

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

El Paso Natural Gas Company

3. ADDRESS OF OPERATOR

PO Box 289, Farmington, NM 87401

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

At surface

1530'S, 830'E

At proposed prod. zone

same

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

6 miles East of Aztec, NM

15. DISTANCE FROM PROPOSED*

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

830'

16. NO. OF ACRES IN LEASE

155.74

17. NO. OF ACRES ASSIGNED
TO THIS WELL

155.74

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

500'

19. PROPOSED DEPTH

3275'

20. ROTARY OR CABLE TOOLS

Rotary

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

6209'GL

22. APPROX. DATE WORK WILL START*

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"	24.0#	120'	84 sks. circ. to surface
7 7/8"	4 1/2"	10.5#	3275'	360 sks. to cover Ojo Alamo

Selectively perforate and sandwater fracture the Pictured Cliffs formation.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well.

This gas is dedicated.

The SE/4 of Section 21 is dedicated to this well.

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

A. G. Busico

TITLE

Drilling Clerk

DATE

11-27-79

(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

NM000

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

1980

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

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

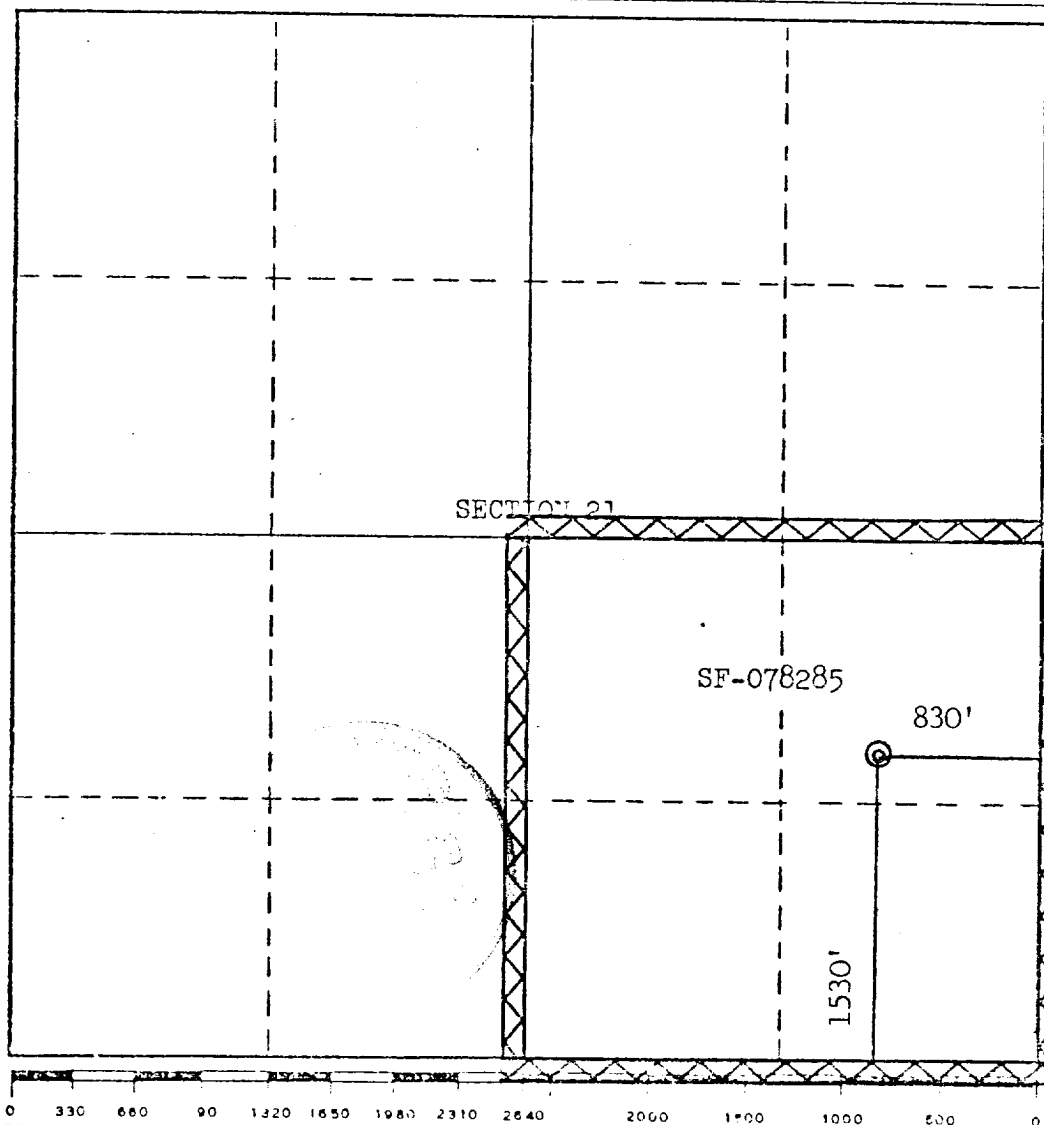
Operator EL PASO NATURAL GAS COMPANY			Lease SUNRAY (SF-078285)		Well No. 6
Unit Letter I	Section 21	Township 31N	Range 10W	County SAN JUAN	
Actual Footage Location of Well: 1530 feet from the SOUTH line and 830 feet from the EAST line					
Ground Level Elev. 6209	Producing Formation PICTURED CLIFFS		Pool BLANCO PICTURED CLIFFS	Dedicated Acreage: 155.74 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

A. G. Susco

Name Drilling Clerk

Position El Paso Natural Gas Co.

Company November 27, 1979

Date

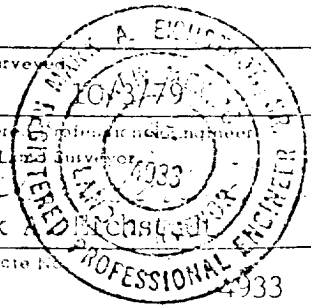
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Mark

Certificate No.



0 330 660 990 1320 1650 1980 2310 2640 2970 3300 1+00 1000 500 0

El Paso NATURAL GAS
COMPANY

El Paso Natural Gas Company
DALLAS, TEXAS 75201
PHONE 595-6500

Well Name SUNRAY #6
Location 1530' SL / 930' E1 Sec. 21 T.31N R.10W
Formation PC

We, the undersigned, have inspected this location and road.

U. S. Forest Service

Date

Don Ford
Archaeologist,

10/2/79
Date

Bureau of Indian Affairs Representative

Date

Bob Mal
Bureau of Land Management Representative

10/4/79
Date

Andy Steing
U. S. Geological Survey Representative - AGREES
TO THE FOOTAGE LOCATION OF THIS WELL.

10/4/79
Date

REASON:

Seed Mixture: II

Equipment Color: BROWN

Road and Row: (Same) or (Separate)

Remarks:


C.C. to Dave Vilvin
Earl Mealer
John Ahlm

Multi-Point Surface Use Plan

Sunray #6

1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
3. Location of Existing Wells - Please refer to Map No. 2.
4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines - Please refer to Maps No. 1 and No. 2. Map No. 2 shows the existing gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
5. Location and Type of Water Supply - Water for the proposed project will be obtained from Hart Canyon Water Well.
6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.
7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1,

7. cont'd. will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
8. Ancillary Facilities - No camps or airstrips will be associated with this project.
9. Wellsite Layout - Please refer to the attached Plat No. 1.
10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted as designated by the responsible government agency.
11. Other Information - The terrain is rolling mesa top with sage and mormon tea growing. Cattle and deer are occasionally seen on the proposed project site.
12. Operator's Representative - W.D. Dawson, PO Box 990, Farmington, NM
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 El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.



L. A. Aimes
Project Drilling Engineer

Operations Plan - Sunray #6

I. Location: 1530'S, 830'E, Section 21, T-31-N, R-10-W, San Juan County, NM

Field: Blanco Pictured Cliffs

Elevation: 6209'GR

II. Geology:

A. Formation Tops:	Surface	Nacimiento	Pictured Cliffs	2975'
	Ojo Alamo	1590'	Lewis	3130'
	Kirtland	1635'	Total Depth	3170'
	Fruitland	2550'		

B. Logging Program: Induction Electric and Gamma Ray Density at TD.

C. Coring: none

III. Drilling:

A. Mud Program: mud from surface to TD.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Csg.Size</u>	<u>Wt.&Grade</u>
	12 1/4"	120'	8 5/8"	24.0# J-55
	7 7/8"	3170'	4 1/2"	10.5# K-55

B. Float Equipment: 8 5/8" surface casing - cement guide shoe.

4 1/2" production casing - run cement guide shoe on bottom of a 6' shoe joint. Run a self fill insert floatvalve on top of the shoe joint. Run 8 4 1/2" x 7 7/8" centralizers, one on each joint beginning with the shoe joint.

C. Tubing: 3170' of 1 1/4" EUE, 2.4#, K-55 tubing

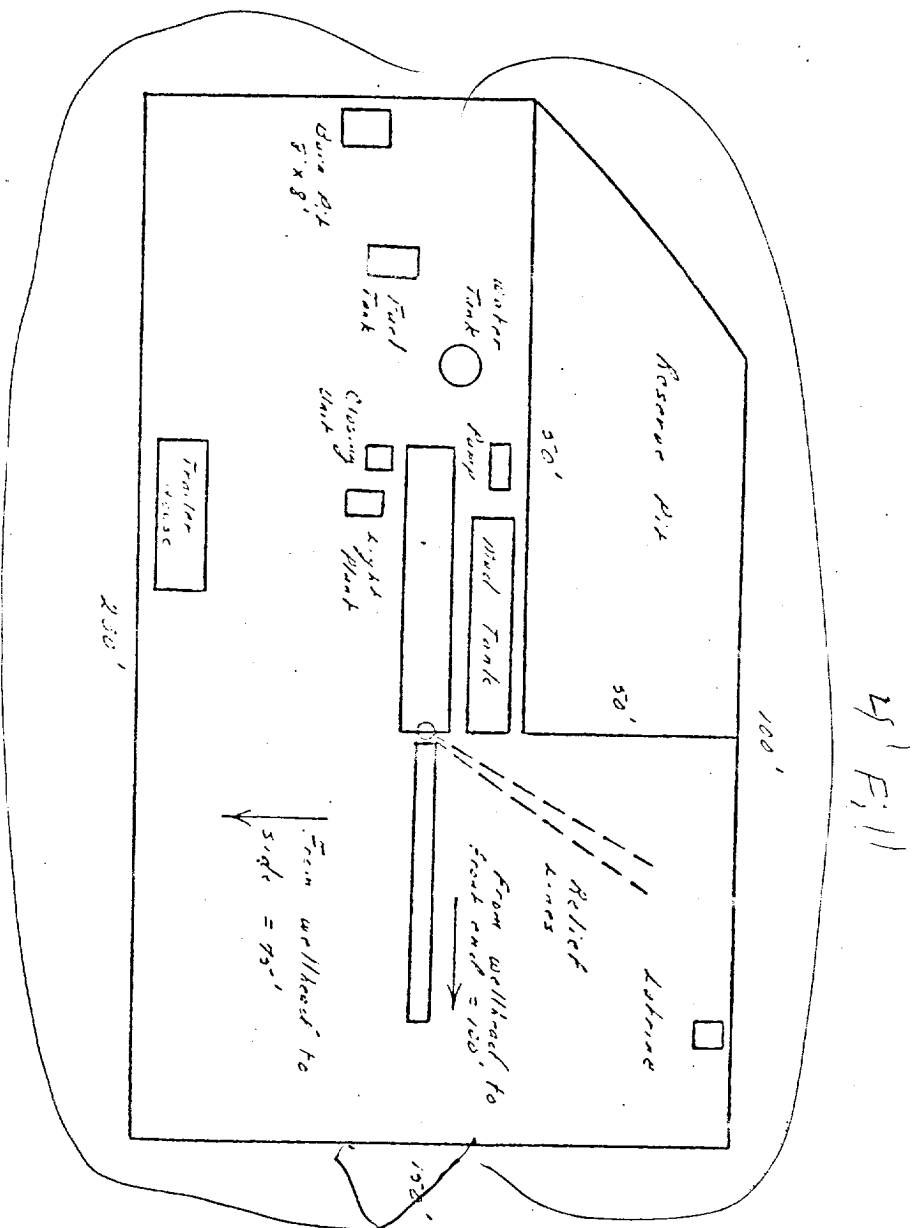
D. Wellhead Equipment: 8 5/8" x 4 1/2" 2000 psi WOG wellhead with a 4 1/2" x 2 3/8" 2000 psi WOG tubing head. Wellhead representative to set 4 1/2" casing slips. 4 1/2" casing to be cut off 24" above casing slips.

V. Cementing:

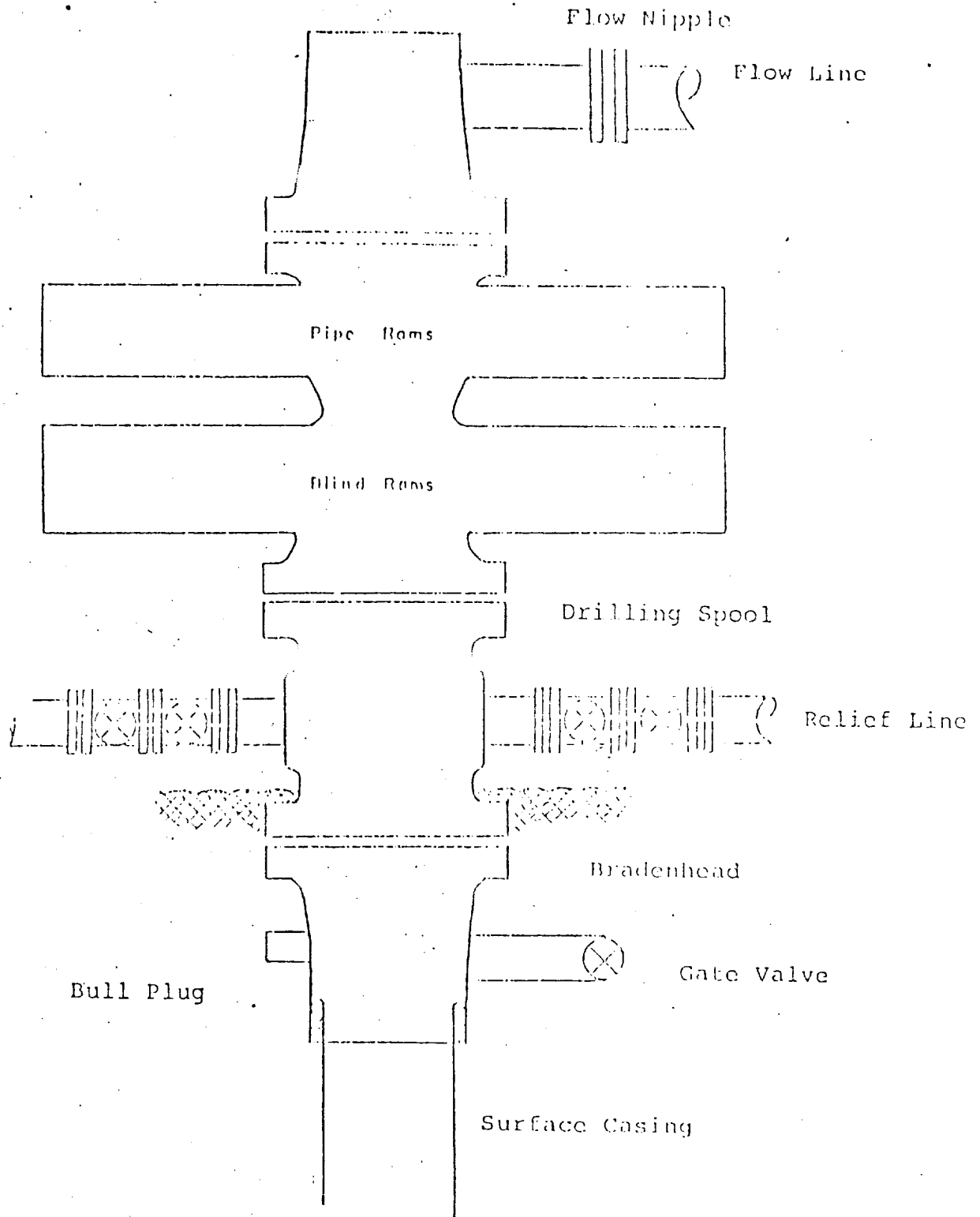
8 5/8" surface casing - 84 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (99 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing, wellhead, and BOP to 600#/30 minutes.

4 1/2" production casing - precede cement with 5 bbls. water. Cement with 260 sks. 65/35 Class "B" Poz with 6% gel and 8.3 gal. water/sk. followed by 100sks. 50/50 Class "B" Poz w/2% gel (540 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Spot 200 gal. 7 1/2% acetic acid on top of plugs. Run temperature survey after 12 hours.

El Paso Natural Gas Company
 Typical Location Plot for Richard Ellis Well



Typical Mud Drilled W.O.P. Installation for Pictured Cliffs Well



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