navajo No. 5-E18

6-18-76

Page 2

Made one swab run with no recovery. Flowed gas 7 hours and recovered 7 bbls. oil. P.O.O.H. with tubing and packer. Prep. to frac.

