

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_ FILE **X** \_\_\_\_\_ WATER SANDS \_\_\_\_\_ LOCATION INSPECTED \_\_\_\_\_ SUB. REPORT/abd \_\_\_\_\_

DATE FILED **1-30-85**  
 LAND. FEE & PATENTED \_\_\_\_\_ STATE LEASE NO \_\_\_\_\_ PUBLIC LEASE NO \_\_\_\_\_ INDIAN **14-20-603-409**

DRILLING APPROVED: **2-4-85 - OIL**

SPUDDED IN: \_\_\_\_\_  
 COMPLETED: \_\_\_\_\_ PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_  
 GRAVITY API: \_\_\_\_\_  
 GOR: \_\_\_\_\_

PRODUCING ZONES: \_\_\_\_\_  
 TOTAL DEPTH: \_\_\_\_\_

WELL ELEVATION: **4660' gw**

DATE ABANDONED: **PA. Application Rescinded 3-28-86**

FIELD: **GREATER ANETH**

UNIT: **WHITE MESA**

COUNTY: **SAN JUAN**

WELL NO. **WHITE MESA UNIT #27-24** API #**43-037-31141**

LOCATION **1030' FSL** FT FROM (N) (S) LINE. **2380' FWL** FT FROM (E) (W) LINE. **SE SW** 1/4 - 1/4 SEC. **27**

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
41S	24E	27	SUPERIOR OIL COMPANY				

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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  
 SUPERIOR OIL COMPANY

3. ADDRESS OF OPERATOR  
 P. O. DRAWER "G", CORTEZ, COLORADO 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface: 1030' FSL, 2380' FWL, SEC. 27 SESW  
 At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 6 miles southeast of Montezuma Creek, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)      260'

16. NO. OF ACRES IN LEASE      1767.92'

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.      1006'

19. PROPOSED DEPTH      5600' *Chemistry Rock Shale*

20. ROTARY OR CABLE TOOLS      Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 Ungraded ground level 4659.6'

22. APPROX. DATE WORK WILL START\*  
 May, 1985

5. LEASE DESIGNATION AND SERIAL NO.  
 14-20-603-409

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 NAVAJO

7. UNIT AGREEMENT NAME  
 WHITE MESA UNIT

8. FARM OR LEASE NAME

9. WELL NO.  
 #27-24

10. FIELD AND POOL, OR WILDCAT  
 GREATER ANETH

11. SEC., T., R., M., OR BLK. AND SURVEY OR ARBA  
 SEC. 27, T41S, R24E SLM

12. COUNTY OR PARISH      13. STATE  
 SAN JUAN      UTAH

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5# K-55	120'	177 ft <sup>3</sup> cmt to surface
12-1/4"	9-5/8"	36# K-55	1430'	895 ft <sup>3</sup> cmt to surface
8-3/4"	7"	23# K-55	5600'	590 ft <sup>3</sup> cmt or sufficient to cover zones of interest

Superior Oil proposes to drill a well to 5600' to test the Ismay and Desert Creek formations. If productive, we will run casing and complete. If dry, we will plug and abandon as per BLM, BIA and State of Utah regulations.

APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING  
 DATE: 2/4/85  
 BY: John R. Bays

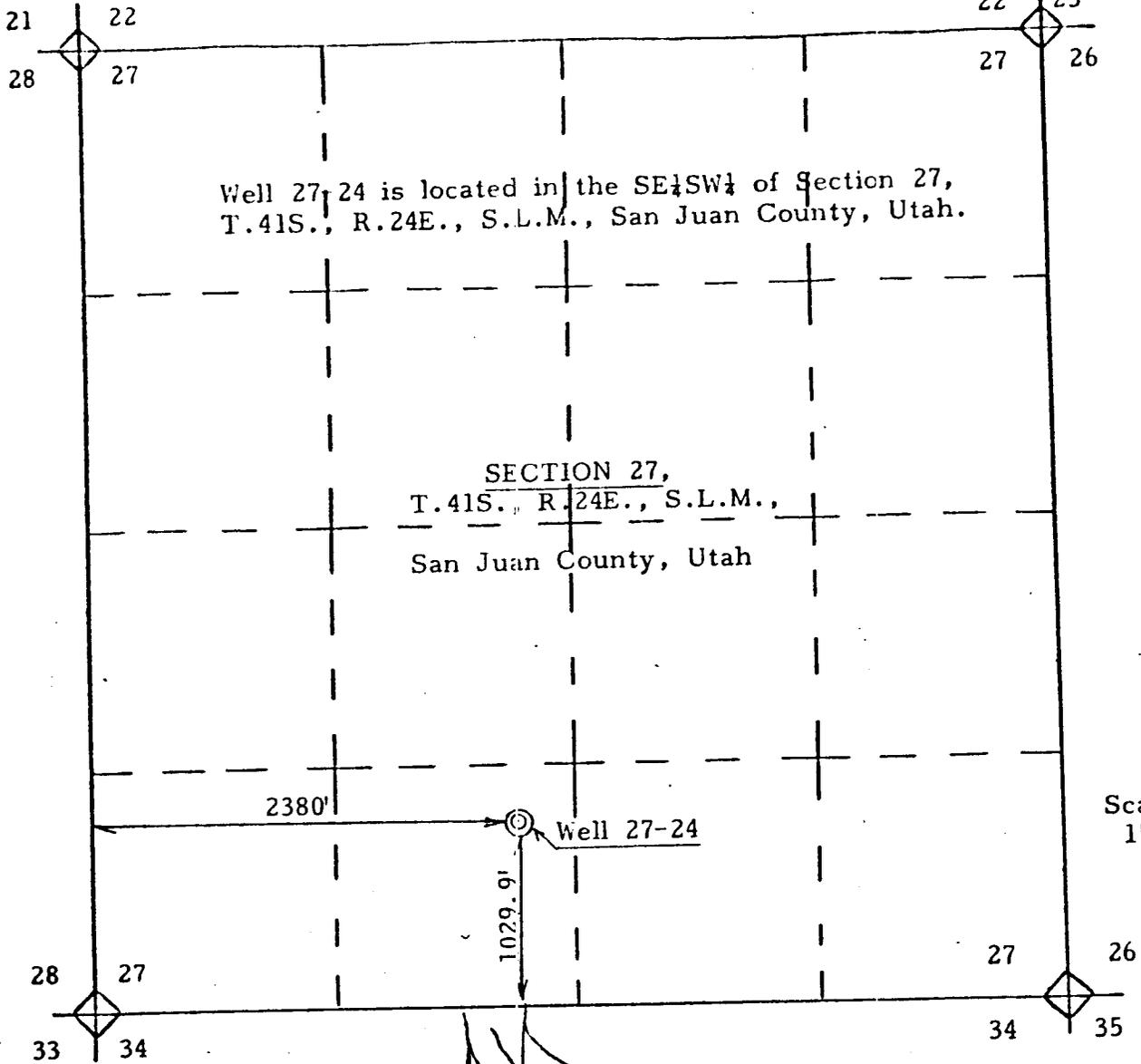
RECEIVED  
 JAN 30 1985  
 DIVISION OF  
 OIL, GAS & MINING

24. 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.

SIGNED James S. Andres TITLE Petroleum Engineer DATE 12-18-84  
 (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



Well 27-24 is located in the SE 1/4 SW 1/4 of Section 27,  
T. 41S., R. 24E., S.L.M., San Juan County, Utah.

SECTION 27,  
T. 41S., R. 24E., S.L.M.,  
San Juan County, Utah

Scale:  
1" = 1000'

Drainage

Existing roadway

Soil: Rocky.  
Vegetation: None

Laydown:  
N. 16° 56' W.

Portion of roadway for relocation

Ref. elev. 4652.2

Ref. elev. 4662.3

S. 80° 33' W.  
183.1'

N. 80° 33' E.  
203.4'

Well 27-24  
Elev. 4659.6

Reserve

Elevations are based on  
elevations of existing  
wells.

Bearing is based on the bearing of  
the north line of Sec. 4, T. 42S., R. 24E.  
This bearing is east-west.

Scale: 1" = 100'

KNOW ALL MEN BY THESE PRESENTS:  
THAT I, FREDRIC P. THOMAS  
do hereby certify that I prepared this plat from an  
actual and accurate survey of the land and that the  
same is true and correct to the best of my knowledge  
and belief.

**THOMAS** Engineering Inc.

215 N. Linden  
Cortez, Colorado  
565-4496

Plat No. 7

*Fredric P. Thomas*

FREDRIC P. THOMAS  
Reg. L.S. and P.E.  
Colo. Reg. No. 6728

Bearing  
Sole  
observation

Utah Reg. No. 4346



SUPPLEMENT TO FORM 3160-3

WELL: White Mesa Unit #27-24

ELEVATION: Ungraded ground level 4659.6'.

SURFACE FORMATION: Dakota

ESTIMATED FORMATION TOPS:	<u>Formation</u>	<u>Top</u>
	Chinle	1388'
	DeChelly	2442'
	Organ Rock	2683'
	Hermosa	4378'
	Ismay	5214'
	Lower Ismay	5330'
	Gothic Shale	5361'
	Desert Creek	5376'
	Chimney Rock Shale	5543'
	TD	5600'

WATER BEARING FORMATION: Fresh water is expected to be encountered intermittently from 120' to 1388'.

HYDROCARBON BEARING FORMATION: Oil & gas could be encountered in the Ismay and Desert Creek from 5214' to 5543'.

MUD PROGRAM:

- Surface to 100' - spud mud.
- 100' to 1388' - fresh water.
- 1388' to 2350' - fresh water/gel/polymer.
- 2350' to 5100' - lignosulfonate mud system.
- 5100' to TD - lignosulfonate mud system. Water loss controlled to 15 cc or less and weighted with barite as necessary.

CASING PROGRAM:	<u>Depth</u>	<u>Hole Size</u>	<u>O. D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
Conductor	0-120'	17-1/2"	13-3/8"	54.5#	K-55	ST&C
Surface	0-1430'	12-1/4"	9-5/8"	36#	K-55	ST&C
Production	0-5600'	8-3/4"	7"	23#	K-55	ST&C

ALL CASING WILL BE NEW.

(2)

CEMENT PROGRAM: Conductor - cement to surface w/ 150 sx (177 ft<sup>3</sup>)  
Class 'B' + 2% CaCl.

Surface - cement to surface w/ 390 sx (718 ft<sup>3</sup>)  
Lite + 10#/sk Gilsonite + .4% LoDense +  
5#/sk LCM & 150 sx (177 ft<sup>3</sup>) Class 'B'  
+2% CaCl.

Production - 500 sx (590 ft<sup>3</sup>) Class 'B' + 1.7%  
D-29 (antimigration additive) + .3%  
R-5 (retarder). Est TOC: 4200'.

PRESSURE CONTROLS: Blowout preventer equipment will be 10" Series  
900 (3000 psig working pressure) with blind rams  
and drill pipe rams hydraulically and manually  
controlled. The BOP's will be tested to 1500 psig  
and actuated daily to insure proper functioning.  
The schematic of the pressure control equipment can  
be seen on the attached diagram.

LOGGING PROGRAM: DIL/SFL: TD to 1430'.  
CNL/FDC: TD to 4300'.  
MICROLOG: TD to 4300'.

HIGH PRESSURE AND/OR H<sub>2</sub>S GAS: High pressure gas or gas containing detectable  
H<sub>2</sub>S are not anticipated while drilling  
this well.

DRILL STEM TESTS: None anticipated at this time.

CORING: None anticipated at this time.

ANTICIPATED STARTING DATE: May, 1985

# **SUPERIOR OIL**

August 16, 1984

Mr. Mat N. Millenbach  
Area Manager  
U. S. Department of Interior  
Bureau of Land Management  
Caller Service 4104  
Farmington, New Mexico 87499

Re: Surface Use Development Plan  
Proposed Well  
White Mesa Unit #27-24  
1030' FSL, 2380' FWL  
Section 27, T41S, R24E SLM  
San Juan County, Utah

Gentlemen:

We submit the following Application with Plats for permission to drill the referenced well.

1. The existing roads are shown on the attached Plat No. 3. Direction to the location from Montezuma Creek, Utah are as follows:  

From the San Juan River Bridge at Montezuma Creek go south on the black top 0.4 miles to the Red Mesa Highway. Go southeast 2.5 miles to a dirt road on the left. Proceed southwest on the gravel road 2.8 miles to the pipeyard. Turn left .2 miles to the location. (Refer to Plat No. 3).
2. No access road will be constructed. The location is on the edge of an existing road. (Refer to Plat No. 3).
3. Location of existing wells within one mile (refer to Plat No. 5).
  - a. Water wells - none.
  - b. Abandoned wells - 6.
  - c. Temporarily abandoned wells -11.
  - d. Disposal wells - none.
  - e. Drilling wells - none.
  - f. Producing wells - 14.
  - g. Shut-in wells - none.
  - h. Injection wells -none.

## **SUPERIOR OIL**

4. There is one existing producing facility owned and controlled by Superior Oil within a one-mile radius. A 5,000' flowline will be laid west from the proposed location to the facility. (Refer to Plat No. 4).
5. Location and type of water supply will be from Superior's McElmo Creek Unit fresh water supply wells near the San Juan River (SW 1/4 Sec. 17, T41S, R25E SLM). Water will be trucked to the location over existing roads and access road to be built.
6. Source of construction materials necessary to build the drilling pad will be obtained from the location. If gravel is needed to maintain existing road or to top off the drilling pad it will be trucked from a privately owned gravel pit 0.25 miles west of Montezuma Creek.
7. Methods of handling waste disposal is to collect it in an earthen pit 6' to 8' deep with steep sides and fenced with small mesh wire and located near the mud pit. The reserved mud pit will be located on the south side of the location. When drilling operations are complete the mud pits will be allowed to dry and then backfilled and leveled to the contour of the original landscape. The reserve pit will be fenced on three sides while drilling and on the fourth side as soon as the drilling rig moves out. OSHA approved chemical toilets will be provided and maintained. (Refer to Plat No. 6 & 7).
8. Ancillary facilities. No permanent campsites or airstrips will be constructed. Two small portable trailer houses for Superior's and contractors drilling Supervisory personnel will be on the location while drilling the well. (Refer to Plat No. 6).
9. Wellsite layout. The location and position of all drilling equipment is shown on the attached plat. There is also a plat attached showing the cross section diagram of the drill pad including all cuts and fills. Material from the location will be used for pad elevation. (Refer to Plats No. 6, 7, 8, & 9).
10. Plans for restoration of the surface. Upon completion of drilling operations the site and unused portion of the access road will be restored to the contour of the original landscape and seeded in accordance with the BIA requirements.
11. Surface land is owned by the Navajo Tribe and is used primarily for grazing. Vegetation is sparse desert type ground cover. There are no Indian habitations or artifacts in the immediate vicinity of the access road, flowline or drill site.

# **SUPERIOR OIL**

12. Superior's representatives:

Permitting - Wm. H. Edwards

Construction - C. D. Likes

Drilling - J. E. Gagneaux

Production - D. C. Collins

Mailing address - P. O. Drawer 'G', Cortez, Colorado 81321

Telephone (24 hours) - 303-565-3733

Dirt Contractor - Perry McDonald Construction

P. O. Box 1750, Cortez, Colorado 81321

Telephone - 303-565-3656

Drilling Contractor - not determined at this time.

13. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 the SUPERIOR OIL COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

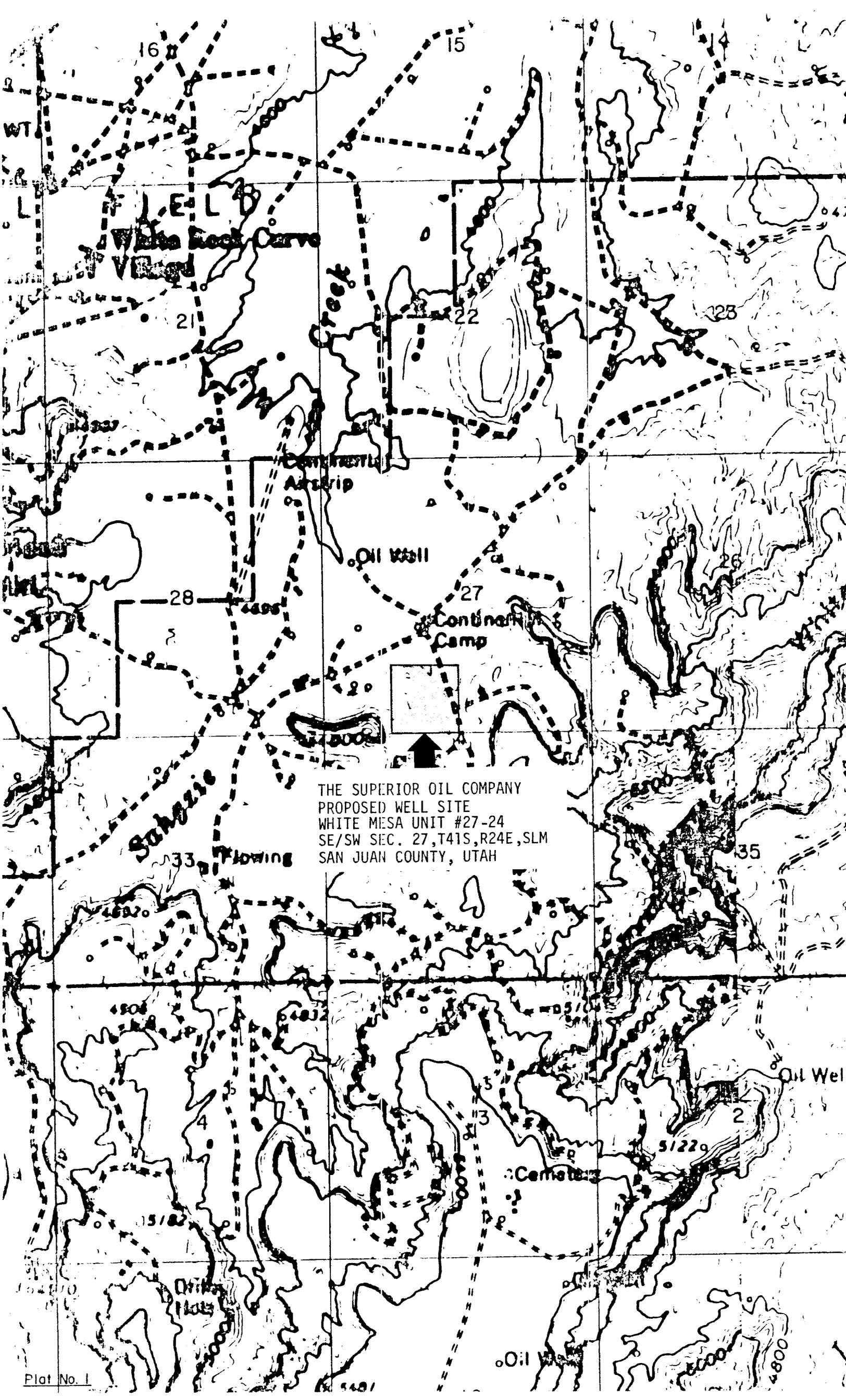
Respectfully submitted,

SUPERIOR OIL COMPANY

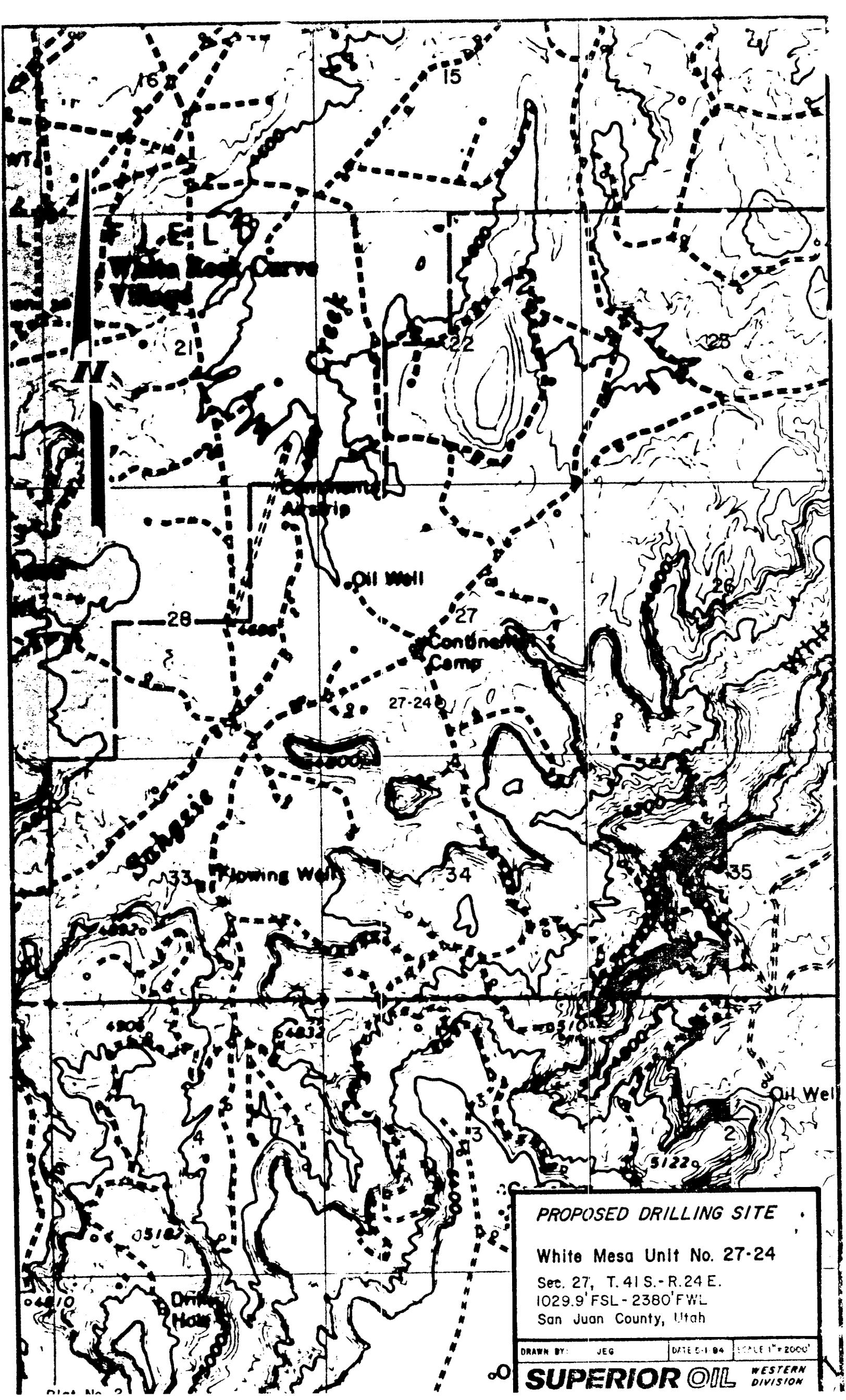


Wm. H. Edwards

Special Projects Superintendent



THE SUPERIOR OIL COMPANY  
PROPOSED WELL SITE  
WHITE MESA UNIT #27-24  
SE/SW SEC. 27, T41S, R24E, SLM  
SAN JUAN COUNTY, UTAH



**PROPOSED DRILLING SITE**

**White Mesa Unit No. 27-24**

Sec. 27, T. 41 S. - R. 24 E.

1029.9' FSL - 2380' FWL

San Juan County, Utah

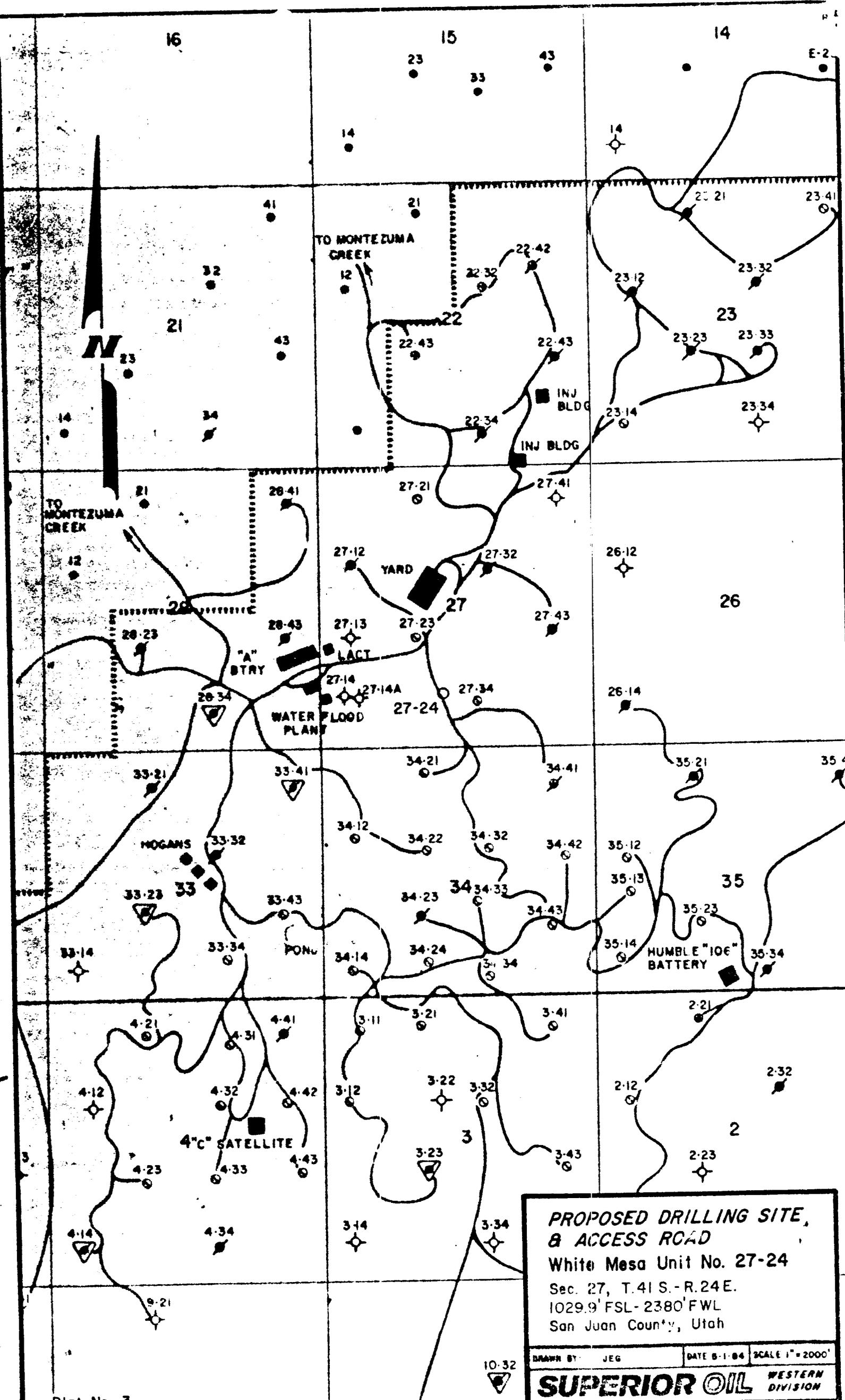
DRAWN BY: JEG

DATE 5-1-84

SCALE 1" = 2000'

**SUPERIOR OIL**

WESTERN  
DIVISION



**PROPOSED DRILLING SITE,  
& ACCESS ROAD**  
 White Mesa Unit No. 27-24  
 Sec. 27, T.41 S. - R.24 E.  
 1029.9' FSL - 2380' FWL  
 San Juan County, Utah

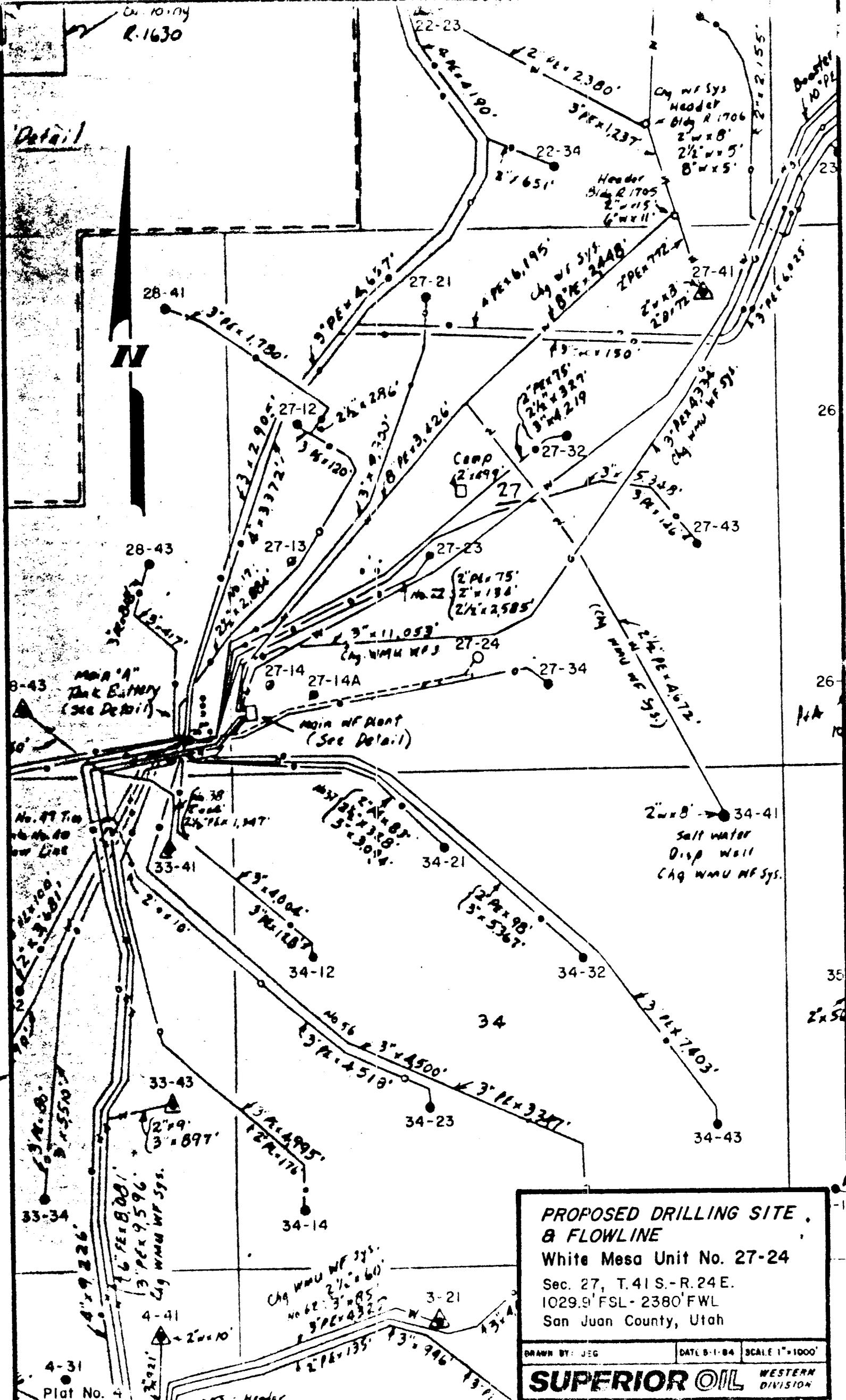
DRAWN BY: JEG      DATE: 6-1-84      SCALE: 1" = 2000'

**SUPERIOR OIL**      WESTERN DIVISION

10-32

W. 10.174  
R. 1630

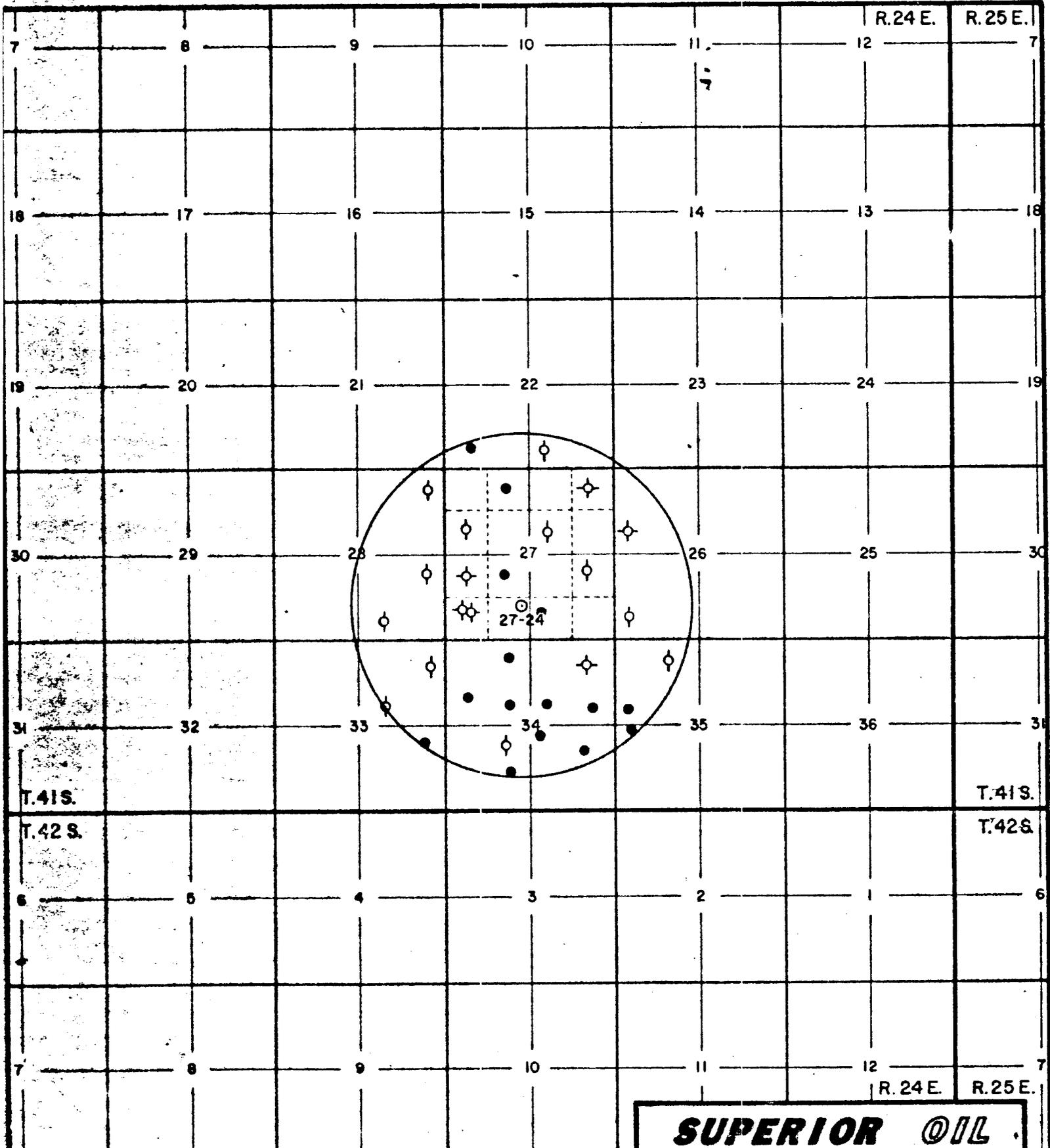
Detail



**PROPOSED DRILLING SITE & FLOWLINE**  
 White Mesa Unit No. 27-24  
 Sec. 27, T.41 S.-R.24 E.  
 1029.9' FSL - 2380' FWL  
 San Juan County, Utah

DRAWN BY: JEG	DATE: 8-1-84	SCALE: 1"=1000'
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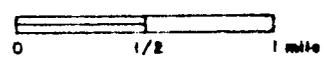
**SUPERIOR OIL** WESTERN DIVISION



- Proposed Well
- Producing Well
- ☼ Gas Well
- ▽ Water Injection Well
- ◇ Temporarily Abandoned
- ⊠ Plugged and Abandoned

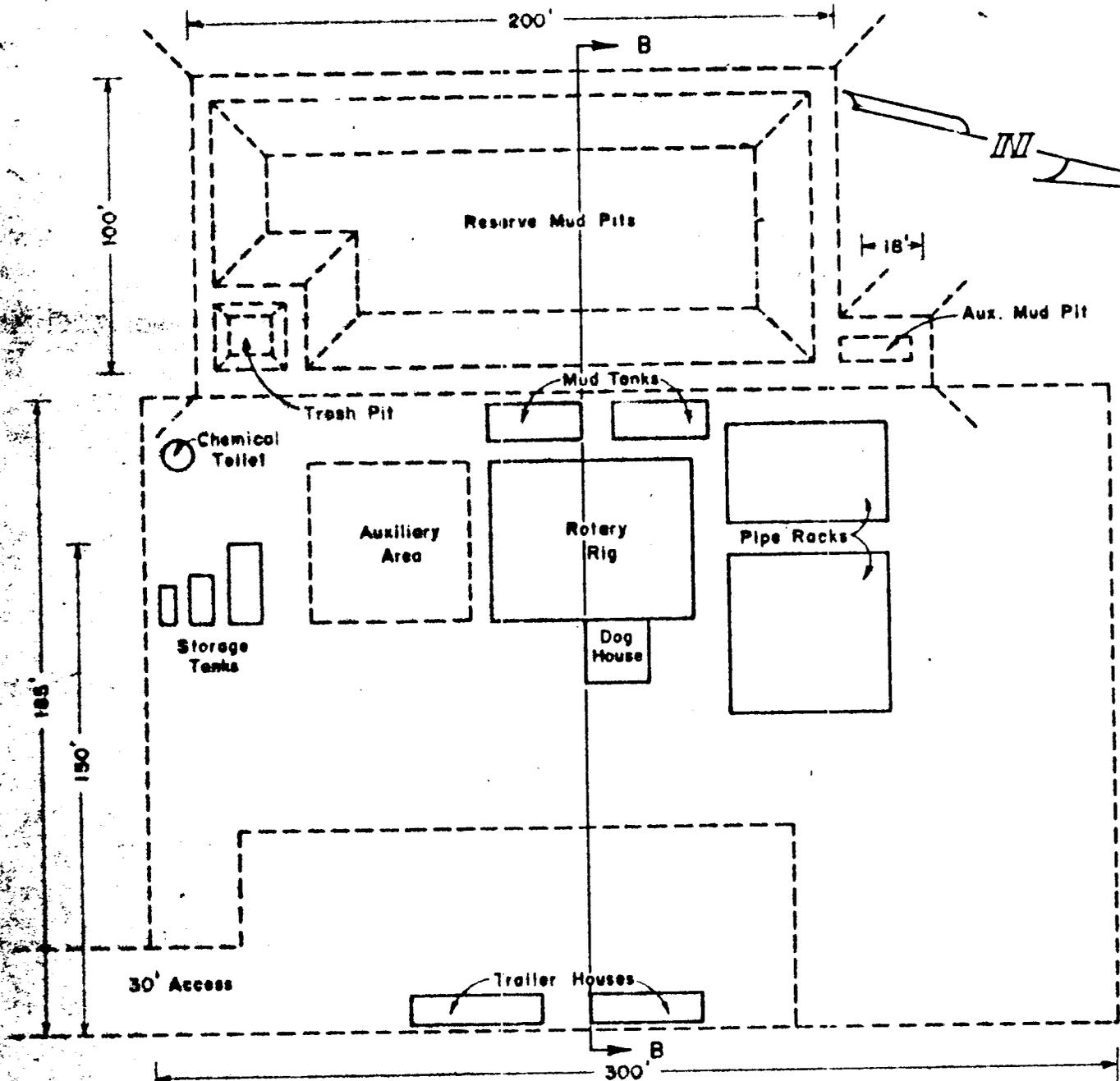
**SUPERIOR OIL**

EXISTING WELLS  
SURROUNDING  
PROPOSED WELL



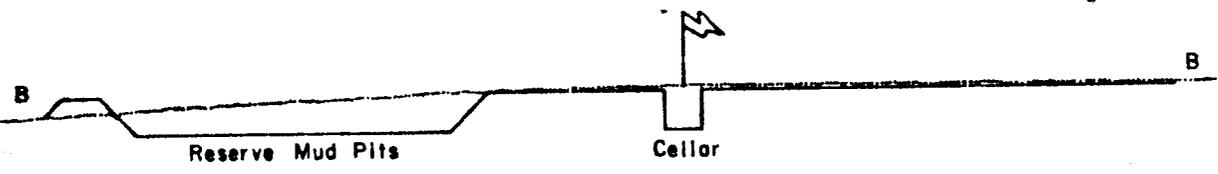
By: JEG

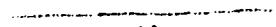
Date: 5-1-84



The Drilling Pad will be graded and compacted, and composed of native materials.

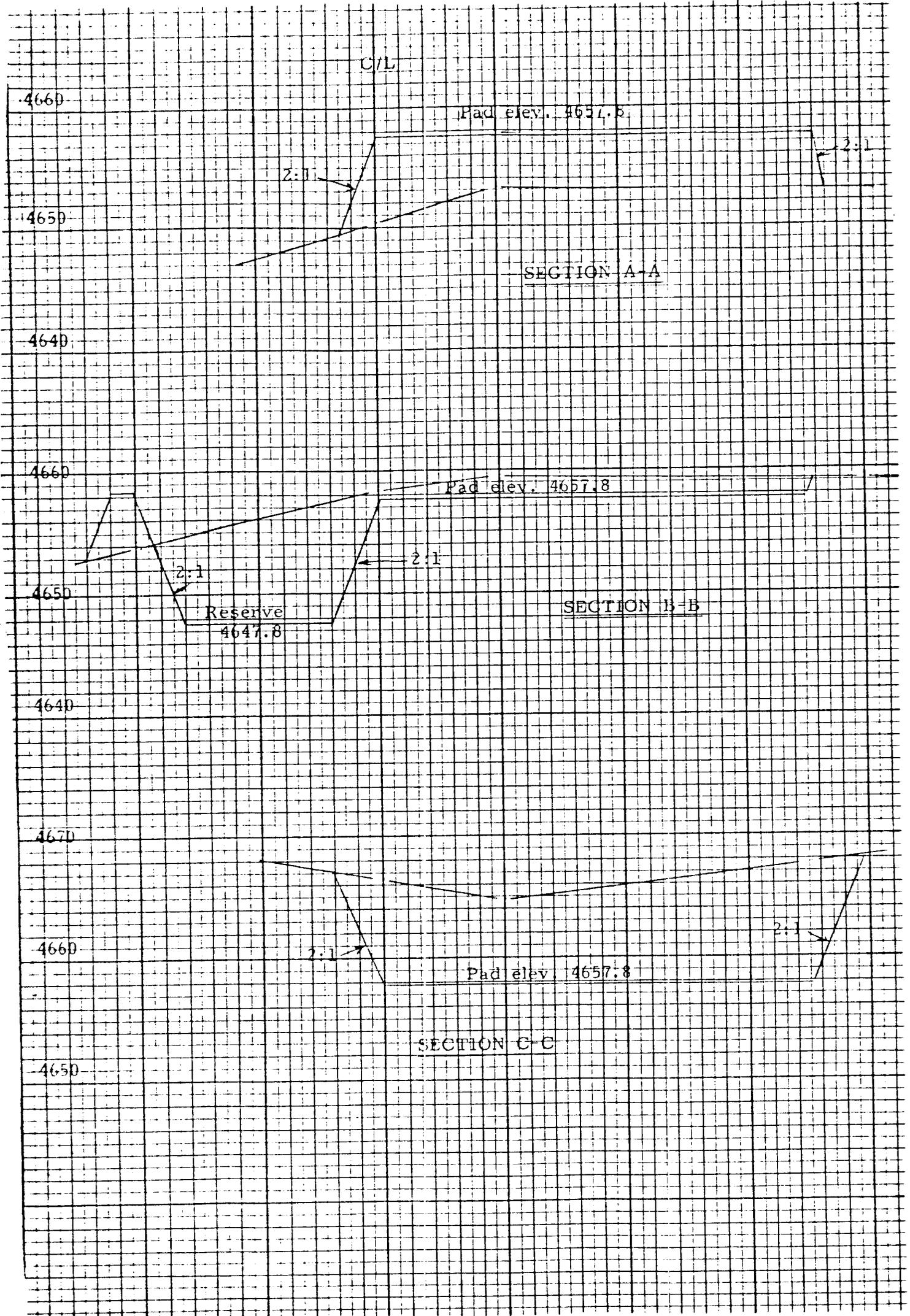
PROPOSED WELL SITE  
 W.M.U. 27-24  
 Original Elev. 4659.6'



Original Contour   
 Reference Point   
 Graded Proposal 

**THE SUPERIOR OIL CO.**   
 CENTER CANYON DISTRICT  
 ENGINEERING DEPARTMENT  
**RIG LAYOUT & DRILL  
 PAD CROSS SECTION**  
 White Mesa Unit No. 27-24  
 Sec. 27, T. 41 S. - R. 24 E.  
 San Juan County, Utah  
 BY JES DATE 5-1-64  
 SCALE 1" = 80' REVISED



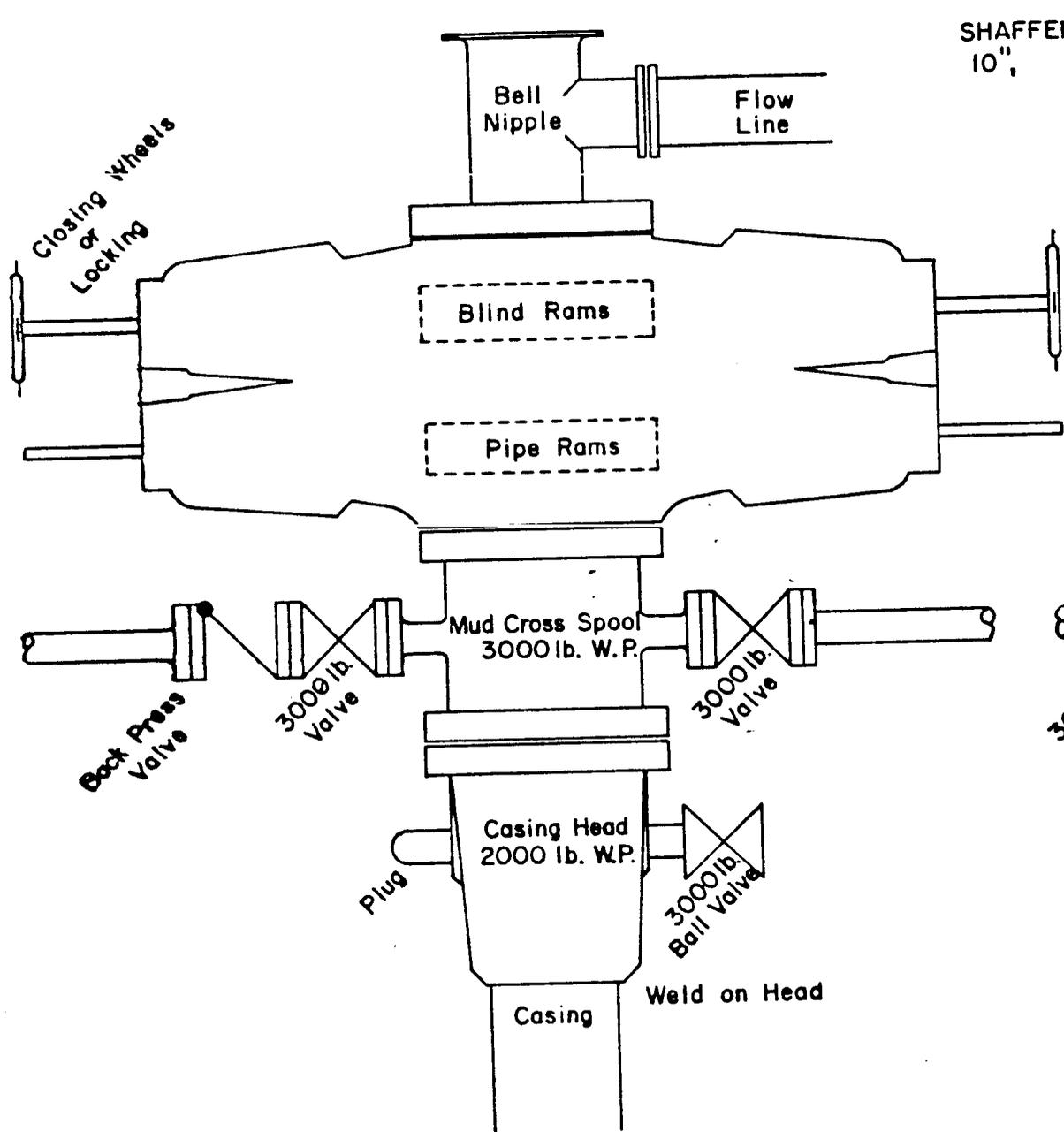


**THOMAS** Engineering Inc.

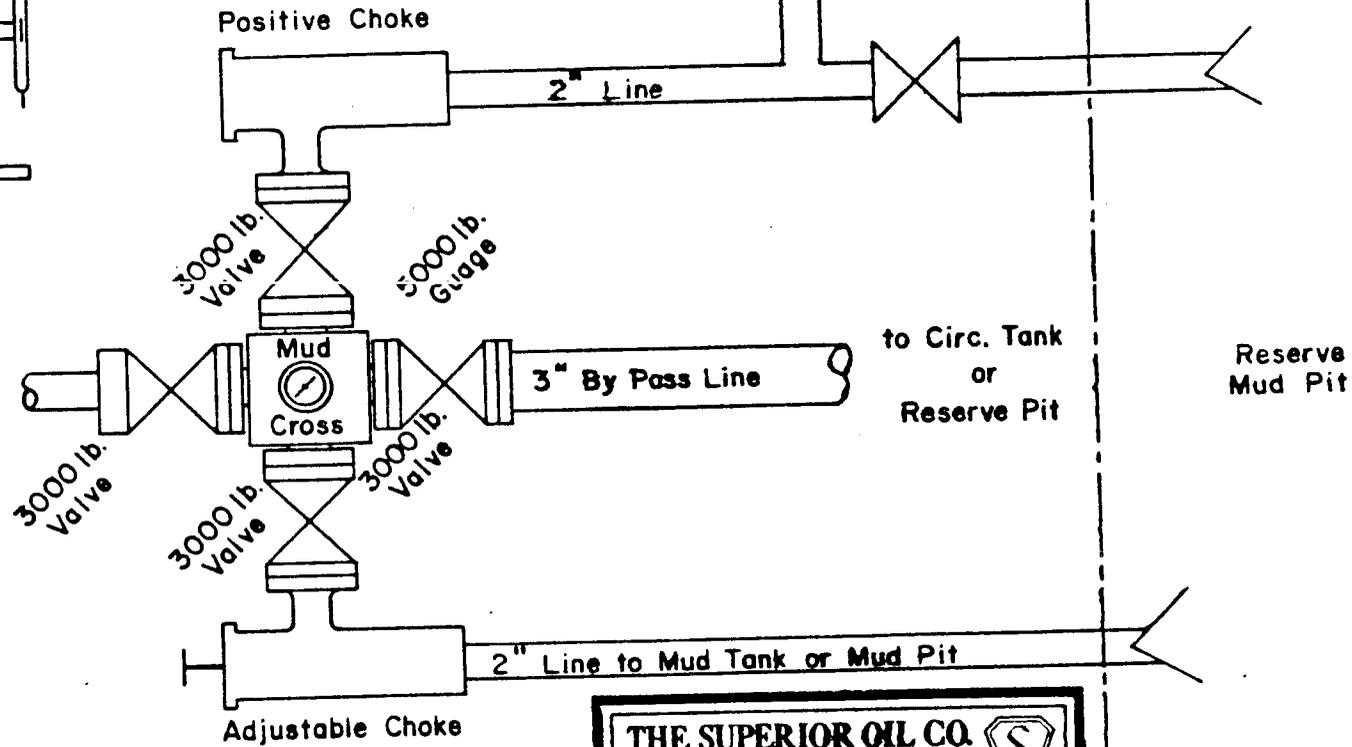
25 N. Linden  
Cortez, Colorado  
565-4496

Horizontal scale: 1" = 50'

Vertical scale: 1" = 10'



SHAFER DOUBLE GATE BLOW OUT PREVENTER  
 10", 3000 lb. W.P., 6000 lb. Test, Type E



Circulating Tank

**THE SUPERIOR OIL CO.**  
 CORTIZ - CASPER DISTRICT  
 ENGINEERING DEPARTMENT



**SCHEMATIC DIAGRAM  
 OF PRESSURE CONTROL  
 EQUIPMENT**

BY JEG      DATE 6/25/70  
 SCALE NONE      REVISED

OPERATOR Superior Oil Co. DATE 1-31-85

WELL NAME White Mesa Unit #27-24

SEC SE SW 27 T 45 R 24E COUNTY San Juan

43-037-31141  
API NUMBER

Indian  
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

Unit Well - & on 1984 P.O.D.  
Water & #84-09-9

APPROVAL LETTER:

SPACING:

A-3

White Mesa  
UNIT

c-3-a

CAUSE NO. & DATE

c-3-b

c-3-c

STIPULATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

February 4, 1985

Superior Oil Company  
P. O. Drawer 'G'  
Cortez, Colorado 81321

Gentlemen:

Re: Well No. White Mesa Unit #27-24 - SE SW Sec. 27, T. 41S, R. 24E  
1030' FSL, 2380' FWL - San Juan County, Utah

Approval to drill the above referenced oil well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Page 2  
Superior Oil Company  
Well No. White Mesa Unit #27-24  
February 4, 1985

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31141.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

as  
Enclosures  
cc: Branch of Fluid Minerals  
Bureau of Indian Affairs

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-013  
Expires August 31, 1985  
LEASE DESIGNATION AND SERIAL NO.

**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.)

OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR

SUPERIOR OIL COMPANY, through its Agent, MOBIL OIL CORP.

3. ADDRESS OF OPERATOR

P. O. DRAWER 'G' CORTEZ COLORADO 81321

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface

1030' FSL, 2380' FWL SESW

14. PERMIT NO.

43-037-31141

15. ELEVATIONS (Show whether SP, RT, GR, etc.)

4659.6 ungraded

12. COUNTY OR PARISH 13. STATE

SAN JUAN

UTAH

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)

PULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON\*   
CHANGE PLANE

Cancel APD

SUBSEQUENT REPORT OF:

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)

REPAIRING WELL   
ALTERING CASING   
ABANDONMENT\*

(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.)\*

Request approval of APD be rescinded without prejudice.

RECEIVED

JAN 14 1986

DIVISION OF OIL  
GAS & MINING

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

SIGNED

*Clyde F. Benally*  
C. J. Benally

TITLE

Sr. Regulatory Engineer

DATE

1/8/86

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 28, 1986

Superior Oil Company  
P.O. Drawer "G"  
Cortez, Colorado 81321

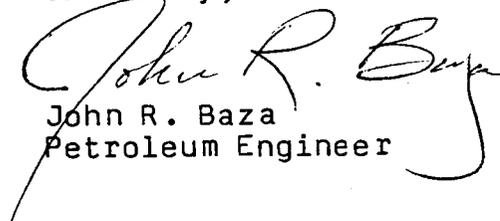
Gentlemen:

RE: Well No. White Mesa Unit 27-24, Sec.27, T.41S, R.24E,  
San Juan County, Utah, API NO. 43-037-31141

Per your request, approval to drill the subject well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, prior to future drilling of the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

  
John R. Baza  
Petroleum Engineer

sb  
cc: BLM - Farmington  
D. R. Nielson  
R. J. Firth  
Well File  
0278T-20