Form 9-331 C
(May 1963)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-24103

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

C/SF

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM22207

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Washington Ranch Storage Project

2. NAME OF OPERATOR: El Paso Natural Gas Co.

9. WELL NO.: ~~WI Federal~~ 24

3. ADDRESS OF OPERATOR: 1800 Wilco Bldg., Midland, Texas 79701

10. FIELD AND POOL, OR WILDCAT: Washington Ranch Ms

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2063' FNL, 2452' FWL
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 34, T-25-S, R-24-E

RECEIVED
MAR - 4 1982
O. C. D.
ARTESIA, OFFICE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 6 Miles SW Whites City, NM

12. COUNTY OR PARISH: Eddy

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
NA	NA	NA
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**
NA	7050'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3695 GR

22. APPROX. DATE WORK WILL START*: February 1982

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
16"	13 3/8"Cond	29.3 H-40	40'	30 cu.ft. Circulate
12¼"	9 5/8"	32.3 H-40	800'	630 cu.ft. Circulate
8½"	7"	23.0 N-80	7050'	1341 cu.ft.

Project approved by NMOCD Order No. R-6175-A.
Selectively perforate and treat the Morrow formation for gas storage.
A 3000 psi WP and 6000 psi test double gat BOP with blind and pipe rams will be used for blowout prevention.

RECEIVED
FEB 5 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Posted ED APD + NL Book 3-5-82

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 [signature] TITLE Area Drilling Eng. DATE 2-4-82

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

MAR 3 1982
JAMES A. GILLHAM
DISTRICT SUPERVISOR

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WEL[L] LOCATION AND ACREAGE DEDICATIO[N] PLAT

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

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

Operator	Lease	Well No.
El Paso Natural Gas Company	Washington Ranch Storage Project	~~WI~~ # 24

Unit Letter	Section	Township	Range	County
F	34	25-S	24-E	Eddy County, New Mexico

Actual Footage Location of Well:
2063 feet from the North line and 2452 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3695'	Morrow	Washington Ranch	N/A Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

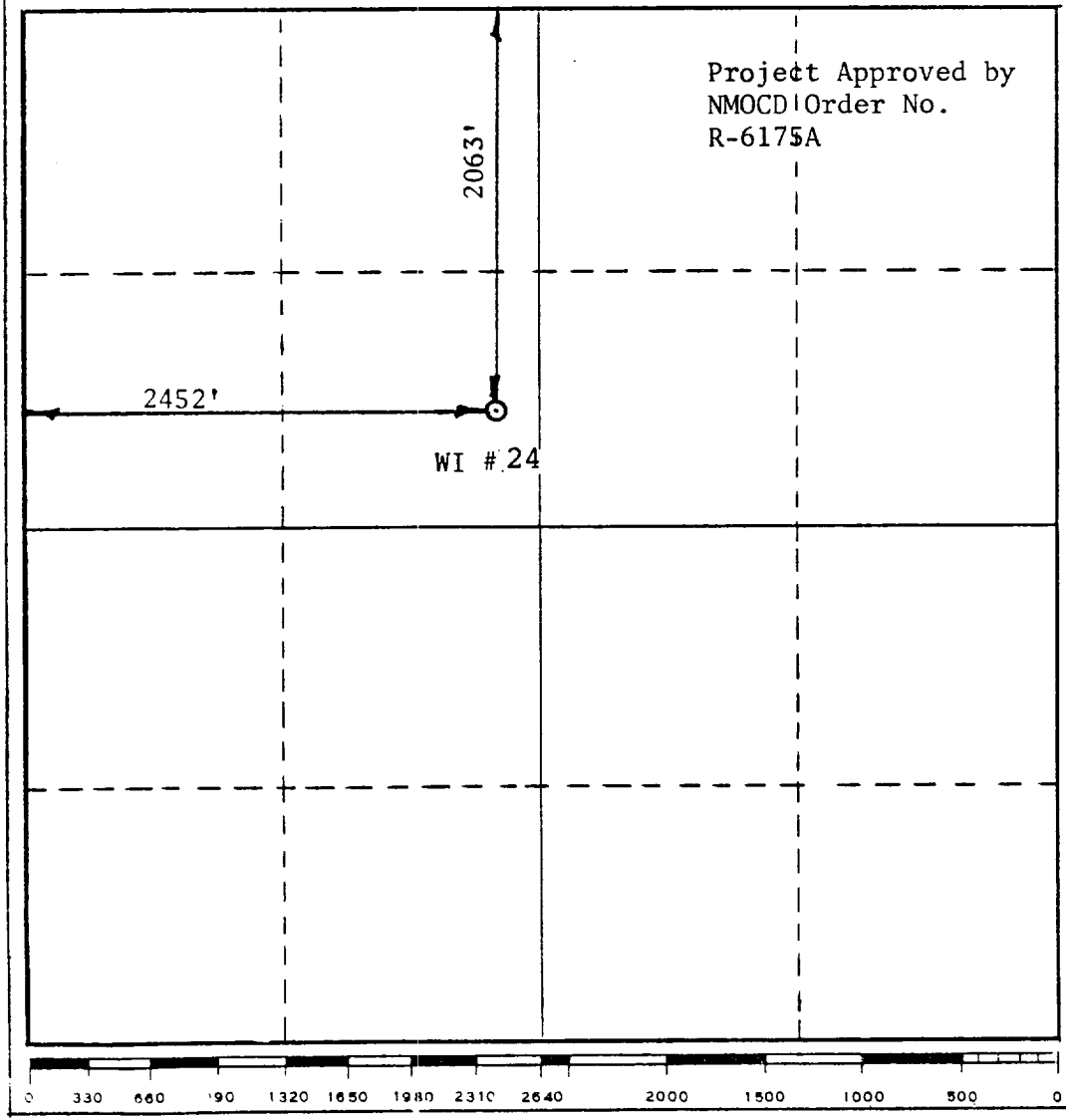
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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.

H. L. Mitchell

Name: H. L. Mitchell

Position: Area Drilling Eng.

Company: El Paso Natural Gas Co.

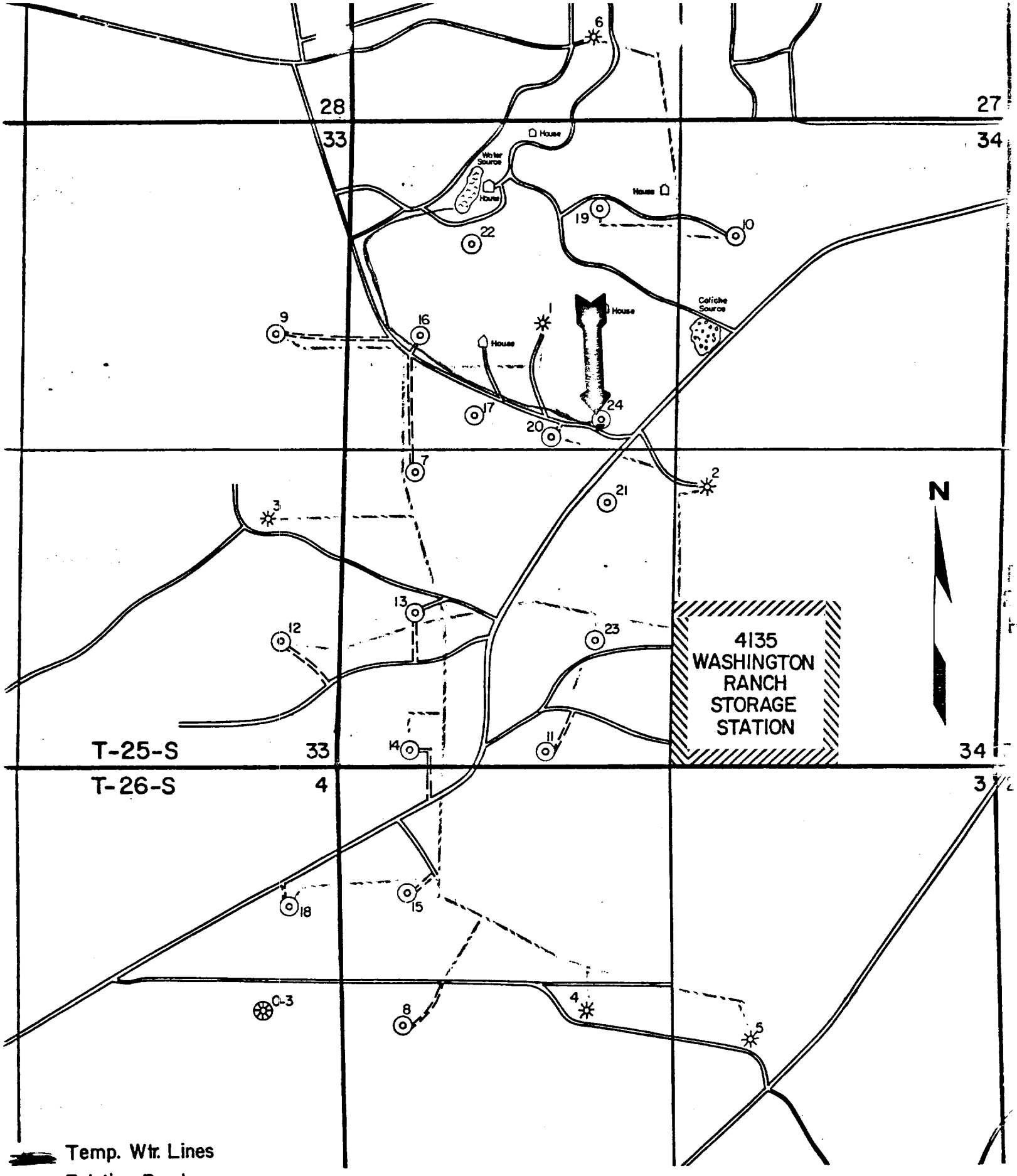
Date: 2-4-82

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: 1/26/82

Registered Professional Engineer and/or Land Surveyor

Certificate No. LS #1317


28
27
33
34
T-25-S
33
34
T-26-S
4
3
House
Water Source
House
House
House
Caliche Source
House
N
4135
WASHINGTON
RANCH
STORAGE
STATION
Temp. Wtr. Lines
Existing Roads
Proposed Roads
Proposed Pipeline
Existing Wells
Proposed Wells

El Paso EXPLORATION COMPANY

1800 WILCO BUILDING
MIDLAND, TEXAS 79701

PHONE: 915-684-5701

OPERATIONS PLAN

Washington Ranch Storage Project W.I. 24

I. Location:

Section 34, T- 25S, R-24-E
Eddy County, New Mexico

Field: Washington Ranch Elevation: 3695 GR

II. Geology:

A. Formation Tops:

Surface	Quaternary
Castile	180
Lamar	500
Dela. Ss	575
Cherry Cn	1,475
Bone Spring	3,550
Wolfcamp	5,550
Strawn	5,685
Atoka	6,950
Morrow Ls	6,500
Morrow Clastics	6,620
T.D.	± 7,050

B. Logging Program:

FDC-CNL
Dual Induction - SFL @ SP & GR curves
BHC-Sonic

C. Coring: None

III. Drilling:

A. Mud Program:

Fresh water non-dispersed mud from surface to coring point.
Use low fluid loss non-dispersed mud from coring point to T.D.

IV. Materials:

A. Casing Program:

HOLE SIZE	DEPTH	CSG SIZE	WT & GRADE
16"	40'	13 3/8"	29.3# H-40
12 1/4"	800'	9 5/8"	32.3# H-40
8 1/2"	7,050'	7"	23.0# N-80

B. Float Equipment:

13 3/8" conductor - None

9 5/8" surface - Cement guide shoe, orifice fill insert float two jts off bottom, centralizers on jts 1, 3, 5, 7, 9, 11

7" production - Cement guide shoe, float collar at top of first jt, one centralizer and four turbolizers per jt for first 16 jts, one centralizer every 3rd jt for 21 jts thereafter. Rough coat bottom 1,500' of casing.

C. Tubing: 7,000 ft. 2 7/8" 6.5# J-55

D. Wellhead Equipment: Bradenhead, 9 5/8" OD slip-on X 11" 3000# W.P. @ 10" X 7" OD hanger
Tbg Spool 11" 3000# W.P. X 7 1/16" 5000# W.P. with 6" X 2 7/8" OD hanger
Upper Run: 3 1/8" 5000# W.P. master valve and production valves.

V. Cementing:

A. Conductor Casing (15" X 13 3/8"):

Cement in place with redi-mix aggregate cement (approx. 2 yds), WOC 12 hrs.

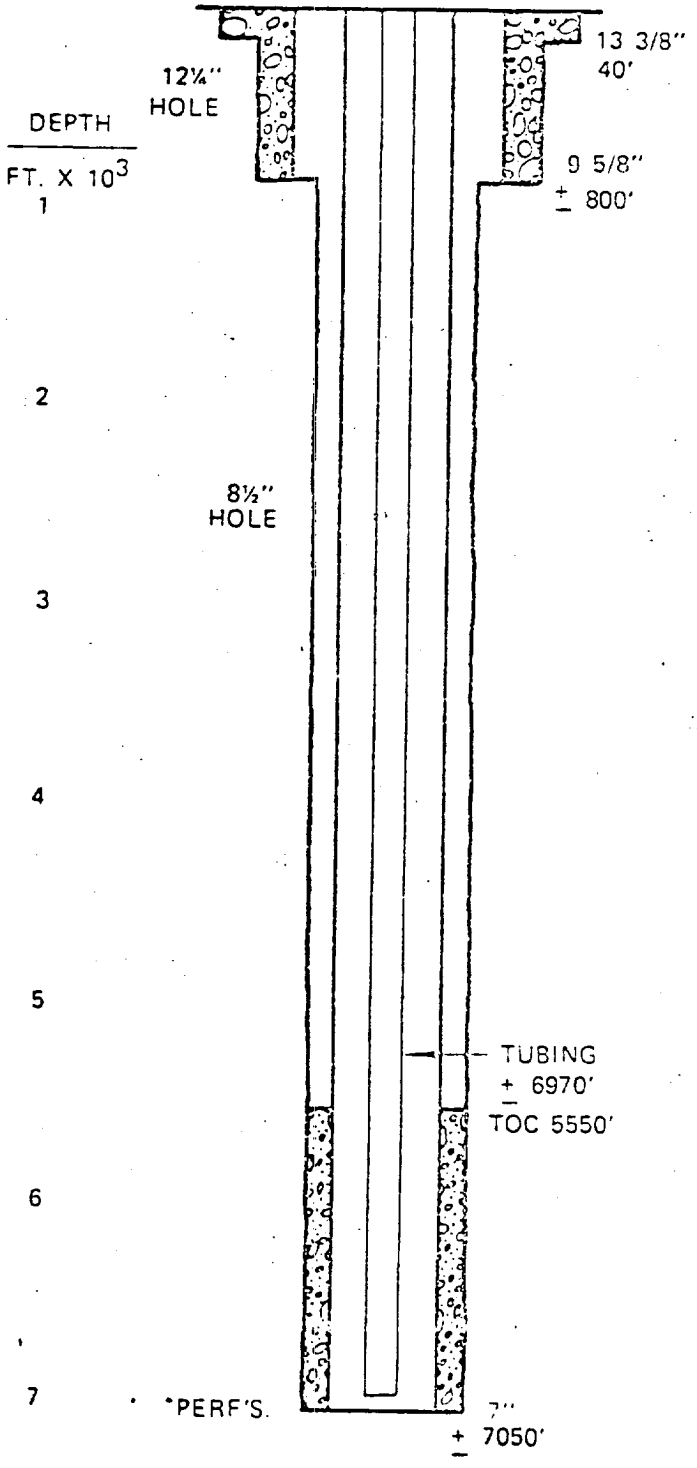
B. Surface Casing (12 1/4" X 9 5/8"):

Use 480 sx Class "C", 2% $CaCl_2$ and 5 lbs Kolite and 1/4# Celloflate per sack. (630 cu. ft., 150% excess to circulate to surface). WOC 8 hrs. Test csg to 800 psi for 30 min. before drilling plug.

C. Production Casing (8 1/2" X 7"):

Use caliper volume plus 20% to fill to approx. 5,550'. Cement with approx. 250 sx Class "H" plus 4% gel and 10% salt, 0.5% D65 and 10 lbs Kolite. WOC 18 hrs. Run temperature survey after 8 hrs.

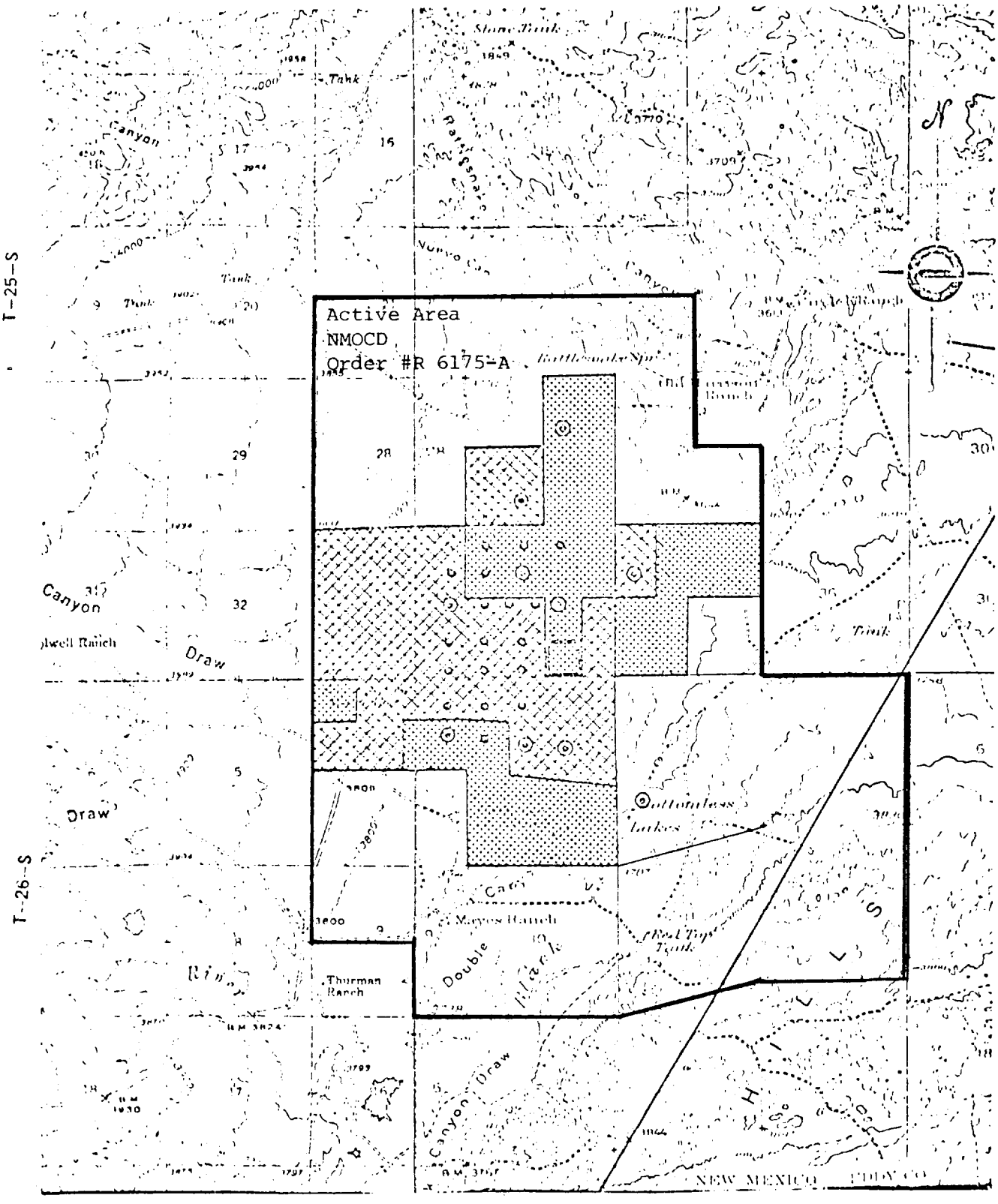
WASHINGTON RANCH
PROPOSED NEW I–W WELL



SIZE	GRADE	WT	BURST	COLLAPSE	DRIFT ID
13 3/8"	USED				
9 5/8"	H–40	32.3	2270	1400	8.845
7"	~~K–55~~ *	23	4360	3270	6.241
2 7/8"	J–55	6.5	7260	7680	2.441

* N-80

*AVG. MID. PERF. 6970'



LEGEND

- U.S. LAND
- FEE LAND
- EXISTING WELL
- PROPOSED WELL
- PROPOSED PLANT SITE

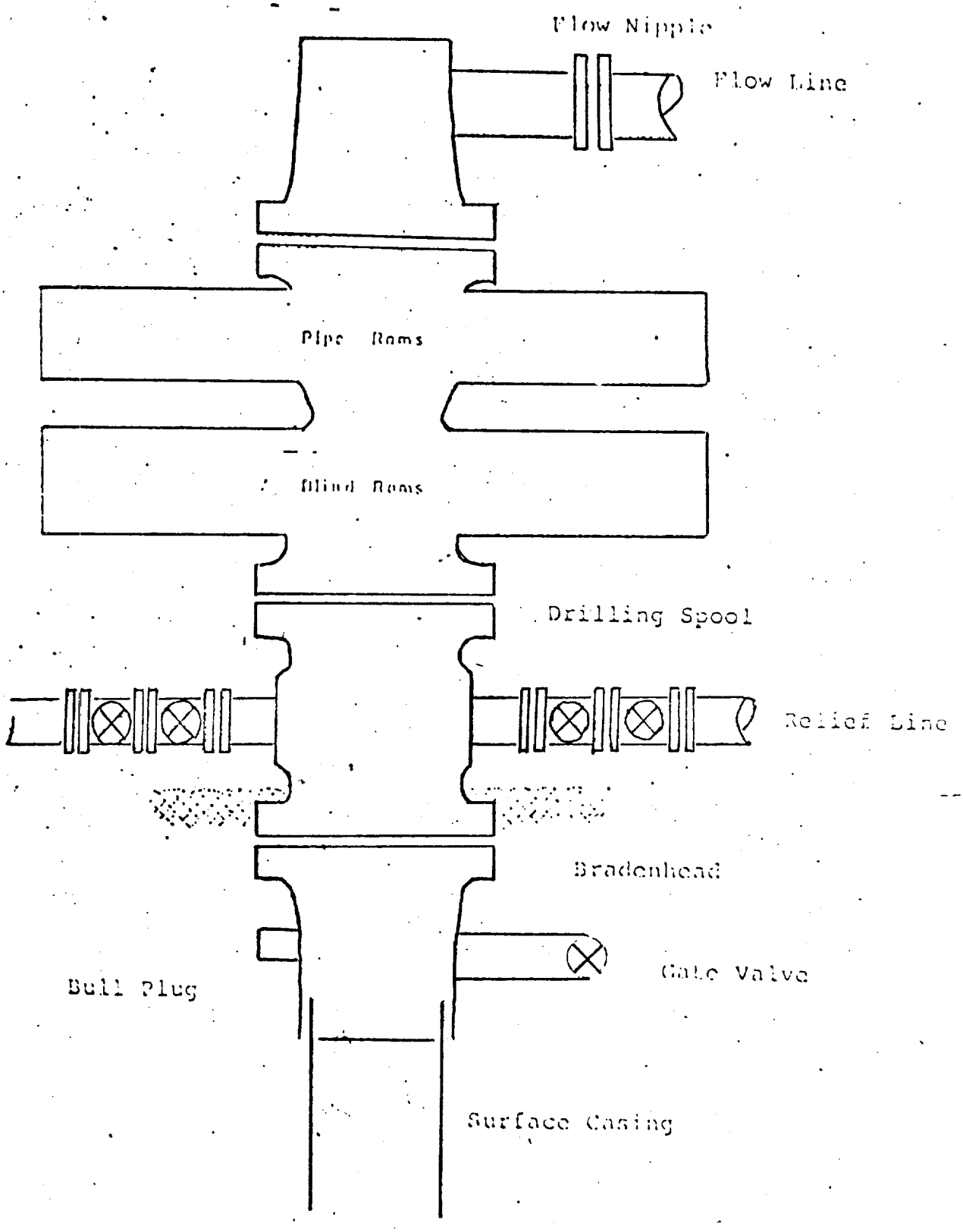
WASHINGTON RANCH STORAGE PROJECT

SCALE 1:62,500

1 0 1 2 3 4 MILES

CONTOUR INTERVAL 25 FEET
DATUM IS MEAN SEA LEVEL

Typical B.O.P. Installation



Series 900 Double Gate BOP, rated at 3000 psi Working Pressure