

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

Southern Union Exploration Company

3. ADDRESS OF OPERATOR

Suite 1800, First International Bldg., Dallas, Texas

75270

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surfaceH 1650' FNL, 990' FEL, SEC. 7, T25N, R13W
At proposed prod. zone

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

25 miles south of Farmington, N.M.

15. DISTANCE FROM PROPOSED*

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

990'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

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

19. PROPOSED DEPTH

1400'

20. ROTARY OR CABLE TOOLS

Rotary

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

6383' GR

22. APPROX. DATE WORK WILL START*

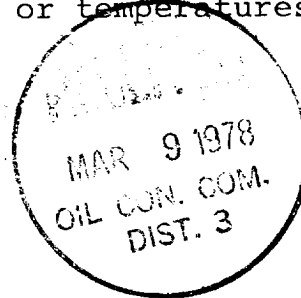
April 15, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
6 1/4	5 1/2 (new)	14.00	100	To surface
4 3/4	2 7/8 (new)	6.5	1400	To surface per caliper log

Operator proposes to drill a Pictured Cliffs test at this location. The Fruitland formation is estimated at 750' and Pictured Cliffs at 1200'. The well will be drilled with mud of 8.5 lb/gal weight, 35 viscosity and less than 10 cc fluid loss. The completion will be determined from open hole logs. No abnormal pressures or temperatures are anticipated.



Gas is dedicated
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

Agent

Area Manager

TITLE Minerals Management

DATE 3-8-78

(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

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

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

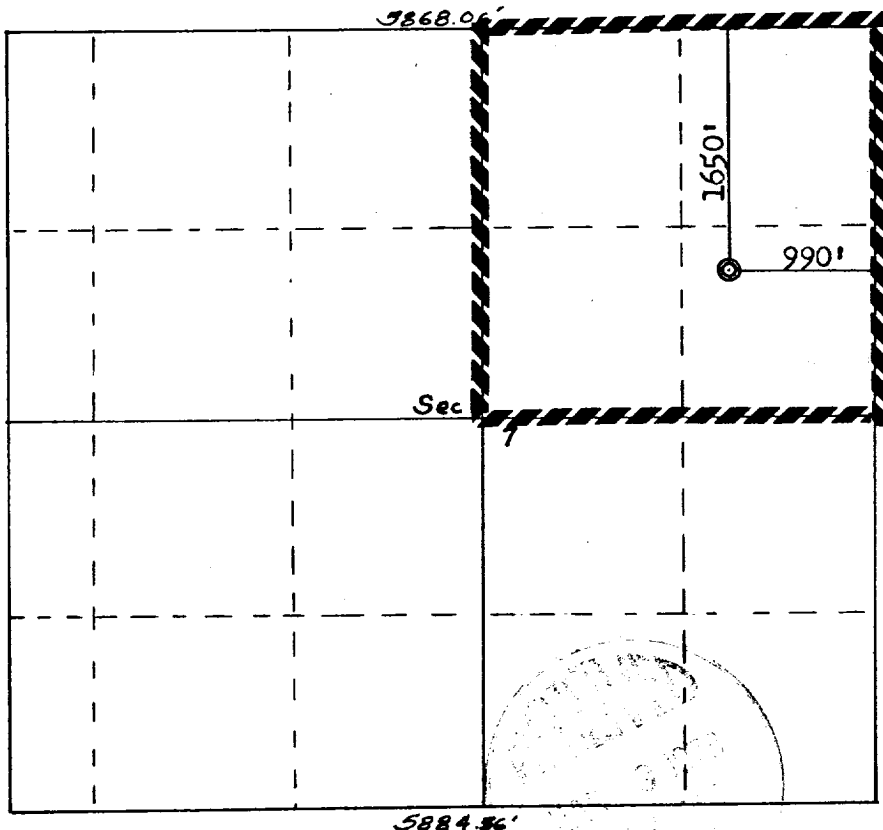
Operator Southern Union Exploration Co.			Lease Rayno-Federal		Well No. 1
Unit Letter H	Section 7	Township 25N	Range 13W	County San Juan	
Actual Footage Location of Well: 1550 feet from the North line and 990 feet from the East line					
Ground Level Elev: 6383	Producing Formation Pictured Cliffs		Pool Undesignated		Dedicated Acreage: 160 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.



SCALE: 1"=1320'

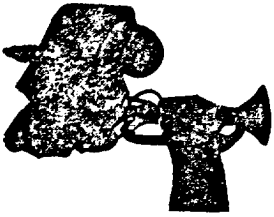
CERTIFICATION

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

Name
W. E. Landry
Position
Area Manager
Company
Minerals Management Inc
Date
3-8-78

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
March 7, 1978
Registered Professional Engineer and Land Surveyor
Fred B. Kerr Jr.
Certificate No.
3950



MINERALS MANAGEMENT INCORPORATED
A Division of SCIENTIFIC SOFTWARE CORPORATION

DEVELOPMENT PLAN FOR SURFACE USE
SOUTHERN UNION EXPLORATION COMPANY

RAYNO FEDERAL WELL NO. 1

1650' FNL, 990' FEL, SEC. 7, T25N, R13W

SAN JUAN COUNTY, NEW MEXICO

1. Existing Roads

The main road serving the area is the Bisti Trading Post road as shown on the attached topographic map.

2. Planned Access Road

As per the topographic map, approximately 500 ft. of new road will be built to the location. Existing trails will be improved.

3. Location of Existing Wells

There are no nearby producing wells. One abandoned well is shown on the topographic map.

4. Location of Proposed Facilities

Will not be required for the prospective gas production.

5. Water Supply

Water will be hauled to location from the San Juan River.

6. Source of Construction Materials

Not applicable.

7. Methods of Handling Waste Disposal

All garbage and trash that can be burned shall be burned. All trash that cannot be burned will be contained in a trash pit and covered with a minimum of 4' of dirt. All production waste such as cuttings, chemicals, overflows of oil, water, and drilling fluids shall be contained in the reserve pit and on completion of drilling activities buried with a minimum of 4' of cover. The reserve pit will be fenced until the liquid wastes have dried adequately and cleanup operations are commenced. A portable toilet will be provided for human waste.

8. Ancillary Facilities

There are no ancillary facilities planned for this location.

9. Wellsite Layout

See attached location layout plat.

10. Plans for Restoration of Surface

Cleanup of the well location will commence immediately following the removal of the drilling equipment. The reserve pit will be fenced until adequately dry to permit cleanup and reseeded in compliance with BLM stipulations. Land no longer needed after drilling operations will be restored and reseeded as above.

11. Other Information

Impact on the environment will be minimal. The access road and well location are on sparsely vegetated land and minimum disturbance will be required.


12. Operator's Representative

Mr. James G. Ellis, Southern Union Exploration Company, Suite 1800, First International Building, Dallas, Texas 75270.

13. Certification

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 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 Southern Union Exploration Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

March 8, 1978
Date


W. E. Landry
Area Manager

Scientific Software Corporation
Minerals Management Division
Company

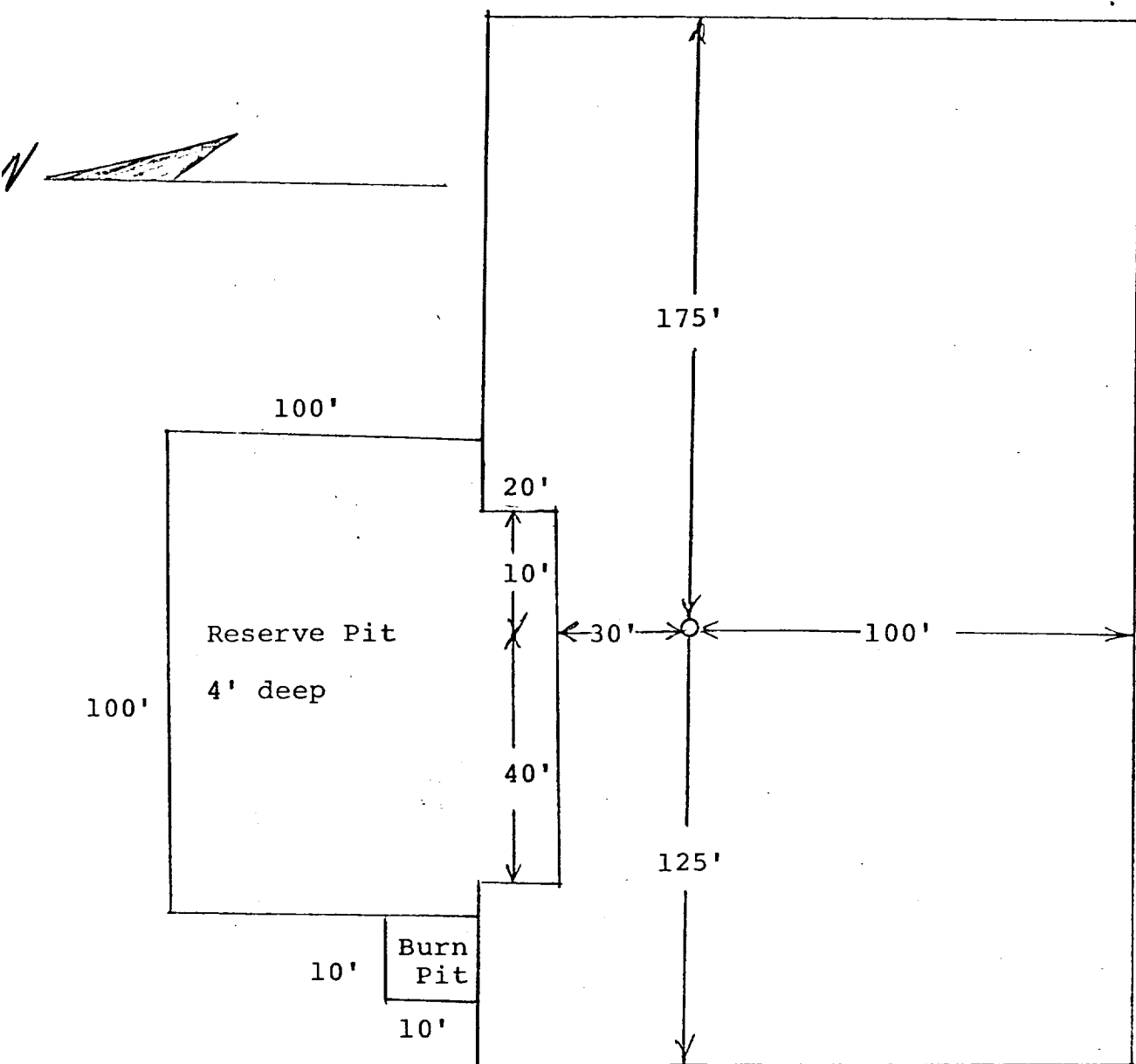
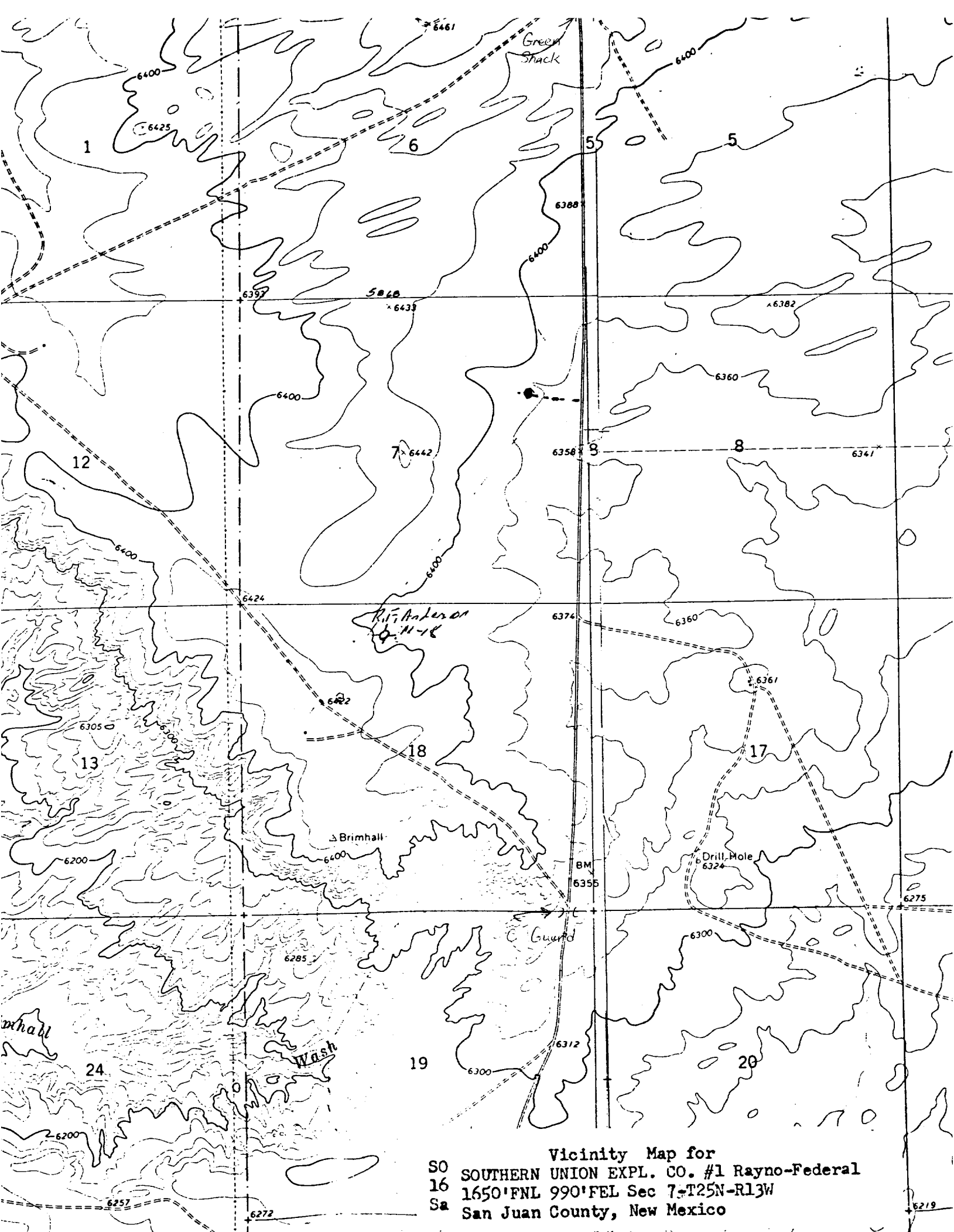


DIAGRAM OF WELL LOCATION



SO Vicinity Map for
 16 SOUTHERN UNION EXPL. CO. #1 Rayno-Federal
 1650' FNL 990' FEL Sec 7-T25N-R13W
 Sa San Juan County, New Mexico