

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

Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR

P.O. Box 90, Farmington, New Mexico 87401

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

At surface 1120' FSL & 1580' FEL

At proposed prod. zone

As Above

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

4 Miles South

15. DISTANCE FROM PROPOSED*

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

1120'

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

2980'

16. NO. OF ACRES IN LEASE

NA

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E/320

19. PROPOSED DEPTH

6200'

20. ROTARY OR CABLE TOOLS

Rotary

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

6672'

22. APPROX. DATE WORK WILL START*

October 15, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 3/4"	9 5/8"	32.3#	200	125 sks
8 3/4"	7"	20.0#	3500	150 sks
6 1/4"	4 1/2"	10.5#	3300-6200	375 sks

It is proposed to drill this well to total depth using a water base mud & gas. In the event Hydrocarbons are encountered on a commercial basis, 4 1/2" production casing will be set and cemented, and the zone of interest will be perforated and stimulated. A B.O.P. will be installed on the surface casing head and all subsequent operations will be conducted through the B.O.P.'s. B.O.P.'s will be tested daily.

For additional pertinent information, please refer to the attachments.
The E/2 of Section 30 is dedicated. 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

William J. Billman
William J. Billman

TITLE

Drilling Engineer

DATE

9/25/79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

SEP 28 1979

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

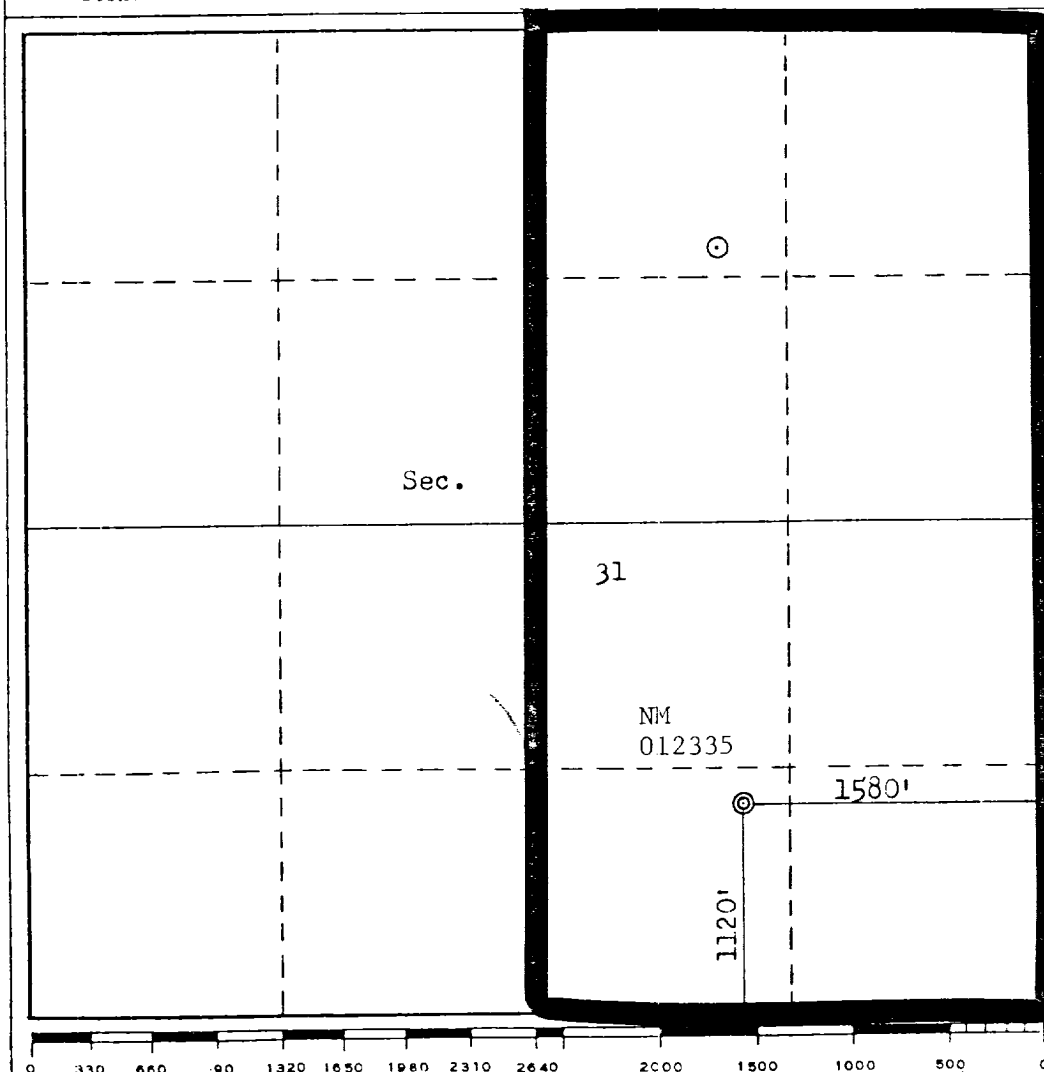
Operator NORTHWEST PIPELINE CORPORATION			Lease SAN JUAN 30-5 UNIT		Well No. 11A
Unit Letter 0	Section 31	Township 30N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1120 feet from the South line and 1580 feet from the East line					
Ground Level Elev. 6672	Producing Formation Mesa Verde		Pool Blanco		Dedicated Acreage: 320 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.

William J. Billman

Name
William J. Billman

Position
Drilling Engineer

Company
Northwest Pipeline

Date
September 24, 1979

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
September 23, 1979

Registered Professional Engineer
and/or Land Surveyor

Frank B. Kerr Jr.
Frank B. Kerr Jr.

Certificate No. **3950**

NORTHWEST PIPELINE CORPORATION
MULTI - POINT SURFACE USE PLAN
for the

San Juan 30-5 Unit #14A

SEP 28 1979

1. Existing Roads: See attached topographic map. All existing roads used, shall be maintained in a serviceable condition at all times during the drilling operation.
2. Planned Access Roads: See attached topographic map. Maximum grade is approximately 1%. The road surface will not exceed twenty feet in width. Upon completion of drilling operations the access road will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary. All activities will be confined to the access road and drill pad.
3. Location of Existing Wells: See attached topographic map.
4. Location of Tank Batteries; Production Facilities; and Production, Gathering and Service Lines: See attached topographic map for locations of existing and proposed gas gathering lines.
5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from the Pine River.
6. Source of Construction Materials: No additional materials will be needed.
7. Methods for Handling Waste Disposal: All garbage, debris, and trash will be buried at least three feet deep. A portable toilet will be supplied for human waste. After drilling operations have been completed the reserve pit will be fenced and the liquid portion will be allowed to evaporate before the location is cleaned up and leveled. The earthen pits will not be located on natural drainages and will be constructed in such a manner so that they will not leak. Any evaporator pit containing toxic liquids will be fenced.
8. Ancillary Facilities: There will be no camps or airstrips associated with the drilling of this well.
9. Well Site Layout: See attached location layout sheet. There will be a drainage ditch above the cut slope.
10. Plans for Restoration of the Surface: Upon completion of drilling, the location will be cleaned, and leveled so that no cut or fill banks will be steeper than 3:1.

All of the area disturbed in connection with the drill site will be seeded as close as possible for any above ground equipment while still allowing for access to the equipment. Seeding will be done within one year after drilling is completed and during the period from July 1 through September 15. Seeding will be done with seed Mixture #1.

All equipment above ground will be painted a non-glare, non-reflective, non-chalking color that simulates the natural color of the site. For this well code number 595-34127, green.

11. Other Information: If, during operations, any historic or prehistoric ruin, monument or site, or any object of antiquity is discovered, then work will be suspended and the discovery will be reported to the District Manager of the BLM.

All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

When drilling with gas, the line used to discharge and burn off the gas will be located so as not to damage vegetation in the area, and if necessary an earthen screen will be constructed to protect the vegetation. All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

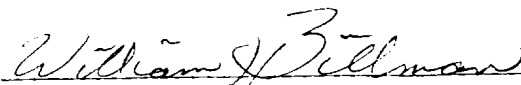
The area covered by the location and proposed access road is gently sloped with scattered brush and some grasses.

12. Operator's Representative: W.J. Billman - P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension #117.
13. Certification:

I hereby certify that I 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 Northwest Pipeline Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9-24-79

Date


W.J. Billman
Drilling Engineer

OPERATIONS PLAN

San Juan 30-5 Unit #14A

I. LOCATION: SE/4 Sec 3, T30N, R5W

ELEVATION: 6672'

FIELD: Blanco. Mesa Verde

Lease Number: NM: 012335

II. GEOLOGY:

A. Formation Tops:

Ojo Alamo:	2890'	Cliff House:	5675'
Kirtland:	3090'	Menefee:	5730'
Fruitland:	3500'	Point Lookout:	6010'
Pictured Cliffs:	3810'	Total Depth:	6200'
Lewis:	3950'		

B. Logging Program: Gamma Ray Induction & Density at T.D.

C. Coring Program: None anticipated

D. Natural Gauges: Gauge at last connection above 5730', 6010' and at total depth. Gauge any noticeable increases in gas flow at depth other than those noted above.

III. DRILLING:

A. Anticipated starting date and duration of activities: Oct 30, 1979 - 2 weeks

B. BOP: Blind rams and pipe rams, 10', 900 series, double gate, rated at 3000 PSI.

C. Mud Program:

a) Spud Mud: Water, lime and gel.
b) Surface to 3950'
Viscosity: 32-38 sec/qt.
Weight: 8.8-9.2 #/gal.
Water Loss: 8-20 cc
Ph: 8.5-9.5

c) From 3950 to 4150
Viscosity: 36-45 sec/qt.
Weight: 8.5-9.5 #/gal.
Water Loss: 8-20 cc
Ph: 8.5-9.5

d) From 4150 to total depth with gas.

IV. MATERIALS:

A. Casing Program:

<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
12-1/4"	200'	9-5/8"	32.3# H-40	200'
8-3/4"	4150'	7"	20# K-55	4150'
6-1/4"	2050'	4-1/2"	10.5# K-55	3950' - 6200'

B. Float Equipment:

a) Surface casing 9-5/8" - B & W Reg. Pattern Shoe
b) Intermediate Casing 7" - Dowell guide shoe (Code #50101-070) and self fill insert float collar (Code #53003-070). Seven (7) centralizers (Code #56011-070) spaced every other joint above the shoe. Place float collar one joint above shoe.

B. Float Equipment cont.

c) Liner 4-1/2" - Larkin geyser shoe (Fig. 222) and Larkin flapper type float collar (Fig. 404). Brown liner hanger with neoprene pack off.

C. Tubing Program: 6150' of 2-3/8", 4.7#, EUE, K-55 tubing with seating nipple on top of bottom joint. Expendable check valve on bottom.

D. Well Head Equipment: WKM well head. WKM representative to set slips and make cut off.

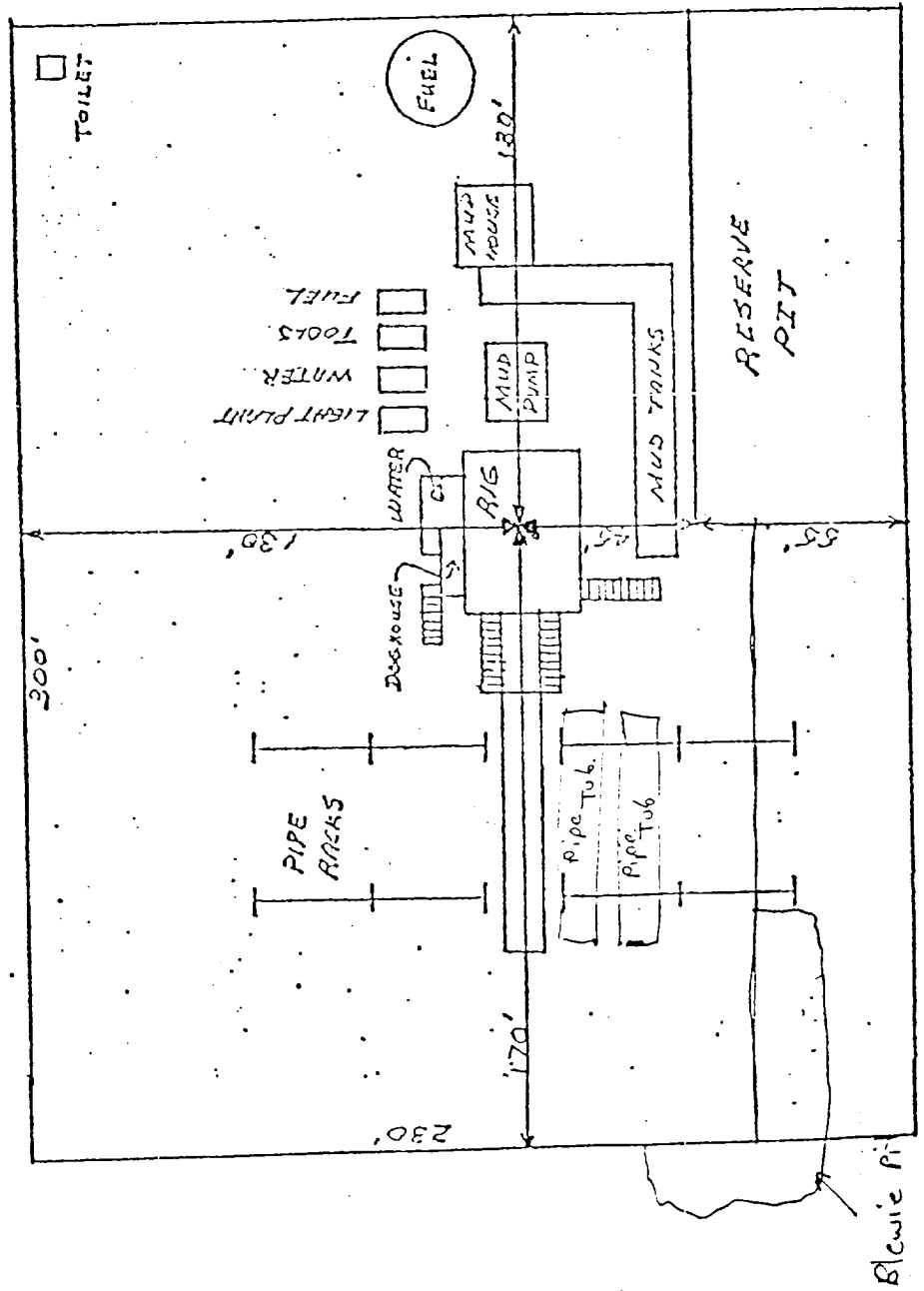
V. CEMENTING:

A. Surface Casing 9-5/8" - Use 125 sacks of Class "B" with 1/4# gel flake per sack and 3% CaCl (100% excess to circulate). WOC 12 hours. Test surface casing to 600 PSI for 30 minutes.

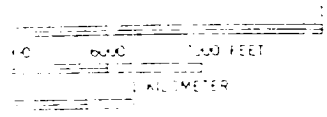
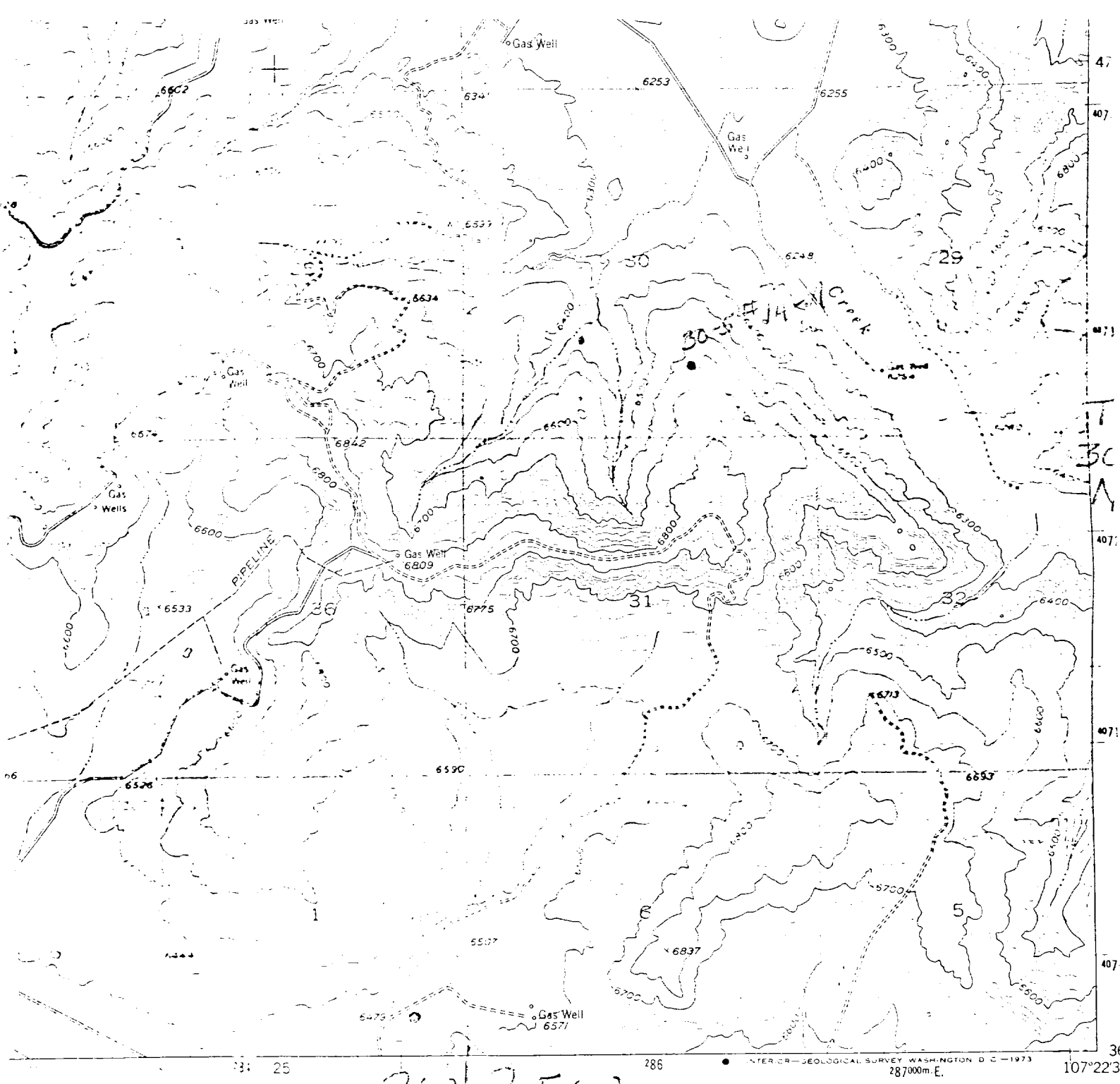
B. Intermediate Casing 7" - Use 150 sacks Class "B" 65/35 poz with 12% gel and 15.52 gallons water per sack. Tail in with 50 sacks Class "B" with 2% CaCl (65% excess to cover Ojo Alamo). WOC 12 hours. Run temperature survey after 8 hours. Test casing to 600 PSI.

C. Production Liner 4-1/2" - Use 220 sacks Class "B" with 4% gel and 1/4 cu. ft. of fine gilsonite per sack. Preceed cement with 20 barrels water mixed with 3 sacks gel (70% excess to circulate liner). Set liner pack off and reverse out excess cement. Run 6-1/4" bit to top of liner and pressure test (test 12 hours after plug is down). Lay down DP and run 3-7/8" bit on 2-3/8" EUE tubing to clean out liner. Perforate 18 hours after plug is down.

NORTHWEST PIPELINE CORPORATION LOCATION LAYOUT



DATE:
SCALE: 1" = 20'



QUADRANGLE LOCATION

ROAD CLASSIFICATION
 Light-duty ————— Unimproved dirt —————

GOMEZ RANCH, N. MEX.
 N3645-W10722.5/7.5

1954
 PHOTOREVISED 1971
 AMS 4557 IV SW-SERIES V881

STANDARDS
 225, OR WASHINGTON, D. C. 20242
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